Occupational stress amongst offshore workers in the Niger Delta region of Nigeria

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Dedication

To my ever loving Mum. You made this dream come true and I'm grateful.

Thank you for your constant support and unconditional love.

I love you dearly.

To my children - Isioma and Goziem. Thank you for your bravery and constant love.

You have made me stronger, better and more fulfilled than I could have ever imagined.

I love you to the moon and back.

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"It always seems impossible until it's done."

Nelson Mandela

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Abstract

This thesis uses labour process analysis to consider occupational stress in the Nigerian oil and gas industry (OGI). Rather than taking a narrow, positivist/psychological approach to occupational stress, which encourages a focus on workplace-level "problems" and "solutions", this study drew inspiration from Thompson's (2003) disconnected capitalism thesis to investigate how various forms of disconnections can lead to stress, thus giving a sociologically grounded investigation into occupational stress. According to this approach, whilst the workplace remains significant as a location for occupational stress, the world "beyond the factory gates" is also viewed as causally significant in determining occupational stress outcomes.

The study uses multiple embedded case studies and survey data to explore occupational stress outcomes in the Nigerian OGI. One of the key findings is that the regional political economy, in which oil companies differentially shape the development of Nigeria and the Niger Delta, is important to understanding occupational stress. More specifically, whilst the Nigerian Government and the agencies of the OGI cooperate in the redistribution of oil revenues in relation to capital and National interests, the terms and conditions of the workforce are less favourable when compared to OGI workers elsewhere and comparatively few resources are returned to the Niger Delta. This toxic combination results in various forms of social, geographical and economic disconnectedness, including, in extremis, devastating local pollution and the kidnapping and murder of OGI workers by Niger Delta indigenes.

The idea of disconnected capitalism is not novel, as Thompson's (2003) often cited paper argues: the tie-in between the interests of managers and shareholders can result in HR managers' failure in making credible commitments to workers. This study broadens the scope of the disconnected capitalism thesis by considering how occupational stress outcomes, in particular, are affected by a range of interacting labour markets, geographical and socioeconomic forms of disconnectedness within a broader political economy framework.

Nigerian OGI labour markets included clear distinctions between contract/permanent, expatriate/local, and male/female workers. Contract, female and local workers, in particular, had less favourable terms and conditions of employment and the resultant resentments between workers worsened workplace relations. Individual position in relation to this disconnected labour market was the strongest predictor of stress. At the geographical level, disconnection from home and communities had an impact on stress outcomes, particularly for those who were married and had dependents. Finally, at the socio-economic level,

insecurities within in the Niger Delta led to disconnections from host communities and a culture of dependency within Nigeria more broadly were also both sources of stress to offshore workers.

Overall, this study offers a ground-breaking attempt to develop a multi-level approach to the study of occupational stress that develops and extends Thompson's disconnected capitalism thesis. In this case, a triple-bind, between managerial, capital and state interests, created a series of local disconnections that both caused occupational stress and, perhaps more worryingly, apparently undermined the productivity of the industry as a whole. In these circumstances a raft of policy and regulation directed at tackling both the employment conditions of the OGI and Niger Delta environmental and socio-economic concerns is badly needed to tackle the problems of the industry as a whole.

Table of Contents

Intellectual Property Statement	ii
Dedication	iii
Acknowledgements	iv
Abstract	vi
List of tables	xiii
List of Figures	xiv
Abbreviations	xvi
1.0 Chapter One: Introduction	1
1.1 Background	1
1.2 Shortcomings of existing occupational stress res	
1.3 Structure of the thesis	
2.0 Chapter Two: Review of Literature on occupatio	nal Stress10
2.1 Introduction	10
2.2 Historical background to stress perceptions	12
2.3 Theorizing stress: Psychological Perspectives	14
2.3.1 Person Environment Fit Model	15
2.3.2 Transactional model of stress	17
2.3.3 Synopsis of the psychological approach to occupa	ational stress19
2.4 Oil Offshore Research into occupational stress	20
2.5 Theorizing stress: Sociological Perspectives	27
2.5.1 The stress process: Sociological Lens	28
2.6 The labour process theory	33
2.6.1 Braverman's Argument	34
2.6.2 Second Wave Theory	37
2.6.3 Connecting the broader social conditions to labor	ır process outcomes40
a) The Role of the State	41
b) Multinational Companies in developing cour	ntries 43
c) Labour markets	47
d) Work-life interface	51
e) The site of production	53

	2.7	Interconnections between broader social relations and experiences 55	of stress
	2.8	Theoretical reflections	57
	2.9	Conclusion	62
3	.0	Chapter Three: Methodology	64
	3.1	Introduction	64
	3.2	Self-confessional statement: a shift to critical realism	64
	3.3	Research Approach	67
	3.4	Research Design/Strategy	67
	3.5	Rationale and mixed method triangulation approach	68
	3.	3.5.1 Methods of interview design	71
	3.	3.5.2 Methods of survey design	78
	3.6	Methods of data analysis	84
	3.	3.6.1 Analytical methods	86
	3.7	Ethical Considerations	88
	3.8	Limitations	89
	3.9	Analysis of the Organizations' profile	90
4	.0 Cł	hapter Four: The Nigerian Background	95
	4.1	Introduction	95
	4.2	Nigerian Geographical Background	96
	4.	1.2.1 Regional zones	97
	4.3	Nigerian cultural setting	100
	a.	a. Patriarchal norms and values	100
	b.	Extended family and means dependency	101
	c.	e. Hofstede's (1984, 1991, 2001) national culture	102
	4.4	Nigerian Economic Setting	104
	4.5	Political history of Nigeria	108
	4.6	The Niger Delta	110
	4.	4.6.1 Niger Delta: Socio-political exclusion	111
	4.	4.6.2 Niger Delta: Economic exclusion	113
	4.	4.6.3 Social Actions by Niger Deltans	118
	4.	4.6.4 Implications for social actions by Niger Deltans	120

4.7 Conclusion	122
5.0 Chapter five: The Nigerian Oil Industry	124
5.1 Introduction	124
5.2 The Nigerian Oil and Gas Industry	125
5.3 Structure of the Nigerian Oil and Gas Industry	131
5.4 Operations of the industry	135
5.5 Industrial Relations in the Nigerian Oil Industry	137
5.5.1 Employment System	138
5.5.2 Health and Safety	148
5.5.3 Work life balance	151
5.6 External factors that impact of the OGIs and sources of stress	152
5.7 Conclusion	158
6.0 Chapter six: Sources of stress in the Niger Delta offshore industry - Inte	
6.1 Introduction	161
6.2 Labour Markets Disconnectedness	163
6.2.1 Indigenous vs. Expatriate Workers	164
6.2.2 Males vs. Females	168
6.2.3 Permanent vs. Contract Workers	170
6.3 Geographical Disconnectedness	175
6.4 Socioeconomic Disconnectedness	184
6.4.1 Insecurity in the Niger Delta	185
6.4.2 Means and Economic Dependencies	190
6.5 Coping	192
6.6 Conclusion	192
7.0 Chapter Seven: Sources of Stress in the Niger Delta: Survey Evidence	196
7.1 Introduction	196
7.2 Description of Sample	197
7.3 Labour Market Disconnectedness	201
7.3.1 Pay and Rewards	201
7.3.2 Training and Progression	206
7.3.3 Autonomy, Discretion and the labour process	212

7.3.4 Job security	219
7.3.5 Flexibility	220
7.3.6 Relationship with colleagues	222
7.3.7 Relationships with Management	224
7.3.8 Law and Representation	227
7.4 Geographical Disconnectedness	229
7.4.1 Home and Family2	229
7.4.2 Work Environment	232
7.4.3 Living condition	234
7.4.4 Relationship	235
7.4.5 Social Life	236
7.5 Socio-Economic Disconnectedness	237
7.5.1 Security over Transportation	237
7.5.2 Safety in the Region	239
7.6 Company differences2	240
7.7 Coping strategies as moderators2	243
7.8 Stress Outcomes	245
7.9 Conclusion	246
8.0 Chapter Eight: Summary and Conclusions	248
8.1 Introduction	248
8.2 Theoretical Contributions	249
8.3 Methodological Contributions2	251
8.4 Empirical contributions2	252
8.4.1 Labour market disconnectedness	253
8.4.2 Geographical disconnectedness	257
8.4.3 Socio-economic disconnectedness	258
8.5 Direction for future research	260
8.6 Recommendations2	260
8.7 Conclusion2	261
References	263
Appendix I: Managerial Interview Questions	299
Appendix II: Workers' interview questions	302

Appendix III: Survey Form305	5
Appendix IV: Survey Categorized as per forms of disconnectedness	3

List of tables

Table 3.1 - No. of respondents used in the case study	73
Table 3.2 - Population of the workers' Interview	75
Table 3.3 - Survey Sample and Percentage Response Rate	81
Table 3.4 - Survey order of rank	87
Table 3.5 - Brief summary of companies	92
Table 4.1 - Nigeria's Real GDP Growth Rates, 2004-2013	105
Table 4.2 - Relative poverty headcount from 1980 to 2010	106
Table 4.3 - Unemployment Rates by Zone (1999- 2011)	106
Table 4.4 - Population living in poverty in the Niger Delta	114
Table 5.1 - Some oil Companies operating in Nigeria	127
Table 5.3 - 10 year crude oil export by region (barrels)	130
Table 5.4 - Joint Venture Contracts and Product Sharing Contracts in the Niger Industry	
Table 5.5 - Upcoming oil projects in Nigeria	137
Table 5.6 - Employment Contracts in Selected Oil companies in Nigeria as at 200	
Table 5.7 - Employment Contracts in Selected Oil companies in Nigeria as at 201	10140
Table 5.8 - Anti-labour practices in the petroleum sub-sector	142
Table 5.9 - Estimated employment figures from 1999-2003	143
Table 5.10 - Annual Salaries of Permanent Oil Workers by Country	146
Table 5.11 - Diversity of staff by gender	148
Table 5.12 - Royal Dutch Shell plc Sustainability Report 2012	150
Table 5.13 - Cost of crises in the Niger Delta	
Table 7.1 - Survey Sample and Percentage Response Rate	197

List of Figures

Figure 2.1 - Person- Environment Fit Model	15
Figure 2.2 - Transactional model of stress	17
Figure 2.3 - Oil offshore platform	22
Figure 2.4 - The stress process	29
Figure 2.5 - Nature and interaction of stress factors amongst workers	60
Figure 3.2 - A realist perspective on data analysis	84
Figure 4.1 Nigeria's States and Regions (adapted from Sklar et al. 2006)	98
Figure 4.2 - Disconnections of Niger Deltans and their effects	.111
Figure 4.3 - Offshore victims in the Niger Delta from 2006 – 2009	.119
Figure 4.4 - Oil Production and Consumption in Nigeria: 1995-2011	.121
Figure 5.1 - Value Chain of the Oil and Gas Industry in Nigeria	.135
Figure 7.1 - Pay and Rewards as per contract vs. permanent and expatriate vs. local workers	
Figure 7.2 - Training and Progression as per contract vs. permanent and expatriate local workers	
Figure 7.3a - Autonomy, Discretion and the labour process as per contract vs. permanent and expatriate vs. local workers	.213
Figure 7.3b - Autonomy, Discretion and the labour process as per contract vs. permanent and expatriate vs. local workers	.214
Figure 7.4 - Job security as per contract vs. permanent and expatriate vs. local work	
Figure 7.5 - Flexibility as per contract vs. permanent and expatriate vs. local worker	:S
Figure 7.6 - Relationship with Colleagues as per contract vs. permanent and expatrivs. local workers	ate
Figure 7.7 - Relationships with Management as per contract vs. permanent and expatriate vs. local workers	.225
Figure 7.8 - Law and Representation as per contract vs. permanent and expatriate v local workers	
Figure 7.9 - Home and Family as per age, marital status, dependants and work patterns and work patterns are status, dependants and work patterns are status.	
Figure 7.10 - Work Environment as per marital status and region	.233
Figure 7.11 - Living Condition as per age, marital status, gender and nationality	.234
	.234
Figure 7.12 - Relationships as per dependants and marital status	.236
Figure 7.13 - Social Life as per age and dependants	.236

Figure 7.14 - Security over Transportation as per marital status, origin by region and	
gender	238
Figure 7.15 – Kidnapping and hostage taking in the oil industry as per de	pendants and
offshore tenure	240

Abbreviations

BBL Barrel

GDP Gross Domestic Product

LPT Labour process theory

MNC Multinational Company

NNPC Nigerian National Petroleum Corporation

OGI Oil and Gas Industry

OHTAS Ontario Health Technology Assessment Series

SWD Shift work disorder

1.0 Chapter One: Introduction

1.1 Background

This study examines the nature and causes of occupational stress amongst offshore workers in the Niger Delta region of Nigeria. In contrast to the psychologically-focused studies which have dominated enquiry in this area, this thesis adopts a sociological perspective, using labour process theory to develop a theoretical understanding of how political economy and macroeconomic, labour market, work-life boundary and workplace levels interconnect to cause stress. Building on Thompson's (2003) 'disconnected capitalism' thesis and blending quantitative and qualitative research, the study highlights the importance of labour market, geographical and socioeconomic disconnectedness for understanding the specific nature and causes of stress in the offshore oil industry in Nigeria. Thompson was interested in how disconnect between capital and labour resulted in negative outcomes for workers. But his study applies and even extends disconnected capitalism in investigating how the disconnect between capital and communities also has negative outcomes for workers.

Occupational stress appears to be an inescapable facet of today's world especially to offshore workers who live and work in an environment that is known to be challenging, dangerous and remote (Gann et al, 1990). A range of studies from the oil sector have shown that offshore workers have higher levels of stress than onshore workers, highlighting the importance of study of this particular group (Parkes, 1998). Yet, the majority of studies on occupational stress on oil industry workers and beyond have been guided by a positivist methodology which has restricted enquiry on the nature and causes of occupational stress to observable events within organizations, particularly job conditions such as work overload, lack of training, role ambiguity and lack of promotion. In contrast, sociologists have argued for analysis which situates the sources of stress beyond the specific workplace, to develop a broader understanding of the nature and causes of stress. Bliese and Jex, (1999) and Pearlin (1999) suggested the need for researchers to understand the contextual effects in the study of occupational stress i.e. examining how broader social conditions can determine a number of different stress outcomes because organizations are influenced by policies and procedures in the society. This study argues for the importance of such a sociologically informed perspective to understand the specific conditions of Niger Delta communities and oil companies in the Niger Delta region.

Theoretically, this study looks at occupational stress from four interconnected levels of analysis – political economy and macroeconomic (specifically, regulations by the state, firm governance, shareholder value and economic indicators of the state), labour markets (choices available to individual worker), work-life boundary (relationship between workers' work, home and personal life) and workplace (job conditions) levels. Empirically, this study will look at three forms of disconnectedness – labour markets, geographical and socioeconomic disconnectedness. The conception of a stratified political economy was used to tease out the connection and disconnections between agents in the economic sphere. This indicated that offshore workers in the Niger Delta felt disconnected at several levels – at the context level, the political and economic exclusions felt by the people of Niger Delta gave rise to conflict in the region hence, the insecurity felt by offshore workers. This factor made offshore workers feel disconnected from the community they lived and worked in, also, it triggered stress to offshore workers in three variant forms – job insecurity, fear and reduced bonuses. At the labour process level, the researcher started by looking at the objects each of the events was associated to. Specifically, the different types of workers were identified to be contract vs. permanent workers and expatriate vs. local workers. Inequalities, especially in terms of pay, rewards, training and progression amongst contract, permanent, expatriate and local workers made the contract and local workers feel disconnected form the workforce and from the management. Also, the fact that offshore workers work weeks or even months away from their homes make them feel disconnected from social networks/family and vice versa. Finally, due to the insecurity in the Niger Delta, offshore workers tend to relocate their family members to safer regions thus running two homes and causing financial strain. Again, the culture of dependency in Nigeria has given rise to offshore workers staying away from home to avoid financial demands form family thus exacerbating geographical disconnectedness. This scenario led to a re-conceptualization of the whole case using three themes – labour markets disconnectedness, geographical disconnectedness and socio-economic disconnectedness. Following the above approach, analysis of selected mechanisms and validation of explanatory power followed thus demonstrating that macro- micro mechanisms were examined.

In adopting a sociological study of occupational stress amongst offshore workers in the Niger Delta, the study's objective is to establish if offshore workers in the Niger Delta region of Nigeria experience occupational stress. The five central objectives of this study are as follows:

- 1. To explore the extent to which the political economy of work, labour markets, work-life interface and job conditions might spawn occupational stressors.
- 2. To determine various stressors experienced by offshore workers in the Niger Delta region of Nigeria.
- 3. To determine what moderators, if any, offshore workers use to shield form stress conditions.
- 4. To determine the extent to which offshore workers experience stress in the Niger Delta of Nigeria.
- 5. To determine the strategies adopted by offshore workers in the Niger Delta in moderating work stressors.

1.2 Shortcomings of existing occupational stress research and contribution of this study

In an attempt to answer these research questions, a number of knowledge gaps in the occupational stress research were identified which the current study aims to fill. Firstly, occupational stress research has been dominated by positivist approaches, particularly within the field of psychology, which seek to locate the nature and causes of stress within specific workplaces. Positivists argue that the world can be known only through direct observation of nature, therefore in view of occupational stress, as in the psychological study of stress, a lot of emphasis is placed on the immediate factors within the organization (workload, career development, role ambiguity, control over job etc.) in determining the causes of occupational stress. Also, this positivistic approach to occupational stress has tended to be dominated by research findings based solely on quantitative data. Studies such as Parkes, 1993; Chen et al., 2003; Sutherland and Cooper, 1996, Cooper et al., 2001 investigated occupational stress using quantitative indicators of stress and found a range of stress factors – work overload, role ambiguity, lack of decision latitude, lack of control over one's job, and poor employee relations. Its implication is that researchers limit the causes of stress on workplace based factors which are invariably observable factors ruling out stress factors that emanate outside the workplace (see Mazzola et al., 2011). Resultantly, this study utilizes both quantitative and qualitative methods in examining occupational stress with the aim of giving textual descriptions of how offshore workers experience stress thus offering a deeper insight into occupational stress.

Secondly, despite a recent shift from the psychological towards a more sociologically grounded study of occupational stress in determining the causes of occupational stress, no research has directly focused on offering an approach where the interconnections between the

socio-political and economic factors are analysed. This study offers a multi-levelled study of stress with the combination of critical realism and disconnected capitalism thesis. Specifically, this study takes the workers employed in offshore production and the Nigerian oil industry as its primary focus because of their crucial salience in the structure and development of the Nigerian economy and society. The Niger Delta becomes necessary for this investigation as it is where majority of Nigeria's crude oil is explored and produced. Oil production in the region has been accompanied by the degradation of their agricultural land, fishing waters and settlements which inadvertently have led to clashes in the Niger Delta communities. These contextual factors make it a very interesting case for empirical work in the study of occupational stress in the offshore industry as it will break new grounds in understanding occupational stress in the context of the Niger Delta region of Nigeria which represents the developing countries of the world. Also, it will also provide an international comparison with other similar studies.

Thirdly, there remains relatively little occupational stress research in the offshore environment (Burke and Richardsen, 2011). Considering the political and economic significance of the oil and gas sector to any country, stress research on the workers in the offshore production is sacrosanct. Also, there remains a very limited literature on occupational stress in Nigerian offshore oil industry; therefore, this study adds value to our knowledge of stress encountered by offshore workers in general and offshore workers in Nigeria.

Finally, whilst the issue of stress has generated a substantial research literature, most studies have focused on the sources of stress in organisations in the advanced Western economies within industrialised and urban setting (Dollard and Duraisingam, 2005). This raises strong concerns about the transferability of their conclusions across global settings because the political, economic and social institutions differ across countries. As a result, Kortum-Margot, (2001) has stressed the urgency of conducting systematic studies to examine the effects of psycho-social work factors in developing countries where work-related stress and other occupational illnesses remain under-reported and underestimated. Therefore, this study is a response to Kortum-Margot's (2001) call for occupational stress studies to be carried out in developing countries. In filling the gap of knowledge and understanding of occupational stress in developing countries, this study gives an account of the nature and causes of stress in Nigeria.

1.3 Structure of the thesis

This thesis is structured in eight chapters; a brief description of the contents of each chapter is **given below**:

Chapter One outlines the central research problem, discussing the significance of the present study along with the research questions.

Chapter Two is a literature review of the theoretical, philosophical and empirical literature on stress which demonstrates the current state of the art on how occupational stress is to be understood in the broader context. This chapter considers the contribution of a number of disciplines (specifically, psychology and sociology) to a growing body of knowledge on the subject of stress. Underpinned by a positivist world-view, psychological research into stress advocates direct observations of nature and hence, ignores intransitive knowledge i.e. realities beyond human perception identified by Bhaskar (1997). In practice, psychological research into occupational stress analyses tends to analyse measurable stress factors in the immediate work environment of individuals, such as work overload, role ambiguity, lack of promotion and low decision latitude, neglecting external factors that might cause stress. In theorizing occupational stress from the psychological standpoint, two dominant models of stress remains – those that focus on person-environment fit and those that emphasize the 'transactional' nature of stress.

This chapter moves on to theorize stress from the sociological standpoint because it offers the potential to look at a fuller set of factors that shape stress. This approach acknowledges that the study of stress should incorporate socio-cultural and economic factors. Whilst the sociological approach acknowledges that external factors might cause stress, it is difficult to find sociological studies of stress where interconnections between the socio-political and economic factors are explicitly analysed. In the effort to develop a sociological account of occupational stress, the thesis examines the sociology of the labour process and notions of disconnections from Thompson's (2003) disconnected capitalism thesis to offer four distinct levels within which stress might occurs – political economy and macroeconomic level, labour markets levels, work-life boundary level and the workplace level.

The political economy and macroeconomic level looks at factors that determine the distribution of economic and social rewards. Specifically, regulations by the state, firm governance, shareholder value and economic indicators of the state were analysed. The labour market level looks at the supply and demand sides of labour services regarding

workers' experience of stress. Various actors involved in the labour market processes were looked at- the state, in terms of regulations that impact on the workplace and workers; the firm, in terms of workers' recruitment and categorization into various employment contracts; unions, regarding their resistance of managerial control strategies and then, social stratification of workers and its impact on workers' experience of stress. The work-life boundary level looks at how workers' work lives impact on their family and personal (hobbies, social networks, personal achievement) lives and vice versa. The workplace level is the site of the labour process and looks at workers' job conditions as in the psychological study of occupational stress.

This chapter also looked at how different forms of disconnections (labour market, geographical and socio-economic disconnectedness) can generate stressors for offshore workers. Although, this is done theoretically, it offers an opportunity for these implied concepts to be tested empirically to provide evidence of occupational stress. This chapter, therefore, contributes a fuller understanding of occupational stress as it embraces both the psychological literature and the less abundant but significant sociological approach. Finally, this chapter revises literature on occupational stress to highlight commonly identified stress factors in the offshore environment. It is important to note that this section was based on research carried out in stable and more developed countries (Norway, China, and United Kingdom) unlike Nigeria which is the focus of this research.

Chapter Three gives details of the methodology used in the research and a brief background to the samples is given. This chapter moves on to demonstrate its shift from pragmatism to critical realism. The ontological underpinning of pragmatism is that people's lived experiences are crucial for understanding the world which might have limited this study of occupational stress to factors directly experienced by workers but critical realism brings a different outlook to occupational stress research. Specifically, critical realist concepts such as depth, stratification, intransitive knowledge, causal power offer analysis where stress factors both directly experienced (workload, role ambiguity, lack of decision latitude and lack of control over work) and indirectly experienced (employment regulations, labour markets, communities) by workers are considered. As a result of the research philosophy, this study applies the logic of abduction and retroduction to uncover and describe the mechanisms that produce occupational stress. This study used multiple embedded case studies and survey data and therefore, justifies the decisions to use both qualitative and quantitative methods, and primary and secondary data while their limitations are discussed.

The three-staged research design is presented. The first stage comprises of 8 managerial interviews, aimed at defining and giving deeper understanding of the context of the case study (Nigerian oil and gas industry) through managers' standpoints. The second stage comprises of 14 workers' interviews, aimed at understanding the nature and causes of occupational stress from workers' perspective. The third stage is a descriptive survey, which tests the causes of occupational stress identified in initial research stages. The survey was sent to 200 offshore workers in the Niger Delta of Nigeria; 171 responded, thus achieving a response rate of 85%. This high response rate was achieved with the help of gate keepers who persisted in sending reminders to respondents. Finally, ethical considerations as well as limitations of the study were given.

Chapter Four looks at the specific context of work and employment in Nigeria and offshore oil working in the Niger Delta. This chapter highlights the background of Nigeria by geopolitical zones in terms of their educational attainments, occupations and resources. It moved on examine the cultural setting of Nigeria. This is necessary as it informs the specific examination of stress factors that emerged in the empirical chapters. A closer look is taken on Niger Delta. Specifically, a 'double disconnect' felt by the people of the Niger Delta – sociopolitical and economic exclusions is examined in this chapter. They feel excluded from the political life within the bigger society and they feel economically excluded in a number of ways – underdevelopment in the region, poverty and no basic amenities despite the huge revenue that comes from their region. These disconnections have felt by the people of Niger Delta exacerbated how stress is experienced in the region was thoroughly investigated.

Chapter Five presents findings of the case study in investigating the sources of stress and the interaction between these stress factors. The chapter sets out findings from the interviews as well as the secondary data. The aim is to look at macro structures that might lead to occupational stress. This chapter finds that workers' categorization into various groups – contract vs. permanent, expatriate vs. local and male vs. female was a major concern to them. Conditions of work especially pay, training, right to join unions, and job security differ between these groups of workers with local, contract and female workers getting less favourable work conditions.

Also, insecurity in the Niger Delta in the form of kidnapping and killing of offshore workers and family was a major source of worry for both managers and workers. Respondents also acknowledged a lack of national and organizational policies on occupational stress; this is

worrisome and calls for concern by policy makers to make urgent policies that protect the health, safety and well-being of offshore workers in the Niger Delta.

Chapter Six sets out findings gathered from workers' interview regarding occupational stress. The chapter uses Thompson's 'disconnected capitalism' thesis to organise the analysis around three themes: labour market, geographical and socioeconomic disconnectedness. The labour market disconnectedness confirms findings identified in chapter 5. Specifically, it identified that certain types of workers are important to the study of stress sin the Nigerian oil and gas industry – contract vs. permanent workers, local vs. expatriate workers and female vs. male workers. A sense of injustice was felt by contract, local and female workers as they were treated less well in terms of pay, rewards, trainings, decision latitude, control over job, job security and rights to organize. This inequality led to workers' dissatisfaction, disunity amongst workers and feelings of alienation form management.

Due to the isolated geographical location of offshore work, workers felt disconnected from family, friends, community and hobbies/personal lives. These disconnections had stress impacts especially on workers who were married and had dependants in the form of estranged relationships between partners or couples, poor parent – child relationship, sexual difficulties, inability to achieve personal goals, inability to enjoy hobbies or social life. At the socioeconomic level, kidnapping and killings of offshore workers and their family in the Niger Delta led to workers' disconnection form host communities, conflict induced displacement which leaves economic and emotional impacts as workers are further disconnected form families. Nigeria, being a collectivist country, makes it possible for the poor to be catered for by their direct or extended family members who are more privileged. This economic dependency made workers prefer to stay offshore than come onshore to be burdened by the needs of family members. This, although solves their financial problems, it exacerbates disconnections form family and thus, stress.

Chapter Seven complements and triangulates the findings from the interview, presenting results from a quantitative survey of offshore oil workers in the Niger Delta. Therefore, it assesses how factors in the labour markets, the geographical location of offshore work and socio-economic factors impact on offshore workers' experience of stress based on the survey. At the labour market level, the findings confirms that contract and local workers are treated less well in terms of pay and rewards, training and progression, autonomy, discretion and labour process, job security, flexibility, relationship with colleagues, relationship with managers and then, law and representation. At the geographical level, a higher majority of

workers who were married or had children were worried about their home and family compared to workers who were single and had no children. At the socioeconomic level, male workers and married workers were more concerned about security around transportation while workers with children worried more of the safety in the region.

Chapter Eight presents the theoretical, methodological and empirical contributions of the study. It further addresses gives directions for future research and recommendations. This chapter concludes that occupational stress is evident amongst offshore workers in Nigeria, thus, national and organizational policies on occupational stress are needed to tackle the issue of occupational stress in Nigeria.

2.0 Chapter Two: Review of Literature on occupational Stress

2.1 Introduction

Occupation related stress is referred as 'worldwide epidemic' by the World Health Organization because it is drastically increasing worldwide (Kayastha et al., 2012). For example, it has been estimated that nearly 10 per cent of the United Kingdom's GNP is lost each year due to job-generated stress in the form of sickness absence, high labour turnover, lost productive value, increased recruitment and selection costs and medical expenses (Arnold et al 2005). Also, Jones et al., (2003) estimated that up to 5 million British employees felt "very" stressed by their work; on average, each person affected took 28.5 days off work per year making stress the second most prevalent type of work-related ill-health after musculo-skeletal disorders. Cascio, (1995) argues that changing information technology and organizations that are now smaller with fewer people doing and feeling less secure put more pressure on the workers. According to Cooper (1998), the industrial revolution of short term contracts and newer technology which has burdened workers with accelerated pace of work with demands for greater immediacy of response have brought about attention in occupational stress research.

Previous studies showed that prolonged exposures to occupational stress have deleterious effects on both physical and psychological health (Sciacchitano et al, 2001). Therefore, recognizing and understanding the multiple adverse effects of job stress is very important in protecting the health of employees and improving their working and living conditions (Sun et al, 2007). In understanding these effects, there have been two dominant approaches in looking at occupational stress – psychological and sociological approaches. The psychological approach is primarily concerned with immediate individual and personal response to stimuli while the sociological approach places the stress response in the broader context of the forces of social, cultural, economic and political processes. Since the inception of research in the field of occupational stress, it has had an organizational focus i.e. it has focused on how individuals perceive and react to the work environment (Beehr, and Newman, 1978; Jex, 1998; Katz, and Kahn, 1978; Lazarus, and Folkman, 1984; McGrath, 1976). Though it has been valuable, Bliese and Jex (1999) call for the need to understand the contextual effects in the study of occupational stress. In order to understand what things like "career development", "work overload and underload", mean in the context of the oil offshore environment, one will have to examine how the social condition can determine a number of different stress outcomes. It is important to note that individuals in organizations

are influenced by policies and procedures in the society, (Bliese and Jex, 1999) which contribute to their experience of occupational stress. Therefore, these sociological factors must be explored in the study of occupational stress for a fuller understanding of the topic. Hence, the current study will adopt a sociological stance.

In contributing to the knowledge of occupational stress, this chapter will be structured as follows:

Section 2.2: This provides a historical overview to the concept of stress in general and occupational stress in particular. This section looks at occupational stress from the viewpoints biological sciences. Its criticisms way forward were discussed.

Section 2.3: This section will theorize stress from psychological perspectives. In doing this, two dominant models will be looked at – person-environment (PE) fit model and transactional model.

Section 2.4: This section will theorize stress from the sociological stance. The aim of this section is to demonstrate through empirical evidence ways in which economic and social structures and processes affect set(s) of job conditions and eventually cause stress.

Section 2.5: This section will engage with debates on the nature of work, particularly the labour process theory as it looks at how work is generally ordered. Contributions given by Thompson's disconnected capitalism and the philosophy of critical realism will be discussed here. In doing this, occupational stress will then be looked at from four levels – individual, work-life interface, labour markets and macroeconomic levels.

Section 2.6: Considering that the oil and gas sector of any country is crucial for their economic performance and progress, this section will review the occupational stress literature in the oil offshore industry. This serves as a guide as to how and what the research has been based on and then gives an opportunity for the current work to make contributions to the stress research in the oil offshore industry.

Finally, conclusions will be drawn based on the categories of literature reviewed in this chapter. However, the overall argument is that the sociological perspective offers a very important and necessary approach to understanding occupational stress. With the help of critical realism, the labour process theory makes a huge contribution to understanding the nature of work and therefore crucial for understanding sources of occupational stress.

2.2 Historical background to stress perceptions

Research on stress emanated from a wide range of disciplines including biology, psychology and sociology respectively (Peterson, 1994). From the biological stance, research on stress can be traced back to the work of Hans Selye (1956) who is generally regarded as the 'father of stress' because he was the first researcher to use the term stress to describe the physiological responses in reacting to adverse conditions. Selye (1956) viewed stress as a physiological response to the demands made on the organism. In his study, Selye (1956) developed the concept of General Adaptation Syndrome (GAS). The concept is in three stages – the first is the alarm reaction which refers to the first physiological response to a stressful event; the second is the resistance stage, here, adaptation takes place. This means that physiological reactions change and the body's resistance are higher than normal. Finally, after a long term exposure to the stressful event, the body's capacity to adjust deteriorates and exhaustion sets in. At this stage, Selye argues that the individual is at a high risk of developing illness or may even die (Peterson, 1994).

Selye (1956) argues that given enough intensity, different stimuli are going to produce the same response pattern of stress. This bio physiological contribution of Selye was opposed by a number of researchers (Mason, 1975; Monet and Lazarus, 1977; Cassell, 1970) because firstly, there is a possibility for some stress events to bypass the stress response and still mount up over time into serious biological or psychological dysfunctioning; therefore, this GAS concept does not capture all levels of stress (Aneshensel et al., 2013). Secondly, Selye treated stress as a generalized and nonspecific physiological response i.e. all stressors lead to the same physiological response. This criticism is centred on Selye's lack of explanation as to why people reacted differently to stressful situations and why certain diseases develop in some individuals and different or even no disease in others. In fact, Mason (1975) argues that the concept of stress should be more behavioural than physiological. This led to the psychological study of stress.

Stress has always been in existence but known as a non-technical term to refer to hardship. After the two world wars, interest in the topic of stress rose especially in the late 1940's (Lazarus, 1999). According to Lazarus (1999), the terminology of stress developed from the 'shell shock' of World War I, to the 'combat fatigue' of World War II, 'post-traumatic stress disorder' of the Vietnam war and after some studies have been carried out to know how stress works. These findings fuelled the growth of the "stress industry" especially when psychologists wanted to know how to train people to cope with stress from the war and its

negative effects. Knowledge about it was spread by the media and reached the public. After the World War II, it became obvious that many conditions of life such as being married, writing an exam or even being sick could produce effects similar to those of the combat. This led to a growing interest in stress as a cause of distress and dysfunction in human beings even from the workplace (Lazarus, 1993).

Narrowing the topic of stress down to the workplace, it is important to note that in the past decades, effects of economic globalization and rapid technological changes have resulted in increased workload and a faster pace in the workplace (Dollard, 2003). Modern trends such as organizational downsizing, competition for funding and high demand jobs have led to rising studies in occupational stress (Dollard, 2003). Psychologists put forward models (details will come later) to conceptualize occupational stress for example, the person environment (PE) fit model which explores the importance of the misfit between the person and his environment. Basically, this model views occupational stress from two stances: the fit between the demands of the environment and the person's abilities and the fit between the person's needs and the supplies of his environment. The greater the misfit, the greater the stress (Vagg et al., 2002).

Similar to the physiological concept of stress, the psychological perspective faced some opposition. Firstly, it is apparent that the PE fit model is limited in practice. Being static in nature, it only identifies the different sources of stress through the misfit of person and environment without offering solutions to the misfit (Cooper et al, 2001). Secondly, psychology as a discipline is guided by a positivist model of science and reasoning as it believes that the only way to find out truth is through direct observation of nature. This resonates in the psychological approach to occupational stress as it only identifies with the stress factors in the workplace ignoring those factors outside the workplace that could impact on the experience of stress in the workplace. For example, this model, according to Aneshensel et al. (2013) does not say much about the role of context and prior experience in defining stress; stress cannot be defined independently of the social environment in which it occurs because its meaning is defined by the social contexts surrounding it such as work, family, community etc. These criticisms have led to sociologist giving their views on stress.

Sociologists conceptualize stress as a social process i.e. interaction of an individual with the cultural, social and political components (Peterson, 1994). According to Pearlin and Bierman (2013), stress occurs when it is difficult to adjust to circumstances and experiences, as a result, impose harmful effects on cognitions, behaviour, emotions and physiological well-being. Some scholars have looked at stress from a sociological stance and deduced two broad forms of stress: (a) socio-environmental demands that tax or exceed the individual's ordinary capacity to adapt and (b) the absence of the means to attain sought-after ends (Pearlin, 1983; Lazarus, 1966; Aneshensel, 1992; Menaghan, 1983). Stressors, mediators/moderators and outcomes have remained the major conceptual underpinnings in the sociological study of stress. Although, the sociological study of stress is still a work in progress, it covers a wider and broader aspect of people's lives as personal problems can be and often are reflections of structures and contexts in which people lead their lives.

In summary, physiological approaches to stress deals with immediate stimulus-response relationships with stress while psychological approach added a broader dimension covering the short term individual and personal response to stimuli. Then, the sociological approaches have moved closest to placing stress in the wider and more meaningful context of the forces of social, cultural, economic and political processes which makes stress a long term process where a large number of forces act towards producing a physiological response.

2.3 Theorizing stress: Psychological Perspectives

Stress research in psychology has mainly been laboratory based in order to give psychological explanations to physiological processes (Peterson, 1994). For example, since psychology has long been doubtful about individual differences in the study of stress, psychologists like Lazarus (1966, 1968) and Lazarus et al (1970) began to study stress as naturalistic as possible in the laboratory. In their study, Lazarus et al (1970) had subjects watch staged stressful films while they periodically checked the subjects' self-report of distress and recorded their autonomic nervous system activity in the form of their heart rate and skin conductance. These experiments established the fact that subjects reacted differently to stressful events as was not previously covered in the Selye's work (Lazarus, 1993). This account shows that psychology utilizes the positivistic method of reasoning; it limits the sources of occupational stress to the nature that can only be seen in the workplace i.e. the factors intrinsic to the workplace such as work role, work overload and under load, career development etc., ignoring factors extrinsic to the workplace such as family, culture, society

etc. The psychological study of stress adopts numerous models in understanding the concept of stress. However, due to the huge task of reflecting all the models in this study and in view of keeping this work more focused, only two models that are dominant in the psychological study of stress will be discussed- person- environment (PE) fit model and transactional models of stress.

2.3.1 Person Environment Fit Model

The PE fit model, developed by French (1973) and his colleagues states that stress occurs when an individual does not have the abilities, skills, or resources needed to satisfy the demands of her or his work. Basically, this model views occupational stress from two stances: (1) the fit between the demands of the environment and the person's abilities, (2) the fit between the person's needs and the supplies of his environment. This is to say that the poorer the fit between the person and the environment, the more severe the stress and the greater the likelihood that employees will experience negative consequences, such as reduced productivity and health-related problems (Vagg et al., 2002).

Objective Person Subjective Person Is there a Is there a fit? If No fit? If No **STRESS STRESS** If there is misfit in both directions, stress occurs **Objective Subjective** environment environment

Figure 2.1 - Person- Environment Fit Model

Author: 2014

This model is founded on the fact that stress does not occur from the person or the environment separately rather by their fit or comparison (Edwards et al 1998). This first fit, as nicely put by Edwards et al (1998), demands include quantitative and qualitative job requirements, group and organizational standards and job role whereas abilities include skills, training, time, capacity and energy the person will have to assemble to meet demands. The second type of PE fit is the mismatch between the person's needs and the supplies in the environment that relate to the person's needs. In explaining needs and supplies, scholars like Harrison (1985) and French and Kahn (1962) have described needs as generic encapsulating the wish to achieve desired ends as a result of values gotten from socialization and learning whereas supplies indicates the internal and external resources and rewards that may fulfil the person's needs (Harrison, 1978). As suggested by Edwards et al (1998), the PE fit defines occupational stress as a subjective appraisal indicating that supplies are not sufficient to meet the person's needs which may be as a result of unmet demands.

Harrison (1978)distinguished between the objective/subjective person and objective/subjective environment. He gave the following meanings to these constructs objective person: individual's needs, competencies and abilities; objective environment: environmental supplies and demands independent of the individual's perceptions of them; subjective person: individual's perceptions of his or her needs, competencies and abilities; subjective environment: individual's perceptions of the environmental supplies and demands. Within these meanings therefore, the theory argues that the objective person and environment affect the subjective person and environment. A misfit between the subjective environment and subjective person will produce stress; once demands exceed abilities and needs exceed supplies, the stress level increases.

In all, this approach to defining occupational stress centers on the statistical interaction between the work environment and the person. This interaction is only assumed and therefore limited to inconclusive findings especially when the interaction is different from what was predicted. Relying on this model of stress therefore might yield premature conclusions. The question to be asked is, where does this model leave us with respect to how individuals manage the misfit? This then assumes a shortfall for the model and a departure from misfit to an approach that identifies stress factors and ways of dealing with stressful situations – transactional model of stress.

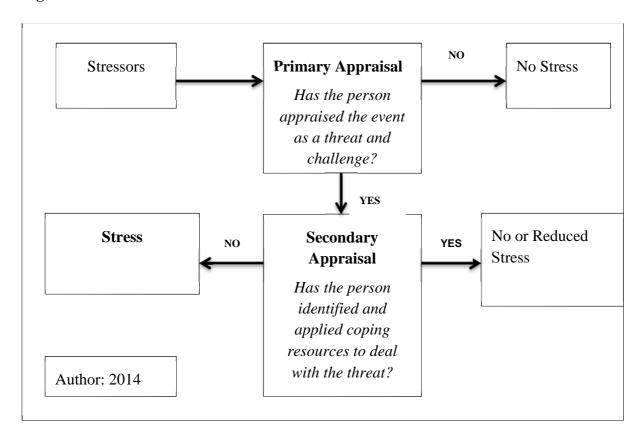
2.3.2 Transactional model of stress

'Stress is not a property of the person, or of the environment, but arises when there is conjunction between a particular kind of environment and a particular kind of person that leads to a threat appraisal'

(Lazarus, 1991c, p. 3)

The transactional model of stress traces back to the late 1960s and was originally developed by Richard Lazarus. Lazarus et al (1952) depict stress as a transaction process between the individual and the environment. They viewed stress as arising from environmental demands which exceeds a person's resources and capability when the outcomes are important for the person. This transactional definition of stress covers a wider and more comprehensive scope of stress because it explores the essential nature of stressor-response-outcome relationships encapsulating an understanding of the dynamic stress process itself not merely the statistical relationship between variables like in the PE fit model. The drive here is that stress is a dynamic cognitive state or better put, an imbalance that gives rise to a requirement for the resolution of that imbalance (Dewe et al., 1993).

Figure 2.2 - Transactional model of stress



According to Lazarus (1966; 1991), this model of stress is in two stages – the person's realization that something is at stake which makes him or her give meaning of threat or challenge to the encounter (primary appraisal). Once this encounter is appraised as harmful or a threat, the secondary appraisal begins with the identification and availability of coping resources to deal with the threat. This led Cooper et al (2001) to conclude that stress is not a factor that resides in the individual or the environment but is embedded in an ongoing transaction between the two. They went further to say that constructs such as the causes of stress and consequences of stress are inseparable in this model. Within the categories in this section, the transactional model of stress points to three core themes – a dynamic cognitive state, an imbalance and a resolution of that imbalance.

According to Conway et al (2008), in recognizing the importance of how a worker's abilities match environmental demands, cognitive appraisal and coping are central to the transactional model of stress that distinguishes it from the PE-Fit model. Many of these identified components are in tandem with studies done by other researchers, for example, McGrath (1976) explained stress as a four-stage, closed-loop process beginning with (1) situations in the environment (2), which are then perceived by the individual (3), to which the individual selects the response (4), resulting in consequences for both the individual and the situation, which closes the loop. Each of the four stages is connected by the linking process of cognitive appraisal: decision, performance, and outcome. Also, Sutherland and Cooper (1996) explored the transactional model of stress in identifying the sources of stress faced by offshore workers in the UK offshore oil and gas exploration and production industries. They came up with ways offshore workers could overcome the impact of stressors they faced, hence Cooper et al (2001) argued that stress in organizational settings is better to be viewed from the perspective of a transactional approach.

Having based the above discussion around general occupational stress i.e. not specific on any occupation, it is essential to move closer to the focus of this study – offshore oil industry as it will give insight into suitable research methods for carrying out the current study. Studies on offshore stress have focused mainly on psychological literature as they focus on the relationship between workers and the workplace environment in determining the causes of stress. Therefore, the following section will look at occupational stress research conducted in the offshore oil industry to identify common factors of occupational stress in such industry.

2.3.3 Synopsis of the psychological approach to occupational stress

Psychological studies of stress believe that the only way to find out truth is through direct observation of nature. This is usually done by identifying stress factors in the immediate environment of individuals ignoring those factors outside the immediate environment that could impact on the experience of stress.

Though many large-scale studies have adopted the P-E approach as a guiding framework (e.g. Caplan, Cobb, French, Harrison and Pinneau, 1980; French *et al.*, 1982) because it provides a useful conceptual framework for understanding how person and environment variables combine to produce stress, it has its shortcomings. First in this regard, is the account of Edwards and Cooper (1990) who argued that this model is plagued with serious theoretical and methodological problems. These problems include how confusing it is to identify the different forms of functional fit and even poor measurement of fit components which limit the possibility of the research and the conclusiveness of its findings. In order words, this model does not specify the content of person and environment measurement, therefore must be obtained from other theories, for example, the content of needs may be obtained from Maslow's theory of needs. This makes its findings ambiguous and potentially misleading (Edwards et al, 1998). Also, Cooper et al, (2001) argues that this model is static in nature as it only identifies the different sources of stress through the misfit of person and environment without offering solutions to the misfit.

On the other hand, the transactional model of stress attempted to resolve the misfit by extending its theory to the three dimensional relationship between the person, environment and outcome thereby giving a more meaningful explanation to occupational stress (Edwards et al., 1998; Coyne and Gottlieb, 1996). Looking closely, the transactional approach does not give a full account of stress with regards to the social and political environment within which organizations are deeply embedded. Powell (2007) argues that organizational practices and structures reflect the rules and beliefs in the wider environment hence, the call by Bliese and Jex, (1999); Pearlin (1999) to understand the contextual effects in the study of occupational stress i.e. examining how broader social conditions can determine a number of different stress outcomes. This is pertinent because individuals in organizations are influenced by policies and procedures in the society.

Tausig (2013) argues that the effects of work on wellbeing cannot be effectively understood by examining individual experiences in particular jobs (psychological approach) rather, from a sociological perspective where work related wellbeing is influenced by socio-economic structures such as the way the economy is structured, the way jobs and employees are matched, workers' position in the social stratification system and intersection of social institutions. Some studies have shown that these structures have a direct link to work related stress (Fenwick and Tausig, 2007; Tausig and Fenwick, 2011). A sociological approach is therefore suggested in understanding occupational stress for a fuller understanding. According to Bliese and Jex (1999), this sociological perspective reflects the reality that occupational stress, like most organizational phenomena, is impacted by different variables. The insights gained from a sociological approach will add to existing research and will help to gain a greater understanding of occupational stress, and assist in organizational attempts to reduce workers' stressors.

2.4 Oil Offshore Research into occupational stress

Research on oil platforms has a relatively short history; the early studies showed up in the mid-1980s (Hellesoy, 1985; Sutherland and Cooper, 1986). As a result, there is little research on the work experiences of workers in the oil and gas sector. Even when such research geared up, it however slowed considerably after the year 2000 because oil companies did not support such studies thus making research in the industry difficult (Burke and Richardsen, 2011). Also, workers working away from researchers' reach exacerbate the difficulty of investigating oil workers' working experience.

The oil and gas sector of any country is crucial for their economic performance and progress. Caplan et al., (1975) described the offshore oil environment as having constant noise and activity where the workers live and work in a restricted area for a long time without breaks; environment in the offshore oil and gas industry contains many environmental and organizational factors that are potential sources of stress. Consistently, Sutherland and Cooper (1989), and Parkes, (1998) regarded the offshore oil environment as a stressful occupation and the workers faced with both the offshore and onshore stress. However, numerous stressors have been identified as harmful to the wellbeing and safety of the workers. These stressors include the risks of travel by helicopter and ship, an adverse physical environment, rough seas, exposure to noise and accident hazards, arduous physical activities, a monotonous life within a limited space, isolation from the family and community, and the special demands and constraints inherent in offshore work (Aiken & McCance, 1982; Cooper & Sutherland 1987; Gann, Corpe, & Wilson, 1990; Norman et al.,

1988; Parkes, 1992, 1994; Rundmo, 1992a,b; Sutherland & Cooper, 1991; Ulleberg & Rundmo, 1997). Not only do these factors affect the offshore workers, they also have negative effects on their family members (Clark, McCann, Morrice, & Taylor, 1985; Morrice, Taylor, Clark, & McCann, 1985; Taylor, Morrice, Clark, & McCann, 1985). Again, Hellesoy (1985) found that offshore work lacks variety which resulted in lapses of attention which could be dangerous especially in cases of emergency.

Offshore workers live and work in an environment that has attracted the attention of some research workers as having a particular potential for stress (Gann et al, 1990). The study of occupational stress in the offshore industry dates back to the 80s. In their (Cooper and Marshall, 1976; Cooper and Sutherland, 1987 and Sutherland and Cooper, 1996) findings, career prospects and rewards, physical climate and work, organizational structure and climate, under-stimulation-low demand, work overload, air transportation, physical wellbeing, relationship at work and at home, the uncertainty element of the work environment, living in the environment and site management all formed part of the sources of stress they found in the offshore environment. More recently and sociologically based, a study by Amorim et al. (2013) on the offshore experience of nurses revealed that the work of offshore nurses differs from that of nurses working in healthcare institutions as the core competencies of the nurse are more broadly applied in the offshore context; for instance, the confinement of the workers, demands the presence of a health professional that can assist individuals with specific requirements, such as anxiety, nausea due to the rocking of the platform, diarrhea, and muscle pain caused by work efforts, among others.

Offshore environment

Oil companies operate in one of the toughest environments on earth; from the heat of the Middle Eastern deserts to the extreme cold of the Arctic region to the hostile waters of the North Sea (Rig Life, 2010). Work on offshore installations imposes environmental and work-related constraints and demands that do not apply in onshore work settings (Parkes, 2010). In fact, Elliot (1985) described the offshore environment as dangerous, arduous and socially isolating. Rigs and platforms (see fig 2.5) sometimes mobile or permanent are often used in oil offshore locations, anchored to the seabed. These rigs or platforms can be located on land, swamps or water (Rig Life, 2010). Because of the rough offshore environment, workers' fitness for work in the offshore sector is ensured through medical examination (Donnelly, 2009; Parkes, 1998). Although offshore work is stressful, more and more workers desire to

work there because of the high level of pay with starting salaries on par with management onshore (Burke and Richardson, 2011).

Figure 2.3 - Oil offshore platform



There is a wide array of job roles in any oil offshore platform, going from engineers, managers, supervisors, cooks, maintenance workers, welders, crane operators etc. However, the highly skilled offshore workers are often employed in 3 aspects – exploration (for those who search for the oil), drilling (for those who access the oil reserve) and production (for those that bring the oil to the surface). These roles necessitate oil companies to have large production platforms to accommodate workers in these roles in order to achieve efficiency (Burke and Richardsen, 2011). With a working environment such as the description above, the following section will go on to discuss various stressors associated with workers in the offshore oil environment.

Parkes (2010) distinguished the sources of stress in the offshore oil environment into two main types - operational risks (e.g. risk of explosion, fire, structural failure, shut-down, reduced productivity) resulting from human error and impaired performance, and risk to the physical and psychological well-being of individual offshore workers (e.g. injury, illness, sleep disturbance, anxiety). Also, particular features of the offshore work environment and how they impact on the experience of stress by offshore workers will be described below. *Shift work*

Offshore work is typical for its shift work pattern. The remote locations of offshore work makes it necessary for workers to extend their work patterns; working 2 weeks offshore and a leave period onshore depending on the organization. During the offshore weeks, the standard shift duration is 12-hrs, alternating with 12-hrs off-shift (Parkes, 2010). The study by

International Labour Organization, (1993) suggests that a universal 12 hours shift duration

operated in offshore platforms worldwide. The large scale survey (N=9945) by Lauridsen, (2006) showed that 33% of offshore workers on the Norwegian platform had both day/night shift, 43% were day workers, while less than 3% worked night shifts only. This means that many of the offshore workers are over worked. Empirical evidence has shown that shift work has an adverse impact on physical health, well-being and job performance (Ross, 2009). Studies by Ross, 2009 and Bjorkum et al., (2004), although not conclusive, showed evidence that night shifts and long shifts have a significant relationship with increased accidents and reduced safety in the offshore environment.

Also, shift work has been linked to health and psychological problems, and problems of social adaptation due to long absences form home (Ross, 2009). More so, a study by Pallesen et al., (2004) suggests that shift work is linked to sleep disturbances (lower sleep duration and quality) and problems of adapting from night shifts when workers return onshore. In the study carried out by Waage et al., (2009) using 103 shift workers in the North Sea oil platform, it was found that 23% of workers suffered from a severe sleep disorder they termed 'shift work disorder' (SWD). SWD was characterized by sleepiness in the night and insomnia in the day which gave them poor sleep quality and health complaints. In addition, studies by Edwards & Rothbard (2000); Greenhaus & Beutell, (1985) and Kelloway et al. (1999) all posit that shiftwork, as common with offshore workers is most likely to cause work-family conflict due to the fact that involvement in one domain takes away time needed to meet demand in the other domain or stressors in one role (e.g., spousal conflict, work role ambiguity). This shift work inherently involves constrictions and recurrent changes for workers and their families that are different from typical office roles; this makes working offshore a lifestyle (Lewis et al., 1988).

Indeed, shift work can be unsettling to marital relationships especially when children are present (Presser 2000; White and Keith 1990). Offshore workers usually come home exhausted having come straight off shift and having travelled numerous hours (Clark and Taylor, 1988; Collinson, 1998). Pressure is usually placed on the family unit especially the children due to the absence of a family member (Mauthner et al., 2000). Parental shiftwork may have direct associations with the quality of parent-child relationships because parents working nonstandard hours spend less time with children in developmentally important activities. For example, parents working non-standard hours were less likely to read to their children, to participate in their child's education-related activities, and to help with homework, compared to those working standard hours (Wight et al., 2008). In addition, working in isolated conditions over long periods has negative effects on the well-being of

workers such as depressive mood, reduced work performance, physical and mental complaints, interpersonal conflict, lapses of attention and emotion (Sandal et al., 2006). Further evidence of increased anxiety, dissatisfaction with work pattern, distorted sleep pattern was reported by Parkes, (1993).

Risks

In terms of risks encountered in an offshore location, offshore workers have the most hazardous and dangerous jobs in the world. For instance, among 200 jobs considered, Forbes Magazine rated offshore workers as having the worst jobs in America in 2010. They used 5 conditions in their determinations: pay, stress, work environment, hiring outlook and physical demand (cf. Burke and Richardsen, 2011). Some of the risks are similar to a typical industrial workplace e.g. machinery accidents from malfunctions and human error, slips and falls, deaths or injuries (skull fracture, broken bones, burns, amputation)caused by falling objects. Some risks in the offshore locations are unique to the offshore work e.g. explosions and fires, exposure to hazardous chemicals, handling of oil and gas. Not only do oil workers face these risks, the rescue team who clean up after major disasters or accidents face the risks too (Burke and Richardsen, 2011). In Morken et al.'s (2004) study, they found that musculoskeletal disorders were significant causes of sick leave and disability among Norwegian offshore workers; this was attributed to physical stressors and the fast pace of working in the offshore industry. Also, Valentic et al. (2005) investigated incidents of illness and injuries using 518 offshore workers over a one year period. They found that the rate of injuries is high with hand and finger injuries the commonest, followed by injuries in the eyes, head, neck etc. because of the limited space offshore, the victims of injuries are usually evacuated.

Lifestyle

Working in these remote locations impacts largely on workers' lifestyle because they normally work a few weeks away from home, in areas far away from the nearest civilization and require long travel times, working long shifts on a site that operates 24/7 and in tough climate conditions (Burke and Richardsen, 2011). Due to this lifestyle that is difficult to adjust to, the oil companies have an above-average labour turnover (Offshore oil Industry Lifestyle, 2010). The offshore lifestyle has increased the level of alcohol consumption of offshore workers. Aiken and McCance (1982) studied alcohol consumption among 213 male workers in the North Sea oil industry. The findings reported heavy drinking with 30 % consuming alcohol above suggested safe limits. Because alcohol was/is not allowed on oil platforms, alcohol consumption was measured during the week before departing offshore.

Also, as social relationships are a core element of quality of life and have been ranked second next health as the most important area of life, reduced social contact and the feeling of disconnectedness have been associated with a reduced quality of life, poor health, maladaptive behaviour and depressed mood. Apparently, offshore workers are vulnerable to a decline in social networks and support due to the nature of their work that compels them to work weeks away from home and community [Ontario Health Technology Assessment Series (OHTAS), 2008].

Family relations

According to Sutherland and Cooper (2000), it is not possible to obtain a complete stress profile by looking only at sources of stress in the workplace as there is a need to also examine the home-work interface. Managing the interface between one's job and various roles and responsibilities off the job is considered as another potential source of stress (Cooper et. al., 2001). One would think that having stayed away from home for a long time, the troubles of offshore workers are over but that in itself impacts on their experience of stress. In fact, family relations have been found to suffer due to shift work, for example, recurrent partings and reunions of offshore workers also was found to place strain on intimate relationships regardless of marital status as individuals strive to match their lives apart with their lives together. Studies have shown that the offshore lifestyle causes strain on marriages and is made worse when working inflexible hours as it brings distinct stressors (Fenwick and Tausig, 2001; see Taylor and Simmonds, 2009). This situation indicates that offshore working has now become a lifestyle which requires family members to cope with regular absences and emotional demands of repeated partings and reunions. However, for majority of the respondents in this study, their reunion with family followed a characteristic pattern of initial happiness followed by a period of irritation reflecting difficulties for both partners to switch to their different lives. The study by Sutherland and Flin (1989) revealed that this offshore lifestyle does not just put pressure on personal relationships, rather, it increases divorce rates.

Specifically on the effects the offshore lifestyle has on families, the wives of the male offshore worker are faced with the 'intermittent husband syndrome' as coined by Clark et al., (1985) to refer to the recurrent absence of the male married workers. In their analysis, Clark et al., (1985) found that newly married, younger wives with pre-school children and no previous experiences of husband were most susceptible to anxiety, sexual difficulties and depression. Also, the continued absence of their husbands makes them independent as they make decisions and take up home responsibilities alone. This independence of wives has been

reported to have negative impacts such as conflict over authority and distrust. Until these conflicts are managed, tension in the family is likely to continue (Clark and Taylor, 1988). In confirming this, Lewis et al., (1988) contend that the workers' absence requires the partners to carry out most of the responsibilities of managing the home and the children, maintaining relationships with extended families and often making independent decision which inadvertently causes conflict in homes. A situation where the offshore partner made all the decisions regarding the family in the absence of the offshore worker was strongly represented in this study and caused strain when the offshore workers attempted regaining their decision making authority.

Other stressors

Many studies support the fact that offshore work is significantly related to stress. For instance, studies by Sutherland and Cooper (1996a, 1996b) revealed offshore stress to be in the form of physical or psychological ill health, forced early retirement, alcohol problems, premature deaths, job dissatisfaction, absenteeism, marital disharmony, divorce, poor job performance. Also, Cooper and Sutherland (1987) found that offshore workers were less dissatisfied with their jobs than onshore workers. Sutherland and Cooper, (1996) argue that stress in the offshore oil and gas exploration and production industries can have far-reaching detriment in both financial and humanistic terms such as loss of life, ill-health and disability and poor performance and productivity. Sutherland and Cooper, (1996) found that growing job insecurity, inequity on rewards and compensations, in the offshore industry is a potent source of stress associated with several serious health problems including ulcers, colitis, alopecia and muscular and emotional complaints which adversely affect the individual and the organization. Further to the effect are disruptive performance, lowered tolerance to other stressors, poor morale and psychological distress. The study by Wong et al., (2002) using 561 male Chinese offshore oil workers ranked the 4 top stress factors as - physical environment of workplace, safety, interface between job and social life/family and career achievements.

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Within the offshore stressors above, it is seen that working offshore is physically demanding and dirty; it is associated with high risk, accident and health hazards (Leonnig and Kaufmann, 2010). Therefore, health and safety is taken seriously for example, a high quality is placed on safety and expertise on companies to bring disasters to the barest minimum. Specifically, oil companies as demanded by Government regulations secure the integrity of installations and the overall safety of the offshore environment, protecting workers from fire or explosions and then provide quick response from emergency services in case of fire or explosion (Rig Life, 2010). All offshore workers undergo training before resuming work in an oil rig (Rig Life, 2010). Specifically, workers in the UK and Norwegian sectors of the North Sea must take an induction course that deals with helicopter escape, personal survival, use of life rafts, first aid post evacuation, firefighting and use of a breathing apparatus. They get safety sessions before each flight and wear immersion suits and life jackets during the flight (Burke and Richardson, 2011).

Although research in the offshore oil industry is still evolving, the above analysis revealed that working offshore is indeed stressful that pose challenges to the overall quality of life of workers. Also, the studies discussed above engaged with the psychological insights of occupational stress and therefore limited their levels of analysis to the workplace and home. It can then be argued that engaging with insights from critical realism and a multi levelled approach will be necessary as it will examine how social structures within which the offshore environments are embedded contribute to the experience of stress.

2.5 Theorizing stress: Sociological Perspectives

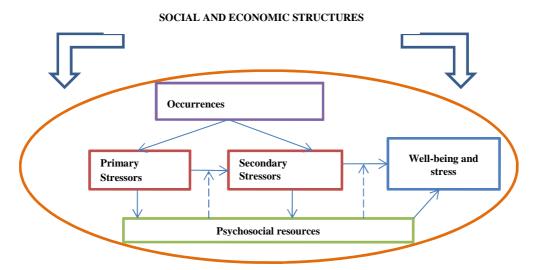
In this section, workplace stress will be looked at from a sociological viewpoint. This stance recognizes that psychological studies of occupational stress are important but constricted in its assumptions of the causes of workplace stress. With this in mind, this section will first present the early works of Peterson (1994) who assert that stress from the sociological viewpoint is a process that involves the interaction of an individual with social-structural, political and cultural forces thereby yielding individual capability and resources to shield from stresses of life. The argument of this section is that the sociological study of stress offers a very important and necessary approach to understanding occupational stress. As Powell (2007) argues, organizations are deeply embedded in social and political environments therefore, organizational practices and structures reflect the rules and beliefs in the wider environment, hence, Friedland and Alford's (1991) call to bring society back into organizational analysis. This however, sets the stage for the sociological study of stress.

The early work on stress relied hugely on disturbing life events but this approach was less effective in offering a more complete process of stress due to the fact that other sources of stress such as economic strains, marital and family conflicts, job pressures, frustrated aspirations, and discriminatory experiences are also chronic in nature and arise from more enduring and difficult life circumstances making scholars explore ways of broadening their scope while investigating stress (Pearlin and Bierman, 2013). As a result, the sociological approach conceptualizes stress as a social process i.e. interaction of an individual with the cultural, social and political components. This interaction yields an individual's capability and resources to shield from the stresses of life (Peterson, 1994). The following section will move on to explore the stress process in order to gain insight into what stress really is from the sociological point of view.

2.5.1 The stress process: Sociological Lens

A comprehensive sociological standpoint of the stress process emerged from the 1980's, precisely, Pearlin et al.'s (1981) study on the effects of involuntary job loss on depression where he found that job loss was only indirectly related to an elevation of depression and led to stronger adversities such as financial and marital strain which he called secondary stressors. These secondary stressors accounted for high levels of depression amongst respondents while their impact on depression was found to significantly depend on participants' internal (mastery and self-esteem) and external (social support) resources to prevent negative effects of stressors. The positive presence of these resources has the capacity to mute the impact of stressors on depression and when the resources were diminished by exposure to stressors, depression was likely to increase. Thus, these resources have the capacity to mediate and moderate the effects of stressors on depression (see Pearlin and Bierman, 2013). This analysis brought about the core components of the social process of stress – stressors, mediators/moderators, and outcomes. These components have continued to be the major conceptual underpinnings of the stress process regardless of its growth and amplification. These core components of the social process of stress are embedded in peoples' location in social and economic standings with each component presuming a set of stressful conditions interacting with one another.

Figure 2.4 - The stress process



Adapted from Pearlin and Bierman (2013)

This model lays great emphasis on the stress being a process that encapsulates the stressors, mediators/moderators, and outcomes relationship. These components will be examined closely in the following sections.

a) **Stressors**

Stressors are occurrences that are hard to adapt to and therefore imposes harmful effects on emotions, cognitions, behaviour, physiological functioning and well-being. There is a distinction between stressors and stress. Whilst stressors are external situations that threaten people, stress is the internal malfunctioning that result from these situations (Pearlin and Bierman (2013). Relating this definition to the workplace, Cox et al (2000) referred to a stressor as a predictor of stress which may either be physical or psychosocial. Psychosocial meaning those aspects of work design and the organization and management of work, and their social and environmental contexts, which have the potential for causing psychological, social or physical harm while the physical stressors include factors that are biological, biomechanical, chemical and radiological. According to the sociological study of stress, we cannot treat stress as stemming from unconnected happenings, instead from connections between broad structures and institutional forces, group of primary and secondary stressors and widely shared values that affect people's wellbeing (Pearlin, 1989).

Wheaton (1994) distinguished the micro, meso and macro levels of the contexts in which stress can occur. These levels indicate that stress occurs at every major context in which people are engaged, ranging from their informal social networks to the neighborhoods in which they reside, the social and economic institutions in which they have roles and then the

broader conditions in the society in which they reside. This framework offers an avenue for incessant investigation into new and unexamined situations that might cause stress. This suggests that stressors are not merely a property of workplace relations but they are also an outcome of the operations of other forces that reside within and beyond the workplace (this will be discussed in a later section). Importantly, the search for socially rooted stressors is challenging because stressors are dynamic rather than static. For example, in the world of work, Glavin et al (2011) identifies stress from innovations in communication technologies. He called it role blurring because roles that used to be segregated in time and space has become comingled.

Furthermore on stressors, Pearlin et al. (1997) came up with stress proliferation which he described as the secondary stressors that emerge from primary stressor which people are initially exposed to. In other words, stress proliferation goes beyond the impact of a single source of stress rather multiple sources of stress that may serially or simultaneously impinge on people's lives. Conversely, the last decade had witnessed the study of stressors gear towards the anticipated or apprehended stress rather that the operant stressor (Starcke et al. 2008). This kind of stress does not exist in reality but has a potential to become so (Pearlin and Bierman, 2013). This is consistent with Agnew, (2002) whose findings suggested that as a stressful event befalls significant others, individuals may increasingly anticipate that their own lives will be impacted by the same threatening events. This is also evident in economic circumstances, e.g. the study by Wilson and Mossakowski (2009) showed that African-Americans and Latinos had greater fear of job loss than their white counterparts irrespective of their education or work experience because a significant number of them had lost their jobs in the past. A study by Ross and Jang (2000) suggested that residents of disordered neighborhoods who have thus lived safely have the tendency of showing concern about their future personal safety.

Conclusively, the study by Pearlin et al., (1981) revealed that the presence of internal and external resources i.e. social support, mastery and self-esteem had the potential of silencing the impact of stressors on depression but when these resources are diminished by exposure to stressors, depression was likely to increase. In short, these resources mediated and moderated the effects of stressors on depression. Applying the transactional model of stress, when these stressors are appraised by an individual, he or she would then find means of reducing or eliminating the stress.

b) Mediators and Moderators

Mediators or moderators are usually the personal or social resources that can be utilized to prevent the negative impact of stressful events. These resources have centered on coping, social support and personal control (Pearlin and Bierman, 2013). This section will look at coping and social structures as moderators. Coping involves an analysis and evaluation process used to determine methods of enabling oneself to produce affirmative results rather than negative results or adverse effects caused by stressors (Lee and Lee 2001). Lazarus and Folkman (1984) proposed two types of coping: problem-focused coping (taking constructive and direct approaches to solving problems, such as defining the problem); and emotionfocused coping (taking steps to mitigate the emotional response to problems, such as avoidance, seeking emotional support). In their study, Taylor and Stanton (2007) linked avoidance strategies to increased distress whilst approach-oriented coping to positive psychological outcomes in general. In the past, coping has been seen mainly as reactive – a strategy to be used once stress has been experienced – coping is increasingly being seen as something exhibited before stress occurs (Greenglass, 2002). This has resulted in the conceptualisation of a further three coping functions. First, anticipatory coping involves those coping efforts intended to deal with a critical event that is certain (or fairly certain) to occur in the near future (Schwarzer and Renner, 2000). Second, preventative coping is concerned with preparation for uncertain events in the more distant future. The intention is to develop resources to lessen the consequences of a stressful event (Peacock et al., 1993). Third, proactive coping consists of efforts to develop general resources, thereby facilitating the achievement of personal goals and working towards personal growth (Greenglass, 2002). Greenglass et al. (2001) found that proactive coping was a useful strategy in dealing with work-related burnout, and that those individuals employing proactive coping strategies were more likely to experience a higher sense of professional efficacy in their jobs. If the mediating or moderating approach employed by the individual does not reduce or eliminate the stressful event, it definitely leads to outcomes which are many at times stressful.

Other moderators of stressors are occupational community and occupational identity. Salaman (1974) defined occupational community as existing when people who work together have some sort of common life and are to some extent, separate from the rest of the society. When this happen, these individuals build their lives on their work, remain friends within and outside of work and base their leisure interests and activities around work. This makes members of the community seek the presence of co-workers when not actually working. This

participation in community contributes to occupational identity. Christansen (1999) linked occupational identity to well-being while Korczynki (2003) argues that a sense of community can be an informal support system for workers. In the study by Sandiford and Seymour (2007), revealed how workers relied on one another for both moral and more practical support when dealing with unpleasant encounters with customers which is a source of work satisfaction, involvement and commitment. All these demonstrate potential of stress moderation. According to the stress process, if moderators are not effective enough to shield an individual against stressors, then stress sets in.

c) Outcomes

Outcomes in the stress process are critical in calibrating the effects of stressors and the extent to which the moderators and mediators help to protect people from these effects. Outcomes standardize the detrimental effect of stressors on individuals and the most typical outcome utilized in the study of the stress process is distress in the form of anger, anxiety and depression (Pearlin and Bierman (2013). Although these indicators of distress have proven to be a reliable measurement for the socially rooted stressors that people encounter in their wide variety of social, economic and experiential conditions, there is an argument that people manifest the distress from stress in different ways and therefore, a single outcome indicator (distress) may not be sufficient (Aneshensel et al., 1991). But since stress research is concerned with highlighting the wellbeing consequences of social arrangements and not equating the mental health effects of stress with a specific disorder that is prevalent in a particular social group, the indicators of distress may suffice (Aneshensel, 2005). This single outcome approach had been dominant in sociological studies except for some studies that included anger and alcohol misuse (Horwitz et al., 2001; Schieman and Meersman, 2004; Williams, 2003).

Bearing the stress process in mind, we now need to consider theoretical resources for understanding how workplace organization can be more or less stressful and to make connections between workplace stress and their contextual conditions that may exacerbate or moderate stress outcomes. In this study, labour process conditions make a point of departure for identifying work stressors as they focus on workplace issues such as control, consent, resistance and accommodation in examining work and employment relations. Thompson and Smith (2009) argue that "material changes in an increasingly globalised capitalism, with more workers in the world, higher employment participation rates of women, transnational

shifts in manufacturing, global expansion of services and temporal and spatial stretching of work with advanced information communication technologies" make it imperative to understand labour processes. Therefore, the next section sets off with discussion around labour process as a generator of work stressors.

2.6 The labour process theory

As a result of the above analysis, although the sociological study of stress gives us an opportunity to look at the outside world in examining occupational stress, we still have to engage with debates on the nature of work, particularly the labour process theory (LPT) as it looks at how work is generally ordered. It is important to indicate that the Marx's capitalist mode of production is essential to the labour process theory. In the capitalist society, workers are assembled in one work location as wage labourers, separated from their own means of production and therefore necessitated to totally depend on capital in order to survive (primitive accumulation). These workers do not sell their labour to the employer rather they sell their labour power i.e. the ability to work for a given period of time and then it is up to the capitalist to get the most labour out of this period of time as possible in order to maximize profit. This makes time and division of labour important to the capitalist. In addition, the capitalist is determined to increase the amount of surplus value produced by workers (the new value created by workers in excess of their own labour cost which is appropriated by capital as profit when the products are sold). This means more control by the capitalist over the labour process thereby controlling the labour process thus depriving workers of control over their own jobs (Marx, 1867).

Kelly (1985) argues that in looking at the institutional conditions that influence actions of firms, it is necessary to consider the role of competition between capitals i.e. the purchase of labour, extraction of surplus value in the labour process and realization of surplus value in product markets. According to Marx (1867), capitalist production goes beyond the production of commodities; it is a production of surplus-value. This is a situation the workers produce, not for themselves but for the capital, thus, making the workers the direct means of creating surplus-value. Marx explains how capital achieves absolute and relative surplus value. On the one hand, capital produces absolute surplus-value by prolonging the working day beyond the point at which the workers would have given a corresponding value to his labour power. On the other hand, capital achieves relative surplus value by increasing the productivity and intensity of work through mechanization and wage reduction thereby yielding a bigger output

per working day. It can be deduced that the workers work under the control of the capitalists to whom the labour and products belong. Marglin (1974) argues that in the capitalist production, hierarchy is inescapable because the actual producers i.e. workers have lost control of production. In the factory setting, a worker's tasks become specialized and minute that he does not have products to sell and therefore makes use of the capitalist as intermediary to integrate his labour with the labour of others and transform the whole into a marketable product. This situation deprives workers of the chance to specialise in the complete task of production and the opportunity to directly sell his product for profit. Marglin contends that workers' deprivation of control of product and process is primarily for reasons of remaining essential to the production process and accumulation on the part of capitalists. Situations like these can generate stressors for the workers.

The labour process theory makes it natural to compare the positions of workers and employers as it relates stress and then, draw a theoretical context within which occupational stress is researched. Scholars have made diverse contributions to the labour process debate providing various standpoints of the world of work; these will be discussed in more detail in the next sections which is concerned with the conceptual framework that underpins the labour process analysis as it is the foundation for investigating and understanding the relations of production in the workplace. In short, as noted by Thompson and Smith, (2010), the labour process theory has strengthened workplace studies that seek to reach beneath formal patterns and discover hidden realms of industrial relations and workplace conflict, therefore, this labour process debate will follow.

2.6.1 Braverman's Argument

To understand today's condition of work, it is crucial to understand what is distinctive about work in the capitalist society and the way labour process has evolved over the history of capitalism. Thompson (1983) identified the three phases of the Labour Process Debate, with the first being Braverman's 1974 proposition on deskilling which faced huge challenges by theorists by late 1970s and then the second wave theory of labour process in the 1980s.

The kind of control capitalists used for extracting relative surplus value was the same kind of control Braverman argued for. In his analysis, Braverman (1974) claimed that control was the vital conception of all management systems. Here, the employers control the skills of workers and makes the overall nature of work less enjoyable to workers by determining what workers are paid and increasing the amount of work to be done. This control is the most important

reason the management function as a separate set of authority, otherwise, it would be another category of skilled workers (Smith, 2008). Braverman (1974) argues that the absolute problem of the capitalist labour process is the translation of labour power into actual labour thus alienating the labour process from the worker. Braverman (1974) drew on Marxist ideology on the capitalist mode of production and used it to shift attention away from regulation, crisis and collapse of capitalism to smaller units of conflict within the workplace i.e. the contest between the owners of the means of production and the workers (Smith, 2008). The importance of capitalists extracting relative surplus value generates conditions of conflicts that can indicate stress to workers.

The second argument by Braverman was the issue of job fragmentation where the employers take full control of the knowledge and design of the production process. Here, the labour process is broken down into its simplest elements, the employers determine the most efficient way in which work will be done and then provide directions that workers will follow obediently. Braverman's argument was that this approach of work will be a way of deskilling workers, with workers performing increased workload and disjointed tasks without understanding the values of the production process. The implication is that workers lose control over the pace of their work by being forced by management to work at a given speed that can be controlled by management. This again gives the management control over the amount of value workers produce over a given time whilst the workers understand the labour process less and less by just following the directions of management rather than developing expertise over years of training.

Lastly, Braverman explored class consciousness based on Marxist ideology of proletarianization which is a downward mobility of workers where people transfer from being either an employer, unemployed or self-employed, to being employed as a worker by an employer. Also, there is a division between unskilled and skilled workers. The skilled workers such as scientists and engineers who design machines and build factories are more valued because they make companies more efficient. Conversely, the unskilled workers who are usually in larger numbers are the ones who are deskilled, undermined and used as cheap labour. Class struggles become eminent as unskilled jobs are easier to be dismissed than the skilled jobs. The implication is that there will be a division of wage levels, thus economic struggles across classes (Kitay, 1997). This portrays inequality in the workplace and suggests that the dynamic of this imbalanced social relationship both limit, condition and drive the

structuring work (Smith, 2008). These manifestations of inequality impact on workers experiences of stressors.

Although, Braverman's ideology was extremely influential, it was contested by critics. Firstly, in terms of deskilling, Friedman contests Braverman's single trend toward deskilling, arguing for relative autonomy on the part of managers. This is a notion of empowerment where managers could leave some discretion in the hands of workers to take responsibility for their actions and initiate improvements in the way they work, all for the benefit of the organization. This way, workers are not deskilled; rather, management is still in control of the labour process thus reflecting a wider choice for management to adopt in accumulating wealth (Friedman 1977a, 1977b, 1990; Noon et al., 2013). Secondly, Braverman's assumption that management had a single shared objective of labour control ignores the plurality of interests within management thus underestimating the diversity and complexity of management objectives (Batstone et al. 1987; Buchanan, 1986, Buchanan and Boddy, 1983, Child, 1985; Noon et al., 2013). Again, Burawoy (1979) argues that Braverman's deskilling thesis understates the degree of workers' consents to their subordination. Beechey (1982) argues that Braverman's argument is gender-blind as he isolated the family domain and labour process from an analysis of the capitalist mode of production thus not acknowledging women's distinct role as domestic labourers.

Following the above discussion, this study argues that Braverman's argument is useful in the study of occupational stress in the offshore oil industry through insights drawn from the conflicts in the workplace, particularly those emanating from relationships between managers and workers. Nevertheless, the experiences of workers are not only characterised by happenings in the workplace, rather, it is an expression of various external factors that influence the workplace vis-a-vis political, economic, and social factors. Therefore, Braverman's arguments of the labour process is not sufficient in examining stress in the offshore oil industry from a social perspective because it is essential to engage the wider context while drawing a fuller account of a phenomenon. The following section will look at discussions around the next phase of labour process debate that emanated from criticisms of Braverman.

2.6.2 Second Wave Theory

Developments of the labour process theory from a Marxist viewpoint and new range of research from the late 70s to the end of 80s followed in the second wave of analysis which had a strong base in the UK. The well-known studies in the second wave analysis were Friedman, (1977); Edwards, (1979); Burawoy, (1979); Littler, (1982) and their primary focus was the issue of managerial control strategies. For Friedman, Braverman limited control to direct control by management over workers neglecting the issue of class struggle i.e. the fact that workers' resistance and managerial counter-pressure are forces that might cause changes to the capitalist mode of production. These changing forms of control emanated from conflict between management and workers; it was repeatedly emphasized that Braverman over looked the Marxist belief that withdrawn labour naturally resists management (Kitay, 1997).

Edwards (1979) elaborated on management's control through technological innovations and machinery where machines have taken over peoples' roles and have made them redundant thereby de-skilling workers. Because there is need to consider various forces that shape people's experience, Thompson (1983) contested Edward's viewpoint on the grounds that he (Edwards) relied on a linear model of labour control driven by technological transformation thus ignoring a contestation of social forces. Knights (1990) made a breakthrough beyond Edwards' focus on control by technology; he points to Edwards's failure to explore the make-up of workers' agency and subjectivity in their daily work. Littler's (1982) work made huge contribution to the second wave theory. Although Littler retained Marxist philosophy, he also based his work on Weberian concept of bureaucracy and legitimation. He asserted that a new approach to labour process was needed, an approach that operated at three levels – job design, structure of control and employment relationships. Littler's use of Weberian theory led to an analysis of subjectivity in the workplace.

Another major contributor of the second wave LPT was Burawoy (1979). In his argument, he said that despite the conflictual foundations Edwards and Friedman based LPT on, there was still a level of cooperation between Management and workers much of the time, he rather proposed the issue of consent where the activities of the organization is ordered in a way that workers perceive themselves as having choices. "It is participation in choosing that generates consent" (Burawoy, 1979). It was from here Burawoy developed his analysis of "games" where workers attention is shifted away from expropriation of surplus value by management, to activities in the workplace designed in a manner more favourable to workers thereby beating the management in matters such as incentives. This chance to gain small successes

fronts the essential disadvantage of workers in the capitalist style of production (Kitay, 1997). It is imperative to consider the immediate balance of co-operation and conflict. In terms of the fundamental nature of the employment relationship, Edwards (2003) argues that the key point about indeterminacy of labour (conversion of labour power into profitable work) and strategies of labour control is that managers and workers are locked in a relationship that is antagonistic and contradictory. The relationship is antagonistic because managerial control strategies are about the setting out of workers' labour power in ways that allow the generation of surplus value without giving workers the chance to determine how their labour power deployed to meet the objective. Also, the relationship is contradictory because managements have to pursue the objectives of control and releasing creativity, both of which are inherent in the relationship with workers and which call for different approaches (Edwards, 2003). Edwards (1986) used the term 'structured antagonism' to explain such a relationship because it has elements of co-operation and potential for conflict. Employer-employee conflicts occur as well as other divergences of interests. Within this context, people at work come into conflict not only with their superiors or subordinates but also with peers, customers and clients. Bearing the above in mind, it is not unusual to think that co-operation is pertinent for tasks in the workplace to be carried out. The absence of co-operation therefore has implications for both employer and employee and therefore might impact on experiences of work stressors.

Undoubtedly, these new forms of control might give a broader view of how occupational stress is experienced because it goes beyond the direct influence from management as prescribed by Braverman towards a more incorporating analysis of management-worker relationships at work. Particularly, it will mirror struggles over divergent interests between workers and management but its constraint is that it does not offer an avenue where the study of occupational stress can engage with wider social settings in identifying the causes of stress to workers thus not sufficient for a sociological study of occupational stress advocated by this study. This phase of the labour process is useful to the study of occupational stress but only in a limited way. There is a tendency of identifying how workers' attitudes are constituted within relations of production but one will only develop an organization-based frame of analysis of occupational stress thus ignoring external connections that could be made. Therefore, the second wave labour process theory will not give a broad sociological explanation of how occupational stress is experienced. Although the second wave theorists (Friedman, Edwards, and Burawoy) made important contributions towards addressing the gap

left by Braverman, their contributions pay little attention to the sociological understanding of labour process i.e. engaging social forces that influence labour process. Nevertheless, such contributions did not leave Braverman's work redundant; in fact, Thompson (1989) reiterated that for the labour process theory to retain its worth and strength, both the early theorists and second wave theorists have to identify with the core elements of the LPT.

The core elements of the second wave labour process cover issues like labour as a commodity, its indeterminacy and then the conversion of labour power to actual labour allowing for capital accumulation (see Littler, 1990: Thompson, 1989, 1990). These points were inspired either directly or indirectly by insights taken from Marxist political economy. No matter one's generation in the labour process debate, the following core components will be identified with:

- i. The role of Labour in generating surplus makes the relationship between capital and labour an important part of the labour process analysis.
- ii. The competition amongst capitalists has put in them a constant appetite for accumulation that compels them to constantly change the forces of production to their favour. This places constraint on workers' empowerment and workers' ability to combine conception and execution in their jobs.
- iii. Because market mechanism (i.e. the process where capitalist purchase workers' labour power for capital) cannot regulate the labour process, there is a necessity for control by management to be utilized in other to reduce indeterminacy gap.
- iv. The conflict of interests between capital and labour is manifested through the dynamics of exploitation and control. Then capitalist, in order to constantly change the work process, must seek some level of creativity and cooperation from labour which might result to workers' shift from resistance to accommodation, compliance and consent.

Although there are different waves of development in the labour process theory, this study is attuned to the core labour process theory; this is not to say that the approach is not without limitations. The labour process theory is useful because it provides understanding of the generators of stressors but does little to explain how these stressors are either catalysed or moderated by broader social condition. Spencer (2000) contested the core labour process theory pointing to its ambiguities concerning levels of analysis and hierarchies of concepts. Although his opinions are valuable, Spencer (2000) failed to demonstrate any convincing

alternative propositions (Thompson and Vincent, 2010). Again, Edwards (1990) contested the core labour process theory on the basis of providing a slim construction of the scope and purposes of the labour process theory as there is a clear distinction between the class struggle at work and in the wider society. On this note, Elger's (2001) standpoint of the core labour process theory was that it was underspecified as to how work and the workplace interact with the wider social relations including the state, inter-corporate relations, labour markets and households. He (Elger) particularly argued that insufficient attention has been paid to refining the core labour process theory. As argued by Thompson and Vincent, (2010), although the labour process theory has been applied to an increasing range of social phenomena, it has been challenged on the basis of interconnections with events, structures and the concepts to explain them. This implies that if theorists omit 'external' factors from swaying the labour process, they will end up in an incomplete analysis. The message to draw from these criticisms is that "beyond the immediate core, the labour process does not occur within a vacuum and other levels of causal phenomenon are important both to maintaining capitalism and explaining local outcomes" (2010:51). This does not mean that the labour process is independent and surrounded by external factors that influence it, rather, external relations are embedded in the various aspects of the core labour process theory with different degrees of influence. The question is how can we identify and make meaningful explanations to the underlying forces within specific labour processes? Therefore, the next section goes beyond the local conditions in specific labour processes. It engages with broader social conditions that impact on labour process (particularly, macro-societal factors that consider the influence of the labour market, employment and economic prospects) and then provides an understanding of how some of these social conditions can moderate stress outcomes at the workplace.

2.6.3 Connecting the broader social conditions to labour process outcomes

It is imperative to look at broader issues beyond the workplace that might form part of stressors experienced by workers. In making this connection, there can be as many factors as possible but I order to keep this work manageable, it has been streamlined to five factors. These factors include: the state (regulations and economic indicators), multinational companies in developing countries (their HRM transfer of practices and casualization), labour market (internal and external), work home boundaries and the actual job condition in the site of production. The following sections will discuss the five factors as they relate to moderators and stressors.

a) The Role of the State

In this section, this thesis is particularly interested in (1) state regulations as regards their influence on other factors to cause stress and (2) how economic indicators of the state can create stressors for workers. Kalleberg (2009) notes that the government has control over working conditions and employment practices through labour laws that regulate the relationship between employers and workers. Fleetwood (2008) mentioned some of the activities of the state as legislating, regulating, and influencing the ideological climate in which the labour market activity occurs, this means that the state participates in some activities that shape the ways in which employers think and act in the labour market. Salamon (2000) notes that the government plays the role of setting out legal frameworks that promote fairness and equity. For example, the Equality Act 2010 makes it illegal to prevent workers from having discussions to establish if there are disparities in pay. The equal terms include basic pay, hours of work, annual leave entitlements, performance related benefits, access to pension schemes, overtime rates and non-monetary terms (ACAS). Gaining from the idea of moderators as discussed earlier, state regulations can be seen as moderators given the fact that when these regulations are adhered to, it promotes equality and fairness in the workplace and therefore might prevent stressors from grievances in the workplace. Again, Kalleberg (2009) argues that government regulations that set minimum acceptable standards in the labour market have eroded hence, the growth of precarious employment. Guthrie et al. (2010) finds that precarious employment gives rise to increased worker vulnerability due to globalisation and new forms of employment contracts leading to perceptions of job insecurity, all of which are major stressors in the workplace.

Not only does the state make employment relations policies, the problem of stress in the workplace requires concrete responses from the state. Such policies or laws require the employers to provide safe working environments and ensure protection of their workers from predictable risks. The Working Times Regulation 1998 limits the length of the working week, regulates rest breaks and makes paid holidays a legal entitlement. The Regulation helps to address some of the main causes of stress, such as long working hours and insufficient rest or holiday (Blaug, et al., 2007). This suggests that such legislations can serve as moderators to workers because if adhered to, they have the potential to prevent stress at work, if otherwise, can aggravate chances of stress at work. Whilst legislations represent stress moderators, the UK Health and Safety Executive (HSE) has produced management standards to help employers evaluate, and take specific actions to control, the risks of work-related stress. HSE

also has the enforcement powers necessary to ensure that employers comply with their obligations under health and safety legislation. Therefore, if employers do not comply with their responsibilities, on the one hand, employers face criminal prosecution, imprisonment or unlimited fines. On the other hand, workers can claim for personal injury, constructive dismissal or discrimination on grounds of disability (Blaug, et al., 2007).

In terms of the economic indicators of the state, the economic phases of growth and decline impact on labour markets. Kalleberg (2009) argues that organizations cope with poor economic climate through downsizing and expansion of temporary and contingent works which is increasingly replacing high-paying and mid-level jobs thereby causing economic and psychological stress to workers (Appelbaum et al., 2003; Bernhardt et al., 2001; Luo, 2010). Downsizing increases job insecurity and job demand and reducing decision latitude for the remaining workers (Kivimaki et al., (2001). Downsizing impacts on workers' families by causing financial and social strain on them. Hanisch (1999) argued that in many countries, the level of unemployment has escalated in recent years and Nigeria is not an exception. A number of studies show that there is a direct relationship between indicators of the state of economy (generally unemployment rates mainly when on the increase) and indicators of stress related poor health in the form of hospital admissions, rate of psychiatric hospital admissions, cardiovascular illness, mortality as it increases the risk of financially related events (see Tausig, 2013). Unemployment occurs due to structural and involuntary reasons i.e. the phases of growth and decline in the economy. These phases affect both the downsized and remaining workers as is evident in the study by Kivimaki et al., (2001) where downsizing led to the restructuring of remaining jobs in a way that led to increased job insecurity and job demands which inadvertently led to reduced decision latitude and poor health to workers. Unemployment threatens the employment identity of an individual and causes financial strain. A typical study by Kessler et al., (1987) on effects of unemployment on health revealed that unemployment has a relationship with increased use of drugs, more drinking, higher rates of depression, anxiety and more physical illness. Not only does unemployment contribute to the experience of stress, workers with low and uncertain employment contracts also experience higher rates of physical and mental illness (Virtanen et al., (2003).

b) Multinational Companies in developing countries

Political and economic events in the global economy, coupled with a new generation of technological advances have produced a new scenario for MNCs and host governments relations. Luo (2004) argues an inclusive partnership between MNCs and host governments which contains cooperation and competition as two separate yet interrelated continua. Cooperation looks at the accommodation and collaboration between MNCs and host governments while competition looks at elements of control/conflicts and seeking private gains at the expense of the other between. Luo (2004) used the term 'coopetition' to describe the combination of cooperation and competition that exist between MNCs and host governments.

In respect to cooperation, MNCs and governments cooperate along four levels: Country-level internationalization, Industry-level competitiveness, Firm-level capability, and Individuallevel productivity (Luo, 2004). At the country level, governments depend on MNCs for ameliorating decelerated economic growth and increasing pressures of global integration. MNCs on the other hand depend on this openness for more efficient flows of production factors within their globally coordinated networks. At the industry level, MNCs seek cooperation from host governments because foreign operations depend on educational, industrial, technological and financial structures built by host governments. Particularly, MNCs cooperate with host governments in developing sophisticated factors such as skilled workforce, information industry and scientific base. At the business level, MNCs and governments cooperate to improve business capabilities. Specifically, MNCs might depend on host governments for privileges, such as tax exemption, local talent recruitment and free land use while governments depend on MNCs for bringing in technological and organizational skills. Finally, MNCs and governments cooperate to enhance individual productivity. Through this cooperation, MNCs tend to enjoy improved productivity of workers which enhances their organizational productivity and operational efficiency through cost reduction or revenue growth. From the government viewpoint, MNCs can play a fundamental role in improving this productivity, especially through joint ventures or alliances (Luo, 2004). If only cooperation was guaranteed both parties, then it can be argued that elements of conflict will be reduced to the barest minimum and thus workers experiences of stressors. But because of a combination of cooperation and competition, the presence of MNCs can be said to generate stressors for workers.

Regarding competition, some clashes of interest inescapably remain because economic and social goals sought by governments do not always harmonize with interests of MNCs (Daniels et al., 2004). These clashes of interest might trickle down to workers thus having direct or indirect impact on workers' experiences of stressors in the workplace. In terms of decision-making, MNCs seek to make the most of risk-adjusted net returns, which may not complement a host government's optimization of social equity and economic efficiency (Rugman and Verbeke, 1998). Luo (2004) examined competition between MNCs and host governments in terms of input-process-outcome based resources. Input-based competition looks at bargain between both parties for natural resources, land rent, information, infrastructure access, distribution, local financing etc. This type of competition was evident in chapter four where oil bearing communities and oil MNCs are at loggerheads over oil and access to infrastructure (see chapter four). Process-based completion touches on the power of changing regulatory framework in a host country. Here, things like foreign direct investments (FDI) rules and policies are determined by the party who holds the dominant bargaining position (Boddewyn and Brewer, 1994). Finally, outcome-based competition involves bargains for market/industry access, local market expansion and financial returns. Each party seeks to control its own resources and uses this control to escalate its bargaining power. Outcome of competition may vary by regions. For example, the control MNCs have on international investment has enormous bearing on the economies of developing countries because governments in developing countries are usually receptive to the terms of MNCs. Governments not having leverage with MNCs has negative impacts on the citizenry of the host government. For example, minimum wage can be set unrealistically low in so as to attract foreign investment (Monshipouri et al., 2003).

There is indeed a coexistence of cooperation and competition in the relationships between MNCs and host governments. Bringing literature from chapter four, we cannot downplay the role of oil multinational corporations in Nigeria's economy in contributing about 85% of the Nigeria's foreign income earnings. The cooperation between MNCs and Nigerian government in many instances has made government's position to always be in favour of the MNCs in conflicts with the host communities (Ebegbulem et al., 2013). This government – MNC cooperation has in it elements of competition as they exploit each other's resources in pursuit of respective goals. The existence of MNCs in this region has been marked with poor basic infrastructure and years of oil exploration and exploitation by MNCs making host community members unable to engage in their primary occupations of fishing and farming

and communities. MNCs exist to maximize profit, as their main concern is to explore and produce crude oil profitably (Ebegbulem et al., 2013).

In making connections to developing countries, notions of cooperation and competition between MNCs and host governments are very important in understanding employment relations practices of MNCs. While MNCs are seeking profit, developing countries are caught between foreign direct investment and overall economic growth through global trade. Developing countries are attractive to MNCs because (1) developing countries have relative abundance of low-skilled and unskilled labour willing to specialize in the production and export of goods using their factor endowment, (2) MNCs need to remain competitive and increase market share by locating capital investments in production facilities where operational costs are low (3) MNCs can have easy access to emerging markets and (4) in developing countries, firm specific advantages allow rents to be created to compensate for costs (political, social, cultural, etc.) that can make overseas production uncertain and expensive. On the other hand, MNCs are attractive to developing countries because (1) MNC operations bring technological and other spillovers (Lall 1992), (2) MNCs bring FDI that creates employment opportunities and new economic sectors though technology and skills transfer, and helps with external debt payments (Brittan 1995), and (3) increased productivity in export sectors (Habib-Mintz, 2009). This coopetition between MNCs and developing countries has some effects on labour standards. Particularly, MNCs tend to exploit lower standards on working conditions, basic worker rights, and environmental regulations, provoking debates around fairness in the workplace (Monshipouri et al., 2003). This suggests that MNCs' motivations are tied with labour standards and its practice. The majority of workers in MNCs indirectly work for MNCs as suppliers and contractors – a trend for MNCs to reduce direct employment. This shapes employment relations as deregulation is promoted and labour protections weakened through the demand for 'flexibility', MNCs role of being the principal users of contractors and employment agencies (Cotton, 2010). According to Rossman (2013) and Holdcroft (2013), MNCs create precarious forms of employment through severe forms of subcontracting managed to avoid their social responsibilities by depriving workers of their right to collective bargaining. This is usually the case in developing countries because unions located in headquarter companies, have leverage with principal companies which can be used to secure basic rights for contract workers (Cotton, 2010). This deprivation might impact on the work stressors experienced by workers. Most of the casual and contract workers are highly skilled and usually perform the same tasks as permanent employees but get lower remuneration and poor terms and conditions of employment (Fapohunda, 2012). Precarious forms of employment can take various forms such as outsourcing, subcontracting, casualization, fixed term contracts, hiring of temporary workers, use of labour agencies etc.

Precarious employment is linked to adverse outcomes in the form of low control over working hours, work-life conflict and stress (McNamara et al, 2011). This may be due to workers' weak labour market position and tenuous employment (Bohle et al., 2004) or inability of employers to guarantee hours and intermittent scheduling (Lewchuk et al, 2003; Louie et al, 2006). Precarious employment is linked to poorer mental health (De Cuyper et al, 2008), poorer self-rated health (Kim et al, 2008) and increased cardiovascular morbidity (Ferrie et al, 2008). All these suggest that low levels of control over labour processes and the increased psychosocial efforts in completing assigned tasks might expose workers to stressors such as sleeping problems (Bohle et al, (2004). Mauno et al (2006) finds that control over work improves stress, health and well-being while reducing work-life conflict.

Precarious forms of employment reflect an array of consequences for workers. In Nigeria for example, it is "characterized by bad work conditions like job insecurity, low wages, and lack of employment benefits that accrue to regular employees as well as the right to organize and collectively bargain. In addition, workers in this form of work arrangement can be dismissed at any time without notice and are not entitled to redundancy pay. It is an unprotected form of employment because it does not enjoy the statutory protection available to permanent employees" (Fapohunda, 2012). The employees are the direct victims of casualization but beyond that, the effects they suffer transcends to employers and eventually the economy. This section is particularly interested in workers' experiences of work and they translate to experiences of stressors. Therefore, only the case of the workers will be made here. Precarious employment puts forth downward pressure on the wages and working conditions of those workers who are viewed as permanent workers. This is due to the fact that pay systems and employment conditions are always operated in a process that engenders comparison among the entire workforce. Again, precarious employment threatens the direct or indirect replacement of permanent workers by casual workers which extends to negative effects on families and the society. Precarious employment leads to financial insecurity for the workers and their families because of low wages, absence of benefits, unprotected work as they are not allowed to join the union (Fapohunda, 2012). These situations might generate stressors for workers as they affect their experiences of work and how they relate to the broader labour market. As severe as these situations sound, many employers support the continuous use of casual workers, thus introducing lots of casual workers in their workplaces,

sometimes structuring almost the entire workforce to be casual workers believing that casualization has numerous benefits such as increased flexibility and lower overhead costs (Fapohunda, 2012).

Forde and Slater (2005) acknowledge that precarious workers are one of the least protected groups and are of poor quality in terms of pay. Employers use precarious workers due to pressures from labour costs (Forder and Slater, 2006). Also, Forde et al, (2008) find that fewer firms provide for precarious workers compared to directly employed workers. The question is, why should people be in precarious employment? A traditional justification for precarious workers may be to use them as replacement for workers on leave or to provide cover while firms attempt to recruit permanent workers (Houseman et al, 2003) which makes them likely to receive lower wages (Forde and Slater, 2005). Another argument is that when firms are not sure of a worker's productivity potential, they will be cautious in offering a permanent contract. Usually, single workers, women (due to their expected weaker labour market attachment) and older workers will be more likely to join precarious employment (Forde and Slater, 2005). Empirical evidence from Forde and Slater (2006) finds that precarious workers tend to have feelings of dissatisfaction that can lead to low levels of commitment and high anxiety about their work situation thus providing short term benefits form organizations.

c) Labour markets

Investigating the labour markets is central to the study of occupational stress. It is the aim of this section to identify factors that influence and are influenced by the labour markets to cause stress to workers. The labour market is a place where workers and employers interact; specifically, employers demand labour while workers supply their labour power. Lazear and Oyer (2003) nicely explained types of labour markets - internal labour markets are those where workers are employed into entry level jobs and higher levels are filled from within. Here, wages are determined internally and may be free of external pressures. On the other hand, external labour markets imply that workers move fluidly between firms and wages are determined by some collective process where firms do not have significant discretion over wage setting e.g. where government sets minimum wage and workers receive the same employment standards regardless of what sector they belong. This differentiation suggests that employers have some sort of control over what supply of labour to accept and distribution of job rewards in the internal labour market while some principal institutions have control over such factors in the external labour market. Since the role of the state has

been discussed earlier, only labour market as it relates the firm will be discussed in this section.

Labour markets govern many areas of employment, including recruitment, redundancy and pay intentions thus generating changes in the labour process (CIPD: labour market outlook, August, 2014). At the firm level, the concept, therefore, refers broadly to structures by which workers are distributed among jobs and the rules that govern employment, mobility, the acquisition of skills and training, and the distribution of wages and other rewards obtained contingent upon participation in the economic system (Kalleberg and Sorensen, 1979). It is the consequences of this categorisation of the workforce that this section is interested in as it might explain how stress is experienced by workers. This section adopts Fleetwood's (2008) model of labour markets which focuses on causality between the supply side, demand side of labour services and the state. Fleetwood recognizes that the working population (prior to exposure to labour markets) has a categorical division by gender, race, nationality, health and so on. Also, participants' membership in one or several of these categories as well as its exposure to factors such as state, firm (size, structure, nature of production), labour and management processes, the state, family, and participants' awareness of available jobs influence who enters the labour market and in which segment of the labour market, wages, fringe benefits, health benefits, autonomy, precariousness, and insecurity all constitute the labour market. Recruitment and categorization of workers into the above group are decided at the firm level.

The labour market connotes different work groups in the workplace defined by ethnicity, race, and levels of education and skill. It is at the firm level that workers exchange their labour power in return for wages, status and other job returns (Kalleberg and Sorensen, 1979). Therefore, themes like gender, education, race/ethnicity and citizenship will be central for explaining occupational stress; these themes were also found important in analysing the data gotten in this research work. Studies have shown that race and ethnicity determine the level of pay at work. In the US, for example, being in a non-white racial group poses a likelihood of non-standard job which have stressful qualities (Hipple, 2001; Kalleberg et al., 2000; Presser, 2003). On the other hand, African Americans are more likely to report experiencing racial discrimination in their jobs which is related to wellbeing (Jackson and Saunders, 2006). Ethnicity has different risks for unemployment. The Survey by the Bureau of labour statistics (2011a) revealed that unemployment rates in the US for African Americans are usually near twice those for white Americans. In short, some racial and ethnic minorities are more likely

to work in non-standard jobs which are known to have stressful characteristics. Also to be discussed is the issue of citizenship; immigrants are more likely to get non-standard jobs and be exposed to stressful job conditions in the form of insecurity associated with non-standard employment (Hudson, 2007; Kalleberg et al., 2000; Tausig, 2013). The relationship of citizenship and work stress is hypothetical as there are no studies with regards to that (Tausig, 2013). Women and men find themselves in different jobs with women's job related stress affected by macroeconomic and social conditions that station women into specific job types that are low paying, smaller and non-unionized industries, less flexible jobs than those occupied by men (Beck et al., 1978; England and McCreary, 1987; Hachen, 1988; Rosenfield, 1989; Glass, 1990; Tomaskovic-Devey, 1993; Gabriel and Schmitz, 2007). Gabriel and Schmitz (2007) suggest that this occupational segregation may be attributed to the preferences of women for more flexible work arrangements due to family related concerns. This argument is also so for education because educational attainment affects jobrelated distress by categorizing workers into jobs with various degrees of stressful qualities. For example, Hudson (2007) found that low educational attainment is an indicator that a worker will compete for non-standard jobs.

Kalleberg et al., (2000) argue that for large numbers of workers, employment is not permanent, the traditional employee benefits such as retirement and health insurance are not guaranteed and income is not anticipated, few opportunities for career advancement are available and no chance to control the conditions of their work; these according to Tausig (2013) may lead to occupational stress. There are disparities in pay and rewards between temporary and core workers; these inequalities are stressors that spawn dissatisfaction to workers and thus stress (Sutherland and Cooper, 1996). It also causes disunity amongst workers and strains workers' relationship with management and fellow workers. The site of production must be recognized as a social setting where workers develop important friendships among co-workers that are carried on after working hours. This opportunity for interaction with co-workers is a human need for socializing and when blocked causes stress (Tausig, 2013).

In fact, Virtanen et al., (2005) reviewed 27 studies on the effect of temporary employment on health and found that there is an association between temporary employment and increased psychological illness. Also, Dooley et al., (2000) found that depression levels among involuntary part time workers were as high as that of the unemployed workers. Burgard et al (2009) found that workers who regard their current employment as insecure are more likely

to experience stress. In terms of worker agency, Hodson (2001) argue that workers are not passive victims of social structures, rather, agents in their own lives who can resist management strategies of control and work autonomously to give meaning to their work. But, when there is a decline in union's power, it leaves workers without a strong collective voice in confronting employers and politicians thus exacerbating managerial control and impeding relationship between workers and employers and thus, creates stress (Kalleberg, 2009). Clawson (2003) made out other social movements - women's movement, immigrant groups, and other community-based organizations that are likely to be more effective than those based solely on work. The argument here is that once these workers' interventions are tampered with, there is likely to be a less friendly relationship between workers and employers thereby causing stress to workers as workers' intentions and expectations might be impeded.

According to Thompson, in the contemporary labour process, firm governance (the mechanism by which firms' goals are set and pursued) is fundamental. He recognizes that the new forms of financial competition (shareholder value) mirror the condition to meet the anticipations of the capital market (cash flows, dividend payments and appreciation in share price) more than those of consumers in the product market. Its implication is waves of downsizing and delayering as firms seek ways of cutting costs to improve financial performance (2003). As workers are being downsized, both the victims and survivors are permanently scarred (Deal and Kennedy, 1999). As victims and their families face economic and social consequences, survivors suffer increased workloads, job insecurity, threats to their pensions and low commitment at work (Beynon et al., 2002; Biewener, 1997; Burchell et al., 1999; Green, 2001).

In all, the labour process here is such that is mostly controlled by the management but has other external factors that impact on this managerial control. Regulations and policies by the state coupled with economic decline contribute to unemployment faced by the working population and thus downsizing (hugely by management's discretion) by firms. As seen earlier, downsizing is a stressor that is hardly moderated by workers thus making them generate stress outcomes in the form of job insecurity, anxiety, fear, depression and financial strains on family. Managerial control in internal labour markets empowers managers regarding distribution of job rewards which develops into labour market segmentation due to inequalities that come along. The study by Sutherland and Cooper, (1996) reveals that inequity of rewards and compensations in the workplace cause dissatisfaction to workers and

thus stress. Factors within social structures of inequalities are fundamental in the study of labour markets. Particularly, a case where race and ethnicity of workers determines pay at work or where immigrants are more likely to get non-standard employment regardless of their experience creates disunity in both external and internal labour market and threatens good relationships between workers and employers hence, causes stress. Also, family obligations have been found to affect labour market participation thus creating occupational segregation divided by gender.

d) Work-life interface

Work-life interface exists when work activities interfere with personal activities or vice versa (Frone et al., 1997); this means workers' work life battles with their personal lives in terms of hobbies, personal achievements, home/family and social networks. This section looks at how their work lives impact on their lives outside work to ascertain if stress occurs as a result of incompatibility.

Employers are the silent partners in the life of all families while the family is a particularly salient social institution that intersects work life (Hertz, 1999, p. 17; Tausig, 2013). Interference in both domain significantly impacts on workers' wellbeing (Frone, 2000; Greenhaus and Beutell, 1985; Grzywacz and Bass, 2003). Work-family conflict is widely recognized as a stressor that may lead to work, family, and health consequences (Bellavia & Frone, 2005). It is a specific form of inter-role conflict in which the pressures from the work and family roles are incompatible to some extent. Participation in one role is therefore made more difficult by virtue of participation in the other role (Greenhaus & Beutell, 1985). Research shows that family can interfere with work and that work can interfere with family (Frone, 2003). Based on a meta-analytical review of 60 studies of work-family conflict by Byron (2005), job stress, family stress and family conflict affect both work to family interference and family to work interference. Work life balance policies go a long way in counteracting absenteeism, turnover and job dissatisfaction because they bring about satisfaction and good functioning at work and at home with a minimum of role conflict (Clark, 2001; Glass and Fujimoto, 1995; Anderson et al., 2002). This means that where such policies are not available, workers might find it difficult to moderate the challenges that come with the incompatibility between work and family lives.

In making connections to other factors, women have been traditionally known as home makers while men worked to take care of the home but there is a recent growing participation of women in the labour market that conditions workers to try and maintain a balance between work and family. This growing trend coupled with increasing numbers of single parents and dual-earner families cause conflict in both domains (Sheridan and Conway 2001, Lewis and Dyer 2002, Kersley et al 2006). The labour market conditions play a role in the kinds of job men and women find themselves in. "The very job characteristics that would reduce stress and job-family tension among employed mothers are difficult for them to obtain because these rewards are linked to an authority and reward structure that places women in marginalized 'women's job'" (Glass and Camarigg, 1992, p.148).

Walsh (2005) argues that excessive work interference could lead to stress, job burnout, lack of satisfaction, absenteeism and both physical and psychological health breakdown. At work, work-family conflict may result in lower job performance, satisfaction, and organizational commitment (McElwain et al., 2005). In the family, the consequences include lower marital and family satisfaction and stress crossover from one partner to other family members (Haines, Marchand, & Harvey, 2006; Matthews, Del Priore, Acitelli, & Barnes-Farrell, 2006). The health consequences of work-family conflict revealed in past research include stress, anxiety, tensions, hypertension, distress, depression, physical symptoms, emotional exhaustion, and burnout (Aycan & Eskin, 2005; Frone, Russell, & Barnes, 1996; Frone et al., 1992; Grandey & Cropanzano, 1999; Grzywacz, 2000; Kossek & Ozeki, 1999; Wiersma, 1990). Whilst this discussion suggests that work-family conflict is a function of competing demands and the management of those demands (Tausig, 2013).

As the family life of workers is influenced by their work lives, their personal lives such as accomplishment of their goals, social life and life satisfaction should not be overlooked. The Second European Quality of Life Survey by Kotowska et al., (2010) argues that "the feeling of an excessive workload due either to professional or family obligations leads to a substantial reduction in life satisfaction. Women who work outside the home and experience work–family conflict tend to be less satisfied with life than women who work solely in the home. Unemployment, nevertheless, has the most negative impact on life satisfaction: even those who report a high level of work–family conflict are far more satisfied with life than unemployed persons".

The personal and family lives of workers are potential moderators, for example, when workers have time to still do their hobbies, achieve personal goals or have cordial relationships outside work; these activities have in them a possibility of ameliorating work

stress. But in a situation where these activities are hampered by activities from work, such moderation is eroded. In all, factors from the labour market and the workplace are stressors and when individuals do not have the resources to prevent negative impacts, they bring about stress outcomes in workers in the form of dissatisfaction, absenteeism at work and home, anxiety, emotional exhaustion, depression, physical and psychological breakdown, lower job performance and lower organizational commitment. This section suggests that factors outside the work lives, personal lives and family lives of workers influence and are influenced by other factors to cause stress to workers.

e) The site of production

Looking at stress from the site of production, the causes of stress will be parallel to the causes of stress identified in the psychology literature of stress. This is the site of the labour process and is the immediate context for the way workers experience their work. It is from here that labour power converts to labour and products. Surplus value is created in production and workers are paid their wages. Therefore, this level of analysis is useful in identifying causes of occupational stress because what we actually do on our jobs and how we are able to do it predict stress (Tausig and Fenwick, 2011; Tausig, 2013). In this section, workers' conceptualisations of work, stressors and stress outcomes are fundamental. Particularly, workers' job requirements, perceptions of control over work and perceptions of entitlements will be examined to identify how they influence workers' experience of stress. But this does not help much in making connections between workplace labour processes and the broader political economy, therefore, the key goal here is to ascertain how workers' job requirements, perceptions of control over work and entitlements are influenced by other factors or indeed influence other factors that might cause stress to workers.

Due to multiple networks of economic, cultural and political trading, there has been technological advancement across borders for movement of capital, good and services. Technological changes in the workplace have some opposing effects on the workers, such as, downsizing in employment, increased workload by workers learning new skills and performing more tasks in a faster manner (Dollard, 2003; Kendall et al., 2000). Workers are usually associated with fear of losing their jobs after downsizing which exacerbates their work overload; specifically, they go out of their ways to please managers through workers attending work ill or working long hours thus resulting in stress and illness (see Johns, 2010).

Thompson (2003) recognizes that the new forms of work organization through reforms of work and employment systems e.g. teamwork have been for the worst for workers due to work intensification, fragmented tasks and close control by managers. Again is the issue of unfulfilled bargain between employers and workers where employers require flexibility, efforts beyond the required minimum and social competence from workers, in return, workers (whether core or peripheral) require from employers commitment and trust-building measures in the employment relationship through investment in training, promotion, job stability, skillbased reward system. This bargain, in the view of Thompson (2003) is not kept by employers thus creating unequal workplace relations especially against peripheral workers. Capelli (1995) points to how employers make less investment in training and skill development, in part, due to fear that such investment will be lost through redundancy or exit from their firm. Whatever the reason is, workers are dissatisfied and thus stressed. For example, workers expect to periodically advance in their careers through promotions; when it is otherwise, it results in stress (Cooper et al., 2001) in fact, according to Jewell (1998), lack of promotion at work leads to dissatisfaction and stress; it also affects family and personal lives of workers since promotion translates to wage increment. Also, the introduction of new technologies might cause organization want to reduce their workforce which often result in deskilling of the workforce (Korunka, Weiss, Huemer and Karetta, (1995).

Workload is usually indexed by how much work is given to workers and how much time is given to get the work done. The well-known Yerkes-Dodson law of 1908 states that there is an inverted-U relationship between the amount of work required of a person and his or her health and performance. This implies that each person has the most favourable and unfavourable band of workload and substantial deviations above or below these bands will induce stress on an individual. The study by Caulfield et al., (1999) reported that workload pressures account for 37% of work-related stress claims. More directly, work overload has been linked to conflict in the family domain; this work-family conflict is widely recognized as a stressor that leads to work, family, and health consequences (Bellavia & Frone, 2005).

The issue of workload has in turn led to increases in role ambiguity, possibly resulting in increased work stress and illness (Dunnette, 1998). Warr (2002) describes role ambiguity as unpredictability of the consequences of one's role performance along with a lack of information needed to perform the role thus making them lose control over their jobs. Karasek's (1979) research showed that those exposed to high levels of demand, as well as having low levels of job control (high-strain situation) were disproportionately more likely to

show increased levels of depression, fatigue, and cardiovascular disease and mortality. This lack of ability for workers to complete assigned tasks in a way that permits individual's contribution was referred to as decision latitude by Tausig, (2013). In his views, this factor is the most crucial variable related to work satisfaction and stress. Findings have shown that low decision latitude at work is associated with increased levels of anxiety, low self-confidence and low job satisfaction thus, stress (Kohn and Schooler, 1983).

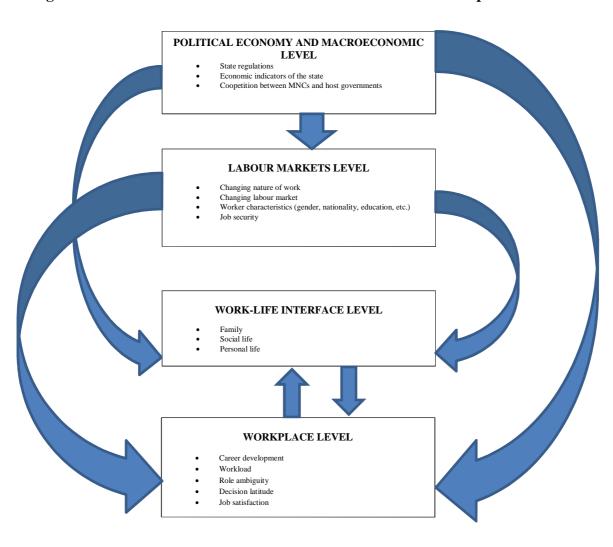
Within the categories of broader issues discussed above as they relate to experiences of work and thus stress, it is imperative to draw a narrative on their interconnections. Bearing the broader social relations in mind, the aim of the next section is to bring to light determinative processes that might cause stress to workers. In applying the concepts derived from the discussion above, it seems that non-workplace factors can be seen as dimensions of work that help to explain some stress factors at work. For example, the shift in the dynamics of capital accumulation; particularly the dominance of financial routes of capital e.g. through downsizing, use of non-standard employment system and delayering as a means of cutting costs to improve financial performance presents situations are issues that might make occupational stress flourish. The task would be to examine their interaction and consequences on workers' experiences of stress.

2.7 Interconnections between broader social relations and experiences of stress

Unlike the psychological study of stress that examines stress from a correlation of the workplace and environmental factors, this section argues that a correlation between two or more observed phenomena is not sufficient as an explanation (Bygstad and Munkvold, 2011). Rather, "The essential aim of sociological theorizing should be to develop fine-grained middle-range theories that clearly explicate the social mechanisms that produce observed relationships between explanans and explandum" (Hedstrom and Swedberg, 1996, p. 281). While the labour process debate has been successful in broadening understanding of existing work relations, it has difficulties in setting out the interconnections between workplace organizations and social relations (Spencer, 2000). This then, must be put into perspective as the sociological study of stress benefits from interconnections between broader social factors as it develops the concept of control beyond the production process. Specifically, it views control and its formation of stress from four interconnected levels touching on the idea of stressors, moderators and outcomes from the sociological study of stress. The first level looks at the influence of the state, particularly, regulations and indicators of economy (unemployment). The second level considers the influence of internal and external labour

markets. The third level touched on work-home boundaries as well as the influence of work on personal and social lives of workers. The fourth level includes issues around job conditions as they relate to stress. This work was limited to only four levels in order to keep the volume of work manageable; therefore, more levels can be applied to this model. All these are in tandem with the sociological study of stress; hence, this study goes beyond the workplace level and beyond the methods of psychology. In short, it embraces the critical insights provided by a sociological perspective.

Fig 2.5: Interconnections between broader social relations and experiences of stress



Within the occupational stress levels of analysis discussed above, it can be seen that a bigger picture of occupational stress is achieved covering four levels of inter-related factors of occupational stress. If workers lack the capacity to prevent negative impacts of these factors, they leave detrimental effects (stress outcome) on workers. While incorporating the labour

process into the discussion, the relationships between employers and workers were examined to ascertain if it leaves negative effects on workers. The state, through their regulations (e.g. labour laws and health and safety laws) has influence over labour markets, work conditions and employment practices which generate stressors for various kinds of workers. Economic decline has negative impact on the labour market and family because organizations cope with economic downturn through downsizing and the use of precarious employment which also leaves workers with limited choice on employment type and difficult financial situations that transcends to their families. Coopetition between MNCs and host governments have consequences on the labour markets as precarious forms of employments are preferred by MNCs. Precarious employments have negative outcomes at the workplace and family domain due to conflicts that arise from low wages, right to organize, job insecurity, lack of benefits and so on. These conditions might impact on the management – workers or worker – worker relationship causing resentment and dissatisfaction. As work activities interfere with home activities and vice versa, workers inability to balance both lives is a major source of stress to them. This model suggests that factors that might cause stress to workers are not limited to the site of production (as argued in the psychology literature).

2.8 Theoretical reflections

This thesis draws inspiration from Thompson (2003) particularly in terms of forms of disconnections experienced at work. Thompson (2003) argues a shift in powers from industrial to financial circuits of capital where attention is more on improved profit in capital market through investments in financial products (e.g. investment banking, equity business, consultancies) rather than competition in product market. This shift was primarily driven by the pursuit of shareholder value within an increasingly financialized capitalism (2003, 2013). More specifically, in the financialized capitalism, there is a growing departure and dysfunctionality between employer objectives in the work and employment spheres where labour is required to invest more of themselves at work through effort, commitment, new aspects of labour power such as emotions while employers retreat from investment in human capital that is manifested through deteriorated job security, career ladders, pensions, etc. thus exacerbating disunity between different domains of the workplace. The principal point here is a relationship between shareholder capitalism, governance and gap between managerial words and deeds. It is the position of this thesis that this unfulfilled bargain supported by the control imperatives in the capitalist labour process spawns unequal workplace relations and might be a potential stressor to workers.

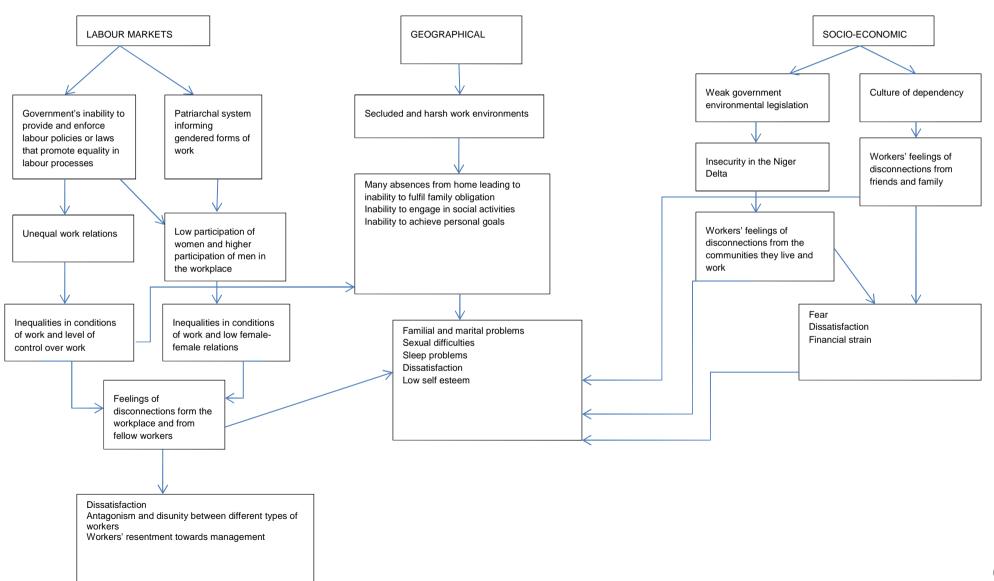
Therefore, the disconnected capitalism thesis can be useful in the study of stress as it gives insight to the different forms of disconnectedness experienced by workers as they relate to stressors and stress. Whilst Thompson (2003) focused on disconnections that exist in capitalism, neglecting that some forms of capitalism might be 'connected'. For example, there is a highly integrated and highly regulated form of capitalism in Germany, which promotes worker's right to co-determination at work (Keller and Kirsch, 2011) while the UK shows a more disconnected capitalism where managers and shareholders' interest are connected whilst workers interests can be ignored (Thompson, 2003). This suggests that the outcomes of disconnected capitalism are different by regulatory context.

Also, disconnected capitalism thesis is useful in examining the disconnections between capital and labour which results in negative outcomes for workers. Arguably, it is limited to a direct analysis of capital and labour, ignoring other social factors. Chapter four of this work hints a 'connection' between the Nigerian Government and oil companies in Nigeria (especially MNCs). Specifically, this 'connection' between the Nigerian government and oil companies represents a situation where the government strongly depends on oil companies for royalties and rents and as a result, weakens the impact of regulations and responsibilities such as (1) environmental regulations regarding the oil bearing communities where oil companies easily get away with environmental degradation which in turn worsens relationships with communities as indigenes lose their main occupations of fishing and farming, (2) labour laws that favour foreign workers more than local workers, (3) corporate social responsibilities of MNCs regarding the development of oil bearing communities are not monitored. The spread out of resources in the Niger Delta communities are thinly distributed. Neither the firms nor government make credible commitments to local communities, hence the oil theft and militancy (especially in the form of kidnapping or killings of oil workers) by the local communities (see chapters 4, 5, 6 and 7). The unsatisfied interests of the oil bearing communities have implications for workers, oil companies and government; the outcome is fraught community relations that have knock-on consequences for levels of stress amongst workers.

Within the analysis above, it is the position of this thesis that Thompson (2003) is a useful tool in the labour process for identifying and understanding connections and disconnections across levels of enquiry and how these connections and disconnections might turn out to be sources of stressors for workers thus bringing forth a less organization-focused frame of analysis. Drawing from the various forms of disconnections identified in the context chapter

and the literature discussed around offshore work and labour process, this section aims to put forward themes around forms of disconnections in identifying occupational stressors and stress. Particularly - labour market disconnectedness, geographical disconnectedness and socio-economic disconnectedness. These themes as presented in the model below are novel and will form part of the theoretical contributions made by this thesis.

Figure 2.5 - Nature and interaction of stress factors amongst workers



Bringing together literature discussed so far in this chapter and chapter four, this thesis finds that Nigeria practices a patriarchal social system which spawns low participation of women in the workplace. Government's inability to provide or enforce labour laws of policies that promote equality in the labour processes exacerbates unequal work relations. Also, Government's dependence on MNCs for FDI escalates MNCs' bargaining power thus makes governments usually receptive to the terms of MNCs. The entirety of these factors impacts on labour markets causing diverse experiences of work for different types of workers – core vs. temporary, men vs. women and local vs. expatriates. Particularly, there's bound to be disparities in pay, rewards, benefits, training, right to organize and control over work across workers which cause feelings of resentment and dissatisfaction and thus might generate stressors for workers. Apart from disconnections offshore workers feel by virtue of their secluded and harsh work environments, intensified work and poor work conditions faced by some workers negatively impacts on their home lives through prolonged absences from home and inability to fulfil family financial obligations. These situations might cause feelings of dissatisfaction to workers and thus might generate stressors for them.

Literature from chapter four hints that there is massive insecurity in the oil bearing communities of Nigeria due to weak government environmental legislations. Insecurity might make workers move to areas they consider safe thus causing feelings of disconnection from where previously used to be home to them. We also find that family is a welfare agency to the needy and elderly relatives in Nigeria. This culture of dependency oppresses workers with financial obligations beyond their immediate families, some of which can and cannot be met. Situations like these might be an indicator of stress to workers through dissatisfaction and disconnecting from family in order to avoid financial strain.

These forms of disconnections present a novel lens of investigating how workers experience work and how their experiences of work might generate stressors for them. They have only been abstracted theoretically and will be examined empirically later on in this thesis. Based on the preceding factors, this study calls for further empirical studies to explore and explain the different forms of disconnections experienced by offshore workers as they relate occupational stress. The argument suggests that there are potentially undiscovered gaps between theory building and empirical evidence, which has to be filled through empirical data. This study, being a sociological study of stress will utilise the notions of stressors – moderators - outcome process in filling in the gaps. Accordingly, the research questions are:

- 1. What are the main stressors amongst offshore workers in the Niger Delta of Nigeria
 - a. Are the stressors experienced by offshore workers only located in the factory gates?
 - b. Do forms of disconnections generate stressors for offshore workers?
- 2. What moderators do offshore workers in the Niger Delta region of Nigeria use to shield form stressors?
- 3. In what forms do offshore workers experience stress?

To conclude, a targeted empirical research effort is required to answer these questions and when this is achieved, a deeper academic and practical understanding of occupational stress will be achieved.

2.9 Conclusion

This chapter has shown the contributions of different disciplines in understanding the concept of stress. The biologists perceived stress from the point that challenging situations make us react physiologically. Specifically, Selye's (1956) concept of General Adaptation Syndrome (alarm reaction, resistance and exhaustion stages of stress leading to adverse physiological well-being) was expounded. However, his work was critiqued on the basis that his concept of stress does not capture all levels of stress because some stress outcomes can be behavioural rather that physiological thus the psychological study of stress.

Psychologists developed many theories in investigating the concept of stress. However, for the sake of keeping this work more focused and managing the volume of work, the models were limited to the person-environment (PE) fit model and transactional model. The PE fit model views occupational stress from two stances: the fit between the demands of the environment and the person's abilities and the fit between the person's needs and the supplies of his environment. On the other hand, transactional model views stress as arising from environmental demands which exceeds a person's resources and capability when the outcomes are important for the person. This means an imbalance that gives rise to a requirement for the resolution of that imbalance. This model covers a wider and more comprehensive scope of stress because it seeks to understand how people cope with stressful situations. These models had shortfalls; for example, on the part of the PE fit model, scholars identified how confusing it is to identify the different forms of functional fit and even poor measurement of fit components which limit the possibility of the research and the

conclusiveness of its findings. On the part of the transactional model, it was critiqued because it does not give a full account of stress with regards to the social and political environment within which organizations are deeply embedded. This led to the call for a sociological study of stress as it includes how economic and social structures and processes affect set(s) of job conditions and eventually cause stress. The core components of the sociological study of stress are stressors, mediators/moderators and outcomes. These core components of the social process of stress are embedded in peoples' location in social and economic standings with each component presuming a set of stressful conditions interacting with one another.

This chapter then turned to closely examining the nature of work and the workplace through the lens of the labour process theory. It looked specifically at how the labour process theory embedded in the sociological study of stress helps to generate broad-ranging discussion on the nature of work. Having identified that the literature of stress in the offshore industry has focused on the workplace neglecting broader social relations, this chapter went on to investigate how the political economy, labour markets, work-home boundaries and workplace factors can generate stressors for workers.

This chapter drew specifically on the notions of connections and disconnection adopted from disconnected capitalism thesis in examining causes of stress at work in order to show that the sociological perspective offers a very important and necessary approach to understanding occupational stress. In fact, it has the potential of bringing freshness to the study of occupational stress that has remained neglected within the mainstream of organizational research. Conclusively, the study of stress from the sociological stance has brought greater awareness of the interconnections of different stressors within and across time, within and across major institutional and ecological context such as family, occupation, and economy. With this, a better grasp of how stressors can generate other stressors and how they can lead to actual stress if not shielded by moderators. Particularly, three forms of disconnection was applied – labour market, geographical and socio-economic disconnections.

These forms of disconnections were only abstracted theoretically and therefore need to be tested empirically. Consequently, primary data need to be collected and analysed thus contributing to the body of knowledge of occupational stress. Therefore, it is essential to look closely at research methods and data analysis methods that will best answer the research questions. Therefore, the next chapter looks at the research design; particularly, it will describe and evaluate the research tools used in identifying the main stressors and the interactions of stressors amongst offshore workers in the Niger delta region of Nigeria.

3.0 Chapter Three: Methodology

3.1 Introduction

This chapter attends to the methodology adopted to answer the research questions proposed by this study i.e. showcasing the methods and techniques employed to collect the data during the field research conducted in the Niger Delta region of Nigeria. It starts by telling a 'story' about how the researcher came to settle for critical realism as the research philosophy. Afterwards, the three staged research design will be presented (one case study, interviews and survey).

This chapter goes on to discuss the rational for the chosen research approach and strategies. The content and procedures of the data collection techniques will be discussed as well as the strengths and weaknesses of each technique. Eight (8) management interviews were carried out at the case study's research stage, Fourteen (14) workers' interviews were conducted at the 2nd research stage while two hundred (200) questionnaires distributed to offshore professionals of which one hundred and seventy one (171) responded giving a response rate of 85%. Following this, the method of data analysis and the limitations of the research will be looked at. Subsequently, an account of each research stage will be shown followed by the ethical consideration.

3.2 Self-confessional statement: a shift to critical realism

This doctoral study has evolved over the past four years. Particularly, there has been a shift to critical realism in explaining stress factors and clearly showing the interaction between stress factors at different levels. While trying to conceptualize stress and how to investigate it, I first deployed pragmatism as the philosophical assumption in the study of occupational stress. Pragmatism is connected with thinkers such as Charles S. Pierce, William James and John Dewey. Their shared argument was that experience is central to our understanding of the interaction between individuals and their environments (see Benton and Craib, 2011).

Essentially, it is the knowledge derived from interaction among groups of individuals and the artifacts in their environment, that create a reality (Schuh and Barab, 2007). According to Cherryholmes (1992) and Morgan (2007), pragmatists acknowledge that truth always occurs in social, historical, political and other context and gives researchers a freedom of choice from different worldviews thus allowing for a mixed method approach. Therefore, it does not see the world as an absolute unity unlike the positivists who believe that there is only one truth out there (Sale et al, 2002). As a result, I thought pragmatism was ideal for

understanding stress from a sociological point of view and thus motivated me to adopt pragmatism as a research philosophy.

Since one of the main tenets of pragmatism is that there are no established structures in the social world that shape knowledge and understanding, therefore, reality must originate from people's lived experiences; this means that reality is limited to empirical facts i.e. things that are observable. Also, pragmatism postulate a problem in the world and then think through how best to understand the problem in such a way as to make things 'better'. This means that when we put pragmatism at work in occupational stress research, it might look at stress factors directly experienced by workers and then provide an input to this problem but it does not in practice immediately prescribe a firm theorization for looking at stress at different levels in order to inform us about the external reality.

I engaged in further reading in search for a philosophy that would accommodate deeper levels of inquiry towards relationships and causality through empirical evidence. However, a turning point came after further reading that brought me to critical realism which immediately met my need for a substitute philosophy to understanding stress from different levels of analysis. Critical realism asserts that different levels of reality exist so it seemed more useful in exploring relationships and causality, I agreed with critical realist assertion that diverse stratified and antecedent causal powers exist (within and beyond people's perception of them) and interact as they influence the forms of events in any given setting (Bhaskar, 1997). This led me to re-work my philosophical statement. I came to a conclusion that with the pragmatist explanation for occupational stress was that they condensed the causes of stress to the lived experience of individuals thus making the role and impact of external factors under-scrutinized in the pragmatist literature.

Critical realism (CR) as a research philosophical standpoint is attributed to seminal work by Roy Bhaskar (see Bhaskar 1989). The basic assumption of CR is that reality exists independent of our knowledge, language or imagination of it and part of that reality consists of individual explanations which influence the ways in which it is experienced (O'Mahoney and Vincent, 2014). CR seeks to understand events and discourses of the social world while suggesting a stratified ontology where several levels explain outcomes (Ackroyd and Fleetwood, 2000). For example, an organization as an entity has people who work in it; these people have families; families live in communities; communities exist within states and so on. Until we understand how these different entities relate, we might not fully understand or

give explanations to the happenings in that organization in the course of research. The conception of the stratified system brings to mind that reality does not necessarily have to be events that can be observed and recorded, rather, it makes a distinction between the empirical (events that we can observe and record), the actual (the events that occur in space and time which may be different to what we perceive) and the real (the mechanism and structures that generate the actual and empirical worlds); this distinction gives a better understanding of the interrelationship between events in different locations implying that there are deeper levels awaiting discovery (O'Mahoney and Vincent, 2014:6). This stratified ontology suggests that powers may exist unexercised so what has been known to have happened, does not exhaust what could happen or has happened (Sayer, 2000).

Critical realism sees the world as an open, multifaceted array of influences that change in a number of different ways; when put in the context of research, such explanation provides a rich and explanatory account of a subject (O'Mahoney and Vincent (2014). The notion of an open system means that the interaction of entities cause events that we observe but the entities cannot be understood without putting the environment within which they interact into perspective. This implies that only individual experiences (as in pragmatism) are not sufficient for investigation because there are external factors whether known or unknown to the people researched that influence their experiences. Particularly, from the point of view of critical realism, Bhaskar (1997) identified two dimensions of knowledge – transitive, which deals with objects that are interpretable by human perception and intransitive which deals with objects that exist regardless of human perception.

Such a philosophy could be seen as appropriate for research into occupational stress because the topic relates to both types of knowledge i.e. the stress factors within the organizations which are directly interpretable by workers and stress factors in the wider society such as labour market, institutional arrangements, communities, employment regulation etc. which exist as structures that might cause stress to workers but independent of workers' thought or knowledge of it. For example, at the stage of data examination and clarification, it was observed that there were some factors not directly experienced by workers that caused them stress at work, for example, how mismanagement of oil revenue by the government causes the people of the Niger Delta to engage in kidnapping of oil workers thus impacting on workers' experience of stress. This means that critical realism offers a broad explanatory framework for occupational stress. In all, my thesis is a critical realist attempt to investigate occupational stress; the rest of this chapter covers the research approach and methodology.

3.3 Research Approach

In contrast to the idea of induction and deduction used by positivists, the dominant research approaches for critical realists are abduction and retroduction. The logic of induction and deduction is based on the observed or empirical data but in the social world, there are objects that are unobservable e.g. relationships, power, status etc. therefore, realists have advocated abduction and retroduction as the logic of analysis arising from, within and after data creation processes (Olsen, 2004). Abduction is valuable for identifying structures when analysing empirical data while retroduction is useful for giving explanations (Blaikie, 2000). Since the aim of this study is to identify and explain what might have caused stress through the use of quantitative and qualitative data analysis activities, retroduction and abduction will be applied.

The layered ontology (as illustrated by Pawson and Tilley, 1997 in fig 3.2) is the key to methodology in the critical realist research, with the aim of uncovering and describing the mechanisms that produced the events. The core to this approach is the fact that theoretical description of mechanisms and structures are given in order to hypothesize how the observed events can be explained. In practice, we identify and explain mechanisms through "description of significant features, retroduction to possible causes, elimination of alternatives and identification of generative or causal structures at work" (Bhaskar 1998a:xvii). This process is called retroduction where we take empirical evidence, hypothesize a mechanism that might explain that particular outcome (Danermark, 2002; Sayer, 2004).

3.4 Research Design/Strategy

This study is an exploratory study which is a good way of discovering 'what is happening; to seek new insight; to ask questions and to assess phenomena in a new light' (Robson, 2002:59). This means that it will clarify the extent to which stress outcomes are determinable to various mechanisms, context or interaction i.e. it has the potential of exploring the factors that influence and interact with events to cause stress. In achieving this, comparative case method will be utilized.

A case study involves investigating and understanding an event and its dynamics within a context of real life setting, using multiple sources of evidence. It tries to comprehend what occurred within a case by looking outside descriptive features and studying the context (Yin, 2003). This study adopts a broadly conceived case study; the type that investigates a generic

type of organizations -oil and gas companies operating in the Niger Delta region of Nigeria. Resultantly, this study is a comparative case study, looking at similar cases to compare similarities and differences in order to draw generative mechanisms, processes, outcomes, differences and conclusions more effectively in identifying and examining various causes of stress (Ackroyd and Karlsson, 2014). Case studies allow the use of multiple sources of data within one study – triangulation; this discussion follows next.

3.5 Rationale and mixed method triangulation approach

In the social research, triangulation means combining together more than one set of methods and practice to draw insight from an investigation; this is central in critical realism retroduction (Downward and Mearman, 2007). According to Denzin (1970), there are two dimensions to methodological triangulation – within method and between methods. Within method comprises making use of different varieties of the same method while between method involves making use of different methods such as quantitative and qualitative methods. This study applied between method triangulation. In justifying the use of mixed methods triangulation, scholars have put forth arguments. Webb et al, (1996) contends that triangulation makes evidence more convincing through the richer validity of findings thus adding completeness to accounts (Shih, 1998). In Denzin's (1989) view, triangulation confirms the accuracy of data. These arguments affirm the complementarity of data during investigation.

There are clear philosophical issues relating to between method triangulation, particularly the combination of quantitative and qualitative methods. The quantitative method according to Sale et al (2002) is based often on positivism. Here, science is characterized by empirical research; all phenomena can be reduced to empirical indicators which represent the truth. The ontological position of the quantitative paradigm is that there is only one truth, an objective reality that exists independent of human perception. Epistemologically, the investigator and investigated are independent entities. Therefore, the investigator is capable of studying a phenomenon without influencing it or being influenced by it. On the other hand, the qualitative method is associated with an 'interactionist' epistemology where a social relationship between the researcher and the researched is reflected (Silverman, 1993). Ontologically speaking, there are multiple realities or multiple truths based on one's construction of reality. Reality is socially constructed (Berger and Luckmann, 1966) and so is constantly changing. On an epistemological level, there is no access to reality free of our

minds, no exterior referent by which to compare claims of truth (Smith, 1983). The investigator and the object of study are interactively linked so that findings are mutually created within the context of the situation which shapes the inquiry (Guba and Lincoln, 1994; Denzin and Lincoln, 1994).

According to the inspection by Symmonds and Gorard (2007), the concept of mixed methods has logical underpinnings rooted more in philosophy than in empirical reality. Within the categories described above, if one accepts that methods are tied to a separate ontology, then combining an 'interactionist' and 'positivist' approach is not logically tenable, given their different ontological principles. Therefore, the use of mixed methods triangulation requires a new ontological assumption. This section argues that critical realism, especially its logic of retroduction provides a basis for mixed method triangulation. Downward and Mearman (2004) addressed the issue of mixing methods with a view to encompassing ontological and methodological issues. In their argument, they maintain that clarifying the ontological basis of inferences and yielding a logically consistent triangulation of insights is made possible through embracing a critical realist perspective.

Although Silverman (1993) rejected quantitative methods in social research, Downward and Mearman (2007) argues that positivism remains influential in social science research. Also, both Byrne (2003) and Olsen and Morgan (2005) argue that quantitative method reflects an interpretive process where causes are explored through reference to institutions or change rather than a mechanical description of events. Therefore, the inner logic of any quantitative analysis rests upon the strength of the qualitative essence launched in causal mechanisms thus different insights of a particular phenomenon are produced. It is on this premise that mixed method triangulation is rendered a logically consistent approach through the lens of critical realism and as the manifestation of retroduction (Downward and Mearman, 2007).

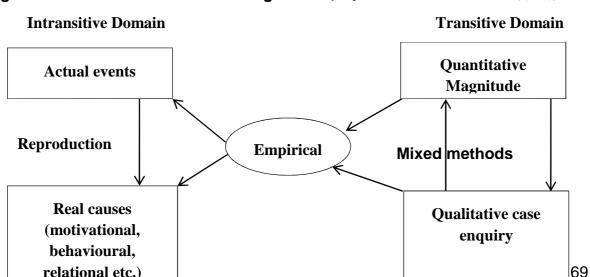


Figure 3.1 - Critical realism and triangulation (Adapted from Downward and Mearman, (2007)].

Byrne (1998, 2012) recognize the relevance of causality in social research because the social world is complex and non-linear. Malcolm (2014) argues that the real character of the social world is probabilistic, and therefore advocates that researchers use causal models derived from sample data. Malcolm (2014) claims that this causal model is established through the description of variables and their relationships to one another; these variables are then translated into measures that can represent reality and then tested. In doing this, one must start with the qualitative in order to identify causes and then move on to quantitative in order to give explanations to the causes (Malcolm, 2014). This suggests that the combination of qualitative and quantitative data gives an opportunity for a causal model to be developed thus, a deeper understanding and explanation for causal relations.

When quantitative and qualitative data are combined, their evidence produces the actual events then theoretical description (s) of mechanisms and structures are given in order to explain how the actual events occurred (retroduction), this way, the real causes of the events are produced and explained. Mingers (2001) argues that mixed methods triangulation provides grounds to link research questions in multi-level analysis and systematically crossreference findings in-depth. It also can offer new insights to research by encouraging creativity and expanding key aspects of the study. According to Byrne and Humble (2007), mixed methods research enables the researcher to answer confirmatory and explanatory questions at the same time and as a result, the researcher is able to confirm and construct theory in the same study. Also, in using a mixed methods triangulation, the quality of a study can be improved when the biases, limitations, and weaknesses of a method following one approach are counterbalanced, or compensated for, by mixing with a method belonging to the other approach (Fidel, 2008). For critical realists like Sayer, quantitative and qualitative methods have complementary strengths and weakness but are compatible; although particular choices should depend on the nature of the object and what one wants to learn about it (2000).

Having given the justification for triangulation, it is now necessary to look closely to the data collection methods. This study has particularly deployed semi structured interviews in the first and second stages of this study while survey at the third stage; the following sections will discuss the data collection procedures.

3.5.1 Methods of interview design

In this section, the method of semi structured interviewing will be discussed as well as the development of interview schedule and the discussion activities. Interviews have become increasingly common in research. For a rich and in-depth account, the interview has to be either unstructured or semi structured. An unstructured interview occurs when the interviewer will at the most use a few brief topics to prompt the interviewee, who is them allowed to respond however he or she wants. On the other hand, semi structured interview occurs when the interviewer is guided by a more detailed topic guide that usually contains some fairly specific questions to ask and likely ways of probing (Lee and Lings, 2008). This study used semi-structured interviews as it was optimal for collecting data on individuals' personal histories, perspectives, and experiences, particularly when sensitive topics like occupational stress are explored. Again, since this study attempts to discover and/or refine theories and concepts, it was appropriate to make the interview less structured (Devers and Frankel, 2000). In the interest of simplicity, throughout this section, the first person is used and the term interview denotes semi structured interview.

As nicely put by Lofland and Lofland (1995:16): "... face to face interaction is the fullest condition of participating in the mind of another human being and ... you must participate in the mind of another human being to acquire social knowledge". Because offshore work and issues of occupational stress in the Nigerian setting is rather an unexplored area, a semi structured interview is used to ensure a level of flexibility and encourage participants to express themselves. The use of interviews was thought to be valuable as it showcased the in depth characteristics of the situations, the meanings brought by participants and what is happening to them at the moment (Patton, 2002).

The idea behind this is to study things in their natural settings in an effort to discover the meanings seen by those who are being researched (or subjects) rather than that of the researcher which produces culturally specific and contextually rich data (Pope and Mays, 1995). These interviews looked in depth at the occupational stress encountered by offshore professionals in the Niger Delta considering the social, economic or political factors that may be affecting the way they experienced stress.

The first stage is a series of scoping interviews with eight (8) managers across four major Oil MNCs in the Niger Delta. The aim was to define the context of the case study analyses and understand the oil Industry in the Niger Delta as well as the roles of the oil MNCs over there.

The second stage of interview was with fourteen (14) offshore professionals, the aim was to discover the stress factors they identified with. The researcher was interested in the experiences of Niger Delta offshore workers in terms of occupational stress; therefore, it only made sense to use the managers and offshore workers in the oil companies in the Niger Delta in the investigation.

In targeting people to participate, some restrictions were given: for the management interview, it was necessary to use managers that were knowledgeable about workers and the business of oil exploration and production and also, in constant touch with staff and can response from the point of view of workers. Hence, Human resource managers, health and safety managers and Public relations managers were used. Regarding the workers interview, for the purpose of not having bias of getting varying responses due to different skill levels of workers, the study focused on offshore professional workers. In this study, a professional means a worker who has graduate or technical jobs while non-professionals are in the low skilled jobs e.g. cooks, washer men, cleaners etc.

In the interview process, the researcher tried to develop a sampling frame i.e. selecting sites and/or subjects capable of answering the research questions and securing their participation in the study as suggested by Devers and Frankel (2000). The site (offshore drilling and production installations located in the Niger Delta) was obvious and did not take time to decide; four of the top Oil multinational companies in the Niger Delta (comprising of EU owned, America Owned and Nigeria Owned) for the management interview and eight top oil multinational companies (comprising of EU owned, America Owned and Nigeria Owned) for the workers' interview. There are usually two types of sampling techniques - probability and non-probability. In probability sampling, just as the name implies, everyone in the population has the same opportunity to get involved in the sample while in non-probability sampling, the features of the population are used in selecting subjects in the study (Corbetta, 2003). This study adopted a non-probability sampling strategy in determining who the subjects will be, by using snowballing and purposive techniques which enabled the researcher to select and study the case that can answer the research questions.

The researcher gained initial access to managers and workers through her personal and business links. Particularly, the researcher had in the past worked as a recruiter for top oil MNCs in Nigeria where she made key contacts with managers and offshore workers. These key contacts became gatekeepers throughout the data collection process as they incorporated

more respondents form their business links. The researcher later selected the respondents who were knowledgeable about the issues being investigated, willing to talk and representative of the range of points of view as suggested by Rubin and Rubin (1995). This process helped in getting the basic information and facilitating access to management staff and offshore workers in the desired organisations.

Table 3.1 - No. of respondents used in the case study

Key	Country	No of respondents	Role Designation	
stakeholders of	Designation			
the case				
NNPC	Nigerian	2	1 Human Resource manager; 1	
			Public Relations manager	
SHELL	EU	2	1 Human Resource Manager; 1	
			health and safety manager	
TOTAL	EU	2	1 Human Resource Manager; 1	
			health and safety manager	
CHEVRON	NON EU	2	2 Human Resource personnel	
TOTAL		8		

Regarding the management interview, a list of questions was developed in advance to explore their goals and strategies of business, the environment where they worked and how it impacted on them, the various stress factors faced by them, work life balance, health & safety and issues around employment relations. To achieve the main purpose of answering the research questions, the management interview questions were divided into 9 sections – background, about the firm, workforce diversity, stress, employment relations, health & safety, workplace skills, work life balance and environment hence, the analysis will be sectionalized accordingly in relation to stress. A schedule of the interview questions is included in the thesis (see Appendix). I observed that respondents felt comfortable and a sense of control while being interviewed in their offices but they were very careful in their utterances. This appeared to me, they did not want to give out information about their organizations and it made me support the little findings I got with secondary data, especially from organizations' websites, industry reports, academic surveys, books and articles.

In relation to the workers interview, at the beginning of each interview, the researcher made sure she introduced herself as a research student from the University of Leeds Business School, gave her name and then explained the aim of the research to the respondents. This introduction was followed by asking the respondents to give a brief CV about themselves

thereby gathering more demographic information about them. This created a relaxed atmosphere to conduct the interview and facilitate the conversation with the respondent. The respondents were also assured of the confidentiality of the given information. A list of questions was developed in advance divided into 9 sections – demographical data, pay differentials, gender/ethnicity, work patter/expectation, workload, work-life interface, career prospects, safety and insecurity and work organization. The questions were put together from various sources, e.g. my further reading especially after getting little information from the management. These questions were validated by my supervisors to ascertain that they have the potential of answering the research questions.

Table 3.2 - Population of the workers' Interview

s/n	Gender	Age	Org.	Marital Status	State and Zone	Position	Work pattern	Contract status
1	Male	48	Shell	Married	Osun (South West)	Pipeline Project Engineer	Irregular	Contract
2	Male	39	Chevron	Married	Ondo (South West)	Electrical Engineer	2 Wks on/off	Permanent
3	Female	28	Schlumberger	Single	Enugu (South East)	Field Engineer	Irregular	Contract
4	Male	32	Shell	Single	British	Process Engineer	4 wks on/off	Contract
5	Male	32	Total	Single	Rivers (South South)	Senior Pipeline welding Inspector	2 wks on/off	Permanent
6	Male	38	Schlumberger	Married	Kwara (North West)	Senior mechanical Engineer	Irregular	Contract
7	Female	32	Chevron	Married	Anambra (South East)	Senior pipeline Engineer	2 wks on/off	Permanent
8	Male	39	NNPC	Married	Enugu (Soutth East)	Electrical Engineer	2 wks on/off	Permanent

s/n	Gender	Age	Org.	Marital	State and Zone	Position	Work pattern	Contract
				Status				status
9	Male	43	Agip	Married	Oyo (South West)	Process	Irregular	Contract
						Engineer		
10	Male	37	Addax	Married	Ekiti (South West)	Field Engineer	2 wks on/off	Permanent
11	Male	30	Fegofs	Single	Kano (North East)	Driller	Irregular	Contract
12	Male	42	Chevron	Married	Akwa Ibom (South	Mechanical	2 wks on/off	Contract
					South)	Engineer		
13	Male	46	Total	Married	Enugu (South East)	Welding	Irregular	Contract
						Engineer		
14	Male	36	NNPC	Married	Anambra (South East)	Senior Drilling	2 wks on/off	Permanent
						Engineer		

The use of interviews was thought to be valuable as it allowed access to the in depth characteristics of the situations, the meanings brought by participants and what is happening to them at the moment (Patton, 2002). The goal is to study things in their natural settings in an effort to discover the meanings seen by those who are being researched (or subjects) rather than that of the researcher which produces culturally specific and contextually rich data (Pope and Mays, 1995). Because offshore work and issues of occupational stress in the Nigerian setting is rather an unexplored area, an informal semi structured interview was used to ensure a level of flexibility and encourage participants to express themselves. These interviews looked in depth at stressors that might be experienced by offshore workers in the Niger Delta region of Nigeria. Leonard (2003) and Saunders *et al.*, (2003) claim that participants may use words in a specific way that gives the researcher an opportunity to probe these connotations thereby, adds significance and depth to the data obtained and may also lead the discussion into areas the researcher had not considered earlier but are significant for understanding the study. In relation to the current study, an enhanced understanding of labour market, geographical and socioeconomic disconnectedness as they relate to occupation stress will be achieved.

For both management and workers' interviews, interviews took place in either the respondents' company onshore premises or homes and lasted between 40-60 minutes. The respondents did not want the interview to be recorded so the researcher was only allowed to take notes hence; handwritten notes of the respondents' responses were taken all through the interview and notes were transcribed by the researcher. In the interest of having a complete and accurate account, the transcription was verbatim. Prior to the interview, respondents' consent was sought through letters (It asked respondents to indicate their interest as regards the interview and also choose the date/time and venue of the interview, and provide contact details) and the respondents were reminded of their rights to withdraw at any time of the study or to feel free not answering uncomfortable questions. Then the interview sessions were scheduled and held as planned. Finally, they were all thanked deeply and promised to be given copies of the final research findings.

3.5.2 Methods of survey design

According to Burns and Grove (2001:426), a questionnaire is a self-report form designed to extract information and is developed with specific items to assist with data collection. The questionnaires were distributed to 200 offshore professionals accompanied by a covering letter explaining the purpose of the study, importance of completing the survey and a pledge of confidentiality (see Appendix). This was done with the help of the researcher's social network in the oil offshore industry in the Niger Delta. The social network contributed to the high response rate (85%) as they kept reminding respondents to complete their questionnaires. The use of questionnaire could also be said to have paid off as large amounts of data were collected from a large number of people just in short time and in a cost effective manner. Again, this stage of research enjoyed uniformity of questions which may yield data more comparable than data obtained from interviews; the responses were also analysed in a more "scientific" or "objective" manner.

Questions from other studies on occupational stress were adapted in the development of the questionnaires used in this study alongside my own questions which helped to shed light on the different aspects of disconnectedness. Among them are, Sutherland and Cooper (1996) and survey based on the Management Standards Indicator Tool produced by the HSE (Health and Safety Executive). Based on relevance to the current study, items on the first draft of the questionnaire were chosen. Once the first draft was completed, copies were given to selected staff at the Leeds University Business School for review; specifically, my supervisors because of their expertise in survey and they were able to ensure that the items covered the crucial aspects of the study and is capable of answering the research questions. The development of the questionnaire involved deciding on the type of questions, compiling the questions and refining the questionnaire. The demographic details of the questionnaire did not require the identity of the participants, thereby maintaining confidentiality. Both positive and negative statements were part of the items in the questionnaire meant for participants to fill based on the 5 point scale. The questions were ordered in a logical sequence to allow for careful documentation of events. During the research design process, the questions were evaluated based on relevancy and appropriateness which is consistent with Burns and Grove's (2001:401) 4 point scale to assess the relevance and content validity of the questions as follows:

- 1. Not relevant
- 2. Unable to assess relevance or item is in need of revision
- 3. Relevant but needs minor alteration
- 4. Very relevant and to the point

Again, in order to encourage respondents to participate in the questionnaire, the questionnaire was designed to be easy to complete, requiring them to tick only. They were assured confidentiality and anonymity in terms of the reporting of research findings. The questionnaire required demographic information from respondents, which may give room for further research. As a result of the above exercise, some questions were added, altered and deleted.

Right after the completion of the questionnaire, a pilot study was carried out with twenty one (21) offshore workers. A pilot study is a feasibility study or trial run done in preparation for the major study (Polit et al., 2001). Its advantage according to Teijlingen and Hundley (2001) is that it might give advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated. Afterwards, the questions were restructured and the major study followed immediately.

For the main survey, 200 questionnaires were distributed to offshore workers who worked in the Niger Delta between January and February, 2013. Each questionnaire was distributed first to the researcher's personal and business links as mentioned earlier, who then helped in distributing other questionnaires to their colleagues and also sent reminders to them on a regular basis. Each questionnaire was accompanied by a covering letter explaining the purpose of the survey and how important it was for the questionnaires to be completed (see appendix). The frequent reminders from the researcher to the gate keepers and then from gate keepers to offshore workers who have been given questionnaires to made up for the high response rate of 85%. The respondents were required to fill in the demographic information and then tick statements (90 statements) according to how they agreed or disagreed with them. The questionnaire was designed to understand the causes of stress to offshore workers in the Niger Delta, ascertain whether workers moderated these stressors or not and then identified consequences. This reflects the stress process discussed in the literature review chapter. The questionnaire was divided into section with the sole aim of finding out stressors, coping strategies of workers, forms of

disconnectedness, and stress outcomes; these sections looked at different causes of stress such as: career development, safety and insecurity, work/home interface, control over job, working condition, living condition, unpredictability of work pattern, organizational structure, workload, air transportation, pay and then pay.

171 questionnaires were completed, giving a response rate of 85 percent. The respondents worked for Shell, Total, NNPC, Chevron, Agip and Schlumberger. The responses obtained from the questionnaire were coded and analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics were used in this study to enable comparison of data set. The following table shows a description of survey sample and percentage response rate. As intended, the respondents were experienced and technically qualified.

Table 3.3 - Survey Sample and Percentage Response Rate

Variable	DEMOGRAPHICS	FREQUENCY	PERCENTAGE
Age	25-29	29	17%
	30-34	72	42.1%
	35-39	43	25.1%
	40-44	21	12.3%
	45-49	6	3.5%
Marital Status	Married	99	57.9%
	Single	72	42.1%
Number of Children	0	54	31.6%
	1	42	24.6%
	2	39	22.8%
	3	27	15.8%
	4	9	5.3%
Gender	Male	148	86.5%
	Female	23	13.5%
Nationality	Nigerian	160	93.6%
	West African	1	0.6%
	Rest of the world	10	5.8%

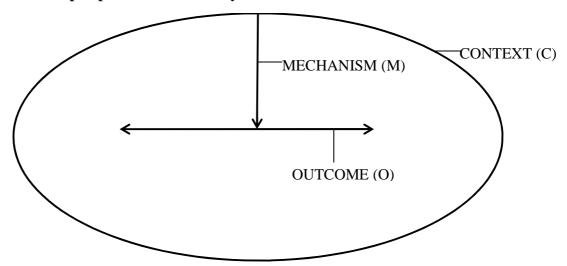
Variable	DEMOGRAPHICS	FREQUENCY	PERCENTAGE
State of Origin by Zone	North Central	28	16.4%
	North East	4	2.3%
	North West	3	1.8%
	South East	27	15.8%
	South-South	60	35.1%
	South West	38	22.2%
	West African	1	0.6%
	Rest of the world	10	5.4%
	Total	171	100%
Educational Qualification	WAEC (GCE O Level)	2	1.2%
	University Degree	118	69.0%
	Masters	50	29.2%
	Others	1	0.6%
Name of Organization	Shell	46	26.9%
- 1 01 01 9	Total	30	17.5%
	NNPC	32	18.7%
	Chevron	31	18.1%
	Agip	20	11.7%
	Schlumberger	12	7.0%
Tenure in organization	1 – 10 years	148	86.6%
6	11 - 20 years	23	13.4%
	J. J. L. L.		
Time spent offshore	1 – 7 years	130	76%
•	8-14 years	41	24%
	· y		1,75

Variable	DEMOGRAPHICS	FREQUENCY	PERCENTAGE
		140	07.00
Role	Engineers	149	87.0%
	Managers	8	4.7%
	Consultants	3	1.8%
	Supervisors	9	5.3%
	Welders	2	1.2%
Job Type	Permanent	70	40.9%
	Contract	101	59.1%
Work Status	Full time	171	100.%
	Part time	0	0%
Work Pattern	Day/night pattern	104	60.8%
	Work/leave pattern	38	22.2%
	Irregular work pattern	29	17%
Working Hours	31 – 40 hours	14	8.2%
<u> </u>	41 - 50 hours	91	53.2%
	51 – 60 hours	66	38.6%

3.6 Methods of data analysis

This section looks at how the gathered data were analysed. The question is, what does the researcher do with the data gathered and recorded? Mechanisms are central to the critical realism analytical strategy; they are causal structures that can trigger events (Bhasker, 1998b). In explaining the outcome of stress amongst offshore workers in the Niger Delta of Nigeria, the logic of the generative causation prescribed by Pawson and Tilley (1997) was applied (see Fig 3.2).

Figure 3.2 - A realist perspective on data analysis



Pawson and Tilley (1997) suggest that a realist study highlights a context – mechanism – outcome pattern where the outcome is triggered by mechanism acting in a context. The interest of this study is to understand stress outcomes and how they are produced in the Nigerian oil and gas industry. Outcomes give the causal explanation of elements in the empirical data in the form of a pattern that triggers inquiry while mechanisms go beneath the surface of objects to explain their 'inner workings' and contexts are pre-existing institutional, organizational and social conditions that impact on people's choices. Therefore, mechanism and context are partners in generating outcomes (Pawson and Tilley, 1997).

In the current study, context represents Nigerian oil industry (Niger Delta) while mechanism represents the labour process and therefore involves systems, persons and organizations. Since

mechanism acts in partnership with context, institutional arrangements, oil companies, Niger Delta communities and culture were put into perspective whilst trying to identify stress patterns amongst workers. This means that some events not directly experienced by workers might cause stress to them whether they are aware of them or not. Therefore, in order to explain the empirical regularities, we need to move from observed events to the causes of the observed events (retroduction).

The conception of a stratified political economy was used to tease out the connection and disconnections between agents in the economic sphere. This indicated that offshore workers in the Niger Delta felt disconnected at several levels - at the context level, the political and economic exclusions felt by the people of Niger Delta gave rise to conflict in the region hence, the insecurity felt by offshore workers. This factor made offshore workers feel disconnected from the community they lived and worked in, also, it triggered stress to offshore workers in three variant forms – job insecurity, fear and reduced bonuses. At the labour process level, the researcher started by looking at the objects each of the events was associated to. Specifically, the different types of workers were identified to be contract vs. permanent workers and expatriate vs. local workers. Inequalities, especially in terms of pay, rewards, training and progression amongst contract, permanent, expatriate and local workers made the contract and local workers feel disconnected form the workforce and from the management. Also, the fact that offshore workers work weeks or even months away from their homes make them feel disconnected from social networks/family and vice versa. Finally, due to the insecurity in the Niger Delta, offshore workers tend to relocate their family members to safer regions thus running two homes and causing financial strain. Again, the culture of dependency in Nigeria has given rise to offshore workers staying away from home to avoid financial demands form family thus exacerbating geographical disconnectedness. This scenario led to a re-conceptualization of the whole case using three themes – labour markets disconnectedness, geographical disconnectedness and socioeconomic disconnectedness. Following the above approach, analysis of selected mechanisms and validation of explanatory power followed thus demonstrating that macro- micro mechanisms were examined.

3.6.1 Analytical methods

With regards to this research, the interview questions were reviewed by experts to ascertain that they have the potential of answering the research questions. According to Devers and Frankel (2000), a critical next step is organizing and managing the vast amount of information collected bearing in mind that this information must be kept in context. The ultimate aim of utilizing these procedures according to Priest et al (2002) is to allow a systematic, dense, explanatory theory to be developed.

From here, data reduction starts. Miles and Huberman, (1994) defined data reduction as the process of selecting, focusing, simplifying, abstracting and transforming the data. At this point, I hope to summarize the raw data into a transcript and the transcript into a set of codes. As suggested by Bryman (1988) and Silverman (2005), this thesis will include extended swathes of raw data in the research write-ups as well as the interviewer's questions and prompts. This is believed to allow readers not to rely solely on my interpretation but get a better picture of the respondents' own concepts and categories. These phrases will be used to develop codes.

Coding is core to data analysis and are designed to capture the meaning of a unit of text, not just the words considering the fact that different people use different words for the same underlying meanings (Lee and Ling, 2008). The coding process started immediately after the management interview had been conducted. The method of qualitative data analysis followed Braun and Clarke's (2006) 'guide' to the 6 phases of conducting thematic analysis- becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report. Since the interview questions were already grouped into sections, it was easier to generate initial codes according to those themes in the first instance. The pieces of data were looked at in great detail – joining categories and collapsing overlapping codes in order to reduce the occurrence of repetition; this period of data manipulation, storage and coding made me very familiar with my data. Braun and Clarke, 2006, defined a theme as "a theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set' (p.82). Thematically, therefore, the patterns of the data were examined and three themes were identified - labour market disconnectedness, geographical disconnectedness and socio-economic disconnectedness, thus the causes of stress amongst offshore workers in the Niger Delta as well as the interaction between these stress factors were limited to the dimension of these themes.

On the other hand, having established three themes in the qualitative data analysis, the quantitative data analysis started by restructuring the questions by the qualitative themes - labour market disconnectedness (pay and rewards, training & progression, autonomy, discretion or labour process, job security, relationship with colleagues, relationship with management, flexibility, law and representation), geographical disconnectedness (home and family, social life, relationships, living conditions and work environment) and socio-economic disconnectedness (security over transportation and safety in the region). SPSS 21.0 was used as the primary software for conducting statistical analysis. According to Saunders et al., (2007), data types can be classified into categorical (data without numerical measurement), quantifiable (data that have numerical measurement) and continuous data (data that can take any value). The responses were manually coded so as to be able to do some statistical analysis. There were a total of 90 statements on the scale of – strongly disagree (SD), disagree (D), neutral (N), agree (A) and strongly agree (SA). Because the questionnaire had both positive and negative statements, they were rated differently as represented in the table below-

Table 3.4 - Survey order of rank

POSITIVE STATEMENTS		NEGATIVE STATEMENTS		
Scale	Rating	Scale	Rating	
SD	1	SD	5	
D	2	D	4	
N	3	N	3	
A	4	A	2	
SA	5	SA	1	

The quantitative data was stored in SPSS according to themes and only the researcher had access to the file as it was stored on the university's M drive. The information entered into SPSS was carefully checked three or four times to ensure minimal entry errors. In terms of how the quantitative data were explored, descriptive statistics was used to summarize occurrences of cases within each question and thus arranging them from highest to lowest. The findings were displayed in tables and histograms for clearer presentation of frequencies and percentages. Furthermore, the central tendencies were measures by generating the mean values of all the questions. Also, cross tabulations were utilized to indicate the positive relationships between questions.

3.7 Ethical Considerations

Throughout interviews and survey, anonymity and confidentiality were of utmost importance. The respondents in this study all agreed to be part of the study on the condition that neither their names nor the names of their organisations will be mentioned. However, a conscious effort has been made throughout this study to adhere to these conditions. According to Saunders et al (2003), ethics means the appropriateness of your behaviour in relation to the rights of your participants during a research. They went further to suggest that one should consider ethical issues throughout the period of study and to remain sensitive to the impact the work leaves on those who provided access, cooperation and those affected by the result.

Good practices in ethics suggest that no participant should be harassed or subjected to questions that created stress or discomfort. Considering the topic of this thesis, it was anticipated that some questions might cause discomfort; therefore, the research employed the services of a counsellor and even had to reschedule some interviews in some cases. It was also stated clearly in the questionnaire that questions that made them uncomfortable must not be answered. Also, there was an agreement between the researcher and social network in the Nigerian Oil industry that the identity of the offshore workers will not be revealed and the findings of the research will not be used for any other purpose.

Again on the issue of ethical consideration is informed consent. Faden and Beauchamp (1986) defined informed consent as the autonomous authorization of one's participation in research. According to Saunders et al, (2009), the return of a completed questionnaire by a participant is taken to have implied consent. They went further to say that participants' consent should be given freely and based on full information about participation rights and use of data. Bearing the above in mind, it may be argued that the respondents' consents were sought at every stage of the study through covering letter.

3.8 Limitations

The study encountered a number of limitations; both operational and methodological. Firstly, time constraints on completing the PhD study made it difficult for the research data to be broadened thus not possible for a longitudinal study to follow in order to follow up the causes of occupational stress amongst offshore workers in the Niger Delta region of Nigeria. Although the study was limited to the oil and gas industry in the Niger Delta because that is where the oil resources of Nigeria is majorly located, it would have been interesting and insightful to compare offshore workers in the Niger Delta to their counterparts in other regions of Nigeria in terms of how they experience occupational stress. Although the study was based on offshore workers in the Niger Delta, its intention was not to look at Nigerians in the Niger Delta rather both Nigerians and non- Nigerians working offshore in the Niger Delta. However, the majority of respondents were Nigerians thus making it difficult for detailed comparisons to be drawn between Nigerians and non-Nigerians. More so, data was collected onshore; it is unclear if data collected offshore would result in any different findings. There is also a possibility of 'selection bias'; since gate keepers were used to distribute questionnaires to participants, it is possible 'healthy worker effect' played out as data are typically obtained from workers who have survived the rigors of offshore work.

In addition, the researcher was restricted by the funds available for travelling to conduct interviews. Particularly when participants had to reschedule without notice; this made some journeys fruitless thus incurring cost. Also, accessing issues around stress was difficult due to their sensitive nature that usually generates emotional response. It was difficult for respondents to discuss their private experiences without their feelings being negatively impacted on. However, in order to achieve the aim of gaining increased understanding and consciousness of

workers' experiences of work and stress, the researcher probed further. To ameliorate negative feelings generated by engaging with the sensitive subject of stress, the researcher had to engage the services of a counsellor which was expensive especially the travel expenses but it paid off especially when one of the respondents hysterically wailed over the loss of his wife during the interview session (the interview was rescheduled and the counsellor had sessions with him to help ease the pain he felt) and other seemed very emotional over their kidnap experiences. It was very difficult to get time off some of the offshore workers when they are onshore because they have so many things to do in so limited time. Again, it was difficult to obtain supporting documents (particularly up to date data) especially about the companies in terms of their health and safety policies, interventions to occupational stress, financial report, etc,. The managers that were interviewed did not offer help towards that and gave little information during interviews. More so, during interview sessions, due to the fact that some interviews took place in the office area or participants' homes, there were frequent interruptions in the form of phone calls, children's attention, text messages etc. all of which delayed and disturbed the interview.

Furthermore, the questionnaire did not ask as much questions in the geographical and socio-economic disconnectedness as it did in the labour market disconnectedness thus more detailed data in the labour market disconnectedness section than others. Also, some local companies did not have websites nor give company information to the researcher which made it impossible to know about them and thus not write about them. More so, respondents did not allow for discussions to be recorded so the researcher made notes for all the interview sessions which made it difficult to catch up with respondents sometimes but I stopped them periodically to take notes which may have delayed or disrupted the interview flow. Some respondents were touchy because the topic was quite sensitive; some were quite emotional and cause interruptions in the interview process.

3.9 Analysis of the Organizations' profile

In total, eight (8) companies of different sizes were used for the study. Two of these companies were Nigeria owned, four companies were EU owned and one company was America owned. This indicates that this study covers both local oil companies and oil multinational companies; it also presumes that workers across various companies will have unique experiences of stress, considering their size, activities and modes of work. Based on information of their websites, a

brief description of each company is given below except for one local company that did not have a website as at the time of this study. The following analysis sets the stage for the findings that will emerge form chapters five, six and seven i.e. empirical chapters.

Table 3.5 - Brief summary of companies

NAME	NNPC	SHELL	TOTAL	CHEVRON	SCHLUMBERG ER	AGIP	ADDAX
Owner- ship	Nigeria	EU	EU	America	EU (Schlumberger was registered in Netherlands, founded in France but has enormous US presence).	EU	Nigeria
Presence in Nigeria	NNPC has its headquarters in Abuja, the federal capital of Nigeria and has zonal offices in Lagos, Port Harcourt, Warri and Kaduna.	Shell has been active in Nigeria since 1937. In Nigeria, Shell has offices in Port Harcourt, Warri, Lagos and Abuja.	Total is present in Nigeria through its main subsidiary Total Exploration & Production Nigeria limited since 1962. Their Nigerian operations, run by a staff of about 1,300 at offices in Abuja, Lagos and Port Harcourt	Chevron operates in Nigeria through its subsidiary Chevron Nigeria Limited. The company operates under a joint-venture arrangement with the Nigerian National Petroleum Corporation.	In 1956 Schlumberger logged the first oil well in Nigeria, and has since grown to provide a full range of services to the oil and gas industry in Nigeria.	Agip operates in Nigeria in the exploration and production of hydrocarbons, in the natural gas and in the oilfield services, construction and engineering sector.	Addax Petroleum began operations in Nigeria in 1998 by signing two Production Sharing Contracts (PSCs) with the Nigerian National Petroleum Corporation (NNPC).

NAME	NNPC	SHELL	TOTAL	CHEVRON	SCHLUMBERG	AGIP	ADDAX
Activities	NNPC has about 11 subsidiaries engaged in upstream (oil exploration), midstream (oil production and refining) and downstream (retail of oil products). NNPC by law manages a joint venture between the Nigerian federal government and oil MNSc.	SHELL's activities cover exploring and producing of oil and gas both onshore and offshore as well as gas sales and distributio n.	TOTAL's activities cover exploring and producing of oil and gas both onshore and offshore as well as gas sales and distribution.	CHEVRON's activities cover exploring and producing of oil and gas both onshore and offshore as well as gas sales and distribution.	Schlumberger is a core provider in the deep-water segment, and its Nigeria Integrated Centre of Excellence addresses problems of production from mature fields (both onshore and offshore) and deep water well placement and recovery challenges amongst others. It has operated as a locally incorporated company since 1970.	AGIP's activities cover exploring and producing of oil and gas both onshore and offshore as well as gas sales and distribution.	ADDAX's activities cover exploring and producing of oil and gas both onshore and offshore as well as gas sales and distribution.

The following chapters aim at understanding nature of Niger Delta, identifying stress factors to offshore workers in the Niger Delta as well as the interaction between these stress factors. More specifically, chapter four sets the background of the study by looking at the economic, political, cultural and social settings of Nigeria and Niger Delta in particular. Chapter five will give an overview of the oil and gas industry in Nigeria (particularly, Niger Delta); specifically, the history, structure, activities, industrial relations issues and external factors that impact the industry will be tackled. Chapter six and seven will strive to answer the research questions while chapter eight discusses the findings, gives direction for future research in occupational stress in the Niger Delta and then give recommendations to curb the effect of stress amongst offshore workers in the Niger Delta region of Nigeria.

4.0 Chapter Four: The Nigerian Background

4.1 Introduction

As discussed in the previous chapter, this study involves a wide-ranging analysis of the oil industry in Nigeria. Therefore, it is imperative to examine the environment (Niger Delta, Nigeria) within which the oil companies operate so as to identify the wider socio-economic factors that might cause stress to the offshore workers in the Niger Delta. In this respect, the aim of this chapter is to present the social, cultural, political and economic background of Nigeria. Nigeria is a country with over 120 million people and over 250 ethnic groups divided into only 6 geo-political zones (North West, North East, North Central, South West, South East and South-South) thereby painting a picture where inequality might be inherent in the nation with a lot of minority groups who do not have a political voice.

Crude oil is currently the economic mainstay of Nigeria and has made Nigeria the most oil-dependent country in the world as measured by oil's share in exports (CIA 2008). This has consequences such as extreme government dependence on oil revenue causing slow economic growth, lack of effective organizations that will demand transparency and responsibility on the part of political office holders causing economic inequality where the elites get richer and the masses get poorer, an unstable revenue allocation system also causing inequality across communities and people, all of which have an end point of resource-induced conflicts (Oyefusi, 2007). In fact, poverty and inequality have had strong concentrations in the Niger Delta causing resentment amongst the indigenes of the region and driving violence in the region (Higgins, 2009). Apart from these inequalities, since oil is usually exported as a crude product, it might circumvent opportunities for oil to be refined locally thereby avoiding the establishment of industries and employment opportunities for Nigerians (CIA 2008).

This background sets the stage for a contextual analysis of Nigeria to be presented in this chapter. Therefore, this chapter starts by presenting the geographical background to Nigeria dwelling more on the Niger Delta because majority of the oil reserves and oil companies in Nigeria are found there. In this section, a detailed analysis of the Nigerian populace will be looked at using the 6 geo-political zones. Moving on, this chapter will engage with Nigeria's cultural setting to analyse the values that exist in Nigeria in order to help in explaining some findings later in this study. In addition, the economic setting of Nigeria will be captured looking specifically at the GDP growth rates and how it translates to employment rates and standard of living of the Nigerian populace.

More specifically to the aim of this chapter, the social, economic and political structures of the Niger Delta will be critically analysed as it will provide a good lens through which the experience of working as an offshore professional in the Niger Delta can be explored. In this section, topics socio-political exclusion and economic exclusion of the Niger Delta will be closely examined. Then, an attempt to portray how working in the Niger Delta will be made and conclusions will be drawn from the overall analyses of the chapter.

4.2 Nigerian Geographical Background

Nigeria is bordered by Benin, Cameroon, Chad, Niger and 853km of coastline on the Gulf of Guinea covering 910,768 square kilometres of land in West Africa. Abuja, the capital of Nigeria, is located in the country's centre. Nigeria is also Sub-Saharan Africa's most populous city, and projected to surpass Cairo as Africa's most populous city by 2025 (United Nations Population Division 2008). Nigeria is a country with a population of over 120 million and approximately 300 ethnic groups. The three dominant ethnic groups are the Hausa/Fulani in the northern region, the Yoruba in the Southwest and the Igbo in the Southeast (Oyefusi, 2007). Officially, Nigeria has six regional zones: North West, North East, North Central, South West, South East and South-South (see Figure 1).

Constructed by colonial powers from a number of different ethnic groups, Nigeria's South and North were administered separately until 1914's amalgamation. In fact, Nigeria's boundaries were not alike in terms of culture, social activities, religious beliefs and physical/environmental qualities. Be that as it may, regional politics continues, as Nigerians have not yet embraced the concept of a single Nigerian nation; in other words, Nigerians lacked national identity (Alubo, 2004; Ghanbari, 2011).

Due to lack of national identity, shortly after Nigeria's independence in 1960, the Eastern region declared their independence which was followed by 30-month civil war from 1967, killing millions of people and worsening ethnic hatred especially between the North and the South of Nigeria (Ghanbari, 2011; Falola and Ihonvbere, 1985). As a result, greater identification with regional, ethnic, or religious identities remains more common than identification with national identity. In the 1960s, shortly after independence, a survey found that when asked "What are you?" over half of the Igbo and Yoruba interviewees said they belonged to their ethnic group, rather than to their country (Klineberg and Zaralloni 1963). Nigeria is usually characterised as a deeply divided state in terms of ethnic, religious, and regional divisions in the country (see Smyth and Robinson 2001). Its implication is that

Nigeria will be threatened by disintegration, civil war, minority agitation, and violent conflicts. Although, all these were evident in Nigeria after independence, disintegration continues to be considered by aggrieved divisions of society as one of the possible ways of resolving Nigeria's problems (Osaghie and Suberu 2005). Within the discussion above, disconnections experienced by Nigerian can be easily deduced as people from different ethnic groups, religious beliefs or region feel disengaged from the entire country.

With over 250 ethnic groups, abundant regional and religious divisions, innumerable social tensions are not unusual. There have been social tensions due to ethnic politics. Estimates indicate that approximately 800,000 Nigerians were internally displaced as a result of "localized conflict" between 1999 and 2003 (Commission for Africa 2005), while "approximately 53,000 were killed from September 2001 to May 2004 in 'communal clashes'" (John et al. 2007). Such conflicts are often attributable to numerous and overlapping factors related to political, religious, ethnic, or regional discord. Regional, ethnic and religious lobbying is evident in Nigeria. The extent of religious and ethnic tensions is often attributed to governmental failure to cultivate a strong national identity (Ikpeze et al., 2004; Rotberg, 2004, 2007). However, amongst these ethnic groups sectionalized into six regional zones, natural resources, ethnic and religious groups, educational attainments, poverty level differ; these factors will be discussed in the following sections.

4.2.1 Regional zones

Nigeria has two major divisions- the North and the South. In these divisions are six regional zones in Nigeria – North East, North West and North Central in the Northern division while South East, South West and South-South in the Southern division. There is disparity in education, standard of living and resources in these regional zones. These regions differ in many ways especially, educational attainments, wealth and formal employments. In terms of education, Nigeria, ranking one of the highest in the world on gender inequality reflects an education gap (Agunwamba et al., 2009). The Nigerian National living standards survey by National Bureau of Statistics September 2003-August 2004 showed that households in the North East and North Central appear to be the poorest. However, this could be attributed to higher household size and lower educational attainment in the regions (cf. Agunwamba et al. 2009). The following sections will briefly outline differences across Nigeria's regional zones in terms of educational attainment and poverty levels.

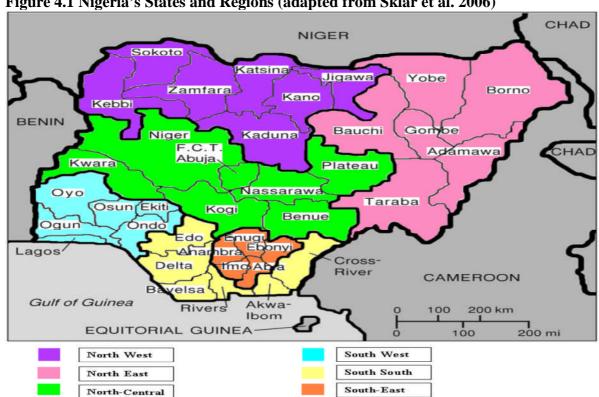


Figure 4.1 Nigeria's States and Regions (adapted from Sklar et al. 2006)

North-East, North-West and North-Central

These regions of Nigeria are known for agriculture and industries. Twenty states out of thirty six states of Nigeria fall within these regions. In the North East, 70-90% of the working age individuals are engaged in subsistence farming or any other agriculture-related activities but the poverty rate in this region is high (Soludo, 2007; Adegbola, 2008). The lowest regional primary school attendance rate in Nigeria is found in these regions, primarily due to the family's need for labour, and enrolment in a Qur'anic school (Education Policy and Data Centre: cf. Agunwamba et al., 2009).

South West and South East

These regions consist of 11 states in Nigeria. The South West has the highest concentration of industries in the country, located in the city of Lagos. Also, the South East is known for farming and their astuteness in trading and business. The South East boasts the highest percent primary school attendance in Nigeria (85%) and the highest preschool attendance (80 % of children aged 6-11 years who have attended school). The next highest levels of both of these are in the South West at 82% and 62% respectively (Education Policy and Data Centre: cf. Agunwamba et al., 2009).

South-South

This region is also known as the Niger Delta which is the centrepiece of this study. It consists of six states (Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers). The birthplace of offshore oil and gas industry is the Niger Delta but apart from oil industry, the region has few industries and the major occupation there is fishing and farming. Despite being the main source of oil exports for the country, this region suffers from poor infrastructure, sanitation, access to healthcare, and educational opportunities, as well as inadequate investment in development. Environmental damage from oil exploration and exploitation has contributed to and exacerbated a number of these problems. These conditions have fuelled unrest, violence, and demands for greater attention to the development needs of the area (Joel 2008; Africa Investment Publishing 2009).

Poverty in the South-South region showed a similar pattern to that of the South East, rising from 13.2 percent in 1980 to 58.2 percent in 1996 before falling back to 35.1 percent in 2004 (Soludo 2007). In the South-South, 80% of children aged 6 to 11 years attend primary school. However, only 42 percent of those children attended preschool, as compared to 80 percent in the South East and 61 percent in the South West. The monetary cost of schooling is the factor most often cited to explain why a child has never attended school and why a child dropped out of primary school (noted by 51 and 46 percent, respectively), with the child being too young the next highest factor in never attending (42 percent), and the child no longer wanting to attend the next highest in dropping out (30 percent) (Education Policy and Data Centre; cf. Agunwamba et al., 2009). Since the Niger Delta is the core of this chapter and entire research, further in this chapter, the case of the Niger Delta will be discussed extensively as it will serve as a springboard for the coming chapters.

In conclusion, the above review shows that poverty is worse in the Northern regions of Nigeria where educational attainment is poor. Poor educational attainment impacts on employment opportunities available to indigenes of the region. For example, data in chapter 7 mirrors a scenario where only 20.5% of the research population came from these regions (North East, North West and North Central) as against 50.9% from South East and South West, then, 22.2.% from only South-South. Again, resources in various regions e.g. oil in the South-South region explains why wealth, opportunities and formal employment are concentrated in the region. Having looked at the different ethnic groups in terms of education and resources, it is imperative to cultural factors that influence the Nigerian people, their workplaces and their experience of stress; this is the aim of the next section.

4.3 Nigerian cultural setting

It is the aim of this section to examine the persistent dimensions of Nigerian culture as it will be useful later on in this study especially in explaining the different ways in which offshore workers experience stress. In fact, it is culture that will influence individual's sense making in their perceptions and attitudes towards occupational stress. Culture simply means people's way of life and it points to the socio-cultural environment in its wholeness. It is measured in terms of the attitudes, beliefs, norms and values which the people of a nation have and hold on to in general (see Savignon & Sysoyev, 2002). The point of focus in this study is on how these concepts influence behaviour in the society as a whole and the workplace in particular. The Nigerian culture is formed by various ethnic groups within Nigeria which brings great diversity or differences as well as similarities. Nigerians have close ties to their ethnic origin, with each ethnic group having peculiar belief system (Shokpeka, 2009). Distinct ethnic groups in Nigeria suggest different cultures and customs amongst them. But one common thing amongst Nigerians is the hierarchy in social structures, especially patriarchy and then the notion of extended family and dependency.

George and Jones (1996) recognized that culture varies from one society to another and therefore came up with the concept of 'national culture'. They defined national culture as the particular set of economic, political and social values that exist in a specific nation. Although Hofstede's argument on national culture has some limitations, this work will only use it as a guide in understanding the Nigerian culture and how it relates to the work environment. This section sets off with discussions around Nigerian family culture in terms of patriarchy and extendedness and dependency, and then how it relates to the workplace. Following this, Hofstede's (1984, 1991, and 2001) five dimensions on Nigerian cultures— power dimension, individualism vs collectivism, femininity vs. masculinity, uncertainty avoidance and long term orientation will be discussed.

a. Patriarchal norms and values

Patriarchy has been defined as a social system wherein the family headship and along with it power and possession passed from the man on to his sons (see Nwoko, 2012). Since the family is the smallest unit of the society, the definition suggests that men are the leaders of the society by extension. According to Chinweizu (1997), "the patriarch zone of function and authority includes the physical protection of the homestead and its territory, the male economic sphere..., the spiritual sphere..., the social sphere." Nwoko (2012) described the

matriarch zone of function on the other hand as restricting women to the kitchen and cradle, and perceived as demeaning for men to venture into. These socially ascribed functions inhibited women's participation in public life, since they were to be seen and not heard. Salaam (2003) neatly sums up patriarchy as a concept that justifies the marginalization of women in education, economy, labour market, politics, business, family, domestic matters and inheritance(Salaam,2003). This suggests low participation of women in workplaces which might cause feelings of disconnectedness and thus stress. In fact, it determines what the appropriate work activities for men and women are which reflects in their rewards, remuneration, progression etc. (Allanana, 2013). Therefore, women exploitation in the workplace is considered to be built into the structure of society.

b. Extended family and means dependency

An extended family is a family in which the child's parents, brothers and sisters live together with other relatives. Many Nigerian homes are extended family homes. In the extended family system, close ties exist between men (husbands) and their parents as well as with other relatives (Babalola 1991). The notion of extended family in Nigeria in taken from ancestral ties; this means that once an ancestry is recognized, the degrees of separation becomes irrelevant. Therefore, everybody is either a father, mother, brother, sister or child, thus constituting multiplicity of primary familial relationships. This trend cuts across practically all Nigerian ethnic groups (Obayan, 1994; 1995).

Extended families usually have close knit relationship with all members of the group. In fact, as an extended family, Nigerian families serve as a welfare and insurance agency to the needy, jobless, elderly and sick amongst members (Falola, 2001). The implication of such arrangement is that there are strong family ties with frequent contacts, care obligation for the aged relatives, financial obligations to relatives, people live with or close to relatives and family relationships can be oppressive; this scenario encourages means dependency. Another implication is that families tend towards the exclusion of 'outsiders' from certain forms of interaction, especially, those involving trust, and a tendency towards keeping secrets (Obayan, 1995).

c. Hofstede's (1984, 1991, 2001) national culture

The first of the five dimensions of Hofstede's (1984, 1991, 2001) national culture is power dimension and its sole concern is human inequality in relation to power, prestige and wealth which means it is societally determined. This dimension deals with the fact that all individuals in societies are not equal and the fundamental issue here is how a society handles inequalities among people. Power dimension is portrayed in the society when people in the lower social status totally obey people in the higher social status thus exhibiting fear to disagree with them. Nigeria scores high on this dimension (score of 80) which means that people accept a hierarchical order in which everybody has a place and which needs no further justification. According to Grzeda and Assogbavi (1999), African cultures are characterized with high power distance considering the fact that authority is allocated on grounds of education, experience and age and exercise of authority is through political system that supports concentration of powers. This high score for Nigeria implies that Nigeria is a highly stratified society where power lies in the hands of the superior in terms of education, experience and age and exercise of authority and the subordinates learn that it can be daring to question decisions of the superior thus making subordinates submissive. This then creates an autocratic leadership picture in Nigerian organizations where workers do not challenge the management even when need be because it is portrayed as disrespectful. In fact, subordinates expect to be told what to do and the ideal boss is an absolute ruler; this hierarchical order leaves the less powerful people dependent.

The second dimension of national culture is uncertainty avoidance which has to do with the way that a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? This ambiguity brings with it anxiety and different cultures have learnt to deal with this anxiety in different ways. The extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these is reflected in the UAI score. Nigeria receives an intermediate score of 55 on this dimension, which does not show a clear preference. Extreme uncertainty creates intolerable anxiety but human society has developed ways (technology, law and religion) to cope with inherent uncertainty for example, organizations use rules to avoid internal uncertainties caused by the unpredictability of workers or stakeholder's behaviour. There are also other ways of coping with such uncertainties – the cultural heritages of societies through institutions like family, school and the state.

The third dimension of the national culture is individualism as opposed to collectivism. It defines the degree of interdependence a society maintains among its members and shows in the way people live together e.g. in nuclear families, extended families or amongst other relatives. According to Hofstede (2001), the degree of individualism or collectivism a society has will strongly affect the nature of relations between an individual member and the organization to which she or he belongs. Nigeria, with a score of 30 in individualism therefore, is considered a collectivistic society. This implies an emotional dependence of members on their organizations; basically, the relationship between employers and workers is moral and family-like. There is a clear distinction between collectivism and power dimension; while power dimension connotes emotional dependence on powerful people, collectivism is emotional dependence on groups and organizations. Here, ties between individuals are loose i.e. people are supposed to look after themselves and their direct family only while in collectivist societies, people belong to 'in groups' that take care of them in exchange for loyalty (Hofstede and Hofstede, 2005). This is manifest in a close long-term commitment to the member 'group', be that a family, extended family, or extended relationships. Loyalty in a collectivist culture is paramount, and over-rides most other societal rules and regulations. The society fosters strong relationships where everyone takes responsibility for fellow members of their group as reflected in how Nigerians look after and protect their extended family. In collectivist societies offence leads to shame and loss of face. In short, in a collectivist society like Nigeria, there are strong family ties with frequent contacts, care obligation for the aged relatives, financial obligations to relatives, people live with or close to relatives and family relationships can be oppressive.

The fourth dimension of national culture is masculinity as opposed to femininity. A society is called masculine when emotional gender roles are clearly distinct: men are supposed to be assertive, tough and focused on material success, whereas, women are supposed to be more modest, tender and concerned with the quality of life (Hofstede and Hofstede, 2005). On the other hand, a feminine society is one where quality of life is the sign of success and standing out from the crowd is not admirable. Nigeria scores 60 on this dimension and is thus a masculine society. A high score (masculine) on this dimension indicates that the society will be driven by competition, achievement and success, with success being defined by the winner / best in field – a value system that starts in school and continues throughout organisational behaviour. In masculine countries people "live in order to work", managers are expected to be decisive and assertive, the emphasis is on equity, competition and performance and

conflicts are resolved by fighting them out. Also, men are believed to be tough and take care of earnings, training and performance at work while women are believed to be tender and take care of friendly atmosphere and cooperation at work; this means that masculinity/femininity quality affects the meaning of work in people's lives. This feature encourages smaller share of women in professional and technical jobs.

The fifth dimension is the long versus short-term orientation. It describes how people in the past as well as today relate to the fact that so much that happens around us cannot be explained. In societies with a normative orientation, most people have a strong desire to explain as much as possible. In societies with a pragmatic orientation most people do not have a need to explain everything, as they believe that it is impossible to understand fully the complexity of life. The challenge is not to know the truth but to live a virtuous life. Nigeria scores very low (13) on this dimension, meaning that its culture is normative instead of pragmatic, in short, traditions are sacrosanct and family life is guided by imperatives. People in such societies have a strong concern with establishing the absolute Truth; they are normative in their thinking. They exhibit great respect for traditions, a relatively small propensity to save for the future, and a focus on achieving quick results.

4.4 Nigerian Economic Setting

The extent to which a country develops is anchored around its resources; this is demonstrated in how the revenue from natural resources (especially the oil and gas industries) has influenced Nigeria's development strategies (Diugwu et al. 2013). The Nigerian economy can be described as fairly strong but with weak development as Nigeria ranks 158th of 177 countries measured in the United Nations Human Development Index (UNDP 2008). Petroleum production and export accounts for more than 90% of Nigeria's export earnings and about 40% of government revenues. 80% of Nigeria's budget is funded by crude oil revenues. The Nigerian economy is greatly dependent on petroleum and has largely been unable to meet the high expectations of many people (Ike and Leo, 2013).

According to the 2012 report by African Economic Outlook (AEO), Nigeria's economic growth had averaged about 7.4% annually over the past decade. Inflation rate fell from 13.7% in 2010 to 10.2 in 2011 following monetary policy tightening and eased to about 8.4% in 2013.

Table 4.1 - Nigeria's Real GDP Growth Rates, 2004-2013

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Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
GDP	10.5	6.5	6.0	6.4	6.0	7.0	8.0	7.4	6.6	6.7
Growth										
Rates										
(%)										
GDP in	67.6	87.8	112.24	145.42	165.92	207.11	168.51	228.64	243.98	262.61
billions	5	4								
of US										
Dollars										

Source: African Economic Outlook (2013); www.tradingeconomics.com

Notwithstanding strong economic performances from 2004 to 2013, the Nigerian economy still lags meaningfully behind more advanced countries in Africa and beyond in terms of living standards. Nigeria accounts for 14 percent of Sub-Saharan Africa's GDP, yet over half of the country's population lives on less than US\$1 per day (World Bank, 2008; IMF, 2007). The growth in population exacerbates the poor living of Nigerians as UN projects that the population will increase to 210 million individuals in 2025 and 289 million in 2050. While the share of Nigeria's population living below the poverty line has fallen from 70 percent in 1999 to 54 percent in 2005 (IMF, 2007). This translates into approximately 80 million Nigerians living in poverty. Only China and India have larger populations of poor people (DFID, 2004). Poverty rates vary widely by region. In the Niger Delta, for example, a 1996 survey found the highest poverty rates in the country as well as high unemployment rates and extremely low rates of literacy, access to health services, and access to safe water (Ross, 2003). However, the table 4.2 captures the relative poverty headcount from 1980 to 2010 in Nigeria.

Table 4.2 - Relative poverty headcount from 1980 to 2010

Year	Poverty Incidence (%)	Estimated Population (Million)	Population in poverty (Million)
1980	27.2	65	17.1
1985	46.3	75	34.7
1992	42.7	91.5	39.2
1996	65.6	102.3	67.1
2004	54.4	126.3	68.7
2010	69.0	163	112.47

The above table shows an upward growth of Nigerian population in poverty. Nevertheless, another economic indicator that points to the performance of Nigeria is the rate of unemployment in the nation. In 2004 the official unemployment rate according to the Federal Office of Statistics was 11.8 percent, down from 18.1 percent in 2000 (Olusakin 2006). However, the World Bank (2008) estimates that the actual rate was 41 percent. In "key urban centres and amongst new graduates," unemployment was as high as 50 percent (World Bank/DFID 2005). This high unemployment rate signifies major challenges to the Nigerian economy. In terms of unemployment by geopolitical zones in Nigeria, the south-south region has one of the highest unemployment rates in the country (see tab 4.3).

Table 4.3 - Unemployment Rates by Zone (1999- 2011)

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	199	200	200	200	200	200	200	200	200	200	200	201	
Zones	9	0	1	2	3	4	5	6	7	8	9	0	2011
South South	5.9	9.5	14.0	8.3	11.5	11.4	11.3	15.9	29.5	22.8	24.7	27.8	24.7
North Central	7.1	8.6	8.9	10.1	6.1	6.5	6.9	8.8	15.9	9.8	15.0	7.9	22.6
North East	8.2	34.5	13.4	12.5	12.8	14.0	15.3	15.1	18.5	12.1	30.1	26.1	31.9
North West	8.2	24.3	18.5	14.4	26.1	23.7	21.3	21.0	12.8	10.7	21.5	13.4	28.8
South East	8.4	15.5	16.5	11.9	15.2	14.4	13.7	15.3	18.1	10.4	15.8	23.0	19.6
South West	6.9	8.9	9.6	9.9	7.3	6.1	5.0	6.7	8.4	7.7	15.2	27.8	11.3
Nigeria	8.2	13.1	13.6	12.6	14.8	13.4	11.9	12.3	12.7	14.9	19.7	21.4	23.9

Source: National Bureau of statistics, General Household Survey Report (1999-2011).

The high rate of unemployment in the Niger Delta is because the oil industry does not require much labour and foreign oil companies often bring many of their own employees into Nigeria; those living in the region gain few benefits from the industry and concurrently suffer high environmental and health costs (Ross, 2003). In exacerbating unemployment in Nigeria, is the fact that oil is mostly exported as crude, thereby making Nigeria miss opportunities to refine it and potentially create more value-added industries that employ more Nigerians (CIA 2008). Other sectors have struggled since the discovery of oil in Nigeria in 1956. Cocoa and groundnut exports have slumped, and palm oil exports have almost disappeared (McPherson 2003). Foodstuff, once an exported good, is now imported from other countries. In industry, the World Bank notes the potential for improved productivity in light manufacturing, leather goods, food, and beverages (World Bank/DFID 2005). It believes the most promising markets for this growth are local and regional, with the exception being those markets in which Nigeria is already globally competitive, such as shrimp and leather.

Alongside unemployment in deterring the economy of Nigeria is corruption. Transparency international ranks Nigeria 121st out of 180 countries in its annual corruption perception index. The AEO's 2012 report claimed that the major challenge of the Nigerian economy is the dilapidated state of infrastructure, the over-dependence on the oil and gas industry and corruption which is widespread. Nigeria is the most oil-dependent country in the world as measured by oil's share in exports. And since crude oil is currently the economic mainstay of Nigeria, Nigeria's performance in monitoring and improving the activities of oil production is crucial in predicting the economic performance of the country rather, corruption has rocked oil's management. For example, in 1965, when oil revenue was about US\$33 per capita, GDP per capita was US\$245 whereas, in 2000, when oil revenues were US\$325 per capita, GDP per capita was still at the 1965 level. This is as a result of waste and poor institutional quality stemming from oil and is responsible for Nigeria's poor long-run economic performance (Sala-I-Martin and Subramanian, 2003). In the opinion of Tayler (2006), this is as a result of high corruption in the country because one percent of the country's population control 80 percent of oil wealth. Palley (2003) called it "natural resource curse"; a situation where mineral wealth fuels corruption and conflict rather than equitable economic development. Again, Nigeria's export income from oil has been above 90 percent since the mid-1970s. In fact, the oil industry generated approximately \$231 billion in rents—"returns in excess of production costs"—between 1970 and 1999, amounting to \$1900 per capita and it does not show in the lives of the citizens. In Ross's (2003) analysis, had each year's oil rents been

invested in a fund that yielded just five percent real interests, at the end of 1999 the fund would be worth \$454 billion. If divided among the general population, every man, woman and child would receive about \$3,750

Dependence on oil and other valuable minerals can expose states to increased risks of civil war (Collier and Hoeffler 1998), high rates of corruption (Sachs and Warner 1999), and atypically slow economic growth (Sachs and Warner 1997). These factors are not far-fetched from the case of Nigeria. In Nigeria, frustration and anger surrounding corruption, pollution caused by the oil industry, and what is often considered an unfair distribution of oil profits has motivated violence and discontent in the Niger Delta (see section on the South-South region for further information) (Ross 2003). Also, years of authoritarianism, chronic opportunism and endemic corruption have debarred its potential benefits from trickling down to the people leading to a larger majority of people living in poverty (Omotola, 2006). At this point, it is necessary to look closely to the Niger delta and examine certain factors that might be potential stress factors to offshore workers in the region bearing in mind that the Niger Delta has had a long history of violence and crisis as a result of the neglect and underdevelopment in the region. All these will follow in the next sections.

4.5 Political history of Nigeria

Military and civilian regimes are entwined in Nigeria's political history. Nigeria gained independence from British colonial control on October 1, 1960. Tafawa Balewa (from the North-East) was elected as Nigeria's first prime minister in the parliamentary government. His tenure lasted about three years before a republican form of government was established in 1963 and Tafawa Balewa was replaced by Nnamdi Azikiwe (from South-East). By 1965, Tafawa Balewa won a parliamentary majority, enabling him to form a new government till the 1966, when a bloody coup collapsed his government and government was taken over by Johnson Aguiyi-Ironsi (from South-East). This government lasted only a few months due to a coup that made a Northerner resurface in the leadership of Nigeria – Yakubu Gowon from North Central (see Adebisi, 1998 and Kaiser, 2005).

These coups suggest ethnic hatred in Nigeria and exacerbated ethnic combats. Following, a three-year Biafran civil war started on July 3, 1967, after which Yakubu Gowon was overthrown in a military coup and replaced by Murtala Muhammed (From the North West). After an abortive military coup, Olusegun Obasanjo (from South West) captured government but was replaced by Shehu Shagari (from North West) through a democratic election. This

civilian government lasted barely two years and was overthrown by military coups over four military regimes till 1999 when the former military leader, Olusegun Obasanjo (from South-West) was democratically elected as president till 2003 and then Umaru Musa Yaradua, a civilian (from the North-West) succeeded him and ruled for barely two years and died in office. Goodluck Ebele Jonathan, a civilian (from South-South) has since then remained the president of Nigeria (Kaiser, 2005)

In terms of the relationship Nigeria oil industry has with Nigerian government, Duru (1999) argues that the intervention of the military forces in Nigerian politics in 1966 had implications for the oil bearing communities through suspension of the people's rights and control over the oil bearing land, the cancellation of the 50 percent revenue allocation to the oil bearing communities, and neglect of the environment. Also, the Federal Military Decree no, 23 of 1966 reverted the existing laws that assured the state's control over its resources, and vested the same in the Supreme Military Council and the Federal Executive Council (Alafuro, 2010). The 1969 Petroleum Act already limited community access to communal land and restricted their rights over mineral resources. This situation makes it possible for the oil MNC investors to have unrestricted access to explore for oil, despite the problem of pollution associated with their operations (Ibeanu, 2001). Frynas (2011) points out that the state's inability to effectively deal with environmental pollution and degradation exacerbated discontent and tension against the centralised control of oil by few military leaders and local civilians. Ibeanu and Luckham (2007) argued that this form of governance is one that is deeply entrenched on the authoritarian style of leadership and this can be assumed to have an effect in relation to the oil sector since oil was the only source of revenue.

Nigeria's decree No. 9 of 1971 (still in the military regime) clearly made mineral resources state owned and conferred the power over oil found in Nigeria. This weakened the communities' rights over their environmental resources. Furthermore, the 1978 Land Use Act Section 544 (still in the military regime) reinforced lack of communities' rights to negotiate with the oil companies over access to land and compensation payment. These situations elucidate the imbalanced distribution of income derived from minerals by the government during this period, laying the foundation for intensive agitation for resource control by the Niger Delta people (Raji et al, 2013). The Nigerian oil industry benefits more from a democratic rather than an autocratic leadership in terms of having a voice and having control over operations (see Oyefusi, 2007 and Odularu, 2008). The decrees passed by the military

regimes have some negative effects on the oil bearing communities; these effects will be demonstrated in the next section.

4.6 The Niger Delta

The Niger Delta is one of the 10 most important wetland and coastal marine ecosystems in the world and is home to some 31 million people of whom 75% live in rural areas (NDDC, 2004 and NDTC, 2008). Well positioned, the Niger Delta remains the promised land of Nigeria where majority of the oil is explored and produced. It has massive oil deposits, which have been extracted for decades by the government of Nigeria and by multinational oil companies; oil has generated an estimated \$600 billion since the 1960s (Wurthmann, 2006). Oil wealth from the Niger Delta region, is largely responsible for sustaining the Nigerian Federation (UNDP, 2006: 62). Despite fuelling much of Nigeria's economic growth, the Niger Delta is somewhat relegated from Nigeria's national development. In fact, World bank (2007b) identified some characteristics of the Niger Delta as: - social/political exclusion, economic exclusion, poor governance and corruption, poor infrastructure and public service delivery, environmental degradation and escalating violence and disorder which will be discussed in detail further on. In a nutshell, the communities in the Niger Delta are separated politically, socially and economically from the country as a whole in terms of underdevelopments in the regions, poverty and loss of occupation i.e. farming and fishing because of environmental degradation, high unemployment rates in the region and then political exclusion because they are part of the minority groups in Nigeria. It is not in doubt that these alienations are the root cause of communal agitation in the Niger Delta (Joab-Peterside 2005:30-51). To this end, alienation from natural resources, means of livelihood and species being endangered have been noted (Frederick 2008:5).

Interestingly, natural resource-abundance has been associated with slow growth (Sachs and Warner, 1995), greater inequality and poverty for a larger majority of a country's population (Gavin and Hausmann, 1998; Ross 2004b), corruption of political institutions (Lane and Tornell, 1999; Ross, 1999, 2001), and more fundamentally, an increased risk of civil conflict (Collier and Hoeffler, 2001). All these paint a true picture of the situation in the Niger Delta as examined further down and has inadvertently exacerbated the insecurity in the region. In the following section, the situation of the Niger Delta will be looked at from the lens of the exclusions they face and the adverse effects on their communities and nation as a whole. The

overall situation in the Niger Delta is a causal nexus of events as represented in a model proposed in Fig 4.2 for understanding the disconnections felt by the Niger Deltans.

Economic exclusion Socio-political exclusion Poverty due to corruption Underdevelopment and economic inequality due to oil Socially and politically excluded workers in the region because they come from a minority Indigenes' dislocation from occupations due to environmental dislocation **Social Actions** Emergence of militant groups Oil pipeline vandalism/oil theft for financial purposes and to drive home their needs of inclusion Kidnapping of oil offshore workers for ransom **Implication 1 Implication 2 Implication 3** Reduced oil production that leads to Insecurity in the Exacerbated oil pipeline vandalism decline in national economic growth region Author: 2014 Exacerbated indigenes' dislocation of occupations

Figure 4.2 - Disconnections of Niger Deltans and their effects

4.6.1 Niger Delta: Socio-political exclusion

The Niger Delta people are arguably Nigeria's fourth largest ethnic group occupying 6 out of 36 states and constitute political minorities in all but one of these six states. This is in contrast to the three larger ethnic groups, which historically have been dominant in the regions and states they occupy (see Ukiwo, 2007). However, only in 2007, Goodluck Jonathan who hails from the Niger Delta was elected the vice President of Nigeria and later became the President in 2010 after the death of the previous President. The fact that the Niger Delta falls within the minority group in Nigeria makes the people feel disengaged from the country in terms of political positions. Onduku (2001) argued that there is a constitutional and political problem in the Niger Delta which he classified into two categories; the first being the division of the country into three unequal regions, with the population of the size of the northern region exceeding that of the two southern regions put together and the second being the political and

demographic domination of the northern, western, and eastern regions, being the majority ethnic nationalities and the attendant marginalisation of the minority ethnic nationalities that comprise approximately one third of the population of each region.

The Niger Delta is one of such minority groups but is very important because of its contribution of oil revenue to Nigeria's economy. The concept of a minority is defined as an ethnic, racial or religious group who by virtue of their population (or other demographics) is singled out from others and thus regards themselves as object of collective discrimination (Wirth, 1945: 347). Hence, ethnic minorities often face (or perceive themselves as facing) exclusion from political and economic life within the bigger society. Quite often, the minority is in constant opposition to the dominant ethnic group(s) as they stand little or no chance in the regional assemblies, nor in making demands for access to resources, or developmental projects (Ojakorotu, 2008; Obi, 2001). The above analysis indicates that the people of the Niger Delta feel disengaged from their own country as the region belongs to the rank of the most backward and politically marginalized in Nigeria (Ebegbulem et al., 2013).

There has been slight improvements in terms of the creation of the ministry for the Niger Delta in 2008, charged to drive developments in the region and the resuscitation of the Niger Delta Development Commission (NDDC) which was established in 2000, charged with the mandate of formulating policies and parameters for the development of the Niger Delta area into a region that is economically prosperous, socially stable, ecologically regenerative and politically peaceful [NDDC Website: accessed 4th September, 2013]. In examining the use of such institutions to make a difference in the Niger Delta, Osuoka (2007) argued that they worsen the situation because they are perceived as an imposition from the federal government and a top down approach to development planning and implementation. Local communities had no say in determining the composition of these institutions and they primarily comprise Federal Government representatives. It is therefore perceived by local communities – who have experienced political marginalisation historically - as existing to facilitate the political goals of the ruling party. In short, this exacerbates the disengagement felt by indigenes of the Niger Delta (UNDP, 2006: 35; Osuoka, 2007: 6). This, no doubt is one of the reasons behind the unrest in the region because the people are agitated.

4.6.2 Niger Delta: Economic exclusion

Institutional factors

The Niger Delta is categorized by enormous poverty, environmental degradation linked to exploration and production of crude oil and natural gas as well as corrupt systems of governance (Osuoka, 2007: 1). Basically, while the Niger Delta produces oil wealth that accounts for the bulk of Nigeria's foreign earnings, these vast revenues have not translated into improved human development outcomes for the indigenes of the Niger Delta (UNDP, 2006: 14). The slow pace of development and lack of jobs, water, schools, electricity and clinics in some parts of the Delta have enhanced the upsurge in the region (International Crisis Group, 2006: i). Nigeria's federal system gives much accountability and autonomy to state and local governments; therefore, their effectiveness is central to development progress. Before democracy in 1999, local governments lacked funds to develop their regions but what excuse do they have now that the federal government gives them allocation and even more allocation in the event of crude oil price increase? The problem is institutional weakness and widespread corruption at the local and state levels of government, which results in the unsuccessful delivery and application of development policies and programs (Osuoka, 2007:6). For example, Human Rights Watch finds that in Rivers State, which is the wealthiest state in Nigeria, local governments have failed to make more than nominal investments in education and health. This results in a stark contradiction between Rivers' wealth and the deprivation experienced by many people living there (Human Rights Watch, 2007: 2).

Poverty and corruption

Within the context of the Niger Delta, poverty would commonly be perceived as a situation in which a person or group of persons do not have enough to eat, do not have adequate shelter, access to education and health services or protection from violence. Multilateral organizations also see poverty in terms of "powerlessness, lack of representation in decision making in the society and lack of freedom to express oneself" (UNDP: 2006:36). The people of the Niger Delta are among the poorest in terms of living conditions in Nigeria (see tab 4.4); in fact, they remain among the most deprived oil communities in the world which is the standard economic measure of absolute poverty (Amnesty International: 2005:3).

Table 4.4 - Population living in poverty in the Niger Delta

State	Population*	Poverty level**	Estimated Population Living in Poverty***
Akwa-Ibom	3,920,208	39.96	1,562,594
Baye Isa	1,703,358	25.64	436,740
Cross River	2,888,966	52.60	1,519,596
Delta	4,098,391	41.88	1,716,406
Edo	3,218,332	41.40	1,332,389
Rivers	5,185,400	40.65	2,107,865

^{*2006} population figures; *2004 survey by the National Bureau of Statistics based on income and food intake.

The poverty level table above showed a high level of poverty in the region; out of the total Niger Delta population of 21,014,655, about 42% live in poverty. Clearly, this provides a fertile ground for conflict to erupt (Ibaba, 2011). Similar to this analysis, Alabi (2008) found that about 31% of the people in the Niger Delta region were considered to be very poor compared with 24% which was the national Average. According to the report by Solidarity Centre, 2010, decades of corruption have made Nigerian elites very wealthy by siphoning the oil revenue, damaging the non-oil economy and creating a culture of non-transparency in all levels of government whilst the Niger Delta communities suffer. In short, neither the Nigerian oil workers nor Niger Delta communities have been able to track how oil revenues are spent mainly at the local or state level. Corruption has brought about a divide between the rich and the poor; poverty and inequality in Nigeria has strong concentrations in the Niger Delta and it causes resentment amongst the indigenes of the region (Higgins, 2009). The outcome of a research conducted by world bank asserts that the key cause of conflict is failure of economic development such that many of the world's poorest countries (including Nigeria) experience a situation where poverty causes conflict and conflict causes poverty (Shankleman, 2006); this situation will be examined in the Niger Delta context later on in this chapter.

Development

In terms of development in the region, the region have endlessly required basic infrastructure and amenities - electricity, roads, schools, hospitals, portable water, etc. The other regions are built to the standards obtainable in the developed world having bridges built over dry lands while most of the Niger Delta communities are only accessible by boats and seriously in need

^{*}Estimates by Ibaba (2011) based on population and poverty level.

of bridges. This has made the local people agitated and may be the reason they have resorted to militancy in an effort to focus national and international attention to their plight. (Ebegbulem et al., 2013). Also, the only noticeable government presence in many parts of the region is a heavily-armed security apparatus protecting oil installations. The government provides very little infrastructure, public works or conditions conducive to employment (Amnesty International: 2005:2–3). The Niger Delta is a region that has been marginalised from Nigeria's national development despite generating the nation's oil wealth.

Essentially, there is a significant disconnect between the wealth the region generates for the Nigerian Federation and the transnational oil companies extracting oil from the region, and the region's human development progress (Higgins, 2009). For example, human development index (HDI) of the Niger Delta is 0.564 which is slightly higher than Nigeria's HDI of 0.448 and far below regions or countries with similar gas or oil reserves (Venezuela is 0.772 and Indonesia is 0.697. going further, local government areas without oil facilities appeared to have fewer poor people than those with oil facilities. In fact, the HDI has been steeper for the Niger Delta states than the rest of Nigeria (UNDP, 2006).

Oil workers

The presence of oil workers coupled with their wages seem to be a source of economic exclusion to the indigenes of the Niger Delta. The high wages of oil workers in the Niger Delta makes the area intolerable for the Niger Deltans. For example, the oil workers are perceived as rich thus leads to price alterations in the area, driving up prices and so pressuring the purchasing power of ordinary people and making it difficult for many to meet the costs of basic needs such as housing, healthcare, transportation, education and good and making poverty more pervasive than conventional measures reveal (UNDP, 2006: 57). Unlike other regions of Nigeria, the situation in the Niger Delta is compounded by the influx of expatriate oil workers into the region and their comparatively higher income. Hassan et al., 2002) addressed the fact that the presence of oil workers contributes to skyrocketing of prices of basic services beyond the reach of the indigenous population whose source of living is largely subsistence. On the other hand, the oil companies often require highly skilled workers; because of this, the local people are forced to migrate to the urban centres after being economically displaced or to become low skilled workers dependent on the oil company. This has generated bitter conflict as the issue of employment and participation in the oil industry has divided different segments of the communities (Ejibunu, 2007).

Oil companies

In addition, the oil companies are perceived by indigenes of the Niger Delta to be perpetrators of their environmental degradation through oil spills and gas flares while the government has allowed such actions through their weak environmental legislations (Ejibunu, 2007). The implication for this environment is that indigenes are disengaged froms their traditional occupations of fishing and farming as sources of livelihood. This causes financial strain on them and their family members because there is productivity loses and a decline in their local economies. According to the Constitutional Rights Project (1999), on average, three major oil spills in the Niger Delta are recorded each month. In the first quarter of 1997 alone, one of the major players in the industry recorded 35 incidents of oil spills in its operations. This then makes the discord in the Niger Delta focus specifically between indigenes, the government and the oil workers; the indigenes have persistently agitated and resorted to militancy in an effort to focus national and international attention to their plight thus causing conflict and tension in the region. Niger Delta is now famous for the endemic conflict between local communities and oil multinational companies (Idemudia, 2005). According to Clark et al (1999), oil companies usually claim sabotage in the event of oil spill because under Nigerian law, companies are not obliged to clean up or compensate for the effects of spills caused by sabotage.

The Niger Delta region comprises of a number of different environmental zones-coastal ridge barriers, mangrove swamps, fresh water swamps, forests, and lowland rain forest dominated by rural communities that depend solely on the natural environment for subsistence living (Ebegbulem et al., 2013). According to UNDP Report (2006), the region is home to more than 10 million people and more than 70% of the people depend on natural environment for their livelihood. Paradoxically, those who presently live in the region suffer excessively from negative environmental and health effects related to drilling and flares. The environmental degradation kill fishes, destroy agricultural crops, pollute the waters which seriously affect families and communities because the communities have been left desolate. In fact, these environmental changes have dislocated the indigenes from their occupations and primary means of survival, increased their poverty level and lowered their productivity which ultimately is a major cause of community discontentment (World Bank, 2007b; UNDP 2006:175-311; World Bank 1995:8-66).

Unemployment

As a result of the environmental degradation in the Niger Delta, Anikpo (1998) argue that development has become stagnant; no matter how hard indigenes work, they remain at the same point, and sometimes their situation gets worse and keep them frustrated which certainly lead to youth militancy and violence. The immediate consequence of this dislocation from traditional occupations of fishing and farming by oil extractive activities is unemployment. Indigenes suddenly find themselves without gainful employment and thus unable to provide for the basic needs of their families (Duruigbo: 2004:133). Nigerians living in the Niger Delta region do not benefit significantly from jobs or wealth created by the oil industry, the situation has led to tension and violence between citizens and their government (John et al. 2007). The rate of unemployment is very high among the people of the Niger Delta, in part because the oil companies do not hire their workers from the oil producing region (Ejibunu (2007). In recent years, a number of gangs and well-armed militant groups have emerged, focusing on oil theft and attacks on both oil facilities and workers in order to make ends meet. The indigenes of Niger Delta feel excluded from the wealth generated by the resources in their area - substantiated by the region having the highest rate of unemployment in Nigeria (World Bank, 2007b). The communities especially the rural communities where enormous quantity of oil is found have very limited economic opportunities and often cannot tap directly into the employment benefits of the oil industry because they lack capital resources or skills (UNDP, 2006:17).

Within the categories (socio-political and economic exclusions) discussed above, it is clear that a sense of injustice is perceived by the indigenes of the Niger Delta which makes them feel disconnected from their own region and from Nigeria at large. Generally, it is believed that the Niger Delta has been deprived for a long time when compared to other regions in Nigeria, which are not contributing as much as the region, yet their environment and means of livelihood have been polluted and devastated (Agbo & Ofuokwu, 2008; Ero, 2008). Asuni (2009) claims that a combination of geography, ethnic tension, economic underdevelopment and the presence of an industry that yields many disadvantages but few direct benefits to the people of the region have created a situation ripe for conflict which is crucial in the experience of stress by the offshore workers. Hence, these conflicts (discussed later) include emergence of militant group that engage in kidnapping of oil workers and their family members, pipeline vandalism for oil theft.

The discernible facts from the above analysis is a 'double disconnects' on the part of the indigenes of the Niger Delta; feelings of disconnectedness as a fundamental cause of conflict in the Niger Delta. Also, the deepening of the conflicts and the resultant hostage taking are a result of government's insensitivity to these feelings, demonstrated by its violent response to community agitations or popular protests (Ibaba, 2009). Kidnapping affects the social life and social relations of many people who are held hostages in their homes from dusk to dawn, for the fear of being kidnapped. As a result of kidnapping, night travel has become a high risk venture. Furthermore, oil workers have been forced out of their newly completed houses by kidnappers. People are compelled to present an unfinished look of poverty by not painting the external walls of their houses. People moving to safer region while the remaining ones are afraid to buy or use new motor vehicles for the fear of kidnappers. It was reported that rich people in Rivers State have resorted to riding in taxi cabs and commercial motorcycles popularly called okada (motorcycle) to market, school and social outings as a means to check hostage takers (Soyombo, 2009). Finally, the situation in the Niger Delta scares away potential development partners and robs the state of the benefit of such development alliances and opportunities; it is very clear that available and potential investors are scared of doing businesses in the region and in Nigeria as a whole (Akpan, 2010). In response to these disconnections felt by the people of Niger Delta, they have created social movements and engaged in social actions with the aim of making their plight better; the following section focuses on these actions.

4.6.3 Social Actions by Niger Deltans

Having failed to win concessions through peaceful means, various militant groups have sprung up to undermine the activities of the oil companies using different methods and tactics, thereby daring the Nigerian State. Prominent among such groups are the Movement for the Emancipation of the Niger Delta (MEND), the Niger Delta Peoples Volunteer Force (NDPVF), the Joint Revolutionary Council (JRC) and Movement for survival of the Ijaw Ethnic Nationality (MOSEIN) (Ejibunu, 2007). For example, MEND boasts a fluctuating membership of between 5,000 and 10,000 and has claimed responsibility for a string of kidnappings and increasingly audacious attacks on oil facilities, some of them many miles off shore. It is also heavily involved in the oil-bunkering trade, which provides a steady stream of income to buy weapons (Asuni, 2009). It has given rise to formation of armed ethnic militias that now reject the authority and legitimacy of the federal and state government and operate outside the effective control of traditional governance institutions, resist perceived state

violence and brutality, and give militant muscle to the demand for resource control. The success of ethnic militias operations derives from better organization, superior equipment, better funds and growing linkages with state political actors and other key stakeholders Joab-Peterside (2007).

No doubt, the Niger Delta is a high risk region which makes the offshore experience there significantly different from the rest of the world (see chapter 5). Since 2005, the Niger Delta has witnessed increased pipeline vandalism, kidnapping and militant takeovers of oil facilities which in itself is novel. The political structure, negligence, underdevelopment, unemployment and environmental pollution in the Niger Delta have given rise to kidnapping of oil workers and their family members, attacks of oil platforms and insecurity on the Niger Delta offshore region and Nigeria at large. Fig 4.3 presents the extent to which insecurity in the Niger Delta has gotten to.

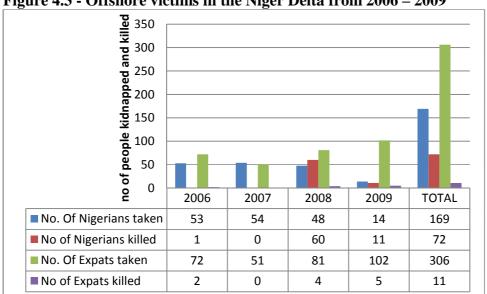


Figure 4.3 - Offshore victims in the Niger Delta from 2006 – 2009

Adapted from www.oyibosonline.com

This means that between 2006 and 2009, 475 people have been kidnapped and 83 killed. Again, the data shows that more expatriates have been kidnapped while more Nigerians have been killed. The amnesty program implemented in 2009 led to decreased attacks in 2009-2010 and some companies were able to repair damaged oil infrastructure. However, the lack of progress in job creation and economic development has led to increased bunkering and other attacks in 2011 (EIA, 2012).

What is worrisome with kidnapping is not only the regularity, but also, the criminal and blatant manner in which it is carried out. The usual scenario is youths, sometimes masked and

armed with sophisticated weapons, attacking oil company targets and engaging the military in combat. The familiar experience is the overpowering, and at times killing of security operatives. Thereafter, workers are taken captive, used as collaterals for negotiation and then released after ransom has been paid; either by government or the affected oil company (Ibaba, 2009). Notwithstanding renunciations by the government and oil companies, it is well known that militants receive millions of Naira as settlement in interchange for captives in their custody. Also, militants are paid to keep off activities of oil production, For example, Mujahid Dokubo Asari, the leader of the Niger Delta Peoples Volunteer Force (NDPVF: a militant group), has revealed that the Rivers State Governor, at one time, was paying militants 100 million Naira (roughly £325, 000) to steer them away from disrupting oil production (*National Standard* 2007:20). This fairly clarifies the high and low tide in militancy. Militant attacks are usually low when such payments are sustained, but any breach of such compensatory payments leads to a surge in militant attacks (Ibaba, 2009).

In relation to oil pipeline vandalism and oil theft, since the people of the Niger delta feel they are not involved in the "oil money", they go for an alternative- oil bunkering. Oil theft, commonly referred to as "bunkering" leads to pipeline damage that is often severe, causing loss of production, pollution, and forcing companies to shut-in production. Disruptions have been attributed to direct attacks on oil infrastructure as well as pipeline leaks and explosions resulting from bunkering activities Nigeria Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal (July, 2010). According to NNPC data, pipeline vandalism increased by 224 percent in 2011 over the previous year. Estimates from Nigeria's Ministry of Finance show that about 400,000 bbl/d of oil was stolen in April 2012, which led to a fall of about 17 percent in official oil sales. Royal Dutch Shell, Nigeria's largest producer, recently estimated that 150,000-180,000 bbl/d, or 6 percent of the country's total production, on average is lost to oil bunkering and spills (EIA, 2012).

4.6.4 Implications for social actions by Niger Deltans

Environmental problems are interwoven with Nigeria's economy, due both to their sources and their costs. The CIA (2008) environmental problems have notable costs for both individuals and entire economic sectors. First, the situation in the Niger Delta impacts negatively on the oil industry in terms of reduced level of production. Estimates from Nigeria's Ministry of Finance show that about 400,000 bbl/d of oil was stolen in April 2012, which led to a fall of about 17 percent in official oil sales. Royal Dutch Shell, Nigeria's

largest producer, recently estimated that 150,000-180,000 bbl/d, or 6 percent of the country's total production, on average is lost to oil bunkering and spills (EIA, 2012). The chart below shows a downward growth in the production of oil in Nigeria in relation to the attacks on oil facilities.

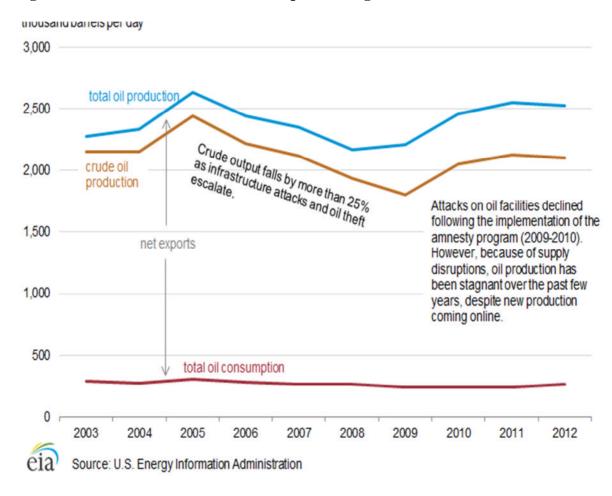


Figure 4.4 - Oil Production and Consumption in Nigeria: 1995-2011

Oil production in Nigeria reached its peak of 2.63 million bbl/d in 2005, but began to decline significantly as violence from militant groups heaved, forcing many companies to withdraw staff and shut in production. Towards the end of 2009, an amnesty was declared and the militants came to an agreement with the government whereby they handed over weapons in exchange for cash payments and training opportunities. The rise in oil production after 2009 was partially due to the reduction in attacks on oil facilities following the implementation of the amnesty program, which allowed companies to repair some damaged infrastructure and bring some supplies back online. Another major factor that contributed to the upward trend in output was the continued increase in new deep-water offshore production (EIA, 2012). This may be a pointer to the high unemployment rate in the industry and in Nigeria in general.

4.7 Conclusion

This chapter started by highlighting the background of Nigeria by geopolitical zones in terms of their educational attainments, occupations and resources. Following this, the Nigerian cultural setting was examined using Hofstede's (1984,1991,2001) national culture dimensions; the intention of this section was to identify the values of Nigerian people as it might become helpful in explaining factors that will come up in the data analysis chapters. In addition, the economic setting of Nigeria was looked at in relation to GDP growth, poverty level and unemployment rate. It was found that Nigeria is over dependent on oil exportation as it was responsible for Nigeria's GDP growth. In spite of the large profits made by oil companies operating in the Niger Delta, the people of the region suffer from high rates of poverty and unemployment.

This chapter moved on to have a closer look of the Niger Delta as it is the environment within which oil companies operate. Two main issues were prevalent amongst the people of Niger Delta – socio-political exclusion and economic exclusion. Regardless of the region's contribution to the economy of Nigeria, the people have felt excluded from political life within the bigger society. On the other hand, they have felt economically excluded in a number of ways; firstly, the people of the Niger Delta have had slow pace of development in their communities with majority of them living without basic amenities despite the huge revenue that comes from their region. Also, the rate of poverty is one of the highest in the region and unemployment has been of topical concern to them. The presence of oil workers in their communities have skyrocketed the prices of basic services and food items beyond the reach of the indigenous population whose source of living is subsistence. Finally, the people have lost their traditional occupations of farming and fishing due to environmental degradation that arose from oil exploration and production. These factors have adverse impacts on their finances thus making feel economically disconnected from their communities and society at large.

This 'double disconnects' by the indigenes of the Niger Delta have lured them to social actions in the forms of militant groups, pipeline vandalism/oil theft and kidnapping of oil workers. The sole aims of these actions are to drive home their needs of inclusion within the larger society and for financial purposes. Of course, these actions have implications for both the Niger Delta communities and Nigeria; firstly, the oil production level will be reduced due to pipeline vandalism and shortage of workers as a result of kidnap which inadvertently cause a decline in the national economic performance as Nigeria's economy is dependent on oil for

its growth. Secondly, the social actions will worsen the rate of oil pipeline vandalism and environmental degradation which will on the other hand increase the rate at which indigenes are disengaged from farming and fishing and then goes on to cause more social actions by the people. This whole process of political and economic exclusion leading to the nation's reduced economic performance, insecurity in the Niger Delta communities and exacerbated oil pipeline vandalism is a vicious circle that leaves effects for the Nigeria, Niger Delta communities and indigenes. It is the dynamics of this interconnectedness that this study has explored.

5.0 Chapter five: The Nigerian Oil Industry

5.1 Introduction

The previous chapter examined the political, cultural, social and economic context of Nigeria and how they impact on the experience of occupational stress in the Niger Delta region. Having examined the general state of the Nigerian economy and the region within which the oil companied operate (Niger Delta), this chapter narrows down to exploring the Nigerian oil and gas industry which is the focus of the research as it relates their activities, structure and industrial relations issues. In doing this, this chapter will present, analyze and discuss the data collected in the first stage of the empirical work i.e. managerial interview within the major oil companies in Nigeria. It is important to note that most of the discussion here will be based on secondary data as the respondents were not generous in giving out information about their organizations. However, the interview involved eight high-ranked respondents in four major oil companies in Nigeria and the purpose of the interview was to investigate the potential causes of stress to offshore workers from the point of view of the oil and gas sector (macro level analysis of stress) as well as the interventions of the oil companies towards managing this stress. The oil industry in Nigeria is the backbone of the Nigerian economy as well as the bone of contention in the current work. Therefore, discussions around the structure of the oil industry, the activities of the oil companies in Nigeria and issues around employment types, unions, gender, and pay will be covered.

This chapter begins with the evolution of the Nigerian oil and Gas industry and then continues with an overview of the Industry highlighting its contribution to Nigerian economic growth. It will go further to discuss the crude oil production and exports. This chapter hopes to present the structure of the industry as well as their activities. More so, a wider analysis of stress will be looked at by examining the influence of external factors on the oil companies in relation to the government, changes in the price of oil, trade unions and the communities within which the oil companies operate. This chapter also seeks to know if oil companies have interventions for managing the stress. To this end, this chapter concludes with emphasis on how this wider context could be a good lens through which occupational stress is viewed; linking the oil sector and other external factors to occupational stress.

5.2 The Nigerian Oil and Gas Industry

This section offers contextual information on the Nigerian oil and gas industry and examines its current state in relation to crude oil production, exports and its contributions to the economic growth of Nigeria. Since oil was discovered in Nigeria in 1956, oil has been an important part of the country's economy, impacting considerably on both the country's economic and political life. Although the search for oil deposits in Nigeria started in 1908, records show that Shell Darcy drilled the first well in 1938 (Aigbedion, 2004, Anyanwu et al., 1997). However, in 1955, Mobil Exploration incorporated received concession over the whole of the former Northern region of Nigeria, where the company carried out relevant geological survey. It also drilled some wells in Western Nigeria before abandoning its concession in 1961. Shell petroleum discovered oil in commercial quantity in Nigeria in 1956 and began production of the commodity immediately thereafter. Apart from the initial discovery of oil at Oloibiri in the Niger Delta further discoveries at Afam and Bomu confirmed Nigeria's status as a major oil producing nation (Aigbedion and Iyayi, 2007).

Nigeria joined the ranks of oil producers in 1958 when its first oil field came on stream producing 5,100 barrels per day (bpd). After 1960, exploration rights in onshore and offshore areas adjoining the Niger Delta were extended to other foreign companies. In 1965 the EA field was discovered by Shell in shallow water southeast of Warri. In 1970, the end of the civil war coincided with the rise in the world oil price, and Nigeria was able to reap instant riches from its oil production. Nigeria joined the Organization of Petroleum Exporting Countries (OPEC) in 1971 and established the Nigerian National Petroleum Company (NNPC) in 1977; a state owned and controlled company which is a major player in the oil industry (Blair 1976, pp. 98-120). The Nigerian oil industry is controlled by the Nigerian National Petroleum Corporation (NNPC) whilst crude oil exploration, drilling and shipping are controlled by oil MNCs.

While the discovery of oil in the eastern and mid-western regions of the Niger Delta pleased hopeful Nigerians, giving them an early indication soon after independence that economic development was within reach, it also signalled a danger of grave consequence: oil revenues fuelled already existing ethnic and political tension and actually "burned" the country. This tension reached its peak with the civil war that lasted from 1967 to 1970. As the war commenced, the literature reflected the hostility, the impact, and fate of the oil industry. Poor corporate relations with indigenous communities, vandalism of oil infrastructure, severe ecological damage, and personal security problems throughout the Niger Delta oil-producing

region continued to plague Nigeria's oil sector (Odularu, 2007). However, the petroleum industry grew rapidly from 1960 and subsequently in 1970; it has replaced agriculture which was the cornerstone of the nation's economy (Obadan, 1998).

Nigeria has about 15 oil depots and four refineries that have a processing capacity of about 500, 000 barrels per day and produce the range of products including Liquefied Petroleum Gas, Aviation Turbine Kerosene, Automatic gas Oil and Premium Motor Spirit. There is a growing offshore oil/gas and deepwater operations in the industry; currently, of the 606 oil fields in the Niger Delta area, 355 are on-shore while the remaining 251 are offshore. Of these, 193 are currently operational while 23 have been shut in or abandoned as a result of poor prospectively or total drying up of the wells. From the very beginning of oil exploration in Nigeria in 1937, till early 1993, virtually all exploration and production activities were restricted to land and swamps but then in 1993, the Federal Government opened up a new frontier in oil and Gas exploration, heralding the bright prospects of a promising future, by allocating some offshore blocks in water depths reaching 2500m and since then, Operators have, indeed, continued aggressive exploration activities (NNPC Website).

Presently, the Nigerian oil industry has grown to be making positive contributions not just in the economy of the nation but to the society at large. Nigeria is one of the world's top ten oil producers and Africa's leading producer with oil and gas reserves of over 31.5 billion barrels and 160 trillion standard cubic feet (seventh largest globally), respectively, with estimated average daily crude production in excess of 2.5 million barrels per day. Undeniably, the oil and gas sector is the economic mainstay of the Nigerian economy as it accounts for more than 90-95% of the nation's export revenues, over 90% of foreign exchange earnings and 80% of Governments revenues (Adegbite and Erhimona, 2008; Venture Career Journal - O & G, 2012). Nigeria has developed her market position by trading their oil to countries including UK, US, India etc. thereby boosting their profit from oil. Also, the oil industry has brought a number of benefits to the people of Nigeria such as employment creation. Fajana (2005) asserts that between year 2000 and 2005, over 65,000 direct employments and 250,000 nondirect employments have been created in the oil industry alone. This has improved the wellbeing of Nigerian families because official statistics show that every oil worker in Nigeria financially supports eight other people. Away from these is the improvement in community infrastructure (schools, hospitals and other basic needs) and skills advancement as a result of training programmes carried out by oil companies; this means that the industry can boast of transfer and capacity building, technology development and economic development (cf. Fajana, 2005). There is varied information as to what the number of foreign oil companies in

Nigeria. However, as at 2005, there were 18 oil foreign companies (estimated) in the Niger Delta and 99% of the crude oil is produced by these foreign oil companies (Fajana,, 2005). The table below presents a list of theses foreign oil companies operating in Nigeria and their year of entry.

Table 5.1 - Some oil Companies operating in Nigeria

National Oil	oil Companies operating in Multinational Oil	Independent	Service and Supply
Company	Company	Company	Company
NNPC	Royal/Dutch Shell,	Addax,	Schlumberger,
(Nigerian National	ExxonMobil,	Amni,	Halliburton, Western
Petroleum	ChevronTexaco, Agip,	Atlas,	Atlas,
Corporation)	TotalFinaElf, Esso,	Brass,	Baroid,
	Conoco	Cavendish,	Cameron, BJ Hughes,
		Consolidated,	M-1 Drilling Fluids and
		Continental,	others
		Dubri,	
		Express,	
		Famfa,	
		Montcrief, Peak,	
		Summit and others	
NNPC and its	Companies operate	These are mostly	They are mainly
subsidiaries are	internationally with	indigenous companies	multinationals with strong
partners in all major oil	considerable financial	which operate with	R&D. Nigerian
ventures. They have	resources, technological	foreign companies	companies are now
extensive domestic	know-how and extensive		entering into services, e.g.
operations	information networks. Their		Lonestar Drilling, Sowsco
downstream, own	activities in Nigeria are		Well Services and others.
large reserves of oil	usually limited to upstream		
and gas and have the	operations.		
monopoly of the oil			
refining and			
petrochemicals sector.			

Source: Sola Fajana (2005)

The above table shows both local and foreign oil companies in Nigeria and their roles but does not capture their level of oil production. However, the following tables present a 10-year crude oil/gas production, export and utilization by the oil companies in Nigeria. The tables will also highlight a selection of oil companies that are involved in oil and gas exploration and production.

Firstly, Tab 5.2 presents a list of oil companies in the Niger Delta; both foreign and local and their crude oil production by barrels. The table reveals that Shell produces the most barrels of oil in Nigeria than their foreign counterparts and then followed by the local oil companies as shown under the 'independent/sole risk column of Tab 5.2. Again, Crude oil production in Nigeria reached its peak of 2.9 million bbl/d in 2005, but began to decline significantly. This decline, according to EIA (2013) can be attributed to the violence from militant groups surged, forcing many companies to withdraw staff and shut in production. Although, oil production seem to be recovering around 2009-2010 but still remains lower than its peak because of ongoing supply disruptions.

Table 5.2 - 10 year Crude oil Production by Company (Barrels)

COMPANY	20	03 20	04 2006	2008	200	2008	2008	2010	20	11 201
IOINT VENTURE COMPANIES(JV):	Continue 199	Sapana tata mata	Name of the Party	Company of the Compan	G married and a second	The state of the s	CONTRACTOR OF THE PARTY OF THE	Appellusion bears	Contraction of the Contraction o	2
BPDC	307,343,430	325,064,539	294,996,169	162,229,026	135,504,413	129,328,995	99,178,340	137,681,473	147,602,494	125,841,702
MOBIL	160,917,241	152,928,763	160,753,591	130,152,450	119,540,374	138,317,186	84,785,917	74,543,309	60,877,924	66,851,703
CHEVRON	126,648,085	121,648,267	118,309,867	127,202,420	39,689,588	113,259,536	74,203,080	76,608,608	72,245,016	68,036,303
TOTAL E & P	44,641,901	43,397,027	38,687,178	38,811,238	127,089,475	34,426,448	31,028,250	31,132,915	26,816,940	22,964,457
NAOC/PHILLIPS	67,157,936	65,526,337	62,263,035	53,931,186	38,833,776	42,552,843	37,923,191	37,423,735	34,626,303	26,456,664
TEXACO	7,971,576	6,713,282	5,469,971	4,693,769	2,231,363	4,250,709	4,432,905	4,122,590	3,783,914	2,785,065
PAN - OCEAN	4.473.089	7.519.300	8.631.714	1.154.481	3	9.764.634	2.561	3.204.542	2,557,294	1.804.542
BUB TOTAL	719.153.268	722,797,616	889,111,525	518.184.570	482.888.989	471.900.351	331,554,144	384.717.172	348,609,885	314,740,438
JOINT VENTURE COMPANIES - AF:					C STATE OF THE STA	St. openingener				
BPDC	26,768,881	43,071,975	42,439,486	3,418,766	\$	30	6,096,195	29,746,886	23,080,837	21,072,517
MOBIL	38,869,336	43,106,427	49,081,781	91,516,761	71,116,205	28,873,600	76,845,529	89,673,390	102,488,316	89,333,216
CHEVRON	3.5	3,138,185	9,083,259	9,121,439	6,927,280	4,941,662	21,703,939	24,758,070	24,472,853	19,948,154
TOTALE&P	6,436,445	32,656,414	40,909,893	40,250,115	40,535,587	36,420,384	26,851,534	21,808,427	22,965,461	19,885,006
NAOC/PHILLIPS	9	- C-		-	(H. ¥ ()	((-)	104 0		6	-
TEXACO	50	S H-		-	Ž 10. ÷ 20	2 2 - 2 3	134 13	50±00	j	-
PAN - OCEAN	39	-	V	San and a san	·				Barana ana ana ana	
BUB TOTAL	72.074.882	121,973,001	141.514.419	144.307.081	118,679,072	70.236.848	131,497,197	185.988.773	173.007.487	160,238,893
PROD. SHARING COMPANIES										3.
CHEVRON (STARDEEP)	3 12	. ic-	-			14,966,049	74,520,908	87,169,458	88,304,428	85,042,163
ADDAX	13,363,454	14,596,666	23,813,968	31,500,666	38,140,656	39,591,166	36,288,676	32,607,403	27,238,898	29.587.366
ESSO EXP. & PRO. NIG LTD	5		20,0.0,000	48,165,582	74,384,085	71,942,086	60,162,116	60,716,025	53,045,402	45,680,674
NAE	3,355,510	9,802,901	11,330,731	9,166,198	6,122,815	6,606,494	10,264,220	11,143,495	10,364,337	8,488,231
BNEPCO	3,333,310	5,002,501	1,566,520	73,700,012	73,973,750	62,021,898	58,651,970	65,039,752	52,705,610	64,237,090
BA PET/TOTAL UPSTREAM NIG.	- S		1,200,320	75,700,012	/3,3/3,/34	62,021,030	28.904.366	60,210,984	56,482,856	56,667,023
			- 9	 	ř –	- t	20,504,500	00,210,304	1,192,189	
BEEPCO FUPNI		- 1		 	i e	+ +			1,192,189	1,273,891
BUB TOTAL	18,718,984	24,389,587	38,711,219	182,632,468	192,621,306	195,127,683	288,792,268	316,887,117	289,333,720	320,434,183
BERVICE CONTRACT:	10,710,054	24,000,007	35,711,216	102,002,400	182,621,806	100,127,000	200,702,200	316,887,117	200,000,120	020,404,100
AENR	3,483,966	3,886,392	4,317,081	4.013.954	3,932,714	3,361,078	3,237,284	2,711,402	2,802,031	3,056,412
BUB TOTAL	3,483,988	3,886,392	4,317,081	4,013,954	3,932,714	3,361,076	3,237,284	2,711,402		3,056,412
NDEPENDENTS/SOLE RISK:	3,403,866	3,886,382	4,317,081	4,013,864	3,832,714	3,361,078	3,237,284	2,711,402	2,802,031	3,066,412
			- 12				· · · · · · · · · · · · · · · · · · ·			
NPDC - OKONO	4,699,496	10,232,754	19,900,957	21,360,219	15,853,124	10,872,342	19,776,687	17,545,916	15,715,680	13,488,363
NPDC	2,120,288	2,809,275	2,025,562	333,700	11 -01	1,494,438	2,092,321	1,685,253	2,899,684	1,630,117
NPCD-FIRST HYDROCARBON					,					868,801
FIRST HYDROCARBON	- 2	- 3	- 13			_ S SI			2	600,063
NPDC-NECONDE		15	-16	1	Ģ.	- S			-	1,703,912
NECONDE	2	- 8	-16 - 3		S	- 8			3	1,094,060
NPDC-ND WESTERN	-10	2.	40 0		2.	- 3			ē	557,460
ND WESTERN	23	- 3	- 12 2			_ 3			3	397,788
NPDC - SHORELINE	22	83	400		S	8. 98			8	172,567
BHORELINE										141,192
NPDC8EPLAT JV	- 2	8	19 9		8	_ S 31		2,513,973	4,909,372	5,491,368
BEPLAT	2	S	- 12 - 12 - 12 - 12 - 12 - 12 - 12 - 12	100000000000000000000000000000000000000	E and the contract of	- C		The second second	4,016,759	4,473,789
CONSOLIDATED	784,799	775,030	726,530	643,639	430,460	491,615	459,331	455,944	549,353	620,455
EXPRESS PETROLEUM	4,214,779	1,592,412	2,918,248	905,741	314,778	298,932	152,694	290,680	16,631	204,226
AMNI	986,443	780,103	839,956	412,564	638,596	1,596,587	7,334,005	6,404,757	6,264,590	5,737,204
CAVENDISH PETROLEUM	3		1,408,276	681,398	18,278		100			3
ATLAS	795,222	177,449	163,979	233,669	520,806	388,117	191,831	153,828	109,087	207,634
CONTINENTAL OIL	12,375,425	14,819,473	13,241,057	9,385,029	3,531,935	5,980,100	7,818,287	6,991,887	6,764,442	6,316,028
MONI PULO	6,692,691	5,836,610	5,794,198	5,347,598	3,239,042	4,128,636	3,035,293	2,557,110	1,770,675	1,671,262
DUBRI	50,936	76,908	152,701	70,608	September 1	22,403	48,007	105,695	139,508	119,355
NAE/ALLIED/CAMAC	10	0			X		480,164	3,232,452	1,355,588	749,826
BUB TOTAL	32,720,079	37,100,014	47,171,484	39,374,186	24,647,019	26,273,170	41,388,620	41,937,486	44,611,389	48,245,470
MARGINAL FIELDS	3	- 6	30	k T	2	S S	32		8	33
NIGER DELTA PET. RES.	(A) 1.8	£ 10+	141,028	784,278	383,795	1,346,666	1,580,284	1,134,508	712,547	407,871
PLATFORM PETROLEUM	7-6			58	47,813	898,575	563,263	324,700	423,418	748,627
MIDWESTERN OIL		8	10 5 3	- 1	•	467,811	1,171,891	1,165,129	2,529,673	3,700,144
WALTER SMITH	- T-	(i) (i)		-		134,942	378,461	600,147	633,462	672,309
PILLAR OIL	18	0	10 - 0		5	51 Unite(4) 1	158,445	73,286		410,526
MOVIDO E&P NIG LTD		8	10 10 10		5	3	17874117111	. A 2000 PATE		A CONTRACT OF
ENERGIA LIMITED	3	3	- 1	1-		0 - 0	26,095	279,286	528,334	536,104
BRITANI U	3 12	3 4			•	1 1	20,033	226,391	293,904	471,783
DRIENTAL ENERGY	12					1 121 1	10.		2,959,422	11,113,915
				0.0						CARL SALES
BUB TOTAL	33	(X	141,028	784,278	431,608	2,847,894	3,878,439	3,803,447	8,080,780	18,061,279

Source: NNPC Annual Statistics Bulletin (2012).

After oil is produced, majority of Nigeria's crude oil is exported to global markets to yield revenue. Particularly, Tab5.3 revealed that between year 2003 and 2012, about 51.3% of Nigeria crude oil have been exported to the US, 22.3% to Europe, 16.1 to Asia and far East, 0.6% to Oceania/Pacific and 9.8% to Africa.

Table 5.3 - 10 year crude oil export by region (barrels)

YEAR	NORTH AMERICA	SOUTH AMERICA	CENTRAL AMERICA	EUROPE	ASIA & FAR EAST	OCENIA/ PACIFIC	AFRICA	TOTAL
2003	329,233,145	64,030,369	-	175,518,968	153,187,639	~	69,046,139	791,016,260
2004	408,856,070	102,778,610	(+)	114,977,451	176,284,313	-	68,390,150	871,286,594
2005	427,662,710	50,575,726	243	148,046,980	147,967,459	-	69,280,456	843,533,331
2006	401,040,785	68,081,235		162,917,829	116,166,923		69,181,185	817,387,957
2007	432,051,483	73,848,033	(4)	120,741,036	99,067,734	-	68,061,569	793,769,855
2008	342,566,123	61,582,276	2,190,566	172,126,638	77,096,968	-	68,917,225	724,479,796
2009	276,990,009	78,963,074	300,828	163,627,724	111,371,037	~	137,942,533	769,195,205
2010	352,265,421	77,012,515	re/	172,875,067	147,376,118	9,453,755	105,719,225	864,702,101
2011	271,462,697	79,579,804		246,626,085	136,032,999	18,092,657	70,287,982	822,082,224
2012	173,496,781	86,831,358	243	333,895,453	140,121,668	20,915,856	75,510,932	830,772,048
OTAL	3,415,625,224	743,283,000	2,491,394	1,811,353,231	1,304,672,858	48,462,268	802,337,396	8,128,225,371

Source: NNPC Annual Statistics Bulletin (2012).

In terms of refining crude oil, despite having four refineries in Nigeria, the country must import fuel because refinery operation rates are low (EIA, 2013). At present, Nigeria has four refineries, with a combined installed refining capacity of 445,000 barrels per day (bpd). These four refineries are: (1) The first Port Harcourt Refinery was commissioned in 1965 with an installed capacity of 35,000 bpd and later expanded to 60,000 bpd. (2) The Warri Refinery was commissioned in 1978 with an installed refining capacity 100,000 bpd, and upgraded to 125,000 bpd in 1986. (3) The Kaduna Refinery was commissioned in 1980 with an installed refining capacity of 100,000 bpd, and upgraded to 110,000 bpd in 1986. (4) The second Port Harcourt Refinery was commissioned in1989 with 150,000 bpd processing capacity, and designed to fulfil the dual role of supplying the domestic market and exporting its surplus. The combined capacities of these refineries exceed the domestic consumption of refined products. The refineries are however, operating far below their installed capacities, as they were more or less abandoned during the military era, skipping the routine and mandatory turnaround maintenance that made products importation inevitable (Odularu, 2007).

5.3 Structure of the Nigerian Oil and Gas Industry

The oil and gas sector in Nigeria is composed of a number of different companies and organizations (both multinational and indigenous) that are engaged in all aspects of the industry's operations from upstream (exploration and production) to midstream (transportation and processing of gas) to downstream (refining of oil, distribution and marketing). NNPC (Nigeria National Petroleum Corporation) has a Joint Operating Agreement (JOA) i.e. a standard agreement with the operators in the oil industry. This JOA sets the guidelines and modalities for running the operations which include setting out the level of participation of each party in the running of the affairs of the company, determining the interests and obligations and then sets out the agreement ownership of production facilities and assets.

This joint venture involves the following foreign owned oil companies. A joint venture operated by Shell accounts for more than forty per cent of Nigeria's total oil production from more than eighty oil fields. The joint venture is composed of NNPC (55 per cent), Shell (30 per cent), Elf (10 per cent) and Agip (5 per cent) and operates largely onshore on dry land or in the mangrove swamp. A joint venture between NNPC (60 per cent) and Chevron (40 per cent) has in the past been the second largest producer (approximately 400,000 bpd), with fields located in the Warri region, west of the Niger River and offshore in shallow water. It is reported to aim to increase production to 600,000 bpd. A joint venture between NNPC (60 per cent) and Mobil (40 per cent) operates in shallow water off Akwa-Ibom state in the southeastern delta and averaged production of 632,000 bpd in 1997, making it the second largest producer, as against 543,000 bpd in 1996. Mobil also holds a 50 per cent interest in a Production Sharing Contract for a deep water block further offshore, and is reported to plan to increase output to 900,000 bpd by 2000. Oil industry sources indicate that Mobil is likely to overtake Shell as the largest producer in Nigeria within the next five years, if current trends continue. A joint venture operated by Agip and owned by NNPC (60 per cent), Agip (20 per cent) and Phillips Petroleum (20 per cent) produces 150,000 bpd mostly from small onshore fields. A joint venture between NNPC (60 per cent) and Elf (40 per cent) produced approximately 125,000 bpd during 1997, both on and offshore. Elf and Mobil are in dispute over operational control of an offshore field with a production capacity of 90,000 bpd. A joint venture operated by Texaco and owned by NNPC (60 per cent), Texaco (20 per cent) and Chevron (20 per cent) currently produces about 60,000 bpd from five offshore fields (NNPC Website: accessed on 17th November, 2013). There is now a shift from JOA to Production

Sharing Contracts (PSCs). While the JOA operates as a form of partnership between joint venture partners, the PSCs emphasizes the sharing of productivity of oil and gas operations in agreed amounts between oil companies as contractors to the Nigerian Government and NNPC as a representative of the interests of Nigerian Government in the venture. Table 5.4 gives a clear picture of what JOA and PSC mean.

Table 5.4 - Joint Venture Contracts and Product Sharing Contracts in the Nigerian oil Industry.

JOINT VENTURE CONTRACTS (JVCs)	PRODUCT SHARING CONTRACTS (PSCs)
1. Partners share in cost of petroleum operations in the proportion of their equity share holding. 2. Each partner can lift and separately dispose of its interest share of crude oil production, subject to payment (to Government) of petroleum profits tax, and royalty 3. One of the partners is designated as the operator of the joint venture. 4. The operator prepares and proposes programmes of work and budget of expenditure, for approval by NAPIMS, the major shareholder. 5. The operator has freedom of action in specific matters, and each party can opt for, and carry out sole risk operations. 6. The contractor pays no corporate tax on its profit. 7. NNPC reserves the right to become operator 8. The commercial aspects of the agreement are covered in the Memorandum of Understanding (MOU). The current MOU provides the companies a guaranteed minimum profit of \$2.30 per barrel after tax and royalty on their equity crude, and a reserves additional bonus, in any year that a company's addition to oil and condensate ultimate recovery exceeds production for that year.	1. The contract areas for the OPL's are located in deep offshore or inland basin. 2. The term of the PSC is for a period of 30 years, inclusive of 10 year exploration period. 3. The contractor bears all the cost of exploration, and if oil is found, also bears the cost of subsequent development and production of operations. If no oil is found, the contractor is not reimbursed for exploration expenses. 4. Crude oil produced is allocated as follows Tax Oil- This is to offset tax, royalty, and concession rentals due to government Cost Oil — This is for reimbursement to the contractor for capital investment and operating up to certain limits. Profit Oil- The balance after deduction of tax oil and cost oil elements will be shared between the contractor and NNPC.

Source: NNPC, 2005.

These multinational oil companies (MNOCs) require services from non-oil companies. In the upstream sector, a collection of activities start from exploration and continue at every level of production up until the crude is delivered. The key operational requirements from oil companies include: fabrication, drilling, construction, installation, engineering, procurement and logistics. The underlying services cover technical, operations and management services in connection with developing, producing or distributing the hydrocarbon resources and other logistics services such as aviation and hotel and catering services in support of operations. The technical services supply chain has been dominated to a very large extent by foreign oilfield services companies employing foreign and Nigerian experts and technicians. The

leading names in the industry such as Schlumberger and Halliburton have been in operating in the country for well over four decades. Local companies such as Oando and Sahara are integrated energy firms whereas Nestoil, Dorman Long and Nigerdock are leading Engineering, procurement and construction companies (Venture Career Journal, 2012).

Historically, Nigerians have had very little share of the country's oil wealth and there was an urgent need to reverse this trend in the wake of the country's return to democracy. To address this anomaly, the Federal Government of Nigeria in the early 2000s introduced the Local Content (LC) policy, christened Nigerian Content (NC) and it was primarily aimed at enhancing increased participation of local indigenous firms in oil and gas industry. The policy was targeted at transforming the industry through the development of in-country capacity and indigenous capabilities in the area of manpower development, facilities and infrastructure towards ensuring that a higher representation of local indigenous companies participate actively in the industry (Lawal, 2006; MacPepple, 2002 and Nwapa, 2007). The Nigerian Government strives for the development of the overall Nigerian economy through employment generation and the development of significant linkage between industrialization and manufacturing processes from oil and gas development. Hence, it has implemented a local content policy that gives priority to Nigerian operators/goods/services and prescribes minimum levels of Nigerian content to feature in oil and gas operations). In implementing its policy of developing local expertise in the oil and gas sector, the Nigerian Government in 1989 awarded oil blocks to a few Nigerians from across the country which aided the employment of nationals. Again, in 2003, oil fields were allocated to 24 indigenous companies. The reason was to give out some of the less desired oil fields from blocks within joint ventures to Nigerian companies. Typically, the indigenous oil companies from the two interventions of Government operate under sole risk arrangements and typically partner with international companies (Venture Career Journal, 2012). This local content is aimed to develop in-country capacity and indigenous capabilities, ensure greater proportion of the work is done in Nigeria with active participation of all sectors, position Nigeria as hub for service delivery within the West African sub region and beyond and take Nigeria on path to industrialization – producer Nation (Adegbite and Erhimona, 2008).

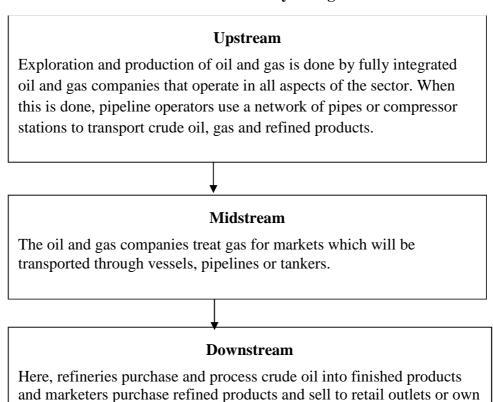
The activities in the industry are regulated by the Department of Petroleum Resources (DPR), a department within the ministry of Petroleum Resources. DPR ensures compliance with industry regulations; processes applications for licenses, leases and permits then establishes and enforces environmental regulations. On the other hand, Nigerian National Petroleum

Corporation (NNPC) has a mandate that covers operations as an integrated oil company spanning exploration & production, gas development, refining, distribution, petrochemicals, engineering and commercial investment (Venture Career Journal – O & G, 2012). In Nigeria, there are legislations that govern the activities of the oil Industry. The Federal (and States) Environmental Protection Agencies (FEPA and SEPAs) are largely responsible for the enforcement of these legislations. However, the agencies have limited control over the oil industry and are ineffective due to corruption, limited funding, weak monitoring and enforcement capacity, and limited qualified staff (World Bank 1995, Volume II, annex J; Fynas, 2000: 87). However, Ejibunu (2007) claim that the environmental policy that are commonly practiced in developed countries are often not followed in Nigeria as a result of lack of power, wealth and equity of the affected community. According to the World Bank (1995), the three major constraints to the regulation of the energy and mineral sector in Nigeria are the absence of requirement for community participation in the planning and development of oil activities, corruption and inadequate compensation for damage to property, and the lack of enforcement of environmental regulations. In addition, unlike other oil- producing countries, Nigeria lacks a separate statute for the conservation of oil (World Bank, 1995, Volume II, annex J; Frynas, 2000:90). This weak legislation has brought about environmental damage such as loss of fertile soil, pollution of air and drinking water, degradation of farmland, damage to aquatic ecosystem that make it impossible for the local people to farm and fish which used to be their major occupations (see detail at the South-South section). In fact, a release by the Nigerian Conservation Foundation (NCF), asserts that the poor management of Nigeria's environment is costing the country about \$5 billion a year in ruined land and forest, most of which takes place at the Niger Delta (Reuters 19 September 2001).

5.4 Operations of the industry

The operations of the industry cover a range of activities that encompass three sub-sectors – upstream, midstream and downstream as discussed earlier in the chapter. The chart below illustrates in detail the value chain of the Nigerian oil and gas industry.

Figure 5.1 - Value Chain of the Oil and Gas Industry in Nigeria



outlets. Here, Government agencies and regulators monitor the industry

to ensure compliance with industry standards.

Source: Venture Career Journal – O & G, 2012

Exploration is characterized by high technology activities. Both onshore and offshore exploration for oil and gas start with the acquisition, processing and interpretation of seismic data over the licence area. Production operations include bringing the oil and gas to the surface, drilling wells, maintaining production through proper reservoir management, and treating, measuring, well testing (to determine well performance), and field-laboratory testing (to determine the quality of the crude oil and natural gas). Crude oil and natural gas are collected from field gathering systems consisting of pipelines that move them from the wellhead to treatment facilities where the crude oil and natural gas are separated, treated (to remove water, sediment and other impurities) and then measured, tested and then stored (for crude oil). Routine operations on a producing well would include a number of monitoring,

safety and security programmes and maintenance tasks. Offshore operations are fundamentally the same as onshore operations with the major difference being in the complexity of the production sites and hence their costs (http://cdnetng.org/?q=sectorsabc/o).

The midstream subsector is primarily involved with the storage and transportation of crude oil and natural gas. Crude oil/ natural gas must be moved from the production site to refineries/ processing plants and from these to consumers, and with maximum efficiency and profits. Crude oil/gas is collected from field gathering systems consisting of pipelines that move them from the wellhead to storage tanks and treatment facilities where the oil/gas is measured and tested. From the gathering system the crude oil/gas is sent to a pump station where they are delivered to the pipeline for land transportation or on to barges and tankers for water transportation. Transporting raw oil and natural gas is a highly technical process that involves compressing the fluids to necessary pressures in order to be transported through or on tankers from offshore drilling sites (http://cdnetng.org/?q=sectorsabc/o).

The downstream oil and gas sector refers to the refining of crude oil as well as the marketing and distribution of natural gas and products which are derived from crude oil, such as liquefied petroleum gas, gasoline or petrol, jet fuel, diesel oil, other fuel oils, asphalt and petroleum coke. The main components of the downstream sector include oil refineries, petrochemical plants, petroleum product distribution, retail outlets and natural gas distribution companies. The output of the downstream industry touch consumers through such products as petrol, diesel, jet fuel, heating oil, asphalt, lubricants, synthetic rubber, plastics, fertilizers, antifreeze, pesticides, pharmaceuticals, natural gas as well as propane. Gas markets include residential, commercial, industrial, power generation, vehicle fuel and petrochemicals (http://cdnetng.org/?q=sectorsabc/o). The oil industry in Nigeria has some upcoming oil projects which indicate that the oil and gas industry has many more years to stay. As an OPEC member, Nigeria has agreed to a crude oil production quota of 1.704 million bbl/d. However, the country still plans on bringing several projects in the next few years especially upstream developments, particularly deepwater projects which will increase Nigerian oil production. The estimate below shows at least a 10- year project plan in the industry which will positively impact on the economy of the nation given the projected oil production level per day and also predicts longer presence of the oil companies in the Niger Delta.

Table 5.5 - Upcoming oil projects in Nigeria

		Liquids	Natural gas	Est.
Operator	Project	(bbl/d)	(MMcf/d) ¹	Start
Chevron	Olero Creek Restoration Project	48	na	2013 2014
Chevron	Escravos Gas to Liquids Plant	33	na	2014
Chevron	Dibi Long-Term Project	70	na	2016
Chevron	Sonam Field Development	30	215	2016
Chevron	Nsiko	na	na	2017+
Eni	Zabazaba-Etan	120	na	2015 2016
ExxonMobil	Etim/Asasa Pressure Maintenance	50	na	2013 2015
ExxonMobil	Bosi	140	260	2016+
ExxonMobil	Erha North Phase 2	60	na	2016+
ExxonMobil	Satellite Field Development Phase 2	80	na	2016+
ExxonMobil	Uge	110	20	2016+
Shell	Bongo Northwest	40	na	2014
Shell	Bongo North	100	60	2016+
Shell	Bongo Southwest (Aparo)	225	15	2016+
Shell	Forcados Yokri Integrated Project 2	90	na	2015 2016
Shell	Southern Swamp Associated Gas 2	85	na	2015 2017
Total	Usan Future Phases	50	na	2016+
Total	Egina	200	na	2017+

¹MMcf/d is million cubic feet per day.

Sources: Source: U.S. Energy Information Administration based on company reports, PFC Energy, and OPEC Secretariat.

5.5 Industrial Relations in the Nigerian Oil Industry

This section will explore each company used in the first stage of interview in terms of their employment system, conditions of work and external factors that influence their operations in the Niger Delta. The aim of this section is to obtain in-depth knowledge of the happenings in the Nigerian oil and gas industry by reporting direct quotes from mangers across four oil companies in Nigeria as well as other secondary sources. This section will depict some underlying factors that may not have been achieved if only the workers were interviewed. More so, managers' opinions on offshore workers' sources of stress in the Niger Delta will be identified; this will give basis for comparison with workers' perspectives as will be discussed in chapter six.

²Units are in barrels of oil equivalent per day (boe/d) for the Forcados and Southern Swamp projects as these will produce both oil and gas.

5.5.1 Employment System

Contract vs Permanent workers

This section will examine the employment system in the Nigerian oil and gas industry by specifically looking at the different work arrangements by different types of workers. In terms of types of workers, two types have been established in the Nigerian oil and gas industry – permanent and contract workers. Permanent workers refer to workers who are direct workers of organizations while contract workers will refer to all workers on contract or fixed term basis whether temporary or casual. Conditions of work differ between these types of workers (discussed later). When asked the ratio between permanent and contract workers and if they are differences in terms and condition, most of them agreed they had more contract workers than permanent workers but no respondents revealed if there were differences in pay between the two types of workers. Managers were reluctant to reveal disparity in pay between contract and permanent workers. This quote by a HR manger is typical, "... in my organization, we have more contract workers than permanent workers, say a rough ratio of 10:7....it is for the contractors to say what they pay contract workers, we don't really know the facts here but our contract workers are not complaining". The other quotes were similar to the one above so the researcher went ahead to do some research about differences in the overall terms and conditions of contract and permanent workers in the Nigerian oil industry.

The traditional system of full-time employment is gradually faced with the use of non-standard work arrangements (contract, casual and temporary employment) by employers; this raises concerns for workers and trade unions alike, especially in the Nigerian oil industry in terms of job security, social security, terminal benefits and minimum conditions of work. There has been a shift towards casualization; this is a process in which employment shifts from full time and permanent positions to higher levels of casual due to increasing desperation of employers to cut down organizational costs (Fapohunda, 2012). The problem of casualization has been a long standing issue in the Nigerian oil and gas industry; the reason has nothing to do with workers' qualifications or experience because many contract workers are higher institution graduates or skilled technicians, experienced drivers with long years of service, clerical and auxiliary staff with administrative skills, etc. (Okafor, 2007).

Permanent workers are hired directly by the company and receive contracts that explain work conditions, wages, working hours, and benefits. They have the right to form unions and bargain collectively to extend their voice in the workplace. In contrast, casual workers are often employed by third-party contractors under various types of part-time and/or short-term work arrangements. They perform many of the same technical and professional duties as permanent workers, but with no job security. They face frequent layoffs and long periods of revolving short-term contracts under a never-ending probation. Though they work at the facilities of the companies and their work is a large part of these companies' productivity, they are legally the direct hires of smaller outside firms and their contributions are too often ignored. Most casual workers are not part of any union structure. They earn lower wages than the regular workers, receive fewer benefits, and can be fired at will. In fact, contract workers occupy a precarious position in the oil industry, and are effectively a new set of "slaves" and "underclass" in the industry (Fapohunda, 2012).

The International Labour Organization (ILO), (2004) confirmed in their report that companies in Nigeria "tend to fire contract workers just before the expiration of their three, six or twelve month contracts, when they are about to become permanent workers...". In addition to the losses suffered by contract workers, Okafor (2007) notes awful low wages, absence of medical care allowances, no job security or promotion at work, no gratuity and other severance benefits, no leave or leave allowance, freedom of association which is often jeopardised, no death benefits or accident insurance at work, no negotiation or collective bargaining agreement. Arguably, casualization has brought about apartheid amongst the oil workers and made oil workers especially the contract workers disconnected from the management.

Up until the early 1990's, workers in the oil and gas industry comprised approximately 70% permanent employees and 30% contract employees but by 2010, a huge increase in the numbers of contract employees was recorded (40% permanent employees and 60% temporary employees). In fact, by 2008 in ExxonMobil for example, 46.13% contract workers and 53.87% permanent workers was recorded whereas in 2010, contract workers made up 64% of the entire workforce while permanent workers made up 36% of the workforce. In the same period in Chevron, 54.55% of the total workforce is contract employees while 45.45% are permanent employees. This statistics means that more than half of Chevron's employees have a contract status (Danesi, 2012). Comparing this to the extraction and refining sectors of a country like the United Kingdom, temporary workers

accounted for only 13.3 per cent and 14.3 per cent of the workforce in 2003 (UK Labour Force Survey, 2003). However, the tables below present workers' percentage in both employment contracts drawing from selected oil and gas companies in Nigeria as at 2003 and 2010 respectively.

Table 5.6 - Employment Contracts in Selected Oil companies in Nigeria as at 2003

	Number of Workers on Permanent Job	Number of Casual/ Contract Workers	Percentage of Workers on Causal/Contract	Total
Nigerian Agip Oil Co.	211	1500	87.7	1711
Elf Petroleum	199	550	73.4	749
Elf Oil	42	132	75.9	174
Shell Petroleum Development	520	8000	93.9	8520
Mobil Producing	492	2200	81.7	2692
Mobil Oil	NIL	492	100.0	492
Nidogas	15	150	90.9	165
National Oil	51	178	77.7	229
Smithnigeria	25	80	76.2	105
Schlimberger Group	250	1000	80.0	1250
African Petroleum Plc	300	376	55.6	676
Nigerian National Petroleum Corporation	on 9000	3000	25.0	12000
Total Nigeria Ltd	136	534	79.7	670
Lighthouse Petroleum	58	105	64.4	163
Comex Nig. Ltd	52	150	74.3	202
Remm Oil Service	120	350	74.5	470
Devtag Drilling Co. Ltd	96	300	75.8	396
Tidex Nig. Ltd	65	120	64.9	185
Consolidation Oil	300	600	66.7	900
Chevron	450	3000	87.0	3450
Trans Pecan Sedco Forex	50	150	75.0	200

Source: NUPENG, 2003

Table 5.7 - Employment Contracts in Selected Oil companies in Nigeria as at 2010

Company	No. of Permanent Employees	Percentage	No. of Contract/Casual Employees	Percentage	Total
Shell (SPDC)	3,625	17.58%	17,000	82.42%	20,625
Chevron	2,000	45.45%	2,400	54.55%	4,400
ExxonMobil	2,118	36%	3,835	64%	5,953
	7,743		23,235		30,978
	Shell (SPDC) Chevron	Employees Shell (SPDC) Chevron 2,000 ExxonMobil 2,118	Employees Shell (SPDC) 3,625 17.58% Chevron 2,000 45.45% ExxonMobil 2,118 36%	Employees Employees Shell (SPDC) 3,625 17.58% 17,000 Chevron 2,000 45.45% 2,400 ExxonMobil 2,118 36% 3,835	Employees Employees Shell (SPDC) 3,625 17.58% 17,000 82.42% Chevron 2,000 45.45% 2,400 54.55% ExxonMobil 2,118 36% 3,835 64%

Source: Danesi, 2012

In terms of the losses faced by contract workers, most of the casual workers have various experiences (e.g. Certificates of degrees attained especially in areas of engineering, computer science, telecommunication and accounting) that would warrant permanent jobs. This is supported by evidence from a HR, she said, "our contract workers have the skill and qualification to work in our rigs....we are happy to be working with them". In most cases, some of the permanent jobs where casual workers were being utilized in the industry include clerical jobs, plant operations, computer services, rig drilling operations, maintenance

services, transportation, flow station operations, flow station guards, deck-hands, forklift operators, typists and fire service men. Even among the permanent workers in the Nigerian oil and gas indsurty, there are more expatriate (non-Nigerian) than indigenous managers which anger the aspirations of the contract workers (Okafor, 2007). Also, training is said to yield motivation for creating new ideas and is valuable to both employers and workers. However, the respondents indicated that oil companies provide workers with education and on the job training but often times, this training and education are for permanent workers and not contract workers. In a direct quote by a HR manager, she said, "... we take human capital development seriously, there is regular training for workers which helps to improve their skills....ehm! Our core workers are more likely to benefit from human capital development".

Again, the use of labour and service contractors has been a source of ongoing conflict between workers, unions and employers in the OGI (Danesi 2012). Concerning the right to join or form a union, contract workers since the mid 1990's were denied the right to join or form unions which is a violation of section 40 of the Constitution. Thus for more than a decade, contract workers did not have a platform to negotiate and improve their terms and conditions of employment hence their exploitation. NUPENG and PENGASSAN (union for full time oil workers) therefore took it upon themselves to campaign against contract employment in the industry as they deemed it a tool of exploitation in the hands of employers in the industry. This campaign through strikes and negotiation with the oil and gas companies and their labour contractors led to the formation of contract unions in the industry. However, many employers and their labour contractors did not accord them recognition as stipulated by section 24 of the Trade Unions Act which states that not all contract workers are members of a contract union. There are still ongoing negotiations between the unions and labour contractors to ensure that all contract workers in the oil industry are members of a contract union (Danesi, 2012). The following table shows the different ways through which some contract workers have been victimized. The table suggests that it is mostly practiced amongst indigenous oil companies in Nigeria.

Table 5.8 - Anti-labour practices in the petroleum sub-sector

Name of company	Nature of victimization
Oil tech. Nigeria limited	Termination of union officials employment and non recognition of the Union
T.Y. Chemicals Nigeria Limited	Termination of union officials Employment
Schlumberger Group Labour Contractors	Non recognition of union and victimization of workers
Amber Resources Nigeria Limited	Non recognition of union and victimization of workers
Globestar Services Nigeria Limited	Anti-union and victimization of Union officials
Eleme Petrolchemical Company	Sacked Union officials
ABB Lummnus	Non recognition of union and victimization of workers
Dubril Oil service	Victimization of workers
Bellbop Nigeria Limited	Victimization of Union Officials & members
Geophysical Nigeria Limited	Victimization of Union Officials & workers
CNCP/BGP (WARRI)	Victimization of Union Officials & workers
VGNL/joint venture IDSL	Victimization of Union Officials

Source: NUPENG, 2003

Although the respondents were not open enough to discuss the differences in the terms and conditions of contract and permanent workers, the discussion above indicate that permanent workers in the Nigerian oil and gas industry have better terms and conditions than contract workers. Another set of workers that showed differences in their terms and conditions were local and expatriate workers.

Local vs. Expatriate workers

The Nigerian oil industry has Nigerian and foreign workers (commonly called expatriates); the use of expatriates and Nigerian atypical workers in the offshore industry becomes an issue of concern. Questions around the makeup of their workforce in terms of Nigerians and non-Nigerians, if there are differences in their roles, pay and skill level were asked and answers such as the following was gotten. One HR manager said, "... we have both Nigerians and non-Nigerians, our aim to attract the best set of people to work for us so we have a diverse workforce spanning from Europe, America, Asia to Africa....we have more non-Nigerians working offshore than onshore because the offshore business requires a high level of expertise and exposure which most of the times are seen in expatriates". Another HR manger from another organization said, "...expatriates usually do supervisory roles because it is generally believed they are more exposed to better technology and will know when there is a need for an upgrade or change of tool".

Consequent on these quotes, Ejibunu (2007) claim that oil companies often require highly skilled workers; because of this, the local people are forced to become low skilled workers dependent on the oil company while expatriates are given the highly skilled job which has better pay; this has generated bitter conflict as the issue of employment and participation in the oil industry have divided different segments of the industry. Furthermore on this argument, Fajana (2005) claimed that although expatriate workers often occupy positions

requiring special skills and expertise, with which Nigerian workers cannot compete (trainers of new tools, equipment and technology and hold managerial positions in multinational oil companies), the number of expatriate workers in unskilled and semi-skilled jobs (which Nigerians can easily do) has been increasing over the past few years. However, all respondents agreed that expatriate workers often occupy positions requiring special skills and expertise due to the fact that they are usually highly skilled. Table 5.10 shows the number of expatriate and indigenous workers in the OGI between 1999 and 2003.

Table 5.9 - Estimated employment figures from 1999-2003

Type of employment	1999		2000	2001					2003	
	Nigerian	Non- Nigerian	Nigerian	Non- Nigerian	Nigerian	Non- Nigerian	Nigerian	Non- Nigerian	Nigerian	Non- Nigerian
Regular	28 375	5 578	29 835	5 865	32 175	6 325	33 930	6 670	36 270	7 130
Contract	10 914	485	11 475	510	12 375	550	13 050	580	13 950	620
Subcontract	4 365	-	4 590	-	4 950	-	5 220	-	5 580	-
Subtotal	43 654	6 063	45 900	6 375	49 500	6 875	52 200	7 250	55 800	7 750
Grand total	49 717	-	52 275	-	56 376	-	59 450	-	63 550	-
Sources: PENG	ASSAN and N	UPENG.								

Expatriate workers accounted for about 12 per cent of the overall workforce in the oil industry (mainly in positions requiring special skills and expertise) and only 3 per cent of the contract workforce in 2003. Although the number of expatriate workers in unskilled and semi-skilled jobs has increased in recent years, the presence of highly paid expatriate workers who perform the same role as Nigerian workers is also on the increase and sometimes causes a certain amount of friction, as there is considerable disparity in the terms and conditions of work of each group (ILO, 2009). Surprisingly, expatriates have certain rights at work that the contract workers do not enjoy such as right to freedom of association, bargain collectively and to equal treatment. Expatriate workers are not only better paid but also protected. Expatriate workers make up a third of the Nigerian oil and gas workforce, often perform higher paid technical and managerial jobs whose pay and benefit package (including contract workers) far exceed those of even comparably skilled full time Nigerian workers. This disparity causes resentment and controversy. For example, in their (Solidarity Centre, 2010) interview with a PENGASSAN leader, it was observed that expatriates filled 77 percent of the top management positions at Chevron Nigeria while Nigerians are put in the forefront to take all kinds of risks and yet they are not being given the same opportunity. Furthermore, while expatriates are often prime targets of attacks and kidnappings by militant groups in the Niger Delta, they also are protected by a security apparatus not provided to most Nigerian

workers. Their housing behind the walls of greatly safeguarded corporate compounds and their access to top-tier education and health benefits only strengthen Nigerian workers' strong and pervasive perception of a discriminatory hierarchy (cf. Solidarity Centre, 2010).

In this section, it was evident that respondents were very silent on the disparity in terms and conditions of local and expatriate workers but the secondary sources have shown huge differences and indicates a potential source of stress to offshore workers in the Niger Delta. There is considerable disparity between the terms and conditions of work of expatriate workers and Nigerian workers. The average pay ratio of expatriate workers to Nigerian workers is about 4:1. The fact that expatriate workers are highly paid causes a certain amount of jealousy and they are often the target of Nigerian workers wishing to improve their working conditions and rights e.g. in April 2003, nearly 100 foreign oil workers including 21 American and 35 British nationals - were held hostage by striking Nigerian workers on four offshore drilling rigs owned by United States-based Transocean Inc. (Fajana, 2005). Jobs in oil and gas extraction and production are generally relatively well paid compared with other economic sectors, although pay systems vary from company to company. In the OGI, individual companies decide the pay and most times, the large companies set high wages in other to attract better qualified employees. The wage in the OGI usually is a consolidated monthly salary involving basic pay, commuting allowance, meal subsidy, utility allowance, furniture allowance, medical allowance, Christmas bonus, housing allowance, security allowance, field assignment allowance and lodging allowance. Basic wages in the upstream sector are usually higher than in the downstream sector, partly because of monetary compensation for occupational hazards (ILO, 2009).

According to global oil and gas salary survey (2013), published by Hays, a global recruitment firm, local workers in the Nigeria's oil and gas sector are the second highest paid in Africa, after South Africa and 26th in the world, with an average salary of N8.706 million (\$55,100). This means that an average oil worker in Nigeria earns more than his or her counterparts in other industries in Nigeria. On the other hand, expatriate workers in the Nigerian oil and gas sector are the highest paid in Africa and 11th most paid in the world, with an average annual salary of N22.246 million (\$140,800). This clearly reveals the disparity in pay between local and expatriate workers in Nigeria oil and gas industry. According to Fajana (2005), this disparity causes a certain amount of jealousy and they are often the target of Nigerian workers wishing to improve their working conditions and rights.

Putting this in the global perspective, the survey by Hays, based on the responses of 25,000 people working in the oil and gas industry across 53 countries, revealed that paying expatriate workers more than local workers is not just unique to the Nigerian oil and gas industry. In fact, only 8 out of 53 countries paid their local workers more than expatriate workers; these countries are – Argentina, Canada, Kuwait, Netherlands, New Zealand, Norway, Saudi Arabia and United Kingdom. Table 5:11 gives better illustration.

 Table 5.10 - Annual Salaries of Permanent Oil Workers by Country

ANNUAL CALABIES		
ANNUAL SALARIES BY COUNTRY	Local average annual salary	Imported average annual salary
Algeria	45,200	92,400
Angola	53,700	108,700
Argentina	94,200	60,000
Australia	163,600	171,000
Azerbaijan	47,500	133,500
Bahrain	N/A	92,200
Brazil	111,000	131,400
Brunei	N/A	123,100
Canada	123,000	122,500
China	68,300	161,400
Colombia	81,700	106,900
Denmark	109,700	148,500
Egypt	41,900	118,500
France	92,800	107,400
Ghana	40,500	121,600
India		
Indonesia	38,900 45,300	111,800
	45,200	146,000
Iran	46,900	68,100
Iraq	47,200	124,500
Italy	69,000	84,600
Kazakhstan	41,900	117,200
Kuwait	114,400	79,700
Libya	42,200	82,800
Malaysia	47,200	130,200
Mexico	50,000	132,300
Netherlands	123,800	84,900
New Zealand	127,600	110,700
Nigeria	55,100	140,800
Norway	152,600	128,600
Oman	72,600	92,100
Pakistan	32,600	70,000
Papua New Guinea	N/A	145,600
Philippines	35,600	170,000
Poland	42,500	139,600
Portugal	51,000	125,800
Qatar	N/A	77,900
Romania	34,400	105,200
Russia	57,900	151,100
Saudi Arabia	86.500	81,000
Singapore	84,900	103,900
South Africa	75,300	93,100
South Korea	81,400	141,800
THE SHELL IN THE S	68,900	97,900
Spain	31,100	
POST CONTROL POST POST POST POST POST POST POST POST		59,800
Thailand	49,400	142,400
Trinidad and Tobago	66,200	168,800
Turkey	77,400	101,900
United Arab Emirates	N/A	79,400
United Kingdom	93,400	93,100
United States of America	121,400	123,800
Venezuela	62,200	113,000
Vietnam	53,300	132,700
Yemen	35,100	97,300

Source: 2013 Oil & Gas Salary Guide

Gender

The oil and gas industry in general is known as male dominated. The number of qualified women in the oil and gas industry is comparatively low whilst the ratio between women and men has been stagnant over the past six years because women are often discriminated at work and therefore occupy less senior positions and are more likely to experience career barrier. All the respondents confirmed that there were more males than females in the Nigerian oil industry while one respondent gave reasons to that. He said, ".... We get more leave requests from the female workers, sometimes, they ask for some days off to attend to pressing family needs, at other times, they ask for office roles due to pregnancy. The way the offshore work is that any given project has to be completed at a given time so such requests cause delays hence why employers just prefer male offshore workers to female offshore workers".

The above quote shows that women are qualified but are not just given the chance to work offshore sometime. This in itself might be a source of stress to both genders but particularly for the women, they might feel discriminated at and thus negatively affect their well-being. This point mirrors patriarchal system inherent in the Nigerian culture (see chapter 4) According to International labour organization's website, women are qualified; in fact, in geosciences, women make up only 18-27 per cent whilst 11-19 per cent of petroleum engineers are women. The statistics show that there are qualified women that should be integrated at all levels of the organization to make them feel positive about the organization and boost involvement of skilled workers in the industry (ILO website). However, the case of the Niger Delta seems worse due to the erratic nature of the environment, for example, Fajana (2005) claim that women workers in the Nigerian oil industry account for only about 15 percent of the overall workforce and majority of the them are employed in the administrative, medical, personnel, human capital development, public affairs and legal departments. The main reasons for this are the volatile nature of the oil industry, harsh work environment, remote locations of worksites and family work conflicts (Fajana, 2005). The findings confirmed that the offshore industry is male dominated as the average ratio of males and females is 98:2. Again is the fact that the level of unionization among women workers in the oil industry is very low. In the United Kingdom for example, very few women workers are unionized in the extraction and related activities sectors except in the oil refinery sector where union density of women was only 5.5 per cent compared with 27.8 per cent for all women in employment (Forde et al., 2005). Comparatively, in Nigeria as at 2003, about 20 per cent of women workers in the oil industry were unionized (Fajana, 2005).

Hays, a top recruitment firm in their 2013 oil and gas global salary guide surveyed the diversity of staff in terms of gender across 8 regions and found that south America, North America, Australasia, Europe and Commonwealth Independent States (CIS) were the top regions with women in the oil industry at 10.3%, 10.2%, 9.1%, 8.3% and 8.3% respectively while the Middle East had the lowest percentage of women at only 3.1% (see Tab 5.11).

Table 5.11 - Diversity of staff by gender

Gender	Australasia	Asia	Africa	Europe	CIS	Middle East	North America	South America
Male	90.9%	93.5%	94.4%	91.7%	91.7%	96.6%	89.8%	89.7%
Female	9.1%	6.5%	5.6%	8.3%	8.3%	3.1%	10.2%	10.3%

Source: Oil and Gas Global Salary Guide (2013).

This shows that scarcity of women in the oil and gas industry is not unique to Nigeria, rather more of a global scenario. Findings showed that gender plays a significant role in the employment opportunities in the Nigerian oil and gas industry which might be a potential source of stress to female offshore workers and even to male workers but to a lower degree. This is assumed so because as female workers are often granted leave to deal with family matters, the male counterparts are not granted such leave and then might cause jealousy between the two groups.

5.5.2 Health and Safety

The respondents claimed that safety is always their first priority. They aim to have zero fatalities and no incidents that harm people, or put their neighbours or facilities at risk. To prevent accidents, they manage safety in a systematic way and are introducing simpler and clearer requirements that are easier for people to understand and follow. It is supported by a set of mandatory manuals covering topics such as personal safety, road safety and process safety. They continue to improve their HSE results by applying strict discipline in all their operations and also ensure continuous improvement on HSE performance objectives including effluent discharge reduction and gas flare down targets. Again, there is always a sensitization programme for workers about health and safety. This program informs workers that health and safety is everybody's role.

In supporting the health and safety of offshore workers, the organization ensures that Health Safety and Environment (HSE) persons are resident on site for effective site supervision, ensures compliance and intervention where and when required and ensures that trained personnel and equipment are readily available with emergency evacuation capacity. There is continuous training on HSE for all staff; this is part of their policy on health and safety. Accidents are always recorded but details were not disclosed. In order to prevent accidents, the organizations ensured that all safety policies are fully operational and enforced. Especially for those that work offshore, emergency procedures such as trained medical personnel, equipment and clinic are readily available on site, evacuation facility are in place.

There are no reliable official statistics on the number of fatalities and non-fatalities in the oil sector alone in Nigeria. However, available national statistics indicate that accidents in the mining and quarrying sector, including oil extraction, are relatively low compared to other economic sectors (Fajana, 2005). Respondents indicated that health and safety is critical to the responsible delivery of oil and gas. Companies in the Nigerian OGI adopt a universal approach to health and safety which include occupational health and safety, safety health environment charter and industrial hygiene. The OGI operates their facilities with the aim of preventing incidents that may cause harm to workers or nearby communities, or cause environmental impact. They also often build a culture where each worker realizes their part in making the industry a harmless place to work and the environment a safe place to live in. The interview showed that safety is everybody's responsibility in the Nigerian OGI.

Regarding the environmental laws, respondents claim their organizations were stricter with environmental legislation as it relates to Nigerian's environmental laws but that the lack of a specific Health and safety law in the Nigeria had forced them to embrace and device the health and safety laws that apply to their parent companies in Europe and USA. Respondents were asked to point to the major causes of harmful incidents on field. The managers indicated that majority of such incidents are as a result of human errors which are often as a result of contractors and site workers' lack of health and safety awareness.

Out of the four companies' involved in the interview, only Shell provided its Health and safety performance report as shown in Tab 5.12.

Table 5.12 - Royal Dutch Shell plc Sustainability Report 2012 SOCIAL DATA

SOCIAL DATA										
	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Fatalities										
Total number	8	6	12	20	26	21	37	34	31	45
Employees	3	1	0	1	2	1	2	3	2	5
Contractors	5	5	12	19	24	20	35	31	29	40
Fatal accident rate (FAR) Fatalities per 100 million working hours (employees and contractors)	1.32	0.96	1.56	2.3	3.4	3.1	5.6	5.0	4.6	6.1
Injuries Total recordable case frequency (TRCF) Injuries per million working hours (employees and	1.26	1.24	1.23	1.4	1.8	1.9	2.1	2.5	2.6	2.6
contractors) Lost time injury frequency (LTIF) Lost time injuries per million working hours (employees and contractors)	0.34	0.36	0.35	0.4	0.6	0.7	0.8	1.0	1.1	1.1
Illnesses Total recordable occupational illness frequency (TROIF) Illnesses per million working hours (employees only)	0.51	0.66	0.76	0.6	1.2	1.5	1.8	2.0	2.1	2.0

Source: SHELL WEBSITE

5.5.3 Work life balance

When asked about the work life balance, respondents articulated that the organizations are beginning to see the need for work life balance for employees in Nigeria and have introduced quite a number of family friendly policies to help employees lighten the conflicts between work and family. These policies are similar across the organizations; they provide health services for their direct workers and immediate family of one wife and four children; secondly they provide crèches for workers who work both offshore and on land. Thirdly, female engineers are entitled to three moth maternity leave with pay and have a provision for female staff to take an extra three months without pay. Fourthly there is a provision for paternity leave of five working days. Fifthly, they provide discounted housing facilities to staff. The respondents mentioned compassionate leave which the employee can take to attend to family issues although this is subject to the HR Managers' discretion. In addition, they have health and social club facilities for their employees and their immediate family and the HR manager stressed employees are advised to close work as at when due and encouraged to take their leave by ensuring that staff were stopped from accruing their leave. They also organize family holidays for employees at a discounted price. They discussed an educational donation for the children depending on the contract signed by each staff (usually for workers on permanent basis) and they also encourage employees to join health clubs of their choice at the company's expense. However the policies that are obtainable across these organizations on work life balance do not include flexible working hours. The HR managers said that their organizations believe that the country is not yet ready for such flexi hours due to lack of infrastructure in place to support such, in terms of technology and power that will enable workers to even work from home if need be.

This section reveals that workers in the Nigerian oil and gas industry are generally not in control of the way they do their jobs. Particularly, organizations try to provide their workers with free or discounted housing facilities and health services but do not give workers control over their work pattern and times thus leaving an actuality of imbalance between their jobs and life which might cause stress to them.

5.6 External factors that impact of the OGIs and sources of stress

Insecurity

The instability in the Niger Delta implies that there are external forces beyond the control of the organization that affect the functioning of oil companies in Nigeria. It was found that seven foreigners were reported kidnapped in Nigeria in 2005. That figure increased to 72 in 2006 and 223 in 2007. This increase has been largely the result of activities by the armed militant groups. 26 of the hostages were UK nationals. Of the 295 foreigners kidnapped in 2006 and 2007, five died as a result of injuries sustained during their abduction including a British person who was killed when the kidnappers' boat was attacked by the Nigerian Navy. One Syrian hostage died of illness very shortly after his release (See Ngwama, 2014). The Niger Delta is known as an area where oil induced conflicts have displaced thousands of people especially oil workers and their families (Opukri and Ibaba, 2008). When asked how working in the Niger Delta affects the working experience of staff, all respondents affirmed that the Niger Delta is a high risk region due to insecurity that emanated from militancy's activities in the form of kidnapping, killings, oil pipeline vandalism. Also, the respondents gave insights into the main causes of stress to offshore workers and organizations' interventions to these stressful outcomes. These factors will be reviewed using direct quotes from respondents and some other secondary sources.

When asked about how working in the Niger Delta had affected their firms, the respondents claimed that working in the Niger Delta has been more of a challenge than pleasure because it is a high risk region. One common response across respondents was the insecurity in the region. One HSE manager said, "... due to the capricious state of Niger Delta, our workers live with higher security awareness and consciousness than workers in other regions". All the respondents agreed to the fact that some of their workers have been kidnapped in the past, some were killed and some were lucky enough to be released after a ransom was paid. As put by one HR manager, "....these things (kidnapping and killings) happen every now and then in this region; its dreadful to work in this region, it's even worse to have your family work here. Even the company faces heat from families of the kidnapped, they are sometimes blamed for the mishap.....it affects a chain of people and have put fear in all of us".

Respondents spoke about the fear they deal with every day of their lives just because they are associated to the oil companies. A public relations officer said, ".... Some of our workers have experienced kidnap by the militants so to them, it's either you have been kidnapped or you know a colleague who has been kidnapped. This is a big problem for us, in fact, there is little we can do as an organization; as a nation, we depend on the government for our security". Still on the insecurity in the region, a public relations manager said, "....we have lost some key workers and it seems more difficult and expensive to attract expatriates here because it is a high risk region. Also, our workers are withdrawn, their night and social activities have reduced, even the buses we provided for workers for easy transportation to work has been deserted because nobody wants to be kidnapped or killed but we have taken our name off the staff buses so the militants will not be able to tell who we are...it's a tough situation".

These scenarios have birthed great loss for the industry and a growing fear of being kidnapped and family members being kidnapped or sometimes killed; it has heightened a situation where offshore workers in the Niger Delta no longer pride themselves as oil workers which inadvertently have given rise to what could be described as "damaged social posture". This study uses the phrase "damaged social posture" to point out to the impact these situations have left on the oil workers. First in this light is that oil workers have become withdrawn from life – they no longer freely go to clubs, social events or even markets thereby engaging the services of maids which have increased expenditure for them. The industry has lost some key technical workers to the insecurity of the region. It is believed that the situation hinders the attraction of prospective talents in petroleum and oil industry especially expatriates. Again, is that the clubs that used to be relaxation areas have become death traps for them. On the hand of caution, the management of these firms no longer inscribes the name of their organizations on their buses anymore. Most importantly is the safety of the offshore workers' family members. Most offshore workers now resort to relocating their families outside the Niger Delta region to places where they consider safe and calm by taking loans from their organizations.

Legislation

Having established the fact that insecurity is a challenge to oil workers in the Niger Delta, the research asked if there was any legislation that protects workers. In response, none of the respondents was aware of any legislation in Nigeria that protects offshore workers from stress. In his direct quote, a health and safety manager said, "eeeehhm! I don't know of any legislation that protects offshore workers but we have health and safety policies in place and

we have never had problems with our policies". Another respondent (HR manager) said, "....there is obviously no national or organizational policy on stress but we try to teach our workers some exercises to do to ease off stress; also, we encourage them to rest as much as they can. We understand working offshore is full of pressure so we always try to approve their leave requests to take some time off work".

The above report suggests a lack of legislation on stress in the offshore oil industry of Nigeria. The managers and assumingly the workers are not clear on what stress policies protects them.

Overall, oil companies in the Niger Delta are not only faced with dealings of militants but coupled with dealings of community members; it is more like a battle between oil companies and Niger Delta communities. However, the bone of contention is the ways these actions can impact on workers' experience of stress. The tension between oil workers and oil communities is evident in the low level of interaction between oil unions, community leaders and members of the civil society in the Niger Delta which has heightened the level of insecurity in the region. Hence, all respondents pointed to the risky nature of the offshore environment and insecurity in the region as the main sources of stress to the offshore workers because workers in the Niger Delta live with higher security awareness and consciousness that their counterparts in Lagos. Therefore, across the organizations, it was consistent that the main risk common amongst offshore workers is the environment. According to Ajaero's (2009) analysis, the situation in the Niger Delta has some implications for the workers, organizations and the nation as illustrated in Tab 5:13.

Table 5.13 - Cost of crises in the Niger Delta

Date	Incident	Location	Casualty and Loss	Loss
11 th Jan 2006	Gun men attack on SPDC oil facility	Offshore E.A Field, Rivers State.	4 foreign energy sector workers kidnapped	12,000 bpd
11 th Jan 2006	Explosion on major crude oil pipeline belonging to SPDC	Forcados, Delta State		100,000 bpd
11 th Jan 2006	MENDS attacked SPDC facility	Port Harcourt	17 soldiers killed, unspecified number of militants and SPDC staff died.	
10 th Feb 2006	US Oil Executive attacked	Port Harcourt	Baker Hughes staff died	
2 nd June 2006	Norwegian Offshore rig attacked	Port Harcourt	16 crew members kidnapped	
21 st Aug 2006	MENDs and Security agents clash	Delta State	10 Militants killed	
12 th Sep 2006	Militants attacked Chevron Offshore Oil Field	Delta State	One worker died	
2 nd Oct 2006	MEND ambushed soldiers I their patrol boat	Offshore of the Niger Delta	10 soldiers killed	
2 nd Oct 2006	SPDC Nigerian convoy attacked	Port Harcourt	Unspecified number of SPDC workers wounded	

Date	Incident	Location	Casualty and Loss	Loss
3 rd Oct 2006	Western Oil workers attacked	Rivers State	7 energy sector workers kidnapped	
4 th Oct 2006	Soldiers attacked militant camp	Rivers State	9 Soldiers killed	
22 nd Nov	Soldiers stormed Militant camp to	Rivers State	1 Soldier killed	
2006	rescue kidnapped oil workers			
7 th Dec 2006	Attack on unidentified location	Rivers State	4 foreign energy sector worker	
			kidnapped	
21 st Dec	Attack on Obagi station	Rivers State	3 security men killed	
2006				
16 th Jan 2007	Attack on oil vessels near Bonny Island	Rivers State		187,000 bpd
1 st Apr 2007	Attack on Chevron offshore oil facility	Funiwa, Delta	6 energy sector workers kidnapped	
		State		
3 rd Apr 2007	MEND attacked offshore vessel	Rivers State	6 energy sector workers kidnapped	50,000 bpd
4 th Apr 2007	Attack on Saipen Site	Okiono/Okpoho	Several oil construction workers	42,000 bpd
		Rivers State	wounded	
7 th Apr 2007	Protest at Chevron flow station	Abiteye, Delta		98,000 bpd
	Escravos terminal	State		
8 th Apr 2007	Oil pipeline attack in Brass and 2 in	Bayelsa State		170,000 bpd
	Akasa			
19 th Apr	Attack on 2 SPDC pipelines in Soku-	Rivers State	12 oil workers kidnapped	
2008	Buguma and Buguma Alakri			

Date		Incident	Location	Casualty and Loss	Loss
21 st	Apr	MENDs vandalized a major crude oil	Rivers State	6 oil workers kidnapped	
2008		pipeline at Kula			
26 th	Apr	Assault on SPDC pipeline forcing	Bayelsa State	8 persons kidnapped	
2008		closure			
2 nd	May	Attack on SPDCV oil facility	Rivers State	5 persons kidnapped	15,000 bpd
2008					
9 th June	2008	Militants and security forces engage in	Delta State	6 militants and 29 soldiers killed	
		gun battle			
19 th	June	MENDs struck SPDC Bonga facility on	Rivers State	Over 100 people killed	
2008		deep offshore oil fields			

Source: Ajaero (2009)

In reaction to this stress encountered by the offshore workers, the management of the companies encourages their workers to be extra conscious of the environment and only go out when necessary. Also, from time to time the Management encourages their workers to engage in relaxation activities in order to reduce stress. At other times, they are compensated with financial benefits and most times, the organizations engage in strategic planning of work activities such as controlled work duration and schedule. The respondents confirmed that their workers have laid complaints that the environment is not safe. There were no support groups for workers who feel this stress from insecurity. Although the organizations have a role in ensuring the safety of their workforce, they are of the view that the security of persons working in the Niger Delta and indeed the rest of Nigeria is principally the role of government. Therefore, the government sometimes provides dedicated security to protect personnel and facilities operated by them. These facilities are critical assets of the Nigerian people. They have an internal process that ensures that these security personnel deployed to protect the people and facilities undergo training on the Voluntary Principles on Security and Human Rights.

5.7 Conclusion

The challenges faced by the Nigerian OGI emanates from internal complexities within the industry coupled with an unstable business environment which connotes external forces, factors and institutions that are beyond the control of the organization and they affect the functioning of a business enterprise. Amongst the internal complexities include the poor employment systems, labour contracts, pay systems in the industry. Undeniably, the Niger Delta has been affected by oil exploration/production and vice versa.

The disparity of pay between expatriate and indigenous workers in the Nigerian OGI causes resentment on the part of indigenous workers. Also, the fact that sometimes, expatriate workers are given highly skilled jobs in the industry even when the indigenous workers with the same qualifications and experience are readily available to do the job have also made indigenous workers distant from the management and caused anger between indigenous and expatriate workers. These indigenous workers are left with no choice but to take the lower skilled jobs as the high rate of unemployment makes it well-known to them that there are thousands of people willing to take the jobs.

Some factors beyond the oil companies also impact on the experience of oil workers. It was found that that an upward change in the price of oil indicates profit and loss as it has cyclical effects. Although an upward change in the price of oil boosts Nigeria's economy, it also causes a decline in the demand of oil and an increase in the price of oil products which indirectly affects cause the oil workers to spend more money on these products. Hence, the union clamours for higher pay on behalf of the oil workers thereby the oil companies spending more money at the long run. Moreso, there are many factors at the root of the instability in the Niger Delta – including unfulfilled aspirations for political recognition and influence, poverty and historical neglect, and criminality which have a direct effect on organizations and then the workers. This makes the threat to the people working in oil and gas operations in the delta high because so many oil workers in the Niger Delta have a fear of being killed or kidnapped as well as their family members which is not so amongst offshore workers in Lagos for example. This has cause loss of key skilled workers in the industry.

Unfortunately, Nigeria does not have a national law or legislation on occupational stress and health and safety especially of offshore workers. The MNOCs rely on the health and safety procedures of their home countries whilst it is unclear the procedures used by indigenous companies. Since the tension between oil workers and host communities is evident in low level of interaction between oil unions, community leaders and civil society members, this whole situation may be ameliorated through dialogue, alongside immediate infrastructure development through sectorial corporate social responsibilities and providing employment to locals by the companies. The priority of these organizations is to keep their staff safe while they continue to work with the communities, the federal, state and local governments, and other agencies in an effort to help restore peace in the Niger Delta. They continue to look for ways to improve the way they manage their relationships with communities to contribute to social development in the region. Consistently, Ejibunu (2007) claims that because of this volatile nature of the Niger Delta, a kind of insecurity has been created in the minds of the oil workers thus bringing about pressure on them. This chapter proves that such an environment as the Niger Delta is ripe for a sociological examination of occupation stress amongst offshore workers in the region.

In this chapter, a strong indication was given by managers that the major sources of stress to offshore workers in the Niger Delta are the insecurity in the region, health and safety and the unfair employment systems between (1) expatriate and local workers (2) contract and permanent workers (3) male and female offshore workers. The next chapter will look at offshore workers' perception of stress in the Niger Delta and then compare managements' and workers' perspectives on occupational stress in the Niger Delta.

6.0 Chapter six: Sources of stress in the Niger Delta offshore industry - Interview Evidence

6.1 Introduction

This chapter covers data from offshore workers' interview on their experience of occupational stressors. In applying the notion of forms of disconnectedness identified in chapter two – labour market, geographical and socioeconomic disconnectedness, it becomes clear that the effects of work on wellbeing cannot be extensively understood just by scrutinizing individual experiences in particular jobs as in the psychology literature. Most studies on occupational stress examine how job characteristics such as workload and roles ambiguity are related to individual levels of stress (Sutherland and Cooper, 1996, Cooper et al., 2001). But these studies have been unable to connect job characteristics to broader social and economic conditions. Markedly, the nature of work has changed regarding labour market, as a result of non-standard work arrangements and increase in low paid jobs. Also, geographical location of offshore work necessitates workers to work weeks even months away from their families and communities hence the importance to examine the intersection of work, workers' social life and family.

In an attempt to make connections to broader socio-economic structures, three themes will be applied to the analysis of the workers' interview data - labour market disconnectedness, geographical disconnectedness and socio/economic disconnectedness. The combination of these three themes produces a sociological account of occupational stress. Taken as a whole, the emergent picture from this chapter confirms the importance of context to understanding workers' experience of occupational stress. Empirical evidence in this chapter suggests that pressure at the workplace comes not just from work but from disconnections within the labour markets, from home/social activities and socio-economic activities that shape how workers experience occupational stress. This chapter sets off with discussions around inequalities and insecurities in the labour market due to the fact that casualization has become the dominant employment model in the Nigerian oil and gas industry. In this section, three groups emerged – contract/permanent workers, local/expatriate workers and male/female workers. Amongst each group, differences regarding pay, training, job security, employment opportunities, and security protection will be looked at. Also, Chapter 5 identified that although organizations try to ameliorate financial burdens of their workers through discounted housing facilities/health services and paid holiday, workers still do not have control in the labour processes. This lack of control by workers worsens the liberty offshore

workers have to travel home from their secluded work environments when the need arises; this situation might affect their family members or other aspects of their lives thus worthy of examination to see if it has a link to occupational stress. Specifically, distinctions between terms and conditions of contract/permanent workers, local/expatriate workers and male/female workers as identified in chapter 5 set the stage for examining causes of occupational stress from the labour market dimension. For example, data from chapter 5 showed that average income of expatriate workers is roughly 4 times that of their local counterparts whilst the pay and conditions of work of contract workers are less better than permanent workers. In fact, chapter 5 suggests an increasing management preference for casualization for the sole purpose of profit maximization. With this in mind, this section will investigate empirical matters that emerge for labour market disconnectedness.

The chapter then moves on to geographical disconnectedness where issues around the geographical location of offshore work and the very nature of offshore work that keeps workers away from home for weeks or even months will be discussed. Specifically, this section seeks to understand how geography of work might influence the way workers experience stress. Finally, socioeconomic disconnectedness on one hand, looks at how safety and insecurity concerns in the region might cause stress to workers and on the other hand, looks at how Nigeria's culture of dependency might cause stress to offshore workers. The previous chapters discussed the oil-related communal conflicts in the Niger Delta where virtually all the oil fields in the country are located. It makes it important to examine how these socio-economic factors impact on the nature of work and thus workers' experience of stress. Specifically, the insecurity in the Niger Delta posed a huge challenge both to employers and workers as seen in chapter 5. Kidnapping of oil workers and their family members who are usually released upon payment of ransom has brought fear and lower productivity into the industry which might be a source of stress to offshore workers in the region. Therefore, this chapter focuses on research questions like- in what ways are oil offshore workers affected by socio-economic factors? Are offshore families affected by these factors? How are the communities and oil companies affected? Nigeria is a collectivist country where workers forcefully inherit financial dependents that exacerbate workers' disconnection from immediate families due to financial demands; these factors are associated with the way in which offshore workers experience stress. Within these three scenarios, this chapter will focus mainly on them in examining stressors experienced by offshore workers in the Niger Delta.

6.2 Labour Markets Disconnectedness

The previous chapter discussed the inequalities and job insecurities characterized by the oil and gas labour markets in Nigeria. Although it is common knowledge that the use of nonstandard work arrangement is a medium for employers to save costs for themselves, it has adverse effects on their workforce because it creates a picture where the core is separated from the periphery. On the one hand, the core is the set of workers on permanent contract who are often times represented by the unions, enjoy higher wages/paid holiday, have higher skilled jobs and have a definite rota while on the other hand, the periphery is the set of workers who are on temporary contract, seldom represented by a union, paid less, have irregular work patterns, often times, work longer hours than the rest, do not enjoy paid holiday and can be laid off at any time regardless of the actual expiration of their contract. In addition, the Nigerian workers form a larger part of the periphery and as a result, feel disconnected from the work in their country owing to the huge disparity in the terms and conditions of expatriate and local workers. The difference in the terms and conditions of permanent workers vs contract workers and expatriate workers vs indigenous workers has limited the desires of contract workers to the terms and conditions of permanent workers whilst indigenous to that of expatriate workers. This segregations and inequalities obviously is a concern to victims.

Although oil companies claim that temporary workers enable them makes use of specialists in their core activities of oil exploration and production while saving cost, the unions (PENGASSAN and NUPENG) are of the view that oil companies engage temporary workers just to save cost and discourage the unionization of workers. Both assumptions appear to be true to a reasonable extent in the Nigerian oil and gas industry because findings showed that contract workers are more than twice of the permanent workers in number, and are not allowed by their employing companies to join unions (see Danesi, 2012). Chapter 5 gave full details of how high unemployment rate is in Nigeria, that demonstartes that temporary workers prefer to be just as they are than to join the unemployed. The rate of unemployment has given casualization a permanent seat. Apparently, since the Nigerian oil and gas industry has more contract workers and are denied the right to organize (see chapter 5), it might lead to a weak trade union membership. Consequent on the above discussion, this section gives empirical evidence on the terms and conditions available to the different classes of workers (expatriate vs. local, permanent vs. contract and males vs. females) in the Nigerian offshore industry and how it impacts on their experience of stress.

6.2.1 Indigenous vs. Expatriate Workers

Political economy

An uneven labour market is well established; evidence from chapter 5 showed that the Nigerian oil and gas industry treat local workers less well than foreign workers thus the antagonism between the two types of workers. Particularly, Inequality between expatriate and local workers was attributed to an institutional structure – the state. Although 'local content policy' as discussed in chapter 5 suggests that priority is given to locals in terms of employment, it does not seem to work out in practice in the Nigerian oil industry. Some respondents pointed out how disconnected they felt in their country and blamed the government for their ordeal of getting lesser pay than expatriate workers. According to a driller, he said:

"you see, I blame the government for not having strong employment laws minimizing foreigners that work in Nigeria especially in the oil industry. If not, how would millions of qualified Engineers be jobless and oyibos (expatriates) will come here to take the jobs; not just the low skilled jobs but even the very high skilled jobs...I feel like a minority in my own country".

More so, another respondent blamed the government for not giving appropriate security protection to offshore workers in the Niger Delta especially local workers. This is another way through which local workers feel disconnected from their country although they live and work in this country. Another driller commented:

"...when I say oyibos(expatriates) should go I mean it. How can my country not defend me first? I think we are still in slavery. The normal thing to do is to protect everyone equally regardless of race rather; the stupid government or oil companies would always give preference to the bloody oyibos (whites) and then leave their own to perish".

This observation reflects Elger's (2001) standpoint that the core labour process theory is underspecified as to how work and the workplace interact with the wider social relations. He had noted that external relations are embedded in the various aspects of the core labour process theory with different degrees of influence. The labour process scenario in the Nigerian oil and gas industry mirrors the government's inability to provide or enforce labour laws and policies that should adequately address some of the perceived grievances and disconnections felt by local workers, described above, as it should, creating huge demands on

the worker's unions which are not in the best positions to resolve such without enabling laws. These inabilities of the government and labour unions support confirmations of persistent and increasing labour exploitation in contemporary capitalism. This scenario is not helped by the relatively low awareness of labour laws and related issues by workers in the Nigerian oil industry as observed in chapter 7 which showed that only 7.5% of local workers, as against 36.4% of expatriate workers are aware of the relevant laws and employment legislations that relate to their work.

Pay

There is a clear distinction between local and expatriate workers regarding their pay and training; the expatriate workers receive higher pay. Although some local respondents argued that Nigeria is a high risk region, and as a result, expatriate workers deserve the higher pay, many of the local workers were not happy with the huge difference in pay. When asked if there was pay disparity between expatriate and indigenous workers, a female Engineer let out her frustration saying:

"I think the expatriates earn about 6 times more than we do ... I think the margin is still too much....they don't do anything special or different from what we do except for very few of them. I think workers should be paid based on their roles and not race. If we can do what the 'oyibos' [whites] are doing, why employ them in the first place and our own people remain unemployed......I just think Chevron wants to appear as a diverse organization like their competitors, please lets change the topic".

The above quote showed how offended the female engineer was for receiving lesser pay than expatriate workers even for the same job and also the fact that employment opportunities in the Nigerian oil and gas industry favours expatriates than locals in terms of employment. Yet another Engineer (male) let out his frustration on the disparity in pay between local and expatriate workers; he said:

"...they (expatriate workers) do not do anything special, it's all gimmick, we all face the same risks and they were not forced to come and work in Nigeria. I know some of them that I'm senior to but they earn more than I do... also, expatriates are hardly sacked, only Nigerian. I have resolved it is something I cannot change so I have accepted it".

These accounts of disparity in pay were particularly juxtaposed with an account by a British Engineer who worked at British Telecommunication on a temporary basis before getting his current job in the Nigerian oil industry. He said,

"I can settle a lot of bills now compared to when I was earning about 9 pounds per hour at BT plus the fact that I only worked for 20 hours a week. It's very comforting to see what I have achieved so far with my current pay...at least I own a flat in Sheffield".

This reflects the satisfaction felt by expatriate workers over their pay compared to majority of local workers who were dissatisfied with their pay.

Contract status

But besides differences in pay between local and expatriate workers is the different status and support these contract workers seem to have, which is likely to impact on stress. A Nigerian Engineer said:

"My dear, the oyibos have come after many decades of colonization to colonize us a second time. They have taken our good jobs, they earn higher, even the contract workers that are oyibo (expatraites) earn more money than permanent workers in this industry, how much more a contract worker like me. Even now that there is insecurity in the region, they have refused to go because they don't earn as much as they do here in their countries. The security men here guard them like gods and the local people almost worship them. 'abeg we don tire for this people' (please we are tired of them)".

The above findings are in agreement with quantitative data in chapter 7 which shows that 98.1% of local workers, as against 36.4% of expatriate workers agreed that their pay was not proportionate to the risks they bore at work. Overall, findings revealed that workers, whether expatriate or local, mostly have the same job roles, face the same risks at work and have the same skill level with a major difference in the wages they received, yet, there is disparity in pay between workers; this inequality can be a stressor to workers. In terms of labour process, managerial control is evident in the Nigerian oil industry in terms of setting out wages for workers but they (managers) have not fulfilled their side of the bargain in terms of fairness in pay and skill-based reward system, rather, have based reward systems on worker's employment contract thus creating unequal workplace relations. This has caused dissatisfaction on the part of local workers as they have put in efforts towards organizational growth but have gotten less commitment from management in return. Not only has this

situation brought about dissatisfaction for local workers, it has caused antagonism between workers and weakened employment relationship.

Training

In terms of training, the trend is similar to pay – a situation where expatriate workers enjoy better formal training than local workers. It is still part of the bargain that employers make investments through human capital development in return for workers' quality time at work towards organizational growth; but, this is not the case here. A local Driller said:

"Sometimes, these organizations think Nigerians are not qualified and do not have expertise to take up lead roles. Why do they train oyibos (expatriates) and leave us in the dark? Why not train us? This is quite disturbing, the oyibos cannot find such great paying jobs in their countries and they come here to take our jobs. Nigerian jobs should first be for Nigerians before any other person".

One sure thing that can be deduced from the above analysis is an important source of antagonism between the types of workers in the Nigerian oil and gas industry. The disparity of pay between expatriate and indigenous workers in the Nigerian OGI causes resentment on the part of indigenous workers. The fact that sometimes, expatriate workers are given highly skilled jobs in the industry even when the indigenous workers with the same qualifications and experience are readily available to do the job have also made indigenous workers distant from the management and caused anger between indigenous and expatriate workers. These indigenous workers are left with no choice but to take the lower skilled jobs as the high rate of unemployment makes it well-known to them that there are thousands of people willing to take the jobs. These positions of inequality in the workplace have been found to expose workers to stressful job conditions through outcomes like dissatisfaction, antagonism between local and expatriate workers, resentment by local workers for management and alienation by local workers. I wish to call this 'fragmented workforce' because of the huge difference in price of labour for the same job thus workers with inferior conditions of service are regarded as second class. This second class status has brought upon victims concerns that are difficult to bear; not just in their current employment as contract workers but syndrome that is attached to it that makes further permanent roles difficult to get (as evidenced later on). All these add up to the experience of occupational stressor amongst offshore workers in Nigeria. Moving on to the second group, the next section will look at gender difference in the labour markets and its impacts on workers' experience of stress in the Niger Delta region of Nigeria

6.2.2 Males vs. Females

The oil and gas industry, especially the offshore environment is generally thought to be mainly for males. In Nigeria, even though women are exposed to formal labour markets in the oil and gas sector, their opportunities in the offshore industry are minimal or limited. I would term it "industrial gender segregation," referring to the division of the labour market based on gender which limits women's employment opportunities notwithstanding their experience both educational and job related. Statistics from the previous chapter showed that women account for only 5.6% of the oil and gas workforce in Africa and about 15% in Nigeria. The comments from a male Driller who is a local worker sufficed:

"It is difficult to tell the ratio of men to women because there are few females offshore. In the 6 projects I have handled, I only came across two females and they were not Engineers and therefore did not come offshore frequently. One was an occupational nurse and the other the logistics co-coordinator".

There were many other respondents who affirmed male dominance in the Nigerian offshore oil and gas industry. These accounts reflect the low participation of women in the Nigerian oil and gas offshore environment regardless of their experience. The males in the industry argue that the environment is just not conducive for women. The males' accounts where they thought they should do the tough tasks while females take on easier tasks and take care of friendly environment confirms Nigeria's masculine culture as identified in chapter 4; this feature might be an explanatory factor for smaller share of women in the Nigerian offshore oil and gas industry. Another local male Engineer said,

"...only 10% or even less of the offshore workers in my company are women and in my opinion, it is not nice for a woman to go to the rigs because of the rig demands and challenges e.g. it takes all your time and women will not have time for their families and they end up complaining and not doing their jobs properly. There are no special treatments for women in my company; we are all engineers so there is no male or female".

Apart from the low participation of women in the industry, it was found that women were sometimes given preferential treatment which made some male workers worried. In a comment by a male Welder, he said, "... but we have only one in my crew. Luckily for her,

she gets pampered and sometimes given some time off for her family and I feel hurt by this because she has a family and I have a family...it's just unfair because it is not compulsory for all of us to work offshore, it's a choice".

Contrastingly, the females disagreed that the offshore environment was for males. They were of the view that there are female professionals out there who are not hired because of the traditional belief that the offshore industry is a man's job. In an account by a female Engineer, she said,

"We (females) are capable to work offshore but it's almost impossible to get a job as an offshore worker. They just post most female engineers to the office and leave the field for men. I think it will be good to see more women here". Correspondingly, the other female Engineer said, "I am bitter that women are not given the chance to use their skills in the field. I understand it's difficult to work offshore but some women are equal to the task, even better than some men. I'm the only woman in my crew and sometimes I feel alone. The men tend to confide in me about their family problems but who do I talk to about my woman problems".

Men make up a large and visible part of the offshore oil industry in Nigeria, which reflects trends in other economies and suggests gendered forms of work (see Tab 5.12). Whilst men claimed that offshore environment is a tough setting for women due to risks, harsh work environments and women's family obligation that usually interferes with their work life, women, on the other hand, showed signs of discontentment over minimal employment opportunities for women in the industry thus impeding engagement and development of women's skills. The workplace is a place where wages are earned, but, friendships are formed too. Findings showed that men did not show signs of dissatisfaction with how they related with fellow men at work, rather highlights a need for women to relate to fellow women at work. Due to limited number of women in the industry, female workers reported feelings of dissatisfaction and alienation in the work environment.

6.2.3 Permanent vs. Contract Workers

Contract status

There seemed to be tension between contract and permanent workers in the Nigerian oil and gas industry over issues like - pay, training, job security, promotion etc. Both temporary and contract workers were found to have job insecurity although majority were contract workers. In a comment by a permanent Engineer (permanent/local), he said,

"job insecurity is another thing we face in my company, redundancy takes place every 5-10 years which makes it hard for you to relax, you are as good as your last breath and most times, it is your performance that speaks for you...so many of my friends have lost their jobs even the hard working ones. Nobody knows who is next" Similarly, a contract Welder argued: "my work is dependent on the needs of my company so it does not matter how many years contract I have left on paper, once they don't require my services, they sack me". Certainly, job insecurity was a central feature of contract employment. Yet another contract Engineer commented: "you can be disposed at any time so we basically live from trip to trip". These accounts reveal that job insecurity is being battled by both contract and permanent worker but majorly by contract workers. The uncertainty and insecurity they feel about their jobs led to dissatisfaction and mirrors a source of stress to the workers.

In digging deep into labour exploitation, some contract workers worked longer hours than prearranged by Management just to protect their income. A contract/local worker said,

"...I'm contracted to work 12 hours but I do 18 hours, I do not have control over the way my work is done as there is no fixed rota, I work long hours at irregular patterns which makes it impossible to plan my life....sometimes, it feels like my company owns me and turn me to the direction they will without permission...I feel like I don't have control of my life so I do a lot of unpaid overtime sadly". Another contract worker argued: "Sometimes, I work for 24 to 26 hours without sleep which can make me vulnerable to errors at work. My workload is just too much for one person to handle. We are not very much regarded as contract workers...we are like slaves in our own country....we work round the clock".

The above findings suggests that although contract workers put in the longest weekly working hours in the Nigerian oil industry, they experience unstable shift patterns and minimal control over their jobs which highlights feelings of discontentment. This suggests that oil companies in Nigeria use subcontracting to pass the problem of safety to agencies as

they make contract workers work excessive and dangerous long shifts. According to Thompson (2003) this scenario brings about feelings of disconnectedness for contract workers and damages workers' perception of effort bargain and psychological contract. Prolonged hours done by contract workers, beyond the standard have implications both for the workers and the organization. A driller (contract) acknowledged the dangerous consequences of longer working hours by contract workers. He said,

"I often work 16 hours a day. It makes me tired; likened to being drunk and this is when mistakes happen. We are not supposed to work more than 12 hours but we do because we are contract workers and do not really have a say. Actually, we forcefully endanger our lives and the lives of other". Similarly, a contract Engineer said, "you cannot predict mistakes and errors and when they happen, they cause injury and death in some cases.....there are no little mistakes when it comes to working offshore but the irony is that we work long hours and susceptible to mistakes". Consequent on the above, the contract workers feel a sense of injustice in the Nigerian oil industry; particularly, they feel they are being used to achieve huge goals for the organizations but the management are not reciprocating their efforts specifically through promotions, bonuses, training etc.

Pay

According to a contract Engineer,

"...I don't care what expatriates are being paid, I only wish to have a permanent contract and get better pay and condition of service....my concern now is the difference in pay and conditions between permanent and contract workers" Another contract Engineer said: "....my company uses me as a professional and pays me peanut....I worked for one of them in the past as a contract staff and even then, I used to earn 5 times more than what I'm earning now as a permanent staff in an indigenous company". These accounts show that multinational companies pay their workers more than local companies so workers from the local oil companies feel dissatisfied with their pay and thus feel disconnected from the industry. The organizations set a dividing line amongst workers in terms of their pay regardless of their experience and expertise which causes feelings of dissatisfaction for contract workers and constitutes a source of stress to them.

Training

Not only are the wages of contract workers lower than the permanent workers', they are seldom offered formal training. Only the respondents who were permanent workers agreed to the fact that they were trained regularly and to a very high extent, the workers are allowed to use their abilities and trainings. This is in agreement with findings from chapter 7, showing that majority of contract workers (89.1%) disagreed that they received adequate training to do their jobs, whereas only 11.4% of permanent workers disagreed. This segregation of workplace conditions in terms of human capital development constitutes a source of stress for contract workers who are treated less well. As an Engineer on permanent contract noted,

"my company trained me for a year when I was employed and have been training me regularly which is invaluable....this training has given me an edge and make me enjoy my role even though it is very challenging". Also, another Engineer on permanent basis commented: "My organization invests so much in training its workers, we go on training regularly and we have a technical community and knowledge sharing sessions where the workers learn from each other. I can boast of about 10 courses (both local and foreign) which is very important for my job". Contrastingly, an Engineer on contract basis commented:, he said, "...since I work as a contract staff, there is really no career ladder for me to grow in, there is not opportunity for promotion or extra pay, in fact, I do not have the privileges of permanent workers such as training, they only use us to get some work done and they do away with us when they are tired of us. No promotion! No Rewards! No Bonuses!"

These cases of inequality shown above makes contract workers feel inferior to permanent workers and thus disconnected from the workforce. The dissatisfaction exhibited by contract respondents establishes a source of stress to them. Also, many contract workers highlighted the absence of the provision of paid holiday as a key illustration of the inequalities between contract and permanent workers. As commented by a Contract worker,

"I needed about two weeks holiday when my wife had our first baby but because I was not entitled to this as a contract worker, I had to make informal arrangements with my colleagues where I initially worked for an extra two weeks for them while they stood in for me during my 2 weeks holiday"

This hints that offshore work in Nigeria is such that reflects imbalance between work life and home life. Organizations seem not to be flexible in providing with work life balance conditions; this can be seen as a stressor for workers. There is evidence in chapter two that this kind of imbalance even have adverse effects on health and psychological well-being, thus, stress. The effort to find get work-life balance, to a reasonable extent is in the hands of the workers, especially contract workers. This result neatly sums up ways in which contract workers indirectly beat managerial control and unfulfilled bargain by managers. There is a peculiarity to the status of contract workers in the Nigerian oil industry, in terms of how it might lead to stress through labour exploitation. This scenario reflects Thompson's (2003) argument of disconnected capitalism where workers are required to put in their time and commitments while the mangers do not make credible commitments to workers, thus feeling of disconnections by workers.

Workers' organization

Although contract workers complained they did not have right to join the union, both contract and permanent workers subscribe to the idea of having an offshore union for a better representation of their needs i.e. a need to have a strong voice as offshore workers. In his comments, a permanent Engineer said:

"our unions are just good at asking the office workers to go on strike.....we that work offshore hardly join in the strike because it's 'gonna' impact on our economy if we do not produce oil...I think it will be best for the offshore workers in Nigeria to have a union....it is the person who wears the shoes that knows where it hurts and I think this union should be open to everyone regardless of race and contract".

On the other hand, a female contract Engineer commented:

"although the unions have made some achievements in the past with regards to our terms and conditions, the contract workers still need the freedom to join unions without being stopped by the oil companies. Also, the unions are just after terms and conditions, they don't really have first class experience of working offshore, they don't understand how we feel isolated from our families and communities, they don't face the risky environment where there is no place to run to for safety when militants arise to do what they do best....in short, we need a union for offshore workers because it's one thing to be an oil worker and it's

another thing to be an offshore worker. The unions do not take care of our families for us when we are at the rig so they should stop deceiving us that they are for us".

Yet another respondent argued, "... the unions have been fighting majorly for increase in remuneration for all oil workers but they don't really understand what it means to work offshore, they don't fight for policies that will better us as offshore workers so as far as I'm concerned, they have been chasing shadows....I have developed sleeping problems what has the union done about it and I know there are so many other people who have developed one ailment or the other.....a separate union for offshore workers will not be a bad idea".

The above accounts made a clear distinction between oil workers who work onshore and the ones who work offshore. Due to the different environmental terrain and different challenges, the offshore oil workers desired for an offshore union. The findings suggest that the current unions do not represent a voice for offshore workers thus the feelings of dissatisfaction by workers. Also, the comment on sleeping problems is a clear case of stress itself and not stressor. This suggests a need to investigate if offshore workers in the Niger Delta experience stress (as in chapter 7).

Conclusion

There is evidence that labour exploitation persists in contemporary capitalist economies. This phenomenon is most observed in developing nations where legislations, awareness and enforcement of labour laws are least developed. There were differences in pay, rewards and conditions between various types of workers – contract/permanent, male/female, and local/expatriate workers.

The dominance of the use of contract workers in the Nigerian oil and gas industry is well established. The findings showed that casualization is intimately related to perceived job insecurity because all of the respondents on contract basis were worried about losing their jobs and to a very large extent worsened by the consequences of job loss especially financial commitments to family as Nigeria is a collectivist country. Again, the study found that terms and conditions of contract workers in terms of formal training, right to organize and job security were not comparable to that of permanent workers and it causes a feeling of worry to the contract workers. More so, workload of contract workers was often more than that of permanent workers which was a generator of stressor for contract workers. Notable from the

analysis above is that contract workers are dissatisfied with their work pattern and have a low morale for their jobs.

Furthermore, gender inequality is of topical concern to the Nigerian oil and gas industry. Low participation of women makes the few female workers feel alone and thus dissatisfied and distressed. Women lag far behind men in the industry in terms of employment into offshore units. The few women offshore feel disconnected from the workforce as each of them appears to be the only female in their individual crews; this alienation might be a source of stress to the female workers.

Finally, a sense of injustice was prevalent amongst local workers in the Nigerian oil and gas industry due to distinctions in pay, employment opportunities, training, and security protection. This diverse disparity between expatriate and local workers make local workers feel disconnected and dissatisfied in their various organizations; these underlying factors might be a source of stress to offshore workers in the Niger Delta. It does not just reflect difference in the capacities of the workers as deduced from the interviews but rather differences in the bargaining power of the local-expatriate labour markets. These differences in conditions of work across different types of workers are stressors; in the absence of moderators, these have led to stress outcomes in the form of dissatisfaction, disunity amongst workers and disconnections.

6.3 Geographical Disconnectedness

Because of the secluded nature of the offshore work environment, offshore workers are compelled to work weeks or even months away from home. The usual work pattern of offshore workers in the Niger Delta is 2 weeks offshore followed by 2 weeks leave except for some workers who have irregular work patterns. This geographical work separation faced by offshore workers impact on the well-being of many people, from workers, to families and surrounding communities. Consequently, some types of supportive social relationships are affected especially with spouses and children thereby causing stress to offshore workers. There has been huge debate on this kind of employment and its impact on family systems (e.g., Bowler, 2001; Loney, 2005; Watts, 2004). However, it is one of the main interests of this section to better understand how the geography of the offshore work may impact on the well-being and job satisfaction of offshore workers, their family members and communities.

In achieving the aim of this section, the experiences of the offshore workforce in Nigeria especially in terms of their recent reunions and partings from family will be captured and compared to the findings of the existing offshore literature. More so, there is a special form of geographical disconnectedness driven by the political context of the Niger Delta that is specific to Nigeria. Families of the offshore workers being moved to 'safe' areas due to security concerns in the Niger Delta exacerbate disconnections from family. This conflux of geographical and community disconnections stand as a point of departure for the next level of disconnectedness i.e. socio-economic disconnectedness. In direct quotations, the respondents speak for themselves on their opinions and concerns of how the geography of their workplace impacts on the family, social life and community.

Geography of work location

Social isolation depicts the overall disconnectedness experienced by offshore workers as they constantly perceive a need or desire increased connection with others especially family and society but are unable to make that contact. This is confirmed by a Female Engineer who said, "....I feel totally isolated from the world; it's just me, my work and my colleagues". Research evidence shows that connections with family and peers influence how well workers cope (moderate or mediate) with working in isolated conditions (Brasher et al., 2010). In the absence of moderators or mediators, a deadlock and thus stress through outcomes like dissatisfaction and estrangement.

Marital relationships

The anticipated return of workers by their families is ruined by unmet expectations such as demands for attention from family. As explained by an Engineer,

"When you have been on night shift, you can only stare and sleep for at least 4 days at home. You cannot really communicate because you are drained. It takes a very understanding family to cope but there is a limit to how far they can go". Regarding his wife, he commented: "the day my wife told me she sometimes feels like a widow was the day I hated my job and started making efforts to get an office role which I know is impossible because I'm a contract staff". Similarly, a married driller who worked as a contract worker let out his frustration on how his work arrangements threaten his marriage, he said: "my spouse understands my job is our only source of income but our relationship is mostly strained by my absence at home; sometimes she feels the only role I play at home is to give them financial support, that I'm not always there for her and the kids.....there are so many times we had gotten to the point of

separation but when we think of the impact it will have on the kids, we keep on trying......sometimes, we live like strangers in the house".

This comment from a driller was typical of the rough spousal relationship amongst offshore workers,

"When you are home, you have to adjust to what the family wants and obviously, you are not used to it but don't have a choice. Working as a driller is like working non-stop for weeks which gives you bad temper at work and home so whenever I get back home, it's to argue and argue and argue with my wife". Similarly, a welder commented, "My absence has made us more quarrelsome each time I'm home. Our kids like to blame their mistakes on my absence and it is very hurtful because I try to make my stay with them memorable and I provide for them".

The home should normally be a source of peace and rest, therefore, a moderator to the stress that comes from life generally and work specifically. When this moderating factor erodes, stress thrives through resentment, dissatisfaction and lowered commitment to work or family obligations. In fact, workers might experience feelings of disconnections from home which can be a generator of stressor for them.

Parental issues

Pressure is usually placed on the family unit especially the children due to the absence of a family member (Mauthner et al., 2000); this continuous separation was routinely noted as one of the most difficult and challenging aspects of the work arrangements of offshore workers in the Niger Delta. In affirmation to this, an Engineer who had an irregular work pattern lamented:

"Hmm! it's tough. The last time I was away, I missed my son's dance presentation in the competition that he eventually won. I promised him I was going to be there when I was not sure when next I will be getting home....you promise them heaven and earth yet you don't fulfil one and they don't find it funny". Also, an Engineer said, "I have missed out on a lot of important events in their lives; I did not witness my little girl receive a prize in school, I did not get to see them walk, talk or even teach them how to ride a bike, I never attend any of the parents' meetings in my children's school and my children feel bad about it....sometimes, they don't just respond to my home coming,".

For the next Engineer that was interviewed, he explained that his child puts it to him regularly that he is less than a daddy because he is always away. He said:

"just yesterday, my last child told me that daddies should take their children to school every day and asked me why I did not always take them to school...these questions come up every now and then and it is sickening. The worst part for me is that she has not realized that this will go on for a long time because times are hard and daddy needs to provide for her and everyone at home".

The above comments reveal that children feel disconnected from their offshore parents and vice versa. This disconnection is basically due to the geographical separation and then worsens the child's closeness to the offshore parent. Inability of offshore workers to perform their parental roles due to their job generates imbalance between home and work and thus stress.

Other familial issues

A driller explained how powerless he felt when there are domestic issues that he cannot solve whilst offshore. He said:

"I have three children and a wife and of course I call them often. There can be distress at home and you can't really do anything from the rig....your wife gets worried and calls you all day but you don't offer solutions because you are on sea. You get home after two weeks or even a month depending on your schedule; your wife feels less of you and makes it obvious. Most times, what they want is a hug and that assurance that comes with your presence; unfortunately, you can't give this from work. It's not a good life for marriages because you don't have enough time and space to deal with problems". This indicates how helpless offshore workers may feel with regards to fulfilling their family obligations. This state of helplessness is worsened by workers' geographical disconnections from home.

In this study, offshore lifestyle of staying away from home was found to lead to job dissatisfaction and sexual difficulties because the workers let out their frustration saying they did offshore work just to be able to provide for their families and if they had their ways, they would be doing other jobs. As commented by an Engineer regarding his wife:

"... We waited 8 years for a baby; in those 8 years, we thought we had medical issues that deprived her from conceiving not knowing I was always home at her infertile days as my work pattern is not definite.....I thank God, we finally discovered what the problem was, I took compulsory leave from work and it happened, my wife was pregnant and we had a baby....I hate everything about my work pattern except the pay and I can't change it because my family depends totally on my income. I wish I had an office job so I can afford to look after my baby".

Workers' partings from the family also caused stress to the family involved. Regardless of gender, responses showed that partings are the most difficult stage of their working lives which again reflected job dissatisfaction. Partings seemed to affect the children more in this study. Consistently, the study by Mauthner et al., (2000) revealed that offshore working has direct impact on the entire family concerned especially children. As explained by a female Engineer;

"The last time I went back offshore, my son cried hysterically and that made me feel bad. He is only 4 and does not understand that mummy works offshore. When my boy was much younger, he did not know I was his mummy rather he referred to his nanny as mummy and that always killed my spirit. Now he knows I'm his mummy but it does not change the fact that he needs me around. Going back offshore is usually the most difficult part of my job. I still do this offshore thing because it's our source of livelihood; if not, I am so sick of it".

Similarly, a male Driller said, "I will be going back to the field a day after tomorrow and we are already having episodes of the kids crying....it makes me sad but I have explained to them that it's the kind of job that I do and I'm making more money for us to go on holiday when next I return home......the holiday bit seemed to have worked the magic but in truth, I don't know when next I will be here and if they will be on break because they are in boarding school". Likewise, the Engineer who lost his wife said, "I felt irresponsible and like I had let my children down again. I know my wife will not be happy wherever she is but if I don't provide for the family, nobody will".

In all, this highlights how dissatisfied workers were with their work arrangements because they seemed far away not just in location but in every way.

Relationships

A female Engineer who was single and had no children had struggled to keep up with a relationship. She had a negative view of the offshore work arrangements and held firm to the belief that it's better to do offshore job free from intimate relationships as offshore jobs ruin relationships. She explained:

"I do not have a boyfriend at my age, I was supposed to meet up with a guy last week and probably start up something but my supervisor needed me in the field and asked that I move my break to this week so I did not get to meet with the guy. Now that I'm in town, I called his phone, he said he had travelled to Abuja....This has always been my relationship story...never stable. In short, it's better to do this offshore thing free from a husband or boyfriend otherwise, it's going to ruin your relationships".

Offshore Lifestyle

A driller commented: "...you are just a sleepwalker for about four days at home. In these 4 days, you sleep at 5pm, wake up at 11pm and by that time, the kids are sleeping, then you sleep back at 4am and wake up at 10am, again, the kids are in school so you really don't get to chill with them. When you are starting to fit in at home, all of a sudden, you have to go away again". One could argue that a recurrent shift work pattern aggravates offshore workers disconnections from family as they lack time to reconnect with family. Many of the respondents showed dissatisfaction with their work arrangement as it impacts on the family roles.

In a more solemn scenario, a characteristic comment was given by an Engineer who was divorced. He pointed out that his work arrangements as an offshore worker contributed significantly to his divorce. He argued:

"Before our divorce, we had trust issues due to my many absences. This lingered for years until I realized she was seeing someone else. Truth be told, women need men around them, although my job gives me money to provide for them, it does not give me enough time to spend with them. It only takes a very patient woman to cope with my kind of job. My dear, don't be deceived, people are on their third and fourth marriages offshore, awful!" Not only are workers affected by the offshore lifestyle, their spouses or partners are also facing the hit. For example, a driller said, "my wife said that I'm not always around to make important decisions with her and when I come home, all I want to do is to encroach into her world and give orders. I'm still the man but you know when you give women a little power, they would want to rule you". Also, a contract Engineer complained how he gets recalled to work on short notice which inadvertently affects his home life and how he plans his life. He said, "...sometimes, when I'm on leave, my supervisor recalls me to duty and I only have 24 hours" notice for a new job, the thing is, my work pattern is not definite and it makes it hard for me to plan my life and it causes friction between I and my family. This is because I am a contract worker; the permanent workers are given some respect to a very reasonable extent". This account shows that the work pattern of offshore workers spills into their home life and causes stress to them. It also suggests that contract workers do have control over their shift pattern like the permanent workers which causes resentment and feelings of alienation in the workplace. These situations make the workers seem far away from their home, reconnecting to their home becomes a problem.

Well-being

Apart from the negative effects of geographical separation on family relationships, it affects the self-esteem of offshore workers. Workers tend to bear the guilt of any 'bad' event that happens while they were away at work; this is the grounds for their low self-esteem. For example, an Engineer who lost his wife to child birth said:

"I got a call that my wife had passed away during child birth and I had no relative around to take care of my new baby and 3 year old. I was devastated and blamed myself for the mishap because if not for this rubbish work, I would have been there for her. Sometimes, I wish for death but if I don't go back to work after a while, how would my family survive the financial challenges...it's a hard world....If I was there for my wife, I know she would still be alive; the workload was just too much for her. I hope she rests in peace".

On the other hand, a female Engineer felt less a mother and wife as a result of her consistent absence from home. This made her dissatisfied with her job. In her comment about her last reunion with family, she said:

"It was another opportunity to be a mother to my lovely son and a wife to my husband because each time I'm offshore, I feel less a mother and wife".

For her, this situation was worsened by the fact that her husband was made redundant which made her the breadwinner and her husband always at home. She claimed that her husband has been labelled by people as a house husband which makes him sometimes transfer his aggression on her. In the Nigerian Culture, women are home makers while men are bread winners but in her case, the reverse was the case and it caused her and her family shame. In her comment she said:

"I got married in 2005 (many years after I started working offshore) and I and my husband had a 5 year plan for me to work offshore and then seek an office job afterwards to be more around for our family. This 5 year plan elapsed in 2010 but unfortunately, my husband was made redundant; this changed our plan because I am now the breadwinner of the family and I'm not complaining. We pray he gets another job real soon as people have labelled him a house husband. You know the culture thing of a man being a man. He doesn't even know when he transfers his aggression on me but it was not my fault that he was laid off".

Personal Lives

Another point of discussion was the personal lives of the workers were disrupted by their work arrangements especially location and work pattern. The offshore lifestyle was perceived as intruding into the personal lives of workers. It makes them unable to achieve personal goals for themselves. In a comment by a Welder, he enrolled for online master's programme for about 5 years now and has not been able to complete it due to the kind of work he did. He said,

"...as far as I'm, concerned, I have been planning to obtain a Master's Degree for more than 5 years now but my job won't let me....I don't have a definite work pattern so it's impossible, in fact, I had tried to do it online but I abandoned it after a while because my job still did not give me the required time....there is no form of flexibility in my job, I always have to be there to supervise, I can't work from home". Similarly, a female Engineer said: "of course, my job gets in the way of my hobbies and my duties as a wife and mother. Work is very demanding and so is home. I must confess, combining the two is a difficult task". Another female Engineer who was not married said, "there are so many things I can no longer achieve for myself; I enrolled in a fitness club and I have never been there and the fee is not refundable, I rented an apartment and have only spent 2 nights there, I had made plans with friends and family to hang out or attend an event but cancelled it because of work, I have missed out on so many family meetings, Above all, I do not have a social life anymore, my family understands but my friends do not and just think I'm unreachable....I should have 10 days leave but I never get this in reality, in fact, for the past 3 years, I have only had 3 days leave". Social lives

Undeniably, the social lives of offshore workers were negatively influenced by their work location thereby making them feel disconnected from society.

Some workers also complained that their jobs were in the way of their social lives; they have not been able to cast their votes during elections in their Local Governments, States and Nation. Also, they have not had the opportunity to attend to community meetings which again makes them feel disconnected from their communities. In venting their frustration, two respondents said:

"... There is no sense of community at work, I have never been to prison but my work experience when I'm offshore is pretty much similar to prison life; stuck with colleagues, small sleeping and leisure areas. I liked the way I used to attend village meetings, play football and have drinks with my buddies. I definitely miss masquerade but gone are the days....my job won't let me".

Also, a driller commented: "Drilling is a 24/7 operations and does not respect weekends or holidays. It takes a lot to be able to manage your workload, time and still be able to have an active personal, family and social life....In about 8 years I have not been able to vote in elections, I have only spent Christmas twice with my family and I have not spent Easter with my family".

These points expose the fact that these offshore workers needed to feel connected to their communities. Many of them wanted to maintain ties to the community where they live and also keep their families in the region rather; they expose their families to the social dislocation of moving away permanently. Typical of this were comments from a driller and Engineer.

Other findings

Of course, not all impacts of working offshore are negative. For most people, the main reason to continue with their jobs was to secure a livelihood and to provide for their family members. The oil industry in Nigeria has some of the highest paid jobs and these workers have been sending money home to meet domestic needs like child education, accommodation and upkeep. Many of the respondents mentioned how working in the oil industry was more lucrative than their previous jobs thereby giving them a better quality of life. For example, one Engineer repaired and sold computers before getting a job in the oil industry

"...the pay in this industry is a lot better compared to other sectors in Nigeria so I can't complain. I'm thankful that I can provide for my family with their basic needs from my income. Not having a job will be a bit more destructive to me and my family".

Another positive side to working offshore is the fact that to some of the workers, the offshore family is their only family and they do not like going onshore. A Driller explained,

"My dear! It doesn't always feel good leaving the offshore environment because I don't even have family to go to. I lost my parents when I was 10 and I was their only child. As far as I'm concerned, I only have the offshore family i.e. my colleagues. It is always very lonely going back to my rented apartment in Warri so most times, I put up with my colleagues who are onshore at that time. Currently as I am onshore, I'm at Chike's and I can't wait to go back offshore because that is my bigger family. All through my journey to the onshore location, I meditated on the good moments offshore. Honestly, it is always boring coming onshore so I have decided to make friends outside my colleagues so I can start enjoying moments outside the work environment".

Conclusion

In summary, the account of offshore workers showed that the geographical location of offshore work has negative influences on workers and their family members in different ways. The offshore workers felt isolated and battled with balancing home life and work life. In fact, they struggled to adjust to their home lived due to fatigue and sleep troubles that come with the nature of their jobs whereas, their family members felt more pain concerning their absence and slow adjustment to home life when they are onshore. Offshore workers were also faced with inability to achieve personal goals and attend to their social lives; these in totality are their causes of stress which was exhibited in the form of dissatisfaction with their offshore roles and disconnections from the world.

6.4 Socioeconomic Disconnectedness

The security challenge in the Niger Delta identified in chapter 4 has caused a divide between the oil companies and the host communities; a situation where the community sees the Governments, oil companies and oil workers as perpetrators of the dreadful conditions in their homeland thus vandalizing the oil pipeline, hostage taking of oil workers (both foreign and local) and oil bunkering by Niger Delta indigenes for economic reasons. The Niger Delta can easily be characterized by war and conflict (UNDP, 2006). Chapter five discussed how the oil companies are the major targets of the social actions by the host communities thus jeopardizing dialogue between oil companies and community members and offering a synchronized form of disconnection between the parties. Nevertheless, one of the interests of this section is the disconnections of offshore workers from the communities.

Delving into the disconnections of offshore workers from the communities, an analysis of this internal displacement shows the deepening link between the insecurity in the region and (1) disconnections of offshore workers from communal network (2) disconnection of offshore workers from their family and friends. In a study by Ibeanu (1999) on people who relocated to Lagos as a result of crises in the Niger Delta, he found that victims nursed a deep sense of loss and dislocation as one of his respondents commented: "we are exiles in our own home". There is virtually no research on the effect of hostage taking and killings of friends and families amongst offshore workers in the Niger Delta, therefore, this study will fill the gap in our knowledge.

Also, Nigeria has a system where the poor or unemployed citizens are rarely catered for; this leaves the burden of provision to the direct and extended family that are more privileged. Because of this, many of the respondents had a number of their extended family members who were dependent on them financially. The means and economic dependencies on offshore workers typically Nigerians exacerbates their disconnections from friends and family as they prefer to stay offshore than be nagged with financial problems whilst onshore. In this section, respondents speak for themselves on their experiences and opinions of the insecurity faced by the Niger Delta region as well as burden of family's financial and social needs with regards to their experience of stress.

6.4.1 Insecurity in the Niger Delta

The gamut of insecurity in the Niger Delta region of Nigeria has not only led to the kidnap of oil workers but sometimes to killings of these workers; all to score political points by host communities. As noted earlier, insecurity in the region is hinged on issues of years of neglect from the government concerning the region that oils the wheels of the nation and also the degradation of the environment by the oil companies. Ngwama (2014) described the experiences of the offshore workers as a sour grape in the mouth because workers constantly watch their backs during their daily activities. He explained that it raises fear concerning the workplace and the community at large as the militants have withdrawn workers' right to movement. When asked about the insecurity in the Niger Delta, an Engineer commented:

"On a daily basis, I commit my work and life into God's hands because in this industry, anything can happen at any time which keeps you constantly in fear". Similarly, a female Engineer said, "although people have been killed and kidnapped offshore and I have also worked in more high risk regions like Cameroun and Cote d Voire during war, I have conditioned my mind that what will be will be though we all nurse fear one way or the other".

The findings showed that all the respondents have directly or indirectly experienced hostage taking and killing in the Niger Delta which have instilled fear in them and made them perceive the Niger Delta as a very unsafe place to work. A driller commented regarding his cousin:

"I know some people that lost their lives to the unsafe situation in the Niger Delta and so many more who have been kidnapped. In 2008 when my cousin and his driver were kidnapped and a ransom of N500, 000 (£1,800) was asked to be paid which was paid by Shell

where we worked at the time but only the driver was released. My dear, till today we have not seen Chuka, I don't know if he is still alive or have even joined these militants. The spate of kidnapping in the industry made my company to start taking workers in ambulances rather than staff bus... that was genius because it kept most of us safe from being kidnapped at that time".

Undoubtedly, the Nigerian oil industry is a high risk region. Regardless of workers' employment contract, workers have had either direct or indirect experiences of insecurity through kidnap and killings. This situation has made workers fearful, reminding them that their lives, family and friends' lives are at stake. The issue of insecurity took a new swing when a native of Niger Delta was kidnapped. This showed peculiarity in ethnicity in terms of insecurity in the Niger Delta of Nigeria – a situation where people from the region suffer less in the hands of abductors that people that are not form the region. An Engineer who is a native of the Niger Delta commented:

"...working and living in the Niger Delta as an oil worker is totally different from anywhere else in the country. The Niger Delta is not a place you would not like to be known as an oil worker because that may be the beginning of trouble for you....I know people who are no more and their crime was being oil workers in the Niger Delta, there were some lucky ones who were kidnapped and eventually released. I was once kidnapped, luckily it happened that I'm from the Niger Delta so I only spent one night in the creek with them...they realised, I was one of them from my name and language...regardless of the fact I was one of them, the experience I had is unforgettable. We starved, we were being pointed with guns round the clock, the militants worked in shifts to make sure no one escaped so we were surrounded by armed militants...in fact, since I was born, I have never seen guns that big or armed men at close range....I would not even wish that experience for my enemy".

When asked what he thought was the root cause of kidnapping, killings and oil vandalism, he said, "....I think they are fighting a good course but in a wrong way.....oil is in our land, the backbone of Nigeria's economy is in our land yet there is nothing to show for it in terms of development, education, employment, political appointments for the people of the Niger Delta.....the Niger Delta is very rich yet the people are so poor. The people have lost their livelihood i.e. fishing and farming to the oil spills and gas flare partly caused by the oil companies and partly by the community people during oil bunkering. It's just a fight for their right as it seems the region has been neglected for a long time". This account re-echoed data

discussed in chapter 5 about different disconnections felt by indigenes of the Niger delta which have led them to actions like kidnap of oil workers, vandalism of oil pipelines for financial purposes to make up for their losses in resource control. It makes offshore workers fearful over transportation in the course of avoiding contacts with the indigenes; this in itself mirrors disconnectedness and dissatisfaction over workers working and interpersonal conditions.

On the contrary, one of the Engineers who had seen the many colours of life seemed not to be bothered about the mishap in the Niger Delta. He said,

"...life itself is a risk and its risky not to take risks in life.....I have learnt not to be too careful in life.....my parents died in a car accident on the same day, life has taught me not to be afraid of death or accidents...these things can come any time whether you work offshore or not, after all, my parents were not offshore workers.....life is full of risks my dear....in fact, these killings, kidnapping, explosions, accidents that happen offshore can only prepare you to work anywhere in the world in any condition so it's a learning process".

A common trend as identified in the course of this research is a situation where oil workers relocate their families outside the Niger Delta region in other to be safe from the mishap that befalls oil workers in the region. As an effect, this has caused more workers to run two homes which huge financial burden on the shoulders of the oil workers as the breadwinners who are supposed to provide shelter for their families. When the offshore families move to a new location, they move away from a place they had known to be a source of identity i.e. they leave behind friends in the neighborhood, schools, churches etc. to a place where they start afresh. These burdens when added up obviously leave on the workers mental and physical strain which no doubt adds to their experience of stress. The situation of running two homes with one in the Niger Delta which is usually the first port of call to oil workers while coming onshore and then other home outside the Niger Delta where is regarded as safe exacerbates familial disconnectedness. The offshore workers sometimes do not make it to their second homes because the first few days of return is just to sleep and even if they eventually get to their second homes, before they settle in, they will hear the duty call. For a male Engineer, married with 2 kids and relocated his family to the UK thinking that Nigeria as a whole is not safe, he said:

"It's sad that I don't get to see my kids as much as I would have loved to because it costs probably an arm and leg to get on a flight to the UK anytime I'm on break. I usually stay in my Port Harcourt home and miss my family. We speak most times on Skype but it's not enough because they just want my presence and I want theirs". A female Engineer had a brutal experience of kidnap with her only son just because she was an oil worker. This is just peculiar to the Niger Delta environment where she worked. She narrated, "The Niger Delta region is volatile and unsafe for anyone.... in 2010, my son was only two; he was kidnapped with our driver on a fateful Monday morning, on their way to the nursery. Once you are an oil worker, the life of your family members is at stake [sob]...I don't even want to imagine how they must have rough handled him and talked to him. I don't even want to imagine how they instilled fear in him and took him to strange and scary places. My driver said he and my boy slept in a forest...it must have been very cold for my boy especially [cry]. That was the worst moment of my life coupled with the fact that my husband had lost his job. Eventually, we got a call after 24 hours from the abductors asking for a 2 million naira (£7,500) ransom. Chevron made the payment and they were both released. Upon release, Chevron asked us to stay in the company accommodation which is safer than where we were living. We did for some months and relocated to Abuja".

The experience of kidnap, whether direct or indirect mirrors stress outcomes in the form of emotional exhaustion, fear, financial strain due to relocation to safer regions. The issue of relocation has two sides to it, some workers move closer to their extended families where better care is given to their families and the reunion reduces emotional burden incurred from kidnap. On the other hand, it makes workers move far away from family, causes offshore workers to run to home and thus bring financial burden to them and exacerbate disconnections from family as it might be more difficult to visit two homes in their short onshore stay.

Furthermore on explaining his personal offshore experience, a male Driller said, "...between 2005 and 2008 was the peak of kidnapping and killings of offshore workers and their family members in the Niger Delta.....I lost close friends and family to the killings so I had to relocate my family to Enugu where my parents live...at least, Enugu is very calm and my parents get to look after my children sometimes. Working in the Niger Delta is not similar to working in Lagos or elsewhere in the country or outside Nigeria. This whole thing has made me more careful and closer to God. Now that I have moved my family to Enugu, I find it

difficult travelling from Port Harcourt to Enugu each time I return home so it even makes my situation worse".

Within insecurity in the Niger Delta, it is discernable that (1) Fear that has been instilled into offshore workers, offshore families due to hostage taking and killings in the region (2) Conflict induced displacement of the offshore families leading to (3) The deepening of the disconnections of offshore workers from their families (4) The economic and emotional impacts that emerged due to family dislocation. These cases of kidnapping and killings of offshore workers and their family members are unique to the Nigerian oil industry and therefore make a distinctive and novel contribution to the advancement of extant knowledge on occupational stressors. Kidnapping and killings of offshore workers and their family members came out as a unique feature that plagued the Nigerian oil industry, thus provides valuable insights into occupational stressors in the Nigerian oil offshore environment as well as the effects of these stressors.

In discussing these issues, it is important to note the order of events, firstly, the fear occurs which leads to displacement, disconnections and then the financial implication. According to Alexander and Klein (2009), hostages are left with psychological effects which translate to poor well-being and an experience of strain. They explained the cognitive (impaired memory & concentration, a state of feeling too aroused with a profound fear of another incident), emotional (fear & anxiety, helplessness, disconnection i.e. emotional switch off, anger, depression, guilt) and social (social withdrawal and estrangement, irritability, avoidance of reminders of the event) effects on victims. It is at this stage that victims are forced to migrate to other cities where they feel safe and where they can avoid reminders of the event. Niger Delta is known as an area where oil induced conflicts have displaced thousands of people (Opukri and Ibaba, 2008). According to the Internal Displacement Monitoring Center (2008), about 480,000 persons were displaced between 2006 and 2008 in on-going clashes around the benefits of oil exploration and exploitation in the Niger Delta. This is evident in the current study as many people agreed to have relocated their families to safer areas of the Nigeria. Relocation is too irregular to obtain a sufficient sample of cases, and, of course, too geographically widespread to make the study of these families feasible (see Gindes, 1998). Hence, there was insufficient data on the impacts of relocation on the offshore families. However, studies show that there is an association of stress with relocation especially when relocations are triggered by events outside the individual's control (e.g. Niger Delta conflict) because victims battle with disrupted life routines, place attachments, separations from

friends, difficulties getting around in a new location feelings of isolation and being neglected by society and government (Wamboldt, et al., (1991); Agency for Toxic Substances and Disease Registry, 2005). On the part of the offshore workers, relocation had financial and emotional implications for them as they spend more money travelling from their first homes to their second; this cost was on them rather than the companies. It was found that some of the offshore workers, when they made it to their first homes did not often continue their journey to their second homes; this might be as a result of time constraint or the cost involved. This keeps them distant from their families thus deepens the disconnection they feel from their families.

6.4.2 Means and Economic Dependencies

In the Nigerian culture, the family unit is fundamental. Unlike the Western world where the family unit is viewed as a man, his wife and children, the typical Nigerian family goes beyond that; it captures the extended family. This culture attaches so much value to family and a man is termed responsible if he provides for his entire family. Nigeria, being a collectivist country compels offshore workers because they are rich to share their surplus with parents, siblings, aunties, uncles, nephews, nieces and cousins. This culture of dependency is necessitated by the lack of social security in the country as seen in chapter 4. In fact, official statistics show that every oil worker in Nigeria financially supports eight other people (see Fajana, 2005). Again, this factor is Nigerian specific.

The fact that offshore workers stay away from home and community appeared to have two sides to it i.e. good and bad. Bad in the sense of the many disconnections that cause them stress but good in terms of staying away from financial demands from relatives. An Engineer and father frankly state his views on this, he stated:

"I quite like being offshore. Sometimes, you get nagged with demands from extended family that you imagine if they were aware of your own problems....I find this offshore job a simple and uncomplicated approach of switching off from people's problems". In the same way, another Engineer said, "...I dread coming home because I have relatives putting up with us who nag me with financial demands and some of them I cannot meet....I have immediate family like my wife and mother who I take care off so I can understand it when they make demands....going back to the field is a moment I always look forward to because I'm sure to be free of nags".

Above comments from respondents clearly represent what obtains in Nigeria; once an oil worker, your wage is better than that of other workers in different sectors of Nigeria and family both immediate and extended makes demands especially financial from you. The fact is that there is a limit to their staying away from dependants and the more they stay away from dependants, when they stay away from dependant, they inadvertently stay away from family and friends which then leave them isolated from family and society. Family and society is assumed a potential source of relief i.e. tool that can be used as moderators to shield away from stressors, but when this is absent, it creates room for stress to play out.

The Nigerian society is highly family oriented with strong emphasis on extended family. There is virtually no difference between obligations to immediate and extended relatives. Some of the respondents gave examples of how they had to get money across to some relatives in the village where there are virtually no banks and the indigenes do not have bank accounts. In a way, these respondents perceived it as a source of stress because not only do they find it hard to give away their hard earned money to a distant relative, it is also their responsibility to find means of getting the money to them. The respondents thought this extended family burden was invading their sense of freedom. This then makes work very important to them because without this source of income, they might not be able to meet these needs and then may be regarded as irresponsible by their family. A welder commented: "...I have elderly relatives in the village who barely eat food 3 times a day and I see it as my responsibility to take care of them. The worst part for me has to be finding ways of getting the money across to them. Sometimes, I have to do a transfer to relatives in the city; they withdraw the money and take back to the village. This costs me extra because I have to give them transport fare to and fro the village and sometimes it is hard to find someone to help you with such errands. Doing this often worries me because not only am I spending my money, I'm cracking my head while spending it". Similarly, a female Engineer said, "... I am a single woman but I have first class experience of a breadwinner....distant relatives asking for money every now and then forgetting I have a mom and siblings to carter for. my mum retired some years back, I am the first in a family of 6 so I get to pay school fees for 3 of my siblings which is not easy because sometimes, I deny myself of certain things just to make life easier for them. Well, I'm glad I have the means to do that now and I hope they finish school and be able to stand on their feet". Data indicates that for offshore workers, being part of this collectivist culture have their psychological moods and sense of freedom threatened by demands form extended families. Here, sacrifices are made to satisfy or please relatives because the tradition abhors individualism. That said, these workers owing to already

threatened security issues in their work and living environments, coupled with family related issues will invariably affect the well-being of workers.

6.5 Coping

According to Tausig (2013), the opportunity to interact with co-workers and supervisors offer possibility of receiving support in times of strain or distress. Also, work in which one does not work alone permits workers to get support and advice regarding work related issues and may be family issues. Having someone to consult is essential to wellbeing. The data indicated that offshore workers found solace in their colleagues. These comments from respondents were typical:

"I know I'm not alone and that consoles me....I have colleagues who go through the same difficult situations as I do, even worse.....that alone encourages me, I know we are together in this trouble". Similarly, another one said," They (colleagues) are family to me because I spend a lot of time with them. They talk me out of depression because I seem to be depressed always at work". One Driller said his colleagues were his only source of encouragement because they are the only ones who truly understand things form his viewpoint. He said, "...my workplace is the only place where I am always welcome...I have people who are in the same boat with me and it's comforting that I'm not alone, when we are emotionally down, we get together and talk about our experiences and encourage ourselves, it's only from colleagues I get encouragement from"

The above comments suggest that a major moderator used by offshore workers in the Niger Delta region is occupational community. They derive encouragement and strength to carry on from fellow workers. Although, this approach is helpful, it does not fully solve the problem of shielding them from stressor; this approach is emotion focused and not problem focused.

6.6 Conclusion

It is pertinent to note that work related stressors is one topic its importance cannot be overemphasized and discussions on this topic cannot be exhausted in one swoop. The psychology literature has looked at occupational stress from the point of view of job conditions being the stress factors whilst the sociology literature has advocated the importance of context in examining social factors that cause occupational stress. This chapter, although has adopted a sociological study of stress has also utilised notions of disconnections from the disconnected capitalism thesis in the analysis of occupational stress amongst offshore workers in the Niger Delta region of Nigeria.

To reiterate, the region as have been pointed out previously is blessed with oil minerals making it the golden zone that lays the golden egg for Nigeria. But events, which primarily revolves around neglect has made working in the region unbearable. A blame game has been on where the community blames government for neglect and the government blames the oil companies for not catering for the environment in which they operate. That notwithstanding, offshore workers, being in the middle of the three groups suffers from leftovers of the many conflicts that come through. Evidently, stress induced psychological and physical situations are borne mainly from interaction of the various forms of disconnectedness in this work. Firstly, the labour market disconnectedness was analysed and findings established with emphasis on (1) the inequality in terms and conditions of permanent and contract workers in terms of pay, training, job security causing dissatisfaction amongst contract workers as they are victims (2) the inequality in terms and conditions of indigenous and expatriate workers in terms of pay, training, job security causing dissatisfaction amongst indigenous workers as they are victims (3) more employment opportunities are given to men in the Nigerian offshore industry which makes the few women feel disconnected from the entire workforce; the female respondents noted they were alone in their crew of over 100 workers and the fact there are no other women to share their women problems with, makes them worry. These factors are generators of stressors to offshore workers.

Again is that sometimes, women are given preferential treatments whilst offshore e.g. extra time off to be with family; this sets grounds for resentment between males and females and males being dissatisfied with the situation. In the labour market disconnectedness, I attempted to examine how labour markets impact on the experience of occupational stress amongst offshore workers. The Nigerian oil and gas industry has been constructed and expanded through a reliance on temporary labour of which Nigerians form a great part which shows no sign of slackening. Although there are advantages, the disadvantages outweigh the profits. It was found that the offshore contract workers and Nigerian workers generally are left to fact the economic, psychological and physical pressures of insecure employment, intrinsic inequalities and reluctance of the management to acknowledge the reality of this disparity. These pressures may cause financial and emotional tensions at home which in turn may lead to workers being trapped in work-home imbalance, thus, stress. This link to the home brings geographical disconnectedness as next.

The geographical disconnectedness was analysed and findings showed that the geographical separation of the offshore work separates them from family and causes disconnections from spouses and children and most times causing marital problems and children not having close relationships with their offshore parents. This in the long run, leaves the offshore workers and their family members with feelings of dissatisfaction with their jobs and rota which add to their experience of stress. Apparently, offshore workers are often away from family, family celebrations or events, community and personal interests. Although this can be curbed by frequent and private means of communication with family (Parkes et al., 2005: Reynods, 2004), this access to communication is a bit difficult for offshore workers because of job demands (Sutherland and Cooper, 1998), structured work routines (Parkes et al., (2005) and limited social interaction (Solheim, 1988). Offshore workers felt highly disconnected from their families to the extent that many of them showed high level of job and rota dissatisfaction. The findings also revealed that their families showed dislike for their jobs and are not coping very well with their many absences. This was felt more by contract workers because many of them had irregular work pattern which disorganized them the more. These contract workers felt helpless as it appeared impossible to change to office roles or have more time to spend with family. Some of them preferred doing office roles and earning lower than the irregular work pattern they had with higher pay, but again, this was threatened because by their terms and conditions as contract workers. This is consistent with the study by Solheim (1988) who found that workers valued long periods onshore than the financial gain of working offshore; this made workers seek compensation for the strain and losses of the offshore period. The disconnection between the offshore workers and their families and communities is so wide and forms a major source of stress to offshore workers..

Finally, the contextual nature of the Nigerian oil and gas industry recognized by its insecurity calls for concern as it has displaced so many people from the region just in the name of safe dwelling. Findings appeared to point to the fact that societal and environmental influences play a large role in employee's perception of stress. Oil workers have been preyed upon by gangs and militants who use kidnapping and violence to intimidate oil companies. As community members, oil workers are aware of the painful difference between them and the impoverished majority outside the industry. Work cannot really be done in a climate of fear and violence. This insecurity in the region has left oil workers and many other people displaced in their own home. The security concerns in the Niger Delta has exacerbated

disconnections of offshore workers from their family as they now resort to moving their family away from Niger Delta, to a much safer place thereby socially disconnecting from their own communities and families because it becomes difficult for offshore workers to meet their families each time they are offshore considering the cost, and limited time. This factor is specific to Nigeria while others are normal in other offshore environments. Also, the Nigerian society is highly family oriented with a strong emphasis on the extended family. Because of the high rate of unemployment and poverty, this extended family see oil workers as the privileged few who must help them out of their poor conditions. There was usually little or no difference in term of one's responsibilities and commitments to both your immediate and distant relatives. The respondents indicated that they had so many financial dependants who nag them with demands that sometimes are difficult to combine with personal demands. At the end of the day, their wages are not enough for their personal use which should be priority rather, they go on and incur debts from their workplaces. In all, the above mentioned forms of disconnectedness leaves no doubt the linkage between key parameters identified – job/ rota dissatisfaction by offshore workers and offshore families, fear, anxiety, helplessness, anger, guilt, social withdrawal/separation, and avoidance of reminders of events to sources of stress encountered by offshore workers in the Niger Delta region of Nigeria.

7.0 Chapter Seven: Sources of Stress in the Niger Delta: Survey Evidence

7.1 Introduction

This chapter presents my findings from an occupational stress survey of offshore oil workers in the Niger Delta region of Nigeria. As the oil industry plays a critical role in sustaining the economy of Nigeria, it is essential to identify factors that influence the health and safety of personnel in this important industry. There is still an evident lack of knowledge about the factors that cause stress to oil workers in Nigeria, however, this research utilizes survey to triangulate, complement and confirm the results of the interview findings in the previous chapter thereby presenting a deeper understanding of stress factors encountered by offshore workers in the Niger Delta. It targets to methodically discover the themes that emerged from the two previous chapters by reaching out to as many offshore workers in the Niger Delta as possible.

This chapter aims to draw on survey data in examining offshore workers' views around stressors they face and the ways in which stress is managed. Beyond identifying stressors as in chapter six, this chapter will further look at the consequences of stressors in the absence of adequate coping strategies, thus stress. This chapter starts with a description of the background data of the respondents and various firms. Then, following the interview findings, this chapter will look at the stressors using notions of 'disconnections' - labour disconnectedness. geographical disconnectedness and market socio economic disconnectedness. The labour market disconnectedness in this chapter will focus on issues around pay and rewards, training and progression, autonomy, discretion and the labour process, job security, flexibility, relations with colleagues, relations with management, law and representation. The geographical disconnectedness dwells on issues around home and family, social life, relationships, offshore living conditions, offshore work environment. Finally, the socio-economic disconnected will emphasize on security over transportation in the Niger Delta and safety in the Niger Delta. The labour market disconnectedness and geographical disconnectedness will be core in this chapter because majority of the questions fall within these categories while a little less on the socio economic disconnectedness. Going on, this chapter will then look at the consequences of stressors experienced by offshore workers in terms of stress outcomes. This is to say that this chapter will examine both stressors and stress amongst offshore workers in the Niger Delta region of Nigeria.

7.2 Description of Sample

The survey was administered during December 2012 and March 2013 in the Niger Delta region of Nigeria and produced a response rate of 85 per cent; this high response rate can be attributed to the gate keeper's effort in sending reminders to colleagues to fill out their questionnaires. A total of 200 questionnaires were sent out and 171 completed questionnaires were returned. The sample of 200 was designed in order to get a representative sample and thus, more accurate results. As shown in table 7.1, the survey sample comprises of 5 oil MNCs, 1 Nigerian Oil Company and 171 respondents.

Table 7.1 - Survey Sample and Percentage Response Rate

VARIABLE	DEMOGRAPHICS	FREQUENCY	PERCENTAGE
Age	25-29	29	17%
	30-34	72	42.1%
	35-39	43	25.1%
	40-44	21	12.3%
	45-49	6	3.5%
	Total	171	100%
Marital Status	Married	99	57.9%
	Single	72	42.1%
	Total	171	100%
Number of Children	0	54	31.6%
	1	42	24.6%
	2	39	22.8%
	3	27	15.8%
	4	9	5.3%
	Total	171	100%
Gender	Male	148	86.5%
	Female	23	13.5%
	Total	171	100%
Nationality	Nigerian	160	93.6%
-	West African	1	0.6%
	Rest of the world	10	5.8%
	Total	171	100%
State of Origin by Zone	North Central	28	16.4%
Ç ,	North East	4	2.3%
	North West	3	1.8%
	South East	27	15.8%
	South-South	60	35.1%
	South West	38	22.2%
	West African	1	0.6%
	Rest of the world	10	5.4%
	Total	171	100%
Educational Qualification	WAEC (GCE O Level)	2	1.2%
-	University Degree	118	69.0%
	Masters	50	29.2%
	Others	1	0.6%
	Total	171	100%

VARIABLE	DEMOGRAPHICS	FREQUENCY	PERCENTAGE
Name of Organization	Shell	46	26.9%
Ü	Total	30	17.5%
	NNPC	32	18.7%
	Chevron	31	18.1%
	Agip	20	11.7%
	Schlumberger	12	7.0%
	Total	171	100%
Tenure in organization	1 – 10 years	148	86.6%
renure in organization	1 – 10 years 11 – 20 years	23	13.4%
	Total	171	100%
Time sport offshore	1 – 7 years	130	76%
Time spent offshore	8-14 years	41	24%
	Total	171	100%
Role	Engineers	149	87.0%
Role	Managers	8	4.7%
	Consultants	3	1.8%
	Supervisors	9	5.3%
	Welders	$\frac{1}{2}$	1.2%
	Total	171	100%
Job Type	Permanent	70	40.9%
Job Type	Contract	101	59.1%
	Total	171	100%
Work Status	Full time	171	100.%
Work Status	Part time	0	0%
	Total	171	100%
Work Pattern	Day/night pattern	104	60.8%
WOLK Lattern	Work/leave pattern	38	22.2%
	Irregular work pattern	29	17%
	Total	171	100%
Working Hours	31 – 40 hours	14	8.2%
	41 - 50 hours	91	53.2%
	51 – 60 hours	66	38.6%
	Total	171	100%

The results showed that the respondents varied widely in terms of their age; more than half of the population (67.2%) fall within 30-39 years of age, 17% is below 30 years of age whereas 15.8% is 40 years and above. This means that the sample is in line with the working population in Nigeria which suggests that employment be given to people not less than eighteen and not more than 65 years of age, therefore, the sample is broadly representative of the sector. Also, this sample is in line with Oil & Gas UK (2010) view that the average age of offshore workers being about 40; this is because the oil offshore industry prefers young and physically fit employees due to their high risk workplace in terms of health and safety. Slightly more than half of the population (57.9%) was married while the rest were single. A greater majority (68.4%) of the offshore workers had dependants ranging from 1-4 while the

rest had no dependant. The oil and gas industry is generally known as male dominated, hence, this study showed that nearly all the respondents (86.5%) were males.

In terms of nationality, almost all workers in the surveyed organizations (93.6%) were Nigerians; this could be attributed to the gatekeepers' being more accessible to Nigerians. The findings showed that 32.7% of respondents are from the Niger Delta region of Nigeria. Also, out of the 36 states in Nigeria, only 27 states were represented constituting 160 respondents. The nine states that were not represented in the study were Bauchi, Borno, Gombe, Jigawa, Kano, Katsina, Yobe and Zamfara; all from the North East and North West region of Nigeria. This may be linked to the argument in the context chapter that marked these regions with the lowest Primary school attendance due to family's need for labour and qur'anic schools; without education, it is highly unlikely to be employed especially in the oil industry.

In relation to educational achievements, nearly all the respondents (98.2%) had university degree; out of these 98.2%, nearly half 42.3% had a master's degree. Since, one must first pass O'level before going on to a tertiary institution, it may be argued that all the respondents possessed GCSC certificate but only 1.2% of the respondents had only GCSC while 0.6% had professional qualifications in their various fields of study. As evident in the results, 87% of the populations were Engineers while the rest were consultants, drillers, supervisors, managers and welders. This means that this research was restricted to offshore professionals only and not just any offshore worker. As mentioned in chapter five, the core activities of the oil and gas industry range from upstream to downstream whilst the core activities of the offshore workers include exploration, field facility development, production and decommissioning, therefore, requiring technical skills. This may be the reason the respondents were professionals. Also, the gate keepers obviously distributed the questionnaires to their colleagues and may suffice for lack of low skilled workers in the sample.

Since the intention of this study was to reach out to as many offshore workers as possible, the respondents came from 5 oil MNCs (Shell, Total, Chevron, Agip and Schlumberger) and 1 Nigerian national oil company (NNPC) in the Niger Delta of Nigeria, all of which are the dominant players in the oil sector. This study had more respondents (26.9%) from Shell than other organizations. The respondents' tenure in their various organizations varied but the findings revealed that nearly all the population (86.6%) had worked in their organizations for

1-10 years whereas only 13.4% had worked in their organizations for 11-20 years. Also, more than half of the population (76%) had 1-7 years offshore experience whereas (24%) had 8-14 years offshore experience.

The result revealed a possibility of the oil and gas industry in Nigeria not having part time workers because all the respondents worked on full time basis. Oil companies employ predominantly contract workers hence, 59.1% of the population were contract workers of which majority worked in Shell and Schlumberger while 40.9% of the population are permanent workers, more than half of them (55.3%) had work/leave pattern while 40.4% worked day/night shift rotation.

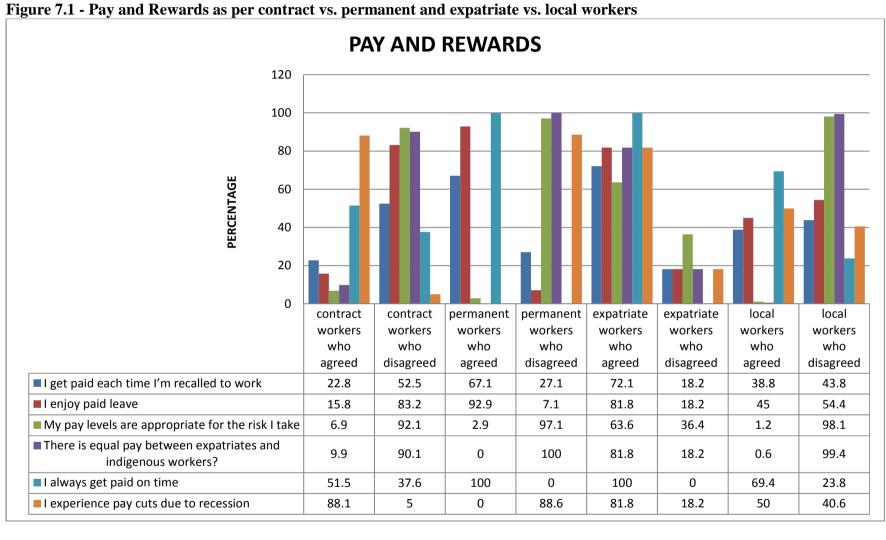
The data further revealed that offshore workers in the oil industry are predominantly (60.8%) shift workers, followed by workers on work/leave patterns (22.2%) and then, workers who did irregular work patterns (17%). As findings in chapter five revealed, the nature of the offshore work in Nigeria is on a shift basis regardless of work pattern but there are differences across different work patterns. The personnel who work on day/night shift rotation have a swing shift pattern i.e. they alternate between day and night shifts. The personnel who work on work/leave pattern have the same number of weeks spent offshore and on shore breaks. Majority of them are day workers which means they usually operate on a regular work pattern whereas those who have irregular work pattern undertake successive jobs as required by their employers; this means they do not have a regular work/leave cycle. The offshore industry could be said to be very busy as its workers work long hours. For example, the findings showed that about 54% of the population worked between 41-50 hours every week; 37.4% work between 51-60 hours weekly while 8.8% work between 31-40 hours weekly. This shows that an average offshore worker works longer than average office worker who does about 40 hours per week. The following sections will now focus on the different forms of disconnectedness experienced by offshore workers in the Nigerian oil industry and will be based specifically on factors whose correlation p value is less than 0.05 and therefore significant.

7.3 Labour Market Disconnectedness

In this section, stressors will be looked at from factors covering pay and rewards, training and progression, autonomy, discretion and the labour process, job security, flexibility, relations with colleagues, relations with management, law and representation drawn from questions in the survey (see appendix). The previous chapter found that labour market disconnectedness was felt unevenly across groups such as contract workers vs permanent workers, expatriate workers vs local workers, various companies, respondents with children vs without children, men vs women, states of origin and organizational tenure. However, this section will further examine differences across these groups to ascertain if labour market disconnectedness is a source of stress to offshore workers in the Niger Delta or not. In particular, respondents were asked to answer if they agreed or disagreed to statements regarding the above factors in their various organizations. The results are presented and discussed in the following sections. It is important to note that all through this section, it was realised that weekly working hours of workers was a proxy for their contract status because majority (92.4%) of those who put in the longest hours per week (51-60 hours) are contract workers. Also, three categorical differences between contract and permanent workers, expatriate and local workers and workers' organizational tenure emerged all through this section; hence, each sub topic will be sectionalized in view of that.

7.3.1 Pay and Rewards

This portion of the survey helped in examining how satisfied or dissatisfied offshore workers in the Nigerian oil industry were with their pay and rewards at work. The more dissatisfied they are with their pay and rewards, the higher the possibility of stress they will experience. The findings showed that pay and rewards factors were important to offshore workers in Nigeria. Precisely, respondents indicated as potential 'triggers of stress' by agreeing and strongly agreeing to the following factors; there is equal pay between expatriates and indigenous workers (94.2%), my pay levels are appropriate for the risks I take (94.2%), I enjoy paid leave (52%), I experience pay cuts due to recession (52%), I get paid each time I'm recalled to work (42.1%) and I always get paid on time (22.2%). Consequently, it became necessary to examine the differences in the 3 categorical variables more closely as shown in the bar chart below and further explained.



The above bar chart reveals categorical differences between contract/permanent workers and expatriate/local workers in the Nigerian oil industry. More details will be given in the following subsections as well as other differences.

Contract vs. permanent workers

This study found differences in pay and rewards between contract and permanent workers in the Nigerian oil industry. As identified in the chapter 6 and 5, contract workers in the Nigerian oil industry experience a reasonable level of disconnectedness from the workforce in terms of the pay and rewards they get from work and this is as a result of their employment contract that is not fixed and the general poor terms and conditions that come with it. However, evidence here confirms that contract workers are treated less well with regards to their pay and rewards which cause them feel disconnected from the workforce and show resentment and jealousy to permanent workers (as in chapter 6) and then might inadvertently trigger stress. Specifically, none of the permanent workers experienced pay cuts due to recession while majority of contract workers (88.1%) pointed out that their pay was cut during recession. This signifies inequality between the two types of workers and reflects how disconnected contract workers feel at work in terms of their pay. More so, it was found that the workers who put in the longest hours per week (51-60 hours) were more likely to have their pay cut due to recession compared to 29.7% and 28.6% of respondents that put in 41-50 and 31-40 hours per week respectively. Further investigation found that majority (87.9%) of workers who put in the longest hours per week were contract workers and was the reason for their pay cut during recession. This means that regardless of the long hours put in at work by contract workers, they are more likely to be the first target of organizations to shrink labour cost during recession which might exacerbate the disconnection and dissatisfaction they feel at work. This was illustrated in chapter 6 where an Engineer who worked on contract basis complained that the organization where he worked only uses contract workers to get some job done and then get rid of them when they are no longer required. Also, as pointed out in chapter 5, since oil companies in Nigeria are usually not the direct employers of contract workers and therefore did not sign contracts with them, it gives companies an easy landing on pay cuts during recession.

In terms of paid leave, majority of contract workers (83.2%) did not enjoy paid leave whereas only 7.1% of permanent workers did not enjoy paid leave. This again shows disparity in rewards between the two categories of workers and this is likely to be causing dissatisfaction

to contract workers. Similar to pay cuts, 87.9% of workers who put in 51-60 hours per week lacked paid leave because majority (92.4%) of them were contract workers compared to 20% and less of respondents that put in fewer hours per week. Such findings reflect disproportion of rewards between contract and permanent workers. In addition, it is believed that when workers are recalled to work, pay follows but this is rarely the case in the Nigerian oil industry especially with contract workers. While 52.5% of contract workers were dissatisfied with the fact that they were not paid each time they were recalled to duty, only 27.1% of permanent workers felt the same dissatisfaction. Clearly, this shows that contract workers are treated less well in terms of pay than permanent workers and suggests that contract workers have given up pay for their jobs which brings little comfort to them.

Expatriate vs. local workers

As seen in chapter 6, there are some disparities of pay between expatriate and local workers with expatriate workers receiving higher pay. In chapter 6, local workers showed resentment and jealousy towards the expatriate workers, for example, a female Engineer let out her dissatisfaction saying that expatriate workers have never been compelled to work in Nigeria, therefore, pay should be based on roles and not on one's nationality. Nevertheless, the survey findings confirmed this disparity of pay between the two categories of workers in the Nigerian oil industry as 94.2% of respondents disagreed that there is equal pay between expatriate and local workers. This disparity in pay was acknowledged more by local workers (99.4%) than only 18.2% of expatriate workers. This suggests that local workers feel disconnected from the pay system in the industry which justifies the resentment shown by local workers in chapter 6 in terms of their lower pay.

The pay level of expatriate workers (36.4%) was generally perceived as appropriate for their risky offshore job compared to 98.1% of local workers who reported that their pay does not commensurate the risks experienced at work. This still points to the fact that expatriate workers receive much higher pay than local workers, sometimes, even when they have the same roles which cause jealousy and dissatisfaction to local workers as in chapter 6.

Organizational Tenure

There were differences in the responses of workers who had longer tenure at work compared to those who had shorter tenure. Generally, the result showed that respondents who had longer tenure were more accepting of situations pertaining disparity of pay and rewards than others. Although many of the workers showed that they were dissatisfied with the disparity in pay and rewards, workers who had longer tenure (69.6%) seemed to be more comfortable with this disparity in pay than those who had worked fewer years (98%). This may be attributed to the fact that those with longer tenure have become used to the system and are less concerned about pay disparities than their counterparts.

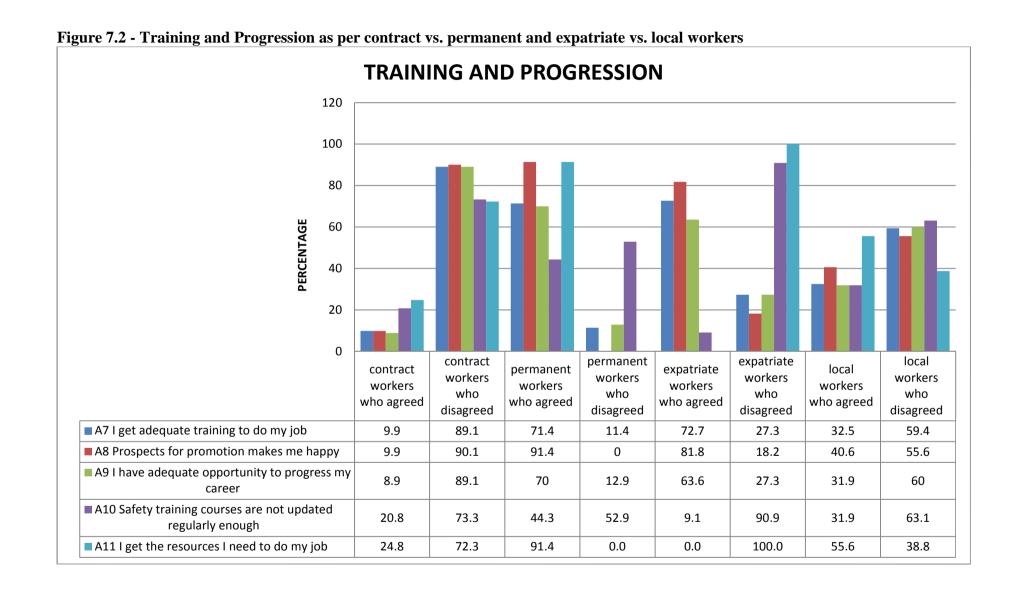
Furthermore, 48% of respondents who had worked for fewer years did not receive pay for being recalled to work whereas only 4.3% of those with longer tenure did not receive pay each time they were recalled to work. It seemed that workers who had worked longer were more experienced and were recalled for their expertise and therefore paid; however, there is a huge gap in the frequency of pay between these two categories in the event that they were recalled to work. Again, 57.4% of respondents who had shorter tenure did not enjoy paid leave whereas only 17.4% of respondents who had worked longer did not. This indicates that respondents who had longer tenure enjoyed paid leave more than their counterparts and then shows that the level of rewards given to workers depended on their tenure in their organizations favouring workers with longer tenure more. Furthermore, the findings showed that workers with shorter tenure experienced more pay cuts due to recession than those that have worked longer years. This means that in times of recession, workers who had shorter tenure are the first organizations turn to while saving costs.

Wholly, there were perceptions of major inequalities between contract and permanent workers as well as expatriate and local workers regarding pay and rewards. Contract and local workers are treated less well in terms of pay and rewards compared to permanent and expatriate workers. This inequality bring about the disconnections they -experience in the labour market as well as the dissatisfactions and discontentment that might cause them stress.

7.3.2 Training and Progression

This part of the questionnaire survey was designed to identify the training and career progression factors that impact on the oil workers' experiences of occupational stress. The results revealed that training and progression amongst offshore workers in Nigeria were important factors and potential drivers of occupational stress to workers in the Nigerian oil and gas offshore industry. More specifically, respondents specified the following factors as indicators of stress (see appendix) with mean values ranging from 2.60 to 3.54: not having opportunity to progress their career (indicated by 57.9%), not getting adequate training to do their job (indicated by 57.3%), not having prospects for promotion (indicated by 53.2%), not getting the resources needed to do their job (indicated by 42.7%) and safety training courses not being updated regularly (indicated by 30.4%).

In order to closely monitor the categorical differences between workers, the following sections will present a bar chart of the findings and a detailed analysis of the differences relevant in this topic.



Consequently, comparisons between the different types of workers will be made to ascertain various causes of stress to offshore workers in the Nigerian oil industry regarding training and progression.

Contract vs. permanent workers

Career progression appeared to be a major source of stress to workers. The findings showed that more than half of the population answered they did not have opportunity for career progression. As Sutherland and Cooper (1996) have noted, lack of training and career progression opportunities is strongly linked to occupational stress because it is demotivating and frustrating and can lead to several serious health problems. All the permanent workers agreed that they progressed in their career whereas almost all the contract workers (90.1%) disagreed. This shows that contract workers in the Nigerian oil industry have fewer opportunities to progress their career than permanent workers; this makes them feel detached from the industry. In worsening this disconnection felt by contract workers is the fact that majority of them put in the longest hours at work yet have fewer opportunities to progress in their career than those who work fewer hours as revealed by the survey findings. Also, evidence showed that majority of workers who had irregular work pattern and day/night shift rotation are contract workers, hence, their dissatisfaction in career progression than those who had work/leave pattern of whom majority were permanent workers. This clearly demonstrates how contract workers have more challenging work pattern and working hours but is secluded from career progression opportunities in the oil industry; this means that contract workers have forfeited these opportunities for their employment because their employment is a source of livelihood to them and their family members thereby leaving them detached from the workforce. This finding is similar to the result in chapter 6 where contract workers reported their dissatisfaction with their long working hours and work patterns as compared to permanent workers and yet no training or promotion is given to them.

It was evident that lack of training was an issue of concern to offshore workers in the Nigerian oil industry especially contract workers. Majority of contract workers (89.1%) disagreed that they received adequate training to do their jobs whereas only 11.4% of permanent workers disagreed. This shows that permanent workers in the Nigerian oil industry have training more accessible to them than contract workers. Such findings confirm that there is a difference in training opportunities given to workers in the industry and that workers' job type determines the extent of training they receive as identified in chapter 5. This segregation

in training opportunities was also confirmed in chapter 6 where only permanent workers agreed to the fact that they received formal training from their organizations. This is a major cause of contract workers' bitterness and dissatisfaction to. Also, because workers who put in the longest hours at work are majorly contract workers, they are faced with two factors that bring them discomfort. Firstly, the fact that they put in the longest hours at work yet are usually denied opportunities for training. Secondly, their colleagues who put in fewer hours have more training opportunities than them because they are permanent workers; this segregation causes frustration, demotivation and indirectly stress as identified in chapter 6. This scenario reflects Thompson's (2003) argument of disconnected capitalism where workers are expected to put in more of 'themselves' at work while the managers do not make credible commitments to workers. Furthermore, in confirming the interview findings where a contract worker reported that there is usually no promotion and career ladder for contract workers in the Nigerian oil industry, the current evidence shows a strong relationship between job type and promotion opportunities. For example, almost all the contract workers (89.1%) were less likely to be promoted than only 12.8% of permanent workers. This reflects inequalities between contract and permanent workers in the Nigerian oil industry; this exacerbates the disconnections experienced by contract workers.

Expatriate vs. Local workers

In terms of career development, findings showed that more Nigerian workers (55.7%) were dissatisfied with the extent of their career progression at work than only 18.2% of expatriate workers. This means that career progression opportunities in the Nigerian oil industry are presented to expatriate workers more than local workers. Obviously, this segregation worsens the extent to which local workers feel disconnected amidst opportunities in their country. This leads to bad working relationship between the two groups as will be discussed further on in this chapter.

In addition, more than half of Nigerian workers (57.4%) disagreed that they received adequate training at work compared to only 27.9% of expatriate workers. This gives evidence that local workers in the Nigerian oil industry have lower accessibility to training opportunities than expatriate workers; this may be due to the fact that employers invest more on the highly skilled workers (expatriate workers) than less skilled workers. Also, it may be seen that organizations prefer investing on high level training which will benefit the organization in the short run as it pertains to the urgent need of the knowledge than to invest in training which might not have an urgent need, hence, giving preference to expatriates in

training opportunities. Without doubt, this points to the reason why local workers feel dissatisfied and disconnected in their own country hence adds as a stress factor to them; this was confirmed by a report from the interview report where a local respondent complained that the fact that training opportunities are given more to expatriate workers makes him feel like a minority in his own country. Also, in confirming the interview findings in chapter six, the results here showed that 60% of Nigerian workers were dissatisfied with promotion opportunities than expatriate workers (27.3%) which indicate that expatriate workers have better chances of being promoted than local workers in the Nigerian oil industry.

Organizational Tenure

The evidence reveals a strong link between organizational tenure and career progression in the Nigerian oil industry; respondents who had longer tenure (30.4%) were less dissatisfied with career progression than those who had worked fewer years (62.2%). This implies that majority of those who had worked longer years may have reached the bar thus no further room for progression, whereas majority of those who had worked fewer years feel they have more room for growth especially to management cadre. As for organizational tenure and offshore tenure, there appeared to be a significant link to training, with respondents who had worked longer (34.8%) feeling less dissatisfied with their training level than those who had worked fewer years (60.8%). This may be because those with longer tenure may have attained a certain level of expertise hence, less worried about training. On the other hand, those with shorter tenure are still striving to acquire more knowledge that may boost their productivity and then bring promotion. In essence, this means that workers with shorter tenure may face stress from lack of training more than those with longer tenure.

Any other Differences

Interestingly, findings showed that there is a relationship between training and gender. Although chapter 6 did not find differences in training between males and females, the results here showed that training favours males than females. 82.6% of females were dissatisfied with the training they got from work while 53.4% of males were dissatisfied with training. Studies have shown that the oil industry is male dominated, it may be assumed that training is more accessible to males because they are perceived as more relevant in the industry. In the Nigerian offshore oil industry, it is assumed that male workers achieve the longest tenure because females usually disengage from work due to family reasons. However, organizations tend to invest more on male workers in terms of training as they believe they will be of more long term relevance because of their loyalty. This finding can be confirmed by evidence in

chapter 5 where it was reported that the number of qualified women in the oil and gas industry is comparatively low whilst the ratio between women and men has been stagnant over the past six years because women are often discriminated at work and therefore occupy less senior positions and are more likely to experience career barrier thereby, making females feel disconnected from the labour market.

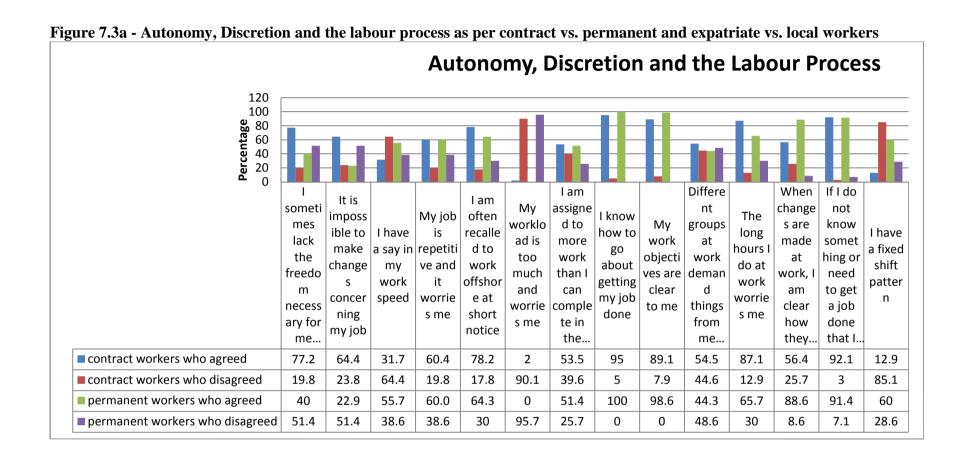
Furthermore, this subtle discrimination against women in the oil and gas industry has translated in the dissatisfaction felt by women as per their prospects for promotion. The findings showed that nearly half of the population (53.2%) were not happy with their prospects for promotion. Sutherland and Cooper (1996) linked lack of promotion to stress, therefore, nearly half of the population experienced stress from their lack of promotion opportunities. A greater majority of females (82.6%) experienced this stress more that 54% of males. This suggests that males have more promotion opportunities than females in the Nigerian oil industry. It is not clear why this is so but it is likely that females, having the same roles as males yet having differences in promotion opportunities will leave them feeling disconnected from the industry which exacerbated the stress they experience at work.

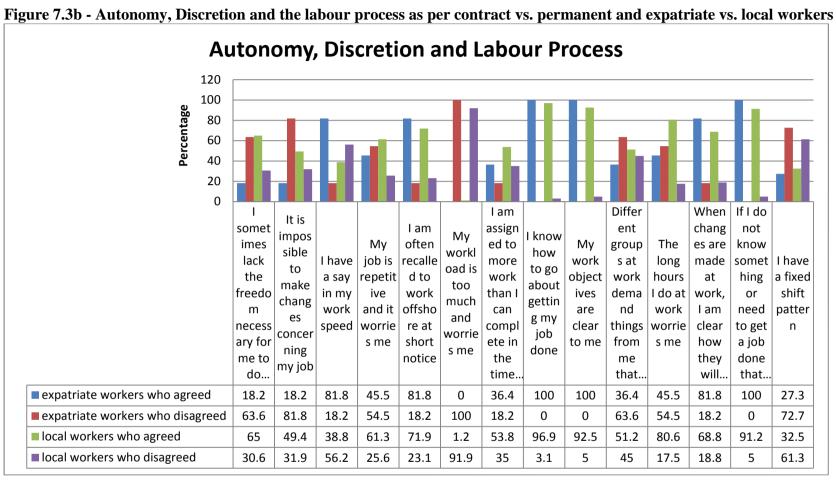
In terms of educational qualification, respondents with the highest educational qualification as Master's degrees were less dissatisfied with training (46%) followed by university degree (61.8%) and then o'level certificate (100%). This suggests that educational level goes a long way in determining the extent to which workers need training and are trained at work. Clearly, workers with lower qualifications are dissatisfied with training in the Nigerian oil industry hence making them feel secluded from the training opportunities the industry holds.

In all, the issue of training and career progression brought to light the fragmentation of the oil industry in Nigeria with the overall reflecting the issue of inequalities as identified in the interview findings and the context chapter. Preferences are given to permanent workers, males, workers with long tenure and non-Nigerians in terms of training/promotion opportunities and career progression in the Nigerian oil industry. These will continue to yield disconnectedness, resentment, demotivation, frustration and stress to offshore workers in the Nigerian oil industry.

7.3.3 Autonomy, Discretion and the labour process

This section of the questionnaire examined the degree of autonomy offshore workers in the Nigerian oil industry have over their roles and the way in which work is organized. The degree of autonomy that employees have over their work can make a great deal of difference to the level of stress that they feel. This can include issues such as freedom to make decisions, control over the pace and order of work, and control over job content. The lower the degree of autonomy and control, the higher the work-related stress is likely to be. Out of 14 questions, 9 questions were factors of concern to the respondents with mean values ranging from 3.24 to 3.66 (see appendix). In descending order, the respondents answered the questions according to the stress they perceived as thus: I am often recalled to work offshore at short notice (indicated by 72.5%), I have a fixed shift pattern (indicated by 62%), I sometimes lack the freedom necessary for me to do my job (indicated by 62%), my job is repetitive and it worries me (indicated by 60.2%), I have a say in my work speed (indicated by (53.8%), I am assigned to more work than I can complete (indicated by 52.6%), the long hours I do at work worries me (indicated by 50.3), different groups at work demand things from me that are hard to combine (indicated by 50.3%) and It is impossible to make changes concerning my job (indicated by 47.7%). While looking at the responses of participants with regards to their pay and rewards at work and how it impacted the way they experienced stress, three categorical differences emerged (contract vs permanent workers, expatriate vs. local workers, tenure of workers) and a few other differences in respondents' gender and educational qualification. These differences will be looked at in more details.





Contract vs. Permanent workers

Having a fixed shift pattern helps workers plan their lives because they can tell when they will be offshore or onshore. Nonetheless, when workers' shift pattern is not stable, it triggers stress. Evidence revealed that a greater majority of permanent worker (60%) had stable shift pattern compared to only 12.9% of contract workers. This result confirms the account in the interview chapter, of an Engineer that worked on contract basis who complained of how his irregular work pattern causes friction at home whilst his counterparts on permanent basis enjoyed a more stable work pattern. The above result (1) shows that contract workers are more likely to feel more stress from shift pattern than permanent workers which creates a divide between the two groups (2) explains why majority of respondents who put in the longest hours of work per week were dissatisfied because they had unstable shift pattern since 92.4% of them are contract workers.

Furthermore, majority of contract workers (77.2%) lacked discretion over their jobs whereas 40% of permanent workers lacked such freedom. This means that permanent workers are given more freedom over their jobs than contract workers; this may be as a result of majority of permanent workers being given more training than contract workers thereby giving them the required skills and positioning them to have more discretion over their jobs. In terms of workers' control over their work speed, more contract workers (64.4%) lacked control than permanent workers (38.6%) meaning that permanent workers in the Nigerian oil industry have more control over their work speed than contract workers which reflects inequality and discrimination against contract workers which make them feel disconnected from the labour market; this was echoed earlier in the interview findings where a contract worker reported jealousy and resentment towards permanent workers stating that contract workers usually have less control over their jobs and therefore, more regards are being accorded to their counterparts who are on permanent basis in the industry.

This study has earlier revealed that workers contract status is a proxy for their weekly working hours with majority of workers who put in the longest weekly hours (51-60 hours) being contract workers while the majority of workers who put in the shortest weekly hours (31-40 hours) being permanent workers; this in itself reflects inequality amongst workers. Nonetheless, slightly more than half of the workers who put in 51-60 hours per week (53.8%) did not have a stable shift pattern whereas only 28.6% of those who put in 31-40 hours per week did not have a stable shift pattern; this was as a result of their contract status. This suggests that the long hours contract workers put in at work stand in their way of favourable

shift pattern. Furthermore, only 7.1% of workers who did 31-40 hours per week lacked freedom to do their jobs whereas, 80.3% of those who did 51-60 hours per week lacked freedom to do their jobs still reflecting feelings of discontentment and disconnectedness by contract workers as demonstrated in the interview findings. In addition, workers who put in 41-50 hours per week (76.9%) agreed that they were given short notice each time they were recalled to work, followed by 51-60 hours (74.2%) whereas only 35.7% of respondents who worked 31-40 hours per week agreed. Earlier evidence revealed that many of those who put in 41-50 and 51-60 hours at work are contract workers which indicate that contract workers are easily recalled to work within short notice than permanent workers. This depicts inequality between the two groups because permanent workers are paid when recalled to work which is different from the case of contract workers. Again, permanent workers having more employee voice in the industry than contract workers make them have upper hand in bargaining their rights in terms of conditions that are not favourable to them leaving contract workers disconnected as they do not have rights to unionise as clearly pointed out in chapter five. A higher majority of contract workers (87.1%) were more worried about the long hours they did at work than permanent workers (65.7%). This shows that contract workers are necessitated to work longer hours than permanent workers in the Nigerian oil industry and reflects more stress on the part of contract workers as evidenced in the interview report.

Expatriate vs. Local workers

Lack of workers' discretion over their jobs was of topical concern to offshore workers in the Nigerian oil industry especially local workers. Evidence shows that while 65% of local workers lacked control over their jobs, only 18.2% of expatriate workers did same. This points to the inequality in the level of control given both types of workers. It could also be that expatriate workers are usually perceived as highly skilled as identified in chapter six hence, their higher control over job. In addition, local workers (56.2%) were found to have less control over work speed than expatriate workers (18.2%). All these may be attributed to the fact that expatriate workers usually occupy supervisory and managerial roles in the Nigerian oil industry as identified in chapter six. Same scenario applies in terms of workers being assigned to more work than they can complete; 53.8% of local workers and 36.4% of expatriate workers were concerned about the increased role assigned to them which they can complete in the time available. Furthermore, Nigerian workers (49.4%) felt it was impossible to make changes concerning their jobs than only 18.2% of non-Nigerian workers; this reflects

inequality in the freedom given Nigerians and non-Nigerians which cause resentment between both categories of workers in the industry as shown in chapter 6.

Organizational Tenure

Having a fixed shift pattern or not, emerged a concern for offshore workers in the Nigerian oil industry. The findings showed a relationship between having fixed shift pattern and workers' tenure in their various organizations. Workers who had shorter organizational tenure (64.9%) appeared to have issues with their shift pattern than those who had worked longer (43.5%). This means that the longer their tenure, the more control they had over their shift patterns. Similarly, workers who had shorter organizational tenure (69.6%) seemed to lack freedom necessary for them to do their jobs more than only 13% of respondents who had worked for 11 years and above. This means that workers with longer tenure have more control over their jobs and this may be as a result of the expertise attained over the years but this lack of freedom by workers with shorter tenure acts as a stress factor to them.

Overall, offshore work is repetitive and the result showed that it worried many oil workers. Workers' tenure in organizations played a role in determining the extent to which the repetitive nature of their work worried them. For example, 64.9% of respondents who had shorter tenure agreed that the repetitive nature of their work worried them while only 30.4% of those who worked longer years agreed. This suggests that those who had worked longer were more used to offshore work thus their repetitive work did not bother them that much. Also, while only 4.3% of respondents that had longer tenure lacked control over their work speed, more than half (61.5%) of respondents who had worked shorter years had less control over their work speed. This indicates a link between organizational tenure and control over work speed in the Nigerian oil industry. Also, 58.1% of workers with shorter tenure in their organizations agreed that they were assigned to more work than they could complete in the time available than those who had worked longer (17.4%). This might imply that majority of those who had worked in their organizations for 11-20 years are supervisors or managers who delegate work to the workers they are senior to. Also, this role conflict across workers with shorter tenure may be attributed to their job descriptions not being well defined thereby compelling them to do roles that ordinarily do not belong to them hence, leading to stress. Again, the offshore work is such that the workers work for long hours compared to those who do office job; this long hours they do contribute to the stress workers face at work. Respondents who had worked longer (34.8%) in their respective organizations were less concerned about the long hours they did at work than those who had shorter tenure (85.1).

This means that as their experience grew in their organizations, they were more used to the routines at work that it did not bother them much. In addition, it was found that offshore workers in the Nigerian oil industry lack control over the demands they get from different groups at work. Particularly, respondents who had worked in their various organizations for 11-20 years (17.4%) seemed to have more grip of this control than those who had 1-10 years organizational tenure (55.4%).

In terms of time spent offshore, it was found that those who had been offshore longer (46.3%) were given more freedom to do their jobs than those who had shorter offshore tenure. This may be attributed to the expertise attained by their long experience offshore. Also, only 22% of those who had longer offshore experience did not have control over their work speed compared to 63.8% of those that had shorter offshore experience. Furthermore, only 36.6% of respondents who had longer offshore experience complained of being assigned to too much work compared to 57.7% of those who had shorter experience. This shows that offshore work is full of tasks that are hard to combine; however, those with longer offshore tenure have more freedom to handle it than those with shorter offshore tenure leaving them stressed.

Any other differences

The freedom workers have in the Nigerian oil industry to make changes concerning their jobs seemed important to workers. More females (56.5%) were faced with lack of this freedom than males (45.9%). Although the interview findings did not show evidence on gender and autonomy at work, this survey has found that autonomy in the Nigerian oil industry are given to males more than females due to their loyalty at work which leave the females dissatisfied and disconnected from the labour market. In all, this section showed that inequality as per autonomy, discretion and the labour process in the Nigerian oil industry cut across different types of workers. In particular, contract workers, local workers, female workers and workers with shorter organizational and offshore tenure had less control over their job and how to do their jobs. This difference has caused a divide between the different types of workers and has even cause resentment, dissatisfaction and jealousy amongst workers.

7.3.4 Job security

Job security appeared to be a major source of stress to offshore workers in the Nigerian oil industry with a mean value of 3.50 (see appendix). There was only one statement to test if they had job security or not. Different responses from different groups will be presented in a bar chart and then analysed this section.

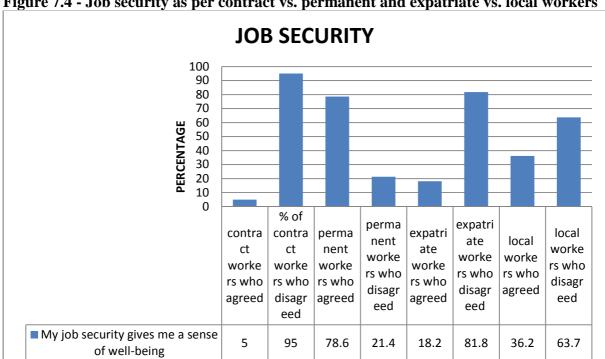


Figure 7.4 - Job security as per contract vs. permanent and expatriate vs. local workers

The prevalence of non-standard employment in the Nigerian oil industry as identified in chapter five has set the stage for job uncertainty to flourish. However, the main difference that was established in this factor of stress was between contract and permanent workers. Specifically, it was found that only 21.4% of permanent workers disagreed that their job security gave them a sense of well-being compared to 95% of contract workers. This suggests that contract workers are more likely to lose their jobs than permanent workers. Following this, it was found that many contract workers had irregular work pattern and day/night shift rotation which resulted in 75.9% and 69.2% of them to be dissatisfied with their job security compared to only 44.7% of those who had work/leave pattern. This finding is consistent with findings in chapter six.

7.3.5 Flexibility

This section of the survey looked at how flexible workers' working times and shift patterns are. These factors seemed to trigger stress to respondents with mean values of 4.26, 3.82 and 3.74 for shift pattern, working time and work pattern respectively (see appendix). Specifically, respondents indicated stress from the following factors; 78.4% from shift rotation, 70.8% from inflexible working times while 65.5% from unstable work pattern.

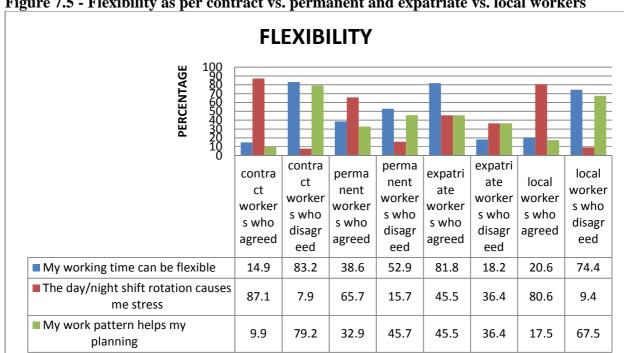


Figure 7.5 - Flexibility as per contract vs. permanent and expatriate vs. local workers

While looking at the responses of participants with regards to their flexibility at work and how it impacts the way they experience stress, three categorical differences emerged across contract vs permanent workers, expatriate vs. local workers, tenure of workers. In addition, gender threw up some differences. These differences will be looked at in more details.

Contract vs. Permanent workers

Shift rotation seems to be the order of work in the offshore environment and has become a topic of concern because it causes stress to workers. However, contract workers (87.1%) experienced more stress from their shift rotation compared to 65.7% of permanent workers. This, according to earlier findings is due to the fact that permanent workers have more of a fixed shift pattern i.e. they are either day or night workers unlike contract workers who alternate day and night shift. Studies have found that workers who have swing shifts like contract workers are hard hit by stress in terms of sleep disturbances which adversely impacts

on their health and triggers stress. This difference in work conditions of contract and permanent workers explains why 75.9% of those who had irregular work pattern experienced more stress from their shift pattern than 57.9% of those on work/leave pattern because majority of those on irregular work pattern are contract workers while majority of those who had work/leave pattern are permanent workers.

As one would rightly think, those on irregular work pattern seldom have a say regarding their shift pattern because they are necessitated by their job contract to do successive jobs as required by their employers whereas those on work/leave pattern are more certain when they will be offshore or onshore. These factors replicate how contract workers in the Nigerian oil industry are given less favourable work conditions thereby causing disconnections from the workplace. In terms of workers having flexible working times, generally, it was found that 70.8% of workers rarely enjoy this flexibility. However, while 38.6% of permanent workers agreed that they have flexible working times, only 14.9% of contract workers did. This shows a divide between the two categories of workers with less favourable conditions given to contract workers hence worsening the disconnection and stress they feel from the industry. As expected, more of workers who had work/leave pattern (39.5%) agreed that they had flexible working times than their counterparts who did day/night shift rotation (23.1%) and irregular work pattern (10.3%). Earlier findings pointed to the fact that day/night shift workers have swing shifts and workers with irregular work pattern which make it clear why they have less flexibility over their working.

Expatriate vs. Local workers

In as much as 78.4% of workers felt the day/night shift they did caused them stress, a greater majority of local workers (80.6%) experienced this stress compared to 45.5% of expatriate workers. This signifies that local workers are more uncomfortable with their shift rotation at work than expatriate workers. Also, in terms of flexible working times, expatriate workers (81.8%) had more flexibility in their work than local workers (20.6%). In all, this means that in the Nigerian oil industry, expatriate workers enjoy flexibility at work than local workers; this disparity might trigger stress to local workers through the disconnections they feel.

Organizational Tenure

Tenure of workers emerged basis for differences in responses. 82.6% of those who had worked in their various organizations for 11-20 years agreed that their working times are flexible compared to only 15.5% of those who had worked 10 years or below. Also, the results also showed that the longer the workers' offshore experience, the more they accepted their working times; e.g. 51.2% of those who had worked for 8-14 years offshore agreed that their working times are flexible compared to only 16.2% of those who had only worked for 7 years or below. It may be argued that those who have longer tenure are most likely to be supervisors or managers thereby giving them more flexibility. In addition, many of offshore workers in the Nigerian oil industry do not have flexible working times.

Any other differences

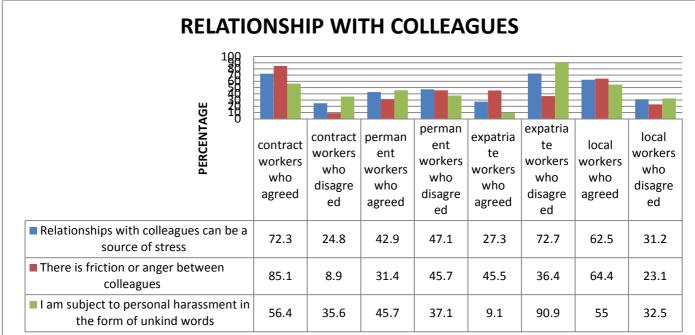
Apart from the three categorical differences, gender came up as a reason for difference in the responses of respondents. 27.7% of males agreed that their working times are flexible compared to only 4.3% of females. This suggests that females experience strain from the rigidity of their working times than males. In addition, the results showed that 87% of females disagreed that their work patterns helped their planning compared to 62.2% of males. Such result signifies a relationship between gender and dissatisfaction over work pattern. It is certain that work life balance hits women more than men thereby making women more sensitive to unstable work patterns due to their family roles than men. This issue will be looked at in more detail later on in this chapter. In all, it can be deduced form this section that workers' contract status and nationality played huge roles in determining how stress is experienced from flexibility in the workplace.

7.3.6 Relationship with colleagues

This part of the questionnaire examined workers' satisfaction with their relationships with colleagues. It looked to see if workers perceived friction between colleagues, if their relationships with colleagues were a source of stress to them and if they are subject to personal harassment in the form of unkind words from colleagues; all these were important to workers with mean values ranging from 3.29 to 3.61 (see appendix). Precisely, 63.2% of respondents perceived friction or anger between colleagues, 60.2% said that their relationships with colleagues can be a source of stress while 52% agreed that they were verbally abused by colleague at work. These high figures suggest that relationships at work

were a major factor of concern to workers in the Nigerian oil and gas industry, this might be attributed to inequalities found in the Nigerian oil industry.

Figure 7.6 - Relationship with Colleagues as per contract vs. permanent and expatriate vs. local workers



While looking at the responses of participants with regards to their relationship with colleagues as per how it might lead to workers' experience of stress, three categorical differences emerged across contract vs permanent workers, expatriate vs. local workers and tenure of workers. These categories of workers have different experiences of work and work conditions which might cause friction between co-workers. These differences will be looked at in more details.

Contract vs. Permanent workers

Evidence so far has demonstrated how contract workers are disconnected from the labour market in terms of their poor work conditions in the Nigerian oil industry. Suffice to say, contract workers (72.3%) experienced more stress from their relationships with colleagues than permanent workers (42.9%). This may be as a result of the inequalities and disconnections they have felt as a result of disparity in pay, control, and job security between the two types of workers. Also, it is important to note that harassment at work makes someone feel unsettled, degraded, humiliated or hurt which adversely impacts on their well-being. More than half of the population (52%) were stressed from harassment in the form of

unkind words at work. Particularly, 72.3% of contract workers were more harassed by unkind words from colleagues than 42.9% of permanent workers.

Expatriate vs. Local workers

Furthermore, although 60.2% of workers reported that their relationships with colleagues can be a source of stress, the result revealed that local workers (62.5%) experienced more stress from their relationships with colleagues than expatriate (27.3%). This shows a significant relationship between workers' nationality and the stress that comes from their relations with colleagues. Such results may be as a result of the various inequalities identified earlier in this section. More so, those who have longer offshore experience (48.8%) felt less stress from their relationships with colleagues than those who had shorter offshore years. This means that when workers work for long in an organization, they become more used to working with all kinds of people in the workplace and adapt more than the ones who have worked less.

Organizational Tenure

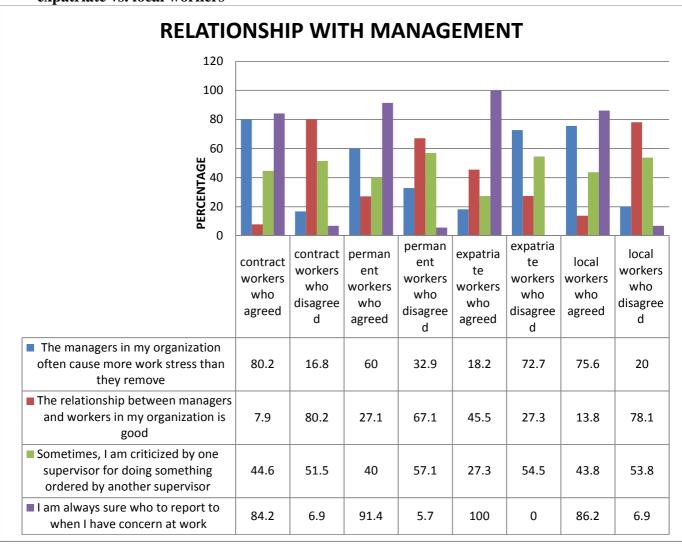
More so, 57.4% of respondents who had shorter years were more harassed by unkind words from colleagues than those who had worked 11 years and more (17.4%). These show a significant relationship between job type and this factor of stress. It is important to remember that majority of contract workers are Nigerians and that the different ethnic groups and religious beliefs in Nigeria break grounds for harassment to thrive at work. According to the UK Equality Act 2010, harassment at work is unlawful. This again sound a clarion call to policy makes to incorporate such laws in the Nigerian employment system and make them known to workers whilst ensuring them of their protection at work. In all, the inequalities between contract and permanent workers and expatriate and local workers might have cause friction in their relationships at work.

7.3.7 Relationships with Management

This section of the questionnaire looked at the relationship between workers and management to see the extent to which workers are satisfied or dissatisfied. However, workers' relationship with managers emerged a topic of concern to workers seemed important to the workers with mean values ranging from 1.98 to 3.98 (see fig 7.7). specifically, almost 75% of respondents disagreed that their relationships with managers are good, 71.9% agreed that their relationships with managers to them than remove it while only 6.4% of respondents disagreed that they were always sure whom to report to in case they have concerns at work.

While looking at the responses of participants with regards to their relationship with management as per how it might lead to workers' experience of stress, three categorical differences emerged across contract vs permanent workers, expatriate vs. local workers, tenure of workers, gender and educational qualification. These differences will be presented in a bar chart and then discussed in more details.

Figure 7.7 - Relationships with Management as per contract vs. permanent and expatriate vs. local workers



Contract vs. Permanent workers

Findings on workers' relationship with managers revealed that 80.2% of contract workers agreed that their relationships with managers are not good compared to 67.1% of permanent workers. It might be that contract workers perceive management as being responsible for their poor work conditions. However, it implies that contract workers in the Nigerian oil industry are more susceptible to poor working relationship with their managers than permanent workers. In all, the result showed that irrespective of workers' job type, working hours and work pattern, workers' relationship with managers is not good and cause stress to workers than it removes. This may be as a result of managers' high level of work control which disconnects the workforce from the labour market.

Expatriate vs. Local workers

There were also differences in the way expatriates and locals experienced stress from their relationships with management. When asked if there was a good working relationship between workers and managers, 78.1% of Nigerian answered no while only 27.3% of non-Nigerians answered no. This shows a strong relationship between workers' immigration status and their relationships with managers; this corresponds to Nigerian workers' response to their relationship with colleagues. On the issue of work relationship between workers and managers, result showed that majority of Nigerian workers (75.6%) agreed that managers cause more stress than they remove compared to only 18.2% of non-Nigerian. Previous evidence showed that local workers have less favourable work condition which may make them blame the management for their reluctance to acknowledge the reality of this disparity, hence adversely impacting their relationship with managers. This then indicates a strong relationship between workers' nationality and work relationships between workers and managers in the Nigerian oil industry.

Organizational Tenure

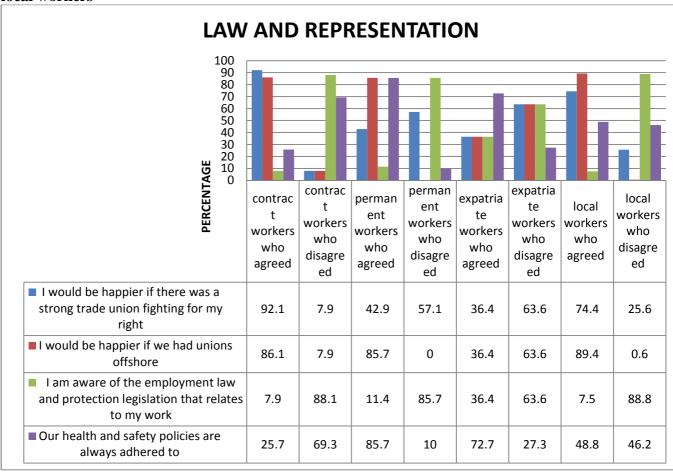
In terms of having a good relationship with managers, 81.1% of respondents that have spent 1-10 years disagreed compared to 34.8% of respondents who had worked 11 years and more. Likewise, 77% of respondents who had worked for 1-10 years in their respective organizations perceived managers as causing stress to them than those who had worked 11 years and more (34.8%). In addition, majority of workers who had less offshore experience (80%) perceived their relationship with managers as bad whereas 58.5% of those who had worked 8 years or more disagreed. These might indicate that workers with fewer years at work perceive their relationship with managers as bad as a result of their less expertise in the

job which requires more of supervision and corrections. In all, the inequalities between contract and permanent workers and expatriate and local workers might have caused friction in workers' relationships with management at work.

7.3.8 Law and Representation

This section of the survey was interested in how satisfied or dissatisfied workers were with the unions representing them and knowing their awareness of their employment protection at work. The results indicated that issues around law and representation might trigger experiences of stressors to workers in the Nigerian oil industry with mean values ranging from 3.06 to 4.37 (see fig 7.8). Majority of the respondents 87.1% of respondents did not know the employment law and protection legislation relating to their work, 86% of respondents wished for offshore unions because they were not happy with their unions, 71.9% of respondents were not happy with their unions and 45% of respondents disagreed that their health and safety policies were always adhered to.

Figure 7.8 - Law and Representation as per contract vs. permanent and expatriate vs. local workers



While looking at the responses of participants with regards to their law and representation as per how it might lead to workers' experience of stress, three categorical differences emerged across contract vs permanent workers, expatriate vs. local workers and tenure of workers. These differences will be looked at in more details.

Contract vs. Permanent workers

Previous evidence from chapter five revealed that permanent workers in the Nigerian industry are allowed to join unions unlike contract workers who are not. Consequently, contract workers (92.1%) were more dissatisfied with unions compared to only 42.9% of permanent workers. Also, 82.8% and 76% of respondents who had irregular work patterns and day/night shift rotation respectively were more dissatisfied with unions than 52.6% of those who had work/leave pattern. This is simply because majority of workers in the first two categories are contract workers while it is permanent workers for work/leave pattern. This means that there is a significant relationship between job type and workers' satisfaction over unions in the Nigerian oil industry reflecting inequality in the right to unionize which again keeps contract workers disconnected form the labour market. In this regard, none of the permanent workers wished for offshore unions but 86.1% of contract workers had that desire. This implies a significant relationship between job type and workers' satisfaction with unions in the Nigerian oil industry. This finding confirms evidence from chapter six where contract workers showed a sense of dissatisfaction to the fact that they were not allowed to join unions.

Expatriate vs. Local workers

Cross tabulations showed a significant relationship between workers' nationality and workers' knowledge of employment law that protected them. 88.8% local workers were not aware of such laws while 63.6% of expatriate workers were not aware of the law. Previous findings have revealed that expatriate workers have better work conditions in the Nigerian oil industry hence, not bothering much about employment laws in Nigeria. Again, since majority of expatriate workers in this study worked for oil MNCs, it could be that the employment laws in the parent companies apply to them. In addition, 89.4% of local workers were not satisfied with their unions and wished for offshore unions while only 36.4% of expatriate workers felt same. It again reflect the inequalities in the industry where expatriate workers are more comfortable with the terms and conditions of work than local workers hence, not to bothered about negotiating better terms through the union. The results indicated a strong relationship between workers' immigration status and satisfaction of workers over unions.

Organizational Tenure

Majority of workers (87.1%) were not aware of employment laws protecting them at work. This finding serves as a signal to policy makers in Nigeria to make laws regarding work conditions of workers in the Nigerian oil industry and also to make these laws known to workers. Workers should be aware of their responsibilities and rights as well as what their employers should be doing with regard to, their health, safety, pay, contract, etc.; in a case where workers do not know their rights, they cannot even fight for their rights. However, respondents who had shorter offshore years (91.5%) appeared to be more unaware of employment protection law than those who had worked offshore for 8-14 years (73.2%). In addition, workers who had worked with shorter tenure were more dissatisfied with unions than those who had worked for 11 years or more. Also, a greater majority of workers who had 1-7 years offshore experience (91.5%) were dissatisfied with their unions and wished for offshore unions compared to 68.3% of those who had worked offshore for 8 years or more. This means that those with longer tenure have become used to their status of union activities than those with shorter tenure.

7.4 Geographical Disconnectedness

In this section, stress will be looked at factors covering home and family, living condition, social life, work environment and relationships. Based on interview findings regarding geographical disconnectedness, differences in responses from age, various companies, respondents with children vs without children, gender and states of origin will be looked at. In particular, respondents were asked to answer how if they agreed or disagreed to statements regarding the above factors in their various organizations. The results are presented and discussed in the following sections.

7.4.1 Home and Family

This portion of the survey examined how respondents' working away from home affected their home lives. In particular, the respondents showed that the following factors were important to them with mean values ranging from 3.38 to 3.86 (see appendix). in descending order, the following percentages of workers experienced stress from these factors; worrying about travel affects my home life (indicated by 64.9%), my job keeps me away from home (indicated by 64.3%), I worry about my family when I'm working away from home (indicated by 56.7%), I face problems of unwinding when I return home (indicated by 59.1%)

and I hardly meet my family need because of my job (indicated by 51.1%). This means that more than half of the respondents experienced stress from home and family as a whole.

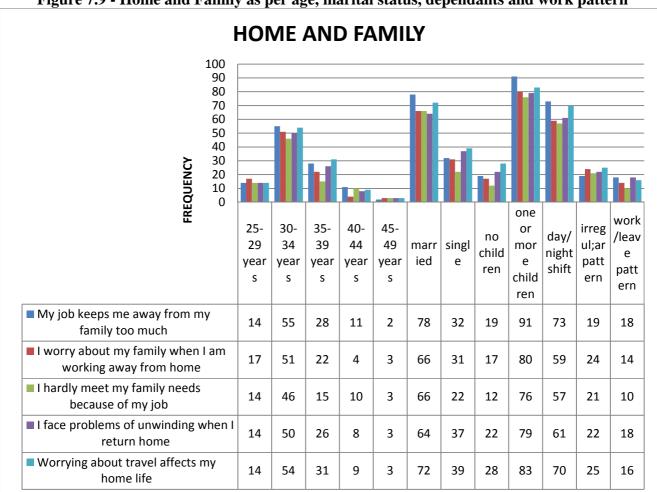


Figure 7.9 - Home and Family as per age, marital status, dependants and work pattern

Findings from chapter six revealed that offshore workers in the Nigerian oil industry are faced with stress in terms of being disconnected from home and family as a result of their work. Their work is such that necessitates them to work weeks or even months away from home, making them absent from family events, social events and children's personal events thereby causing disconnections and stress. Although 64.3% of respondents agreed that their jobs kept them away from their family for long, this stress was experienced more by middle aged workers i.e. 30-44 years (64.6%) compared to about 40% of respondents from the 25-29 and 45-49 age category. This may be as a result of young workers being new in their career ladder are still very much enthusiastic and then not too bothered about being away from home for long while the oldest category workers, having been in the industry for longer tenure, have gotten used to their absences from home compared to the middle aged workers. In addition, workers appeared to be worried about their families when working away from

home. In particular, married workers (66.7%) were more worried about their family whilst away than single workers (43.1%). Such result indicates that their offshore job has a spill over effect on their home as a result of the grave disconnections workers feel from their homes and family when they are absent.

In addition, 66.7% of married workers felt they hardly meet their family needs because of their jobs while only 30.6% of workers who were single felt same. This shows a significant relationship between marital status and workers' obligation to their families despite their working away from home. Also, married workers (78.8%) felt their jobs adversely affected their family lives by keeping them away from their families whereas only 44.4% of respondents that are not married felt this stress. This means that workers who have immediate families such as spouses and children are more prone to feeling that their jobs keep them away from family than the ones who do not. Discussing workers who have immediate family, the result showed that workers who had one or more children (77.8%) felt their jobs kept them away from their families compared to only 35.2% of respondents who had no children. This is because having a family puts on workers more responsibilities to their job roles such as discharging fatherly or motherly roles to children, discharging your duties to spouse emotionally, presence, home chores, finances etc. knowing that offshore workers stay away from home for long, it clearly points to the fact they hardly meets their family's needs which causes stress not just to them but also to their family members as identified in chapter six. Also, offshore workers in the Nigerian oil industry just like offshore workers in other countries face problems of unwinding when they return home. This issue was more of a problem to some groups than others. Workers who had children (67.5%) faced this problem more than workers who had no child (40.7%). This confirms the result in the interview findings that identified many cases where workers were faced with fatigue and complained that the first few days of return were used to sleep and get used to home life. If such workers have children, they would want to spend time with their children and vice versa but because they are usually drained form work and need to sleep, they deny their children of such leisure times which cause disconnections from both parties. Similarly, 65% of workers with children agreed that they hardly meet their family needs because of their jobs compared to only 22.2% of respondents without children. This may be seen in times when the offshore families might have an urgent, emotional or unexpected need that demands the attention and presence of the offshore workers but denied due to their working away from home. This scenario makes workers worry and even blame themselves in case something goes wrong as identified in

chapter six. This worsens the disconnections felt by offshore workers from their homes and families.

Furthermore, 70.2% and 62.1% of respondents who had day/night shift rotation and irregular work patterns respectively (of whom majority are contract workers) believed their jobs kept them away from family compared to 50% who had work/leave pattern (of whom majority are permanent workers). Similarly, over 50% of respondents who had day/night shift rotation and work/leave pattern respectively agreed that they hardly meet their family need because if their jobs compared to only 34.5% of those who had irregular work pattern. These categories of workers (day/night shift and irregular work pattern) find themselves more in the offshore rig than at home because of the nature of their work pattern. This suggests a significant relationship between work pattern and offshore job keeping workers away from their families. In addition, it may be assumed that their families are safe and close to other family members. In reaffirming this, the cross tabulation found that workers a significant relationship between state of origin and worrying about family whilst away with the respondents from the Niger Delta region being the least worried (56.7%) compared to over 65% from other regions.

7.4.2 Work Environment

This section of the survey looked at how workers were satisfied or dissatisfied with their work environment compared to doing office job close to home. All the statements in this category were important to respondents with mean values ranging from 3.23 to 4.08 (see appendix). Many of the respondents indicated their concern in the following statements: the harsh weather offshore makes me anxious (78.4%), the environment where I work is safe (66.7%), my dangerous working environment makes me anxious (66.7%), there is no space to unwind when offshore (53.8%), we have inadequate facilities for physical exercise (55%) and there is inadequate leisure facilities to occupy free time (50.3%).

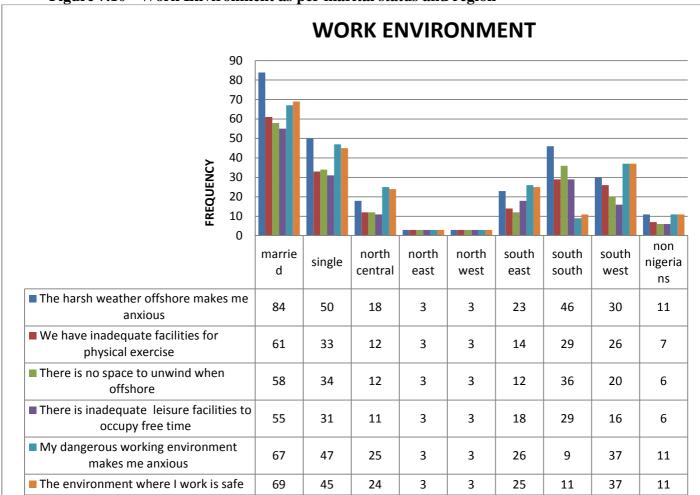


Figure 7.10 - Work Environment as per marital status and region

The findings showed that 84.8% of married workers were anxious about the harsh weather offshore than 69.4% of single workers. Because 94.9% of married workers had children, it became obvious why 82.9% of workers with children were anxious about the offshore weather compared to 68.5% of those without children. Such finding signifies a positive relationship between marital status/number of dependants and the harsh offshore weather. The cross tabulation showed a significant relationship between workers' states of origin and their perception of safety at work. Majority of workers who were from the Niger Delta (70%) agreed that the Nigerian offshore environment is safe compared to only 25% from North East and no respondent form other regions. This means that people from the Niger Delta region feel a lot more comfortable in their region than others and their safety is surer in the Nigerian oil industry than workers from any other region who seemed to be socially disconnected. This was demonstrated in chapter 6 where a respondent from the Niger Delta was kidnapped and released just because he is from the region.

7.4.3 Living condition

This section of the questionnaire looked at how pleased or unhappy workers were with their living condition compared to their homes. This section touched on workers' diet offshore and conditions in the offshore accommodation and four factors had mean values of 3 and more while the other two factors had mean values less than 3 (see appendix).

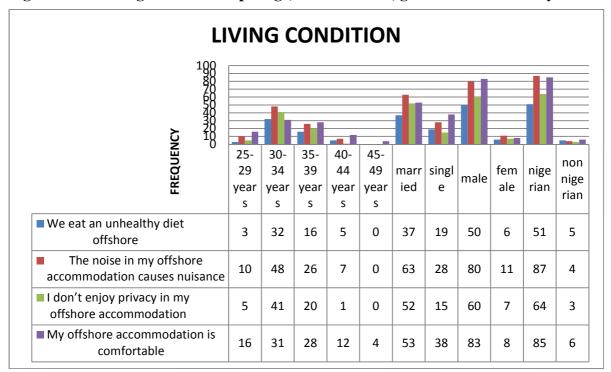


Figure 7.11 - Living Condition as per age, marital status, gender and nationality

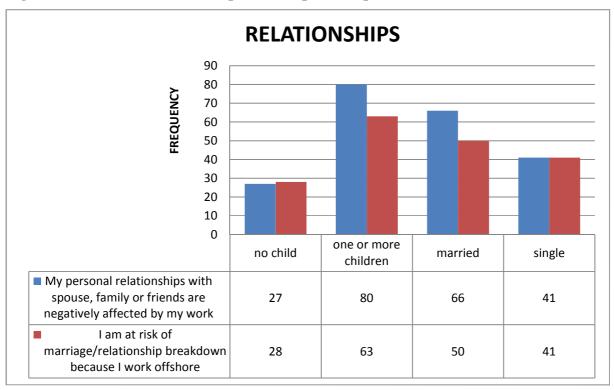
Many of the workers were dissatisfied with the offshore accommodation in terms of the noisy nature. The result showed that none of the oldest workers (45-49 years) experienced less stress from noisy offshore accommodation compared to 33.3% - 66.7% from other age groups. Obviously, the older workers have become used to the environment and seem to be coping better that the younger ones who are probably finding their way up their career ladders. Also, majority of workers in the 45-49 age category were married leading to 63.6% of married workers to be dissatisfied with noisy offshore accommodation compared to only 38.9% of single workers. More so, local workers (54.4%) were found to be dissatisfied with noisy offshore accommodation than non-Nigerians (36.4%). Also, 52.5% of married workers did not enjoy privacy in their offshore accommodation whereas only 20.8% of single workers felt same. This means that married workers in the Nigerian oil industry feel more stress from lack of privacy in the offshore accommodation than single workers.

The result found that the married workers (61.6%) were more concerned about not having adequate facilities for physical exercise than single workers (45.8%). Since more of the respondents with children were married, 63.2% of those with children were dissatisfied with facilities for physical exercise than those without children (37%). Also, males (58.1%) were more dissatisfied with facilities for physical exercise than females (34.8%). Again, workers who had irregular work pattern (72.4%) were more dissatisfied with facilities for physical exercise than 52.6% and 51% of those who had work/leave pattern and day/night shift rotation respectively. This could be because those who do irregular work pattern have less time for leisure than the rest. Non-Nigerian (54.4%) were more dissatisfied with the leisure facilities offshore than Nigerian (50%).

7.4.4 Relationship

This section of the questionnaire dealt with how workers' job impacted on their relationships with spouses, friends and family. The statements here were important to respondents with mean values greater than 3 (see fig 7.12). 62.6% of respondents indicated that their personal relationships with spouse, family or friends are negatively affected by my work while 53.2% indicated that they were at risk of marriage/relationship breakdown because they worked offshore. This suggests a significant relationship between offshore work and workers' relationships with friends and spouses.

Figure 7.12 - Relationships as per dependants and marital status

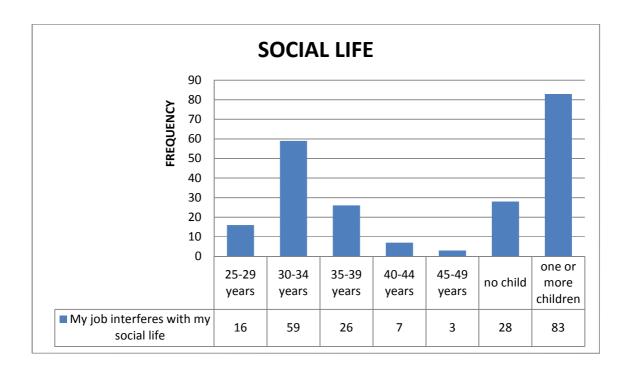


The result showed that respondents with children (68.4%) had strained relationships with spouse, family or friends more than those without children (50%). Similarly, respondents with children (53.8%) were more at risk of marriage/relationship breakdown than those without children (51.9%). Interestingly, workers who were single (56.9%) were more at risk of marriage/relationship breakdown than married workers (50.5%) although this stress factor was faced by 53.2% of the respondents. This suggests that the geographical disconnections experienced by offshore workers cause them stress and then spills over to their family and friends. This is consistent with findings in chapter six indicating that offshore work cost workers their relationships and marriages. This had further psychological effects on workers because they tend to blame it on themselves leaving them with feelings of guilt.

7.4.5 Social Life

This section was interested in finding out if workers' job interfered with their social lives. Only one statement was given which emerged with a mean value of 3.75 signifying its importance to offshore workers in the Nigerian oil industry. 64.9% of respondents agreed that their job interfered with their social lives. This section will then go on to identify which group of people agreed.

Figure 7.13 - Social Life as per age and dependants



An average of 53.5% of respondents from age categories 40-49 disagreed that their jobs interfered with their social lives compared to only an average of 31.3% from age categories 25-39. This means that the older age group were less concerned about their social lives than the younger groups may be because of their long years of working offshore. Also, workers who had children (70.9%) agreed that their jobs adversely affected their social lives whereas 51% of workers without children did. Such result indicates that workers with children will have more social activities such as events in their children's lives which they miss out because they are offshore thus cause stress to them. This supports the findings in chapter six.

7.5 Socio-Economic Disconnectedness

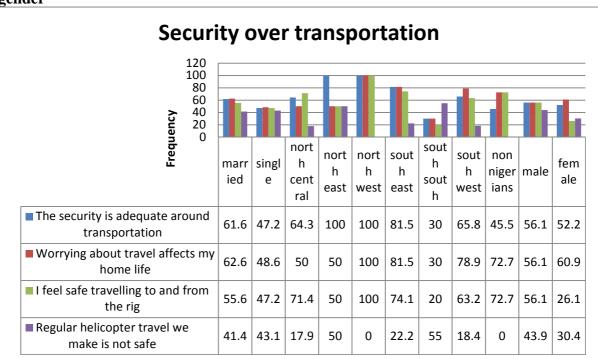
In this section, stress will be looked at from factors covering safety in the Niger Delta and security over transportation by looking at differences in responses from various groups. In particular, respondents were asked to answer how if they agreed or disagreed to statements regarding the above factors in their various organizations. The results are presented and discussed in the following sections.

7.5.1 Security over Transportation

The provision of security when travelling to and from the rig is a major concern for the oil workers, hence showing mean values ranging 3.25 to 3.63 (see fig 7.14). Specifically, out of the four statements, respondents indicated their concern in the following order: 55.6%

indicated that security is not adequate around transportation, 56.7% agreed that worrying about travel affects their home lives, 52% disagreed that they felt safe travelling to and from the rig while 42.1% agreed that regular helicopter travel they make is not safe.

Figure 7.14 - Security over Transportation as per marital status, origin by region and gender



Lack of security over transportation is an indicator of stress to offshore workers in the Nigerian oil Industry. This is due to the volatile environmental circumstances of the region created by the indigenes of the region in an attempt to drive home their point on the mismanagement of oil revenue and underdevelopment in their region despite the huge revenue that comes from oil in their land. This makes offshore workers endangered by attacks from militants who see oil workers as guilty party to their poor environmental state thus escalating tension felt by offshore workers. However, male offshore workers (56.1%) in the Nigerian oil industry showed more concern for lack of security over transportation in the region than their female counterparts (52.2%). Also, When asked if they felt safe travelling to and from the rig, the result showed that 56.1% of males disagreed while only 26.1% of females disagreed. This shows males were more disturbed about safety over transportation to and from the rig thus yielding a significant relationship between gender and safety over transportation in the Nigerian oil industry. This is because males are more of a target from the militants than females thus being their only victims of kidnap and hostage taking in the Nigerian oil industry.

Furthermore, a smaller percentage of respondents from the Niger Delta region (30%) disagreed that security is adequate over transportation compared to 65% of respondents from other regions. Also, only 20% or respondents from the Niger Delta did not feel safe about their safety over transportation compared to 50% and more respondents from other regions. More so, workers from the Niger Delta (30%) worried less about the effect travelling has on their home life than 50% and more respondents from other regions. These suggest that because the oil industry is located in the Niger Delta, and because it is home to the workers form the region, they are a lot more comfortable about security over transportation than workers from other regions. This was evident in the chapter six findings where a worker who was from the Niger Delta was kidnapped but faced less dreadful circumstances just because he was from their region. It may be argued that overall, workers from the Niger Delta are less concerned about safety in the region than workers from other regions.

In terms of workers' marital status, it was found that workers who were married (62.6%) were more worried about the effect travelling has on their home life than those who were single (48.6%). This suggests that people with family grew more concerned over safety over transportation. More so, results showed that 78.3% of respondents who had worked for 11 years and more worried more over the effects travelling have on their home life than 53.4% who have worked for 10 years and less. Similarly, those who had worked for their organizations for 11 years and more (78.3 %) worried more over their safety over their regular helicopter travel than those who had worked less (36.5%). This is because majority of workers who had worked longer were married and had children therefore; that same relationship between marital status and worrying over the effect travelling has on workers' home life is applicable here. Again, those who had worked for their organizations for 11 years and more (73.9%) worried more over their safety over transportation than those who had worked less (48.6%). In terms of the safety of the regular helicopter travel, the result showed that majority of non-Nigerians (90.9%) did not feel safe as against 38.8% of Nigerians. This may mean that the helicopter services in Nigeria are not up to the standard of the countries where the non-Nigerians come from.

7.5.2 Safety in the Region

This section of the questionnaire has only one question which was interested in workers' safety in the Niger Delta region. Considering evidence from the interview findings, kidnapping and hostage taking emerged as unique to the Nigerian oil industry; therefore, this

section examined the extent to which they were satisfied or dissatisfied with their safety in the region. This statement was very important to the workers as evident in its mean value of 4.49 (see fig 7.15).

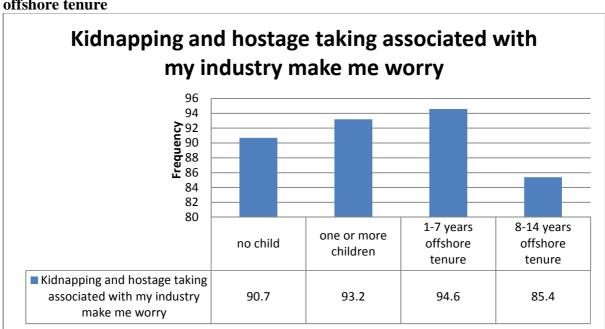


Figure 7.15 – Kidnapping and hostage taking in the oil industry as per dependants and offshore tenure

Findings from the survey showed that 92.4% of respondents agreed that kidnapping and hostage taking associated with the oil industry in Nigeria worried them. It was found that workers who had children (93.2%) were more worried over their safety than those who did not have children (90.7%). This may be as a result of economic dependencies from family; should anything go wrong, their families will be adversely affected especially financially. Also, offshore experience was found to be a determining factor to the level of safety workers perceived in the region. For example, the result showed that 85.4% of those who had longer offshore experience (8-14 years) were less worried than 94.6% of those who had lower offshore experience.

7.6 Company differences

The findings revealed that company differences were a good way of understanding workers' experience of stress. In terms of pay and reward, evidence from chapter 5 showed that organizations used pay cuts as a strategy for shrinking labour costs in times of recession and that majority of oil MNCs in Nigeria have more contract workers than permanent workers.

However, some organizations cut workers' pay in times of recession than others. In the case of shell and Schlumberger, 71.7% and 66.7% of respondents respectively reported that they had experienced pay cuts compared to 48.4% from Chevron, 45% from Agip, 40% from Total and 37% from NNPC. On the part of shell, it was found that across all the surveyed organizations, Shell had the most contract workers; more than double of the contract workers in other organizations; this might explain why more respondents from Shell reported pay cuts. Furthermore, evidence gathered from chapter 5 showed that Schlumberger is a contractor to oil companies and therefore depends on the major oil MNCs for work which might explain why they are hit more by recession than other organizations, thus many respondents from Schlumberger reporting pay cut during recession. In addition, some organizations pay their workers for being recalled more than others; 65% and 50% of respondents from Agip and Total respectively agreed that they get paid each time they are recalled to work compared to 46.9%, 35.5%, 33.3% and 26.1% of respondent from NNPC, Chevron, Schlumberger and Shell respectively. This means that respondents from Agip and Total are more satisfied with the pay they get from work each time they are recalled than other respondents; this might be a result of differences in organizational policies across the organizations. Also, this inconsistency in the pay workers get when they are recalled to work may be linked to the job type of workers i.e. permanent workers being paid more often than contract workers.

In terms of training and progression, the result showed that the level of dissatisfaction in training varied across different organizations; this means that some organizations give more training opportunities than others. In order of importance, the level of dissatisfaction in training by percentage of respondents is: Schlumberger (75%), Shell (60.9%), Agip (60%), NNPC (50%), Chevron (45.2%) and Total (40%). Since Schlumberger is mainly an oil servicing organization, that gets jobs form the major oil companies and also make use of contract workers, the level of training that the workers will enjoy will be minimal compared to the oil companies. Findings reveal that Total gives training opportunities to its workers more than others whilst Schlumberger gives the least opportunities. However, it might be that Total has a more comprehensive training policies that cover workers, both contract and permanent as opposed to other organizations. More so, the result showed that dissatisfaction with opportunities for career progression varied across different organizations; this means that some organizations give more opportunities for career progression than others. In descending order, the level of workers' dissatisfaction over career progression by percentage

of respondents is: Schlumberger (75%), Chevron (61.3%), Shell (60.9%), NNPC (53.1%), Total (50%) and Agip (50%). This means that workers from Schlumberger and Shell have more workers who have fewer opportunities for career progression than workers in other organizations; this may be attributed to the fact that Schlumberger and Shell have more contract workers who are less favoured in terms of career progression based on the general findings of this survey. Furthermore, the result showed that the level of dissatisfaction over promotion varied across different organizations; this means that some organizations give more promotion opportunities than others. In descending order, the level of workers' dissatisfaction over promotion by percentage of respondents is: Schlumberger (77%), Chevron (64.4%), Shell (63.1%), NNPC (53.1%), Agip (50%) and Total 46.7%). This means that Schlumberger is least likely to give promotion opportunities to workers while Total was most likely to give such opportunities to workers. In all, workers who are in organizations that favour workers less in terms of promotion, training and career progression feel disconnected from the industry because their counterparts in other organizations are more favoured.

Regarding autonomy, the findings revealed that offshore workers in the Nigerian oil industry are often recalled to work at short notice which makes it nearly impossible to plan their lives. There were wide-ranging answers across the different organizations; in descending order, workers in Agip (85%) had least control over the notice given before recalled to work, NNPC (84.4%), Chevron (83.9%), Shell (71.7%), Total (63.3%) and Schlumberger (16.7%). This means that Schlumberger gives much notice to its workers before they are recalled to work offshore than other organizations thus its workers feeling the least stress in that category. In addition, the findings showed that workers have control over their shift pattern in some organizations than the other; almost all the respondents from Schlumberger (91.7%) disagreed to having a fixed shift pattern, Agip (85%), Chevron (61.3%), Shell (60.9%), Total (53.3%) and NNPC (49.6%). This indicates that workers in NNPC have more control over their shift pattern thus feel less stress from their shift patterns than workers from other organizations. Furthermore, 75% and 73.9% of workers in Schlumberger and Shell respectively are assigned to more work than they can complete than their counterparts in Total (46.7%), NNPC (46.9%), Chevron (45.2%) and Agip (20%). This implies that out of the 6 sampled organizations, Agip was the fairest amongst all organizations in assigning appropriate roles to its workers thus their workers were the least stressed from this factor. Also, the responses here were wide-ranging across organizations with only 5% of respondents from Agip agreeing that different groups at work demanded things form them that were hard to combine whereas it was over 40% of respondents in the other organizations. This means that other organizations do not spell out job objectives to workers like Agip thereby exposing their workers to stress from this factor.

Concerning job security, responses on job security varied across organizations showing that with some organizations, workers felt their jobs were more secured than other organizations; 83.3%,78.3%,71% and 60% of respondents from Schlumberger, Shell, Chevron and Agip argued that their job insecurity caused them stress compared to 50% of respondents in Total and NNPC respectively. In addition, results here showed that workers who had spent 1-10 years (68.2%) were more worried than those who had worked 11 years or more (43.5%). This implies that those who had worked longer in their various organizations had perceived they had more job security that those who had worked less.

Also, over 80% of respondents from Chevron, Schlumberger, NNPC and Shell experienced stress from their shift pattern compared to 70% and 56% from Agip and Total respectively. This means that workers in companies like Agip and Total have more favourable shift patterns than their counterparts in other organizations. In the case of living condition, 25% and 41.9% of respondents from Agip and Chevron appeared to have less noisy living areas for their offshore workers than 50% and more respondents from other organizations. More so, workers in Schlumberger (33.3%) were more satisfied with facilities for physical exercise than their 48% and more of their counterparts in other organizations. This means that Schlumberger had facilities for physical exercise that appealed to their workers than other organizations. More so, regarding safety in the region, Schlumberger, being an oil-servicing firm has more workers on irregular work pattern which necessitates them to travel more frequently to the rig than workers in other organizations. Hence, Schlumberger had 66.7% of workers who were worried about the frequent helicopter travel they make at work compared to 50% or less form other organizations. This makes it noticeable why 52% of those who had irregular work pattern were more worried about safety over frequent helicopter travel than those who had work/leave pattern (52.6% and day/night shift rotation (33.7%).

7.7 Coping strategies as moderators

This study examined occupational stressors using three themes – labour market, geographical and socioeconomic disconnectedness. Following, this section will examine the coping strategies employed by offshore workers to ascertain the extent their coping strategies

ameliorated their experiences of stressors. Specifically, using the notion of emotion and problem focused coping identified in chapter two, this section investigates which coping style is used by the categories of workers that have been found important all through the empirical findings — contract/permanent, local/expatriate, male/female workers. From the literature around the stress process, it was gathered that stress can only occur if the moderators (in this case, coping strategies) are not able to help the individual shield against stressors. Therefore, coping strategies will be examined vis-a-vis stress.

In examining the coping strategy used by offshore workers in the Niger Delta region of Nigeria, it was found that majority of the respondents (77.2%) used emotion focused coping whereas only 5.3% used problem focused coping strategy. This means that the coping strategy used by offshore workers in the Nigerian oil industry is not geared towards solving the problem of stressors they experienced; rather, it focused on seeking emotional support.

Particularly, in terms of problem focused coping, only 11.1% of respondents have come up with a strategy about what to do about the stressors they faced and these strategies have focused on family, friends and colleagues. For example, 84.2% of respondents agreed that their colleagues helped out with work overload while 49.1% of respondents got help from friends and extended family whilst away from home. Interestingly, 33.9% of respondents of which more than half (20%) were permanent workers, agreed that their mangers accommodated them when they could not manage all the tasks assigned to them. This hints that permanent workers have better access and relationship with managers than contract workers.

In terms of emotion focused coping strategy, 84.8% of respondents agreed that their friendships with colleagues helped them deal with work stress. 90.6% agreed that they had people they could talk to about their problems and concerns at work. Nearly all the respondents (97.1%) agreed that knowing they have colleagues who faced the same challenges made them feel they were not alone. 74.3% of respondents agreed they had been getting emotional support from others while more than half of the respondents (63.7%) found comfort in their religion or spiritual beliefs. From the account above, it is evident that regardless of the coping strategy used by respondents, they had a sense of community amongst themselves. Their major coping mechanism depended hugely on colleagues and family. Conversely, a huge minority of respondents (14.6% and 8.8%) respectively depended on alcohol and turned to activities such as reading, sleeping or watching TV.

Emotion focused coping strategy, as used by majority of the respondents suggests that these offshore workers have limited capabilities to shield against the stressors they face daily at work. According to the stress process discussed in chapter two, if moderators are not able to help individual shield against stressful situations, stress occurs. It is assumed that offshore workers in the Niger Delta are bound to face stress. There were two statements in the survey that were direct measures of stress outcomes. These statements touch on sleep disturbances and ailments as a result of occupational stressors (as identified in earlier in this chapter and chapter six). Using these statements, the following section will ascertain stress amongst offshore workers in the Niger Delta of Nigeria. It will particularly investigate if there are some groups who are more stressed than others.

7.8 Stress Outcomes

In terms of sleep disturbances, a higher percentage of workers (60%) agreed they had trouble getting to sleep and staying asleep whereas only 39% disagreed. Respondents agreed to having sleep disturbances regardless of gender, nationality, origin by region, offshore tenure, marital status and number of children they had. Therefore, other this stress will be analyses based on other contextual variables. On the other hand, more than half of the respondents (64.3%) agreed to have had ailments associated to their kind of job compared to only 30.4% who disagreed. Respondents agreed to have had ailments irrespective of their offshore tenure, tenure in organization, nationality, origin by state, number of children and gender. These results point to the fact that various experiences of occupational stressors negatively impacted on workers through the stress they experienced (sleep disturbances and ailments). Going further, it will be interesting to identify the categories of workers that experienced these forms of stress than the rest.

Regarding sleep disturbances, findings showed that younger respondents are more susceptible to sleep disturbances than the older respondents. For example, 97,1% of those who agreed to sleep disturbances belonged in the age categories of 25-29 years (8.8%), 30-34 years (55.9%) and 35-39 years (32.4%) whereas only 2.9% of them fell in the age category of 40-44 years and non in 45-49 years. Previous findings showed that bulk of respondents who had children was married, therefore, majority of the respondents who agreed to sleep disturbances 66.7% and 75.5% were married and had children respectively compared to only 33.3% and 24.5% who respectively were single and had no children. With regards to tenure in organization, results showed that out of those who agreed they had sleep disturbances, majority of them (96.1%) had worked in their various organizations for 1-10 years whereas

only 3.9% had worked for 11-20 years. This result suggests a positive relationship between organizational tenure and experience of stress (sleep disturbances) where the longer one works in an organization, the less stress he or she experiences from occupational stressors. Furthermore, results suggest that contract workers experience stress from sleep disturbances more than permanent workers. In fact, 67.6% of those who agreed to sleep disturbances were contract workers whereas only 32.4% were permanent workers.

In terms of ailments associated to offshore work, it was evident from findings that younger workers agreed to have had ailments associated to their job more than older respondents. For example, 8.2%, 79.1% and 7.3% of those who agreed to ailments were in the younger age categories – 25-29 years, 30-34 years and 35-39 years respectively compared to only 7.3% and 5.5% from 40-44 years and 45-49 years age categories. Also, out of the portion of workers who agreed to ailments, more than half 68.2% were contract workers while only 31.8% were permanent workers. This suggests that contract workers experienced ailments associated to their work more than permanent workers. Overall, contract workers were found to be working longer hours than permanent workers and therefore experienced occupational stressors more than permanent workers; this might explain why contract workers reported stress form ailment more than permanent workers.

7.9 Conclusion

This chapter presented findings from survey examining stress experienced by offshore workers, identifying coping styles and ascertaining stress outcomes of offshore workers in the Niger Delta region of Nigeria. The survey utilized 171 respondents, producing a response rate of 85%. The core themes of this thesis (labour market, geographical and socioeconomic disconnectedness) were used in data analysis. The approach of utilizing various forms of disconnections in understanding occupational stress may have argued to have paid off as new sides of occupational stress were revealed.

Findings from the labour market disconnectedness have demonstrated how inequalities between contract and permanent workers, expatriate and local workers and workers with different organizational tenures in the Nigerian oil industry may have contributed to the ways in which workers experience stress. The findings revealed that contract workers and local workers are treated less well in terms of their pay and rewards, training and progression, control over job, flexibility of work pattern and representation in terms of unions. These have led to their poor relationships with colleagues and management, dissatisfaction, jealousy,

resentment and most especially made them disconnected from the entire labour market and can cause them stress. Specifically, the findings suggest that expatriate workers have better working conditions in the form of better pay, training and promotion opportunities, more control over job, better shift pattern, and better relationship with managers than the local workers in the Nigerian oil industry. Also, contract workers were found to be working longer hours which has health and safety implications and also makes them feel dissatisfied because they do not get better pay or training opportunities in return. Coupled with their inability to organize, this might be why contract workers reported dissatisfaction to their relationships with their managers, in fact, majority of them agreed that their relationships with managers caused more stress to them than it removed.

Regarding geographical disconnectedness, age, marital status and dependants were important factors in analysing the data. Middle aged (30-44 years) workers perceived more stress from being disconnected from home and family than the rest of age categories. Workers who were married and had dependants showed more concern for family whilst they worked away from home indicating that offshore work spills over to the home domain resulting in feelings of disconnections. In terms of socioeconomic disconnectedness, it was found that lack of security over transportation is an indicator of stress in the Nigerian oil industry. Particularly, workers who were married and females showed more concern over insecurity in transportation more than the rest of respondents. Also, workers who were originally from the Niger Delta showed less concern over security in transportation. Kidnapping and hostage taking in the Nigerian oil industry is a major source of stress to workers generally but workers who had children and with less offshore tenure (1-7 years) showed more concern.

In terms of moderators used by offshore workers in the Nigerian oil industry, occupational community was an important and immediate source of relief to workers. This is an emotional focused approach and therefore is limited in the extent it can solve the actual problem of stress. Consequently, more than half of the respondents (60%) and (64.3%) reported stress outcomes respectively in the form of sleep disturbances and ailments associated with offshore job.

8.0 Chapter Eight: Summary and Conclusions

8.1 Introduction

The main aims of this research have been to explore the nature and causes of occupational stress among offshore workers in the Niger Delta region of Nigeria from a sociological standpoint. Theoretically, the multi-layered lens drawn from critical realism has made it possible to look at the nature and causes of occupational stress from several levels of analysis. In analysing the interactions across these levels of analysis, the concept of Thompson's (2003) disconnected capitalism thesis was applied. This study has considered the interaction of levels, between the labour process and governance. Specifically, it has looked at occupational stress from four levels of analysis – political economy and macroeconomic, labour markets, work-life interface and workplace levels as opposed to psychological studies that are limited to the workplace level analysis of stress.

Methodologically, this study has utilised a quantitative and qualitative research design. Empirically, this study has broadened the scope of disconnected capitalism by considering how occupational stress outcomes, in particular, are affected by a range of interacting labour markets, geographical and socioeconomic forms of disconnectedness within a broader political economy framework. Empirically, the findings showed that Nigeria's political economy, weak legislations, economic indicators (unemployment, underdevelopment and poverty in the Niger Delta), labour markets and workers' characteristics caused disconnections at different levels thus causing stress. Particularly, at the labour market level, workers' categorization into various groups - contract vs. permanent, female vs. male and local vs. expatriate emphasized inequalities in the terms and conditions of workers in the Nigerian oil and gas industry with local, female and contract workers with less favourable conditions. At the geographical level, workers, especially those who were married and had children were worried about their home and personal lives due to the isolated nature of their jobs that necessitated them to work weeks away from home. At the socioeconomic level, insecurity in the region was worrisome for both workers and management. Also, workers were burdened by the economic dependency of their family members on them.

In this chapter, a number of important conclusions are drawn based on the results analysed in the empirical chapters i.e. chapters 5, 6, and 7. Specifically, this chapter begins by presenting the contributions of the literature review and methodology; in terms of methodology, the particular methodological approach adopted for the study will be explored to ascertain its suitability for analysis of the subject of occupational stress. It will then move on to address draw conclusions form the findings and then see how the findings have answered the research questions set out by this study and their impact on the literature of occupational stress. Finally, possible directions for future research will be explored while recommendations are given.

8.2 Theoretical Contributions

The literature review has attempted to fill the knowledge gap in relation to the causes and consequences of stress in the workplace. The psychology literatures (French et al (1973) and Lazarus et al., (1952) have limited the causes of occupational stress to the workplace. They have paid insufficient attention to the complexity of the interrelationship between social conditions. However, by focusing on socio-economic structures within which organizations are embedded and accommodating psychological approach, the literature review has provided a multi-layered model for investigating occupational stress (see Fig 2.4). Therefore, this is the first comprehensive study to explore the nature and causes of stress using a multi-layered approach and simultaneously, engaging with socio-economic structures. This approach of determining the causes of stress was made possible by the theoretical stance adopted by the study - labour process theory. The literature review attempted to look at occupational stress with this concept in mind and developed a multi-layered analysis of stress factors; showing the way in which workers' job conditions are shaped and influenced by arrays of macroeconomic, labour market, organizational and personal life factors. Therefore, this study contributes to the growing literature within the strand of labour process theory for examining occupational stress through its broader approach to the investigation of occupational stress.

More specifically, this approach identified four possible levels of stratified reality with each possessing the ability to influence factors at other levels to cause stress at work. The model looked at how the political economy and macroeconomic conditions of the state particularly unemployment have potential of making organizations want to reduce their workforce thus causing financial strain on workers and their family members. At the labour market level, the influence of the firms, workers' organizations and family obligations cause changes in the

workplace and work-life interface levels to cause stress to workers. The family and personal lives of workers were seen as potential causes of stress from the work-life interface level. At the workplace level, the model looked at how immediate job conditions impact on workers' experience of stress. Here, under/over promotion, inequality of rewards, career advancement, work overload/underload, role ambiguity and decision latitude can be significant contributors of stress. The literature review utilized the concepts of disconnections and connections from the disconnected capitalism thesis in examining workers' experiences of work and stress. This concept identified three (3) major forms of disconnections—labour market, geographical and socioeconomic disconnectedness. Although there have been calls to bring the society back into the analysis of the workplace, virtually no research on occupational stress has engaged with forms of disconnections.

This study finds that there are other forms of disconnections beyond Thompson's (2003) argument. In examining the connections and disconnections offshore workers felt at different levels of analysis of occupational stress, the disconnected capitalism concept was applied and even extended. The disconnected capitalism thesis by Thompson (2003) was basically limited to occurrences in the labour market; however, this study applied it to other levels of reality in the oil offshore industry by putting workers' disconnections from home and communities into perspective as well as the socio-economic structures. Therefore, this study has also presented the first analysis of these levels of stress analysis using the disconnected capitalism framework; in fact, this work did not just apply the disconnected capitalism framework, rather, it extended it touching on how workers feel disconnected from the labour force, home, social life, community thus causing stress to them.

Also, as clearly pointed out by Burke and Richardsen (2011), most occupational stress studies among oil workers have adopted the psychological standpoint covering the (1) objective work environment e.g. shift work, (2) subjective work environment e.g. workload, roles, poor supervision, (3) various aspects of strain e.g. dissatisfaction and psychological ill health and (4) work outcomes in the form of absenteeism, accidents, injuries. This study has highlighted the importance of combining the psychological and sociological perspectives in examining occupational stress thus adding to our knowledge of occupational stress amongst offshore workers. In all, this study has deepened our understanding of the phenomenon of occupational stress in general and occupational stress amongst offshore oil workers in particular by focusing on the socio-political structures within which a specific industry is embedded, our case study has developed a refined, multi-layered analysis of the changing

aspects of occupational stress which implies that things like the relationships between workers and managers as well as the extent to which workers can act independently towards their jobs and the socio-economic environments that influence actions in the workplace will be allowed to put into perspective whilst examining occupational stress.

8.3 Methodological Contributions

Previous studies on occupational stress have adopted the positivist approach in investigating occupational stress, this has limited their understanding of occupational stress to the factors that can be observed or directly experienced by workers. These academics have struggled to explain the factors and forces that shape human experience within a capitalist economy such as stage regulations, relationships between firms and the communities within which they operate and labour markets; however, with the application of critical realism to this research, this study attempted to fill the gap by explaining such factors in terms of occupational stress. Particularly, by bringing to reality, those underlying factors, sometimes away from people's awareness that cause stress to them thus giving theoretical explanations.

Consequently, there are plenty of quantitative studies in the study of occupational stress with no or very limited qualitative studies. Therefore, this study has made a huge contribution to the methods of examining occupational stress by mixing the quantitative and qualitative approached. This research design allowed triangulating, complementing and confirming results thus achieving an in-depth understanding of the research topic. This approach will be said to have paid off in terms of in depth knowledge gotten from interview, high representation and precise results from survey; given that offshore work and issues of occupational stress in the Nigerian setting is rather an unexplored area. This mixed methods approach can be justified from critical realism position and has aided the collection of data to be done with an exploratory concentration in mind. The sample frame covered both oil multinational and local companies, workers with different contract status as well as expatriate and local workers which yielded opportunities for comparison between groups thus adding value and in depth knowledge to our understanding of occupational stress.

This study has offered the first systematic analysis of occupational stress amongst offshore workers in the Niger Delta region of Nigeria covering both the workplace analysis of stress, work-life interface, labour markets and macroeconomic levels of analysis. Occupational stress, as pointed out in chapter one, has spawned ample research literature largely focused in advanced countries with virtually no research on the nature and causes of stress in the

developing world where it is nonetheless experienced as a significant problem leading to scholars like Kortum-Margot (2001) calling for an urgent need to conduct occupational stress studies. In particular, the research offers new insights in the area of occupational stress in developing countries where work-related stress and other occupational illnesses remain under-reported and underestimated. Therefore, this study has filled our knowledge gap of occupational stress in a developing country like Nigeria thereby giving theoretical, empirical and policy significance. It has also created an opportunity to compare occupational stress studies in both developed and developing countries.

Burke and Richardsen (2011) pointed out that stress research on oil platforms is dated and has been considerably slowed after the year 2000 because oil companies did not support such studies thus making research in the industry difficult. With this in view, this study has added value and credibility to the overall occupational stress research in the oil offshore industry. Particularly, the study drew data from both oil multinational and local companies which again added more value and uniqueness to the study because most studies on occupational stress in the offshore industry used their local oil companies. The empirical data have raised a number of important issues with regard to current debates on occupational stress. In drawing conclusions from the empirical data, we will look at how the research questions were answered and how our findings relate to previous studies on occupational stress.

8.4 Empirical contributions

In examining occupational stress amongst offshore workers in the Niger delta region of Nigeria, three concepts were used to study the connections and disconnections felt by workers which cause them stress. These subjects are: - Labour market disconnectedness, geographical disconnectedness and socio-economic disconnectedness. The first subject looked mainly at the segmentation of the Nigerian oil and gas labour market and its effects on workers' experience of stress; the second looked at how the geography of the offshore work impacted on workers experience of stress while the third looked at the wider socio-economic structures such as safety/insecurity in the region and cultural structures that impacted on workers' experience of stress of stress.

8.4.1 Labour market disconnectedness

The study revealed a prevalence of occupational stress amongst offshore workers in the Niger Delta regardless of race, contract, age, marital status, organization associated with. A number of indicators from the labour market, the location and nature of offshore work, the culture of dependency and insecurity in the region highlighted the uneasy state of workers in the region. The degree of occupational stress experienced by workers differed depending on race, contract type, organization type (multinational or local) while some types of stress were general. Management's perceptions of workers' stress contrasted that of workers thus there were neither organizational policies/actions to help workers overcome their difficulties nor national policy covering occupational stress. Importantly, the measure put forward by organizations to ameliorate the effects of stress on workers were less than effective because their knowledge of workers' stress was limited to observable factors such as workload, working long hours, kidnapping etc., leaving out underlying factors that impacts on workers' experience of stress.

Evidence from chapter 5 suggests that a severe problem facing the Nigerian oil and gas industry is the segmentation of the labour process which emanated from particularities such as contractual arrangements (i.e. contract versus permanent employment), gender (i.e. male versus female workers) and types of workers concerned (i.e. migrant and local workers). Findings from chapter 6 and 7 revealed the implications of labour market segmentation to include differences in access to training, union membership, progression and rewards, wage gaps between various types of workers, differences in working conditions, job security, employment opportunities, and security protection.

Labour market segmentation is problematic because of its link to inequality and discrimination (Deakin, 2013) as is evident amongst the respondents of this study. The Nigerian oil and gas labour market is characterized by inequalities and job insecurities that trigger special forms of disconnectedness amongst workers thus causing stress. The study revealed peculiarities between expatriate and local workers; permanent and contract workers; male and female workers. These groups will be looked at individually.

Between expatriate and local workers, pay was a strong factor. Chapter 6 revealed local workers' resentment over expatriate workers receiving higher pay for the same job role; the main reason for this resentment was the margin of difference as some respondents said expatriate workers received 6 times more than them. This situation makes local workers dissatisfied and even so, feel disengaged from the workforce. Although the 2013 survey by HAYS on oil and gas salary showed that 85.4% of 55 countries paid their expatriate workers more than local workers, its adverse impact on local workers have not necessarily been considered. Such a situation can impair working relationships between the group as evidenced in chapter 7 and which is perceived as a source of stress. Also, findings from chapter 6 and 7 revealed that expatriate workers in the Nigerian oil and gas industry have more access to training and career progression than local workers. More so, during unrest in the region (high rate of abduction and killings of oil workers), expatriate workers are given better security protection than local workers. These scenarios made local workers feel a sense of injustice thus causing antagonism between both types of workers. This situation was found to make local workers feel dissatisfied and disconnected from the workplace and even their country as foreigners take over high paying jobs from them.

A clear distinction was seen between male and female offshore workers. Chapter 5 revealed that employers prefer to hire males in the offshore environment because they are more efficient and dependable. It was gathered that females who work offshore usually request for some time off work to attend to some family and personal needs. The fact that leave requests from females are usually granted was a source of jealousy for the male workers, according to findings in chapter 6. Also, chapter 6 revealed that the offshore oil industry is perceived as a 'male zone', therefore, women are expected to stay home and tend the home or do some other soft jobs. This depicts the masculine nature of Nigeria as argued by Hofstede' (1984, 1991) subject on national culture. Chapter 6 also showed that female workers believe they have the required skills to work offshore but are hardly given the chance to prove it thus the dissatisfaction felt by them. This situation already makes employment opportunities in the offshore industry more accessible to males than females regardless of qualification. This is responsible for the low participation of women in the offshore oil industry and makes the few women feel alone and disconnected from the industry. Chapter 7 revealed that training, promotion and control over job are more reachable to male than female workers which again, make female offshore workers dissatisfied and disconnected form the workforce. These accounts are a clear case of gender inequality in the Nigerian oil and gas industry. Gender inequality has denied women of the opportunity to interact with their fellow

women thus depleting their source of support. Also, it has denied the industry the chance to boost skilled workers by employing the qualified candidates regardless of gender. Clearly, women's roles in the offshore industry are set and reinforced by social norms. This situation is not just unique to Nigeria; for example, in Indonesia, companies in the mining sector tend not to employ young women as operators because "after they have trained they are bound to marry and have children and stop working." (Lahiri-Dutt and Mahy (2007). In Nigeria, perhaps, the weak employment regulations contribute to gender inequality in the Industry.

The third important group that emerged was contract and permanent workers. There were differences in their terms and conditions at work; particularly, around pay/rewards, career progression, relationships ate work and union membership/satisfaction. The unregulated labour market operations expand temporary workers and dislocate people physically, psychologically and morally (Polanyi, 1944). The organization of workers in the Nigerian oil industry is divided into permanent i.e. regular, full time workers and contract i.e. temporary, full time workers. What we actually do on our jobs, the pay we get in return, the terms and conditions of such jobs have strong effects on well-being. These factors differ for permanent and contract workers with the contract workers doing more work and getting less of the terms and conditions; chapter 5 revealed that contract workers are no different form permanent workers except their contracts. One sure thing that can be deduced especially from the analysis given in the previous chapters is an important source of antagonism between permanent and contract workers in the Nigerian offshore industry.

Specifically, chapter 6 and 7 revealed that permanent workers received higher pay than contract workers in the Nigerian oil and gas industry. In terms of pay, Tausig (2013) argued that the wages of temporary workers are lower than permanent workers with little or no fringe benefits; this increases job related stress amongst temporary workers. In fact, contract workers in the oil and gas industries of Trinidad and Tobago earn approximately 40 per cent of the income earned by company employees in the industries (Graham, 2010) which is similar to the findings of this study as contract workers complained of not getting as much pay as permanent workers. Furthermore, only contract workers' pay were seen to be cut due to recession.

Again, chapters 6 and 7 showed that contract workers worked longer hours than permanent workers and usually had irregular work patterns yet had less control over their jobs than permanent workers; this exacerbated the disconnections they felt from family. In return for the longer hours contract worker put into work, they have less access to training, promotion, paid holiday and pay; this situation cause contract and local workers to feel disconnected from the work force and management because they perceive the management as the reason behind the differences. This gives rise to the poor relationships amongst workers and between workers and management (as evidenced in chapter 7) which is a source of stress for both parties (Sutherland and Cooper 1988, 1996; Cartwright and cooper, 1997).

Essentially, contract workers in the Nigerian oil and gas industry were more face with job insecurity than the permanent workers. Contract workers confirmed that their jobs can be easily be made away with by management unlike permanent roles; therefore, the desire of all contract workers is to have a stable employment. The impact of job uncertainty and insecurity on individual's health and the experience of stress is adverse (Tausig, 2013); Kivimaki et al., (2003) found that temporary employment is linked to higher mortality than permanent employment. The impacts has been found to go beyond the individual in question, rather, it extends to his or family members. For example, Coontz, (2005) suggests that the impact is associated to adverse familial effects especially in the decision making of couples on key topics like timing of marriage and children as well as the number of children to have due to financial strains. Furthermore, offshore workers in the Nigerian oil and gas industry were not satisfied with the role of the union. They feel they do not have a strong voice as offshore workers and therefore upheld the view of having an offshore union. Specifically, this notion was felt more by contract workers because they are not given the right to associate with unions. However, the study showed that casual workers in the Nigerian oil and gas industry remain vulnerable given their inability to unionize – hence, cannot negotiate their working conditions. In all, these differences between contract and permanent workers have resulted in disunity between both types of workers and the feeling of isolation from contract workers.

8.4.2 Geographical disconnectedness

Offshore work is such that workers have to work away from home. The offshore environment has always been describes as isolated and dangerous (Elliot 1985). The concept of its isolating nature necessitates workers to work weeks away from home and every form of social activity. The nature of offshore work comes with it pressure for workers, workers' family and the community. The situation of long absences from home makes offshore workers feel unreachable to the world; they feel disconnected from the world and is a major source of concern to them. This disconnection was felt regardless of race, gender or contract status at work. Apart from feeling isolated from the world, working away from their homes affected their home lives. Chapter 6 revealed how workers missed out on their children's big moments, marriages and relationships were threatened (evidenced in chapters 6 and 7), how working offshore gave them the feeling they had dual lives (home and work) which were difficult to handle and how child bearing was delayed due to absences from home. Also, job dissatisfaction, and sexual difficulties were reported by workers. Also, some of them reported low self-esteem because they sometimes feel less a mother or father for not discharging their roles dues to absences from work while a particular female faced shame from the society who tagged her husband a house husband because he lost his job and the wife became the breadwinner; she felt dissatisfied with her job as complained that the natural thing was for a woman to stay at home and look after the children. Chapter 7 showed how offshore workers especially those who had dependants and are married worried over their family whilst they were working away from home, majority of them felt guilty of staying away from home for long. Again, chapter seven revealed that majority of the married workers were more concerned about problems of unwinding at home; this might be because most of the married workers had dependents which may have given them a sense of responsibility.

The offshore condition is not particularly comfortable; workers reported how eating unhealthy diet, not enjoying privacy, noisy living condition, harsh weather, dangerous and unsafe working environments, space to unwind while offshore were issues of concern for them. Also, majority of the workers reported that working offshore adversely affected their social lives and well as impeded their abilities to achieve personal goals. These disconnections felt by offshore workers have led to their dissatisfaction with their jobs; particularly, their offshore roles thus pushing them to seek office roles as evidenced in chapter 6. Also, the shift work associated offshore work was found to have consequences for workers, particularly their sleep patterns and health (as evidenced in chapter 6).

8.4.3 Socio-economic disconnectedness

This study has attempted to fill the knowledge gap in term of the ways factors outside the workplace have shaped and influenced workers and their job conditions to cause stress. In this context, it explored how the state, oil companies and the Niger Delta communities interact to influence offshore workers' experience of stress.

More specifically, the secondary and empirical data from chapter 5 revealed that the weak environmental legislation in Nigeria indirectly cause stress to offshore workers. Oil companies and host communities are playing the blame game; on one hand, the oil companies have been criticized by the indigenes of Niger Delta for engaging in environmental degradation through oil spills and gas flaring. Conversely, oil companies have blamed indigenes of Niger Delta for vandalizing oil pipelines. This situation points to the fact that the government has not closely monitored the activities of the oil and gas industry which has significant implications that provoke chain reactions of stress to oil workers. Firstly, there is a continuum of environmental degradation and oil pipeline vandalism. Environmental degradation has caused dislocation of occupations (fishing and farming) to the indigenes and displacement of indigenes in quest of survival thus triggering financial strains. In order to make ends meet, they have engaged in oil pipeline vandalism and kidnapping of oil workers for ransom which has also triggered a growing fear of being kidnapped or killed amongst offshore workers in the Niger Delta thus causing distress. Secondly, evidence showed that continued oil pipeline vandalism leads to lowered oil production levels and eventual downsizing in the industry. When the level of oil production is reduced, it reduces the nation's GDP due to Nigeria's over dependency on oil (as evidenced in chapter 4) and indicators of the state of economy had been found to have a direct relationship with factors of stress (Tausig, 2013). On the other hand, the lowered oil production rate encourages oil companies to downsize, reduce pay and bonuses of workers which unintentionally causes distress in the form of financial strain and job insecurity. Thirdly, the unrest in the Niger Delta as a result of hostage taking of oil workers makes the government unwilling to invest in the region and investors flee from the region thereby not promoting the economy of the region and exacerbating conflict in the region.

In addition, chapter 5 showed mismanagement of oil revenue by the government which again highlights concatenation of occupational stress factors to offshore workers. Precisely, the Nigerian elites have enriched themselves with oil revenue neglecting the Niger Delta region in terms of development. The indigenes of the Niger Delta, being dissatisfied with this situation have settled for oil pipeline vandalism and hostage taking of oil workers for ransom in order to attract the attention of the public to their plight and then be economically better. As seen in the earlier discussion, this situation puts fear in the offshore workers and cause distress. In all, evidence from chapter 5 shows that offshore workers experience stress from the job insecurity, fear of being kidnapped and reduced bonuses or pay cuts. These factors of stress have been clearly demonstrated to emanate from interconnected happenings from three levels of analysis – government, oil companies and host communities.

However, chapters 6 and 7 looked at socio-economic factors in terms of (1) workers' disconnections from their communities as a result of conflicts in the region (2) workers' disconnections from family and friends as a result of economic dependencies. The host community members perceive oil workers as a huge threat and therefore are their major targets for abduction, thus workers' concern over insecurity in the region. Chapter 6 showed how all respondents had directly or indirectly experienced abduction; chapter 5 also confirmed that each company had experienced workers' abductions while chapter 7 showed how almost all the respondents agreed that kidnapping and hostage taking associated with the oil industry in Nigeria worried them. A major finding across all empirical chapters is the fear workers battle with every day of their working lives; they live from trip to trip because anything can happen. This insecurity has compelled workers to relocate their family members to safer regions of the country which has a number of implications. Firstly, it makes them feel disconnected from the previous neighbourhood they had bonded with; secondly, it causes them financial strain to run two homes and finally, it worsens the disconnections they feel from home as sometimes, they find it difficult to make it to their second homes when onshore considering their short stay. Means and dependency culture in Nigeria also causes stress to offshore workers. Nigeria, being a collectivist country, forces offshore workers to share their surplus with parents, siblings, aunties, uncles, nephews, nieces and cousins. This culture of dependency is necessitated by the lack of social security in the country. Chapter 6 revealed how relatives constantly nag workers with financial demands which deter them from returning home thus worsening the disconnections they feel from home.

8.5 Direction for future research

This last section includes some recommendations for future research. The current study focused on a particular national setting – Nigeria. It was very interesting to examine the nature and sources of stress in a developing country but further empirical studies in other developing countries will be insightful and make grounds for inter-country comparisons with the aim of identifying similarities or differences in the causes of stress.

Furthermore, the present study focused on the oil and gas industry of Nigeria. Similar sectorial studies can be conducted in other sectors of the Nigerian economy investigating the nature, causes and consequences of occupational stress; this will enable inter-sector comparisons. More so, it will be interesting to do further study engaging offshore families in determining their experiences, attitudes and concerns for their family members who work offshore in the Niger Delta of Nigeria as well as opinions of the host community indigenes.

Again, the current study used offshore professionals so future studies should cover non-professionals in the offshore environment, such as cooks, cleaners because probably create ground for comparisons to be made between professionals and non-professionals. It will also be interesting to investigate occupational stress amongst managers in the Nigerian oil and gas oil industry because the current study focused on just the workers. It will also be interesting to investigate the nature and causes of stress to the agents of capital as it will break grounds for comparison between management and workers.

8.6 Recommendations

Seeing that occupational stress goes beyond the workplace, it is important to note that various stakeholders have roles to play in managing it rather than just organizations. The Nigerian labour law should be reformed to develop a legal model that will align atypical forms of employment more closely to standard employment. Particularly, policies should be put in place to boost or strengthen employment protection and relationship rules through workplace social dialogue, collective bargaining, health/safety laws and work-life balance laws. Although one would expect that workers would know the legislation that protects their health and safety at work, awareness was surprisingly absent. Therefore, this study suggests that policy makers should make available laws that will protect health and safety of workers; should this law be in place, this study also suggests that it be publicized and enforced. Also, the state should invest in occupational stress research to follow up with sources of stress to workers and find best ways to manage them.

From the organizational level, organizations should come up with policies that will promote equality amongst all workers and then protect workers from stress and unsafe conditions. Also, action should be put in place to help workers deal with abduction and insecurity in the Niger Delta region of Nigeria. The study concluded that addressing the genuine needs of the people of the Niger Delta through, good governance by the various levels of government, provision of essential social infrastructure, as well as strict adherence to labour laws and international environmental standards by the oil companies would create the enabling environment for tranquillity to reign amongst workers.

8.7 Conclusion

This thesis is a sociologically grounded study of occupational stress amongst offshore workers in the Niger Delta region of Nigeria. It used labour process analysis and a combination of critical realism and an 'extended' disconnected capitalism thesis to examine the nature and causes of stress. Theoretically, it looked at the interactions of stress factors from four distinct levels – political economy and macroeconomic, labour markets, work-life boundary and workplace levels. Empirically, it looked at labour market, geographical and socioeconomic disconnectedness. At the labour markets level, this study found a clear distinction between contract/permanent, local/expatriate and male/female workers with contract, local and female being less treated well with regards to terms and conditions of work. At the geographical level, it was found that workers' absences from their homes and communities caused by the isolation of their work environments had more impacts on workers who were married and had dependants. These absences resulted to their inability to fulfil family obligations which had stress outcomes for both workers and offshore families. Finally, at the socioeconomic level, insecurity in the region and the culture of dependency, that is, the tradition of financial obligation to extended families in Nigeria were sources of stress to offshore workers regardless of their employment contracts, earning power and marital status.

This study contributes to various debates around and beyond occupational stress. Theoretically, this study prescribed a model for understanding how labour process connects to broader social conditions to generate occupational stressors and stress for workers. This adds to the knowledge of how the labour process theory can be utilized in understanding the nature and causes of occupational stressors to workers. Also, this study demonstrates how forms of disconnections can generate stressors for workers. Overall, this study contributes to the literature on the

sociological study of stress as it engages with social conditions both theoretically and empirically. Interestingly, this study does not just contribute to the body of knowledge of occupational stress; it further contributes to literature on occupational community in the Nigerian oil industry. Particularly, it finds that the sense of community felt by offshore workers in the Nigerian oil industry is their major source of coping with stressors associated with their type of job. This sense of community amongst offshore workers in Nigeria was a moderator of stress to workers regardless of job tenure, gender, marital status, age, job type and nationality.

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Appendix I: Managerial Interview Questions

The interviews were conducted in a semi structured manner and the following questions cover the relevant themes identified in this work.

Background

- 1. Age 20-29 30-39 40-49 50-59 60 and above
- 2. Are you married?
- 3. Do you have children?
- 4. If yes, how many?
- 5. What is your nationality?
- 6. What is your state of origin?
- 7. What is your educational background?
- 8. Tell me about your job ...
- 9. What is your job title?
- 10. How long have you worked in this organization?
- 11. How long have you been in the oil and gas industry?

Workforce Diversity:

- 1. Tell me about the makeup of your workforce.
- 2. Do you have only Nigerians in your organization?
- 3. If no, what is the ratio of Nigerians to non-Nigerians?
- 4. What work do expatriates do?
- 5. What work do local workers do?
- 6. Do they have the same skill level?
- 7. Do they all have the same work experience?
- 8. Is there equal pay between expatriates and indigenous staff?
- 9. Are some roles meant for expatriates only?
- 10. If yes, what roles?
- 11. Do you have females that work offshore?
- 12. If yes, are they treated differently?
- 13. Do you think the offshore industry is meant for the females?
- 14. Do you consider the geo-political zones during recruitment?
- 15. What ethnic group is highly represented in your organization?

Stress

- 1. How stressful is working in this industry?
- 2. In your opinion, what are the most stressful jobs?
- 3. How does operating in the Delta region affect the working experiences of staff?
- 4. With your experience with offshore workers, what are the main causes of stress?
- 5. Is the pay level of offshore workers appropriate for the risky work they do?
- 6. What are the main sources of stress for your workers?
- 7. How, if at all, do you help workers deal with stress?
- 8. Do you have policies in place for stress?
- 9. If yes, what are they?

- 10. Do you know of any government Act or decree that covers workplace stress?
- 11. What actions do you take against stress?
- 12. Do you think the offshore workers are clear as to whom to report to?
- 13. Are your offshore locations safe?
- 14. Do you have workers who feel the environment is not safe?
- 15. If yes, do you have support groups for your workers?
- 16. Do you have plans to ensure the security of your workers?
- 17. Do workers take time off work?
- 18. If yes, how often?
- 19. Does your system of work permit flexibility?
- 20. If yes, how much control do offshore workers have over their working time?
- 21. Are there legislations that protect offshore workers?
- 22. What are they?
- 23. Are the offshore workers aware of these legislations?

Employment Relations

- 1. Describe the employment relations management system of your firm
- 2. Are foreign workers usually faced with issues of integration?
- 3. Does the HR Unit help in cementing the relationship between communities and the workers.
- 4. What position do unions take?
- 5. On the average, what percentage of offshore workers belong to the union?
- 6. Do your workers have confidence in the unions?
- 7. Is there a fee to join the union?
- 8. Are non-Nigerians allowed to join the union?
- 9. Are non-Nigerians restricted in any way?
- 10. Does the government have a say in your operations?
- 11. If yes, in what ways?
- 12. How does employment legislation impact on your employment relations?
- 13. What is the general rate of absenteeism

Health and safety

- 1. Tell me about H&S at your firm.
- 2. Do you take health and safety seriously?
- 3. What do you do to support the health and safety of your staff especially the offshore workers?
- 4. Do you have policies in place for health and safety?
- 5. How do you enforce the health and safety offshore?
- 6. Do you have representatives that work offshore?
- 7. Do you record accidents?
- 8. How often do you record accidents?
- 9. Have you ever recorded job related disease or disorder?
- 10. If yes, how often?
- 11. What measures do you take to prevent accidents in the workpace?
- 12. What emergency procedures do you have in place for those that work offshore?

Workplace Skills:

- 1. What skills do your different groups of workers have?
- 2. Qualifications on recruitment?
- 3. Are your staff trained regularly?
- 4. How do you implement training especially for offshore workers?
- 5. What kind of skills do you have in your organization?
- 6. Do you give your workers the opportunity to use their abilities and trainings?
- 7. Are there specific health and safety courses made available to workers? (How often?)
- 8. Does the organization do any training around stress management or to help workers cope in an offshore environment?
- 9. Is there training specific to coping in the Delta region?

Work Life Balance

- 1. Do you think you are a "family friendly" organization? (Why?)
- 2. What are your policies?
- 3. Do workers make use of these opportunities?
- 4. Are these policies meeting the needs of the employees in the local environment?
- 5. Have the policies been properly implemented?
- 6. How often do staff take time off for family related reasons?
- 7. How often do staff take time off for health related reasons?
- 8. In relation to men how often do women take time off work for family or health reasons?
- 9. In relation to women how often do men take time off work for family or health reasons?
- 10. How flexible is the work rotation pattern for the employee?
- 11. Do employees have control over their work time in anyway?
- 12. Are your offshore workers entitled to paid holiday?
- 13. Does operating in the Delta affect working patterns? If working patterns are affected, what is the impact on WLB issues?
- 14. How do security issues affect your workers' families?
- 15. Where do your workers live?

Environment

- 1. Would you describe the offshore environment as safe?
- 2. If no, what makes it unsafe?
- 3. Do you think the families of your offshore workers feel safe when their relatives are away?
- 4. Does the unsafe environment impact on the workers?
- 5. If yes, how?
- 6. Do you have quiet area offshore for your workers to unwind when necessary?

Appendix II: Workers' interview questions

The interviews were conducted in a semi structured manner and the following questions cover the relevant themes identified in this work.

Demographic Information

I.	How old are you?
	Under 30 years
	30-49 years
	50 years an over
2.	What is your relationship status?
	Married
	Living with a partner
	Have a partner but not living together
	Do not currently have a partner
	Recently separated/divorced

- 3. Do you have children? If so, how many?
- 4. What is your specific job title? (what does your job involve)
- 5. What is your nationality?
- 6. What is your state of origin?
- 7. How long have you been with the organisation?

Pay Differentials

- 1. Do you think your pay is fair compared to other oil workers in Nigeria?
- 2. If you work with expatriates, do you know how much they are paid? Do you think they get a better deal than you? If so, why? If not, why not?
- 3. Are there some jobs that expatriates tend to get? What sorts of roles are these? Are these better or less good jobs than yours?
- 4. Does the prevalence of expatriates stop you getting on at work? If so, how do you feel about this? Does it affect your work? How?

Gender/ethnicity

- 1. Do you have women in your line of work? If not, why not?
- 2. Is it a male dominated profession? Why?
- 3. Are women treated differently?
- 4. Do you think the women have equal chances to men?
- 5. How do you feel about the mix of men and women at work?
- 6. Do you think women should be in the offshore industry?
- 7. Are people of different races treated differently?
- 8. Do people from different ethnic backgrounds mix, or are there distinct groups? Does everyone get along, or are there sometimes tensions?
- 9. Do workers from particular ethic groups have more chances to get ahead?

Work Pattern/Expectation

- 1. What is your work pattern like?
- 2. If shifts, describe your shift patterns?
- 3. Are you expected to report in the office when on-land?
- 4. If yes how often do you report to the office when on-land?
- 5. Do you work at home?
- 6. How often do you take time off work?
- 7. Have you ever had time off for stress due to work?
- 8. What kind of stress?
- 9. What other reasons have you had for taking time off work?
- 10. How much time?
- 11. Do you feel under-pressure at work? What makes you feel stressed?
- 12. Does the system of work allow some choice about when you work?
- 13. If yes how much control do you have over your working time?

Workload

- 1. Do you think you have a hard job compared to onshore workers? What about other offshore workers?
- 2. Is your job physically demanding? If so, why?
- 3. Do you get pressure from your superiors to work faster?
- 4. Do your roles involve targets and deadline? If yes, do you always meet them?
- 5. What happens when you do not hit your targets?
- 6. Do you think your job roles are not challenging?
- 7. Do you often have to work tired? Why are you tired?

Work/Home Interface

- 1. Have you been able to balance your career and other aspects of your life?
- 2. Do you have sufficient time and energy for your family and other responsibilities?
- 3. How do you manage to overcome the demand of home and family with the peculiar system of your work pattern?
- 4. Does working offshore and the doing shift patterns affect your relationship with your spouse, children and friends?
- 5. Are you able to attend outside work interest or extra-curricular activities?
- 6. Do you think you have a healthy social life?
- 7. Are you aware of any policies in your workplace aimed at helping you tackle family and work conflict?
- 8. If so, what are these policies?
- 9. Do you make use of these opportunities?
- 10. Are the policies by your organisation meaningful and properly implemented?

Career Prospects

- 1. Does your job give you the opportunity to use your abilities and trainings?
- 2. Do you get promoted as at when due?
- 3. Do you get equal rewards and bonuses with your other colleagues?
- 4. Do you think you have been adequately trained for your job?

Safety and Insecurity

- 1. Would you describe the environment where you work as safe?
- 2. If no, what makes it unsafe?
- 3. How is security managed in your organization? Do you think this is effective?
- 4. Do you think your family feels safe when you are away?
- 5. Do you know any law or legislation that protects you at work?

Work Organization

- 1. Do you get along well with all your colleagues? Are there some groups you get along with less well? If so, why? What could be done to improve this situation?
- 2. Do you get cooperation from your superiors? If so, why? If not, why not?
- 3. Is there a trade union at your work? Are you a member? If so, why? If not, why not?
- 4. If there is a union(s), how strong are they? What benefits result from there being a union?
- 5. Do they meet your expectations?

Appendix III: Survey Form

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QUESTIONNAIRE FOR NIGERIAN OFFSHORE WORKERS

This questionnaire is for a student of University of Leeds Business School who is undertaking a research

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in partial fulfilment of a post graduate degree. This survey seeks to understand the different stressors in

the Nigerian offshore work environment and to know if offshore workers in the Niger Delta region of

Nigeria have novel coping strategies.

Kindly tick the five point scale accordingly as it measures the different sources of stress that you

encounter at work. There are no wrong and right answers to any of the questions so kindly tick answers

truthfully as you feel they apply to you. Your answers will be treated confidentially and will be used only

for the purpose of this study. For further enquiries, kindly contact the researcher via this email -

bn07nne@leeds.ac.uk

Please make every effort to provide complete and accurate information on this questionnaire. The

accuracy of my measurement of your sources of stress depends on it. Thank you.

305

Background
How old are you?
Are you married? Yes No No
Do you have children? Yes No If yes, how many?
What is your gender? Male Female
What is your nationality?
What is your state of origin?
What is your highest educational qualification? Please tick only one box.
WAEC University Degree other, please specify
What is the name of the organisation where you work?
How long have you worked for this organisation? Years Months
How long have you worked offshore?
What is your specific role in the company (please describe)
What is your job type? (Please tick only one)
Permanent Temporary Contract
What is your work status? Full Time Part Time
What is your work pattern? (Please tick only one)
Day/night shift rotation Work/leave patterns Irregular work patterns
How many hours do you work in a typical working week?

In the following sections, you will be provided with a list a statements – please indicate the extent to which you agree or disagree with each statement by putting a tick or cross in the column that most closely records how you feel about a particular statement.

No.	STATEMENTS	STRONGLY	DISAGREE	NEITHER AGREE	AGREE	STRONGLY				
		DISAGREE		NOR DISAGREE		AGREE				
	CAREER DEVELOPMENT									
Ai	I get adequate training to do my job									
Aii	My job security gives me a sense of wellbeing									
Aiii	I have adequate opportunity to progress my career									
Aiv	I work below my ability									
Av	I find my job a challenge									
Avi	I am often bored whilst working									
Avii	Prospects for promotion makes me happy									
	SAFETY AND INSECURITY									
Bi	Kidnapping and hostage taking associated with my industry make me worry.									
Bii	My dangerous working environment makes me anxious									
Biii	I feel I am able to cope in the event of accidents at work									
Biv	The environment where I work is safe									

No.	STATEMENTS	STRONGLY	DISAGREE	NEITHER AGREE	AGREE	STRONGLY			
		DISAGREE		NOR DISAGREE		AGREE			
Bv	I have had ailments associated to the kind of work I do								
Bvi	Our health and safety policies are always adhered to								
Bvii	Safety training courses are not updated regularly enough								
Bviii	I would know how to cope if someone has an accident.								
Bix	I have trouble getting to sleep and staying asleep								
Bx	I often take time off due to pressure at work								
	•	WORK/HOME	INTERFACE			•			
Ci	My job keeps me away from my family too much								
Cii	I worry about my family when I am working away from home								
Ciii	My job interferes with my social life								
Civ	My personal relationships with spouse, family or friends are negatively affected by my work.								
Cv	I hardly meet my family needs because of my job								
Cvi	My friends and extended family help my partner and children cope whilst I am away.								
Cvii	I am at risk of a marriage/relationship breakdown because I work offshore								
Cviii	I face problems of unwinding when I return home								
	CONTROL OVER JOB								
Di	I sometimes lack the freedom necessary for me to do my job.								

No.	STATEMENTS	STRONGLY	DISAGREE	NEITHER AGREE	AGREE	STRONGLY
		DISAGREE		NOR DISAGREE		AGREE
Dii	When changes are made at work, I am clear how they will work out in practice.					
Diii	It is impossible to make changes concerning my job					
Div	My working time can be flexible					
Dv	I have a say in my work speed					
		WORKING O	CONDITION			
Ei	I know how to go about getting my job done					
Eii	Relationships with colleagues can be a source of stress					
Eiii	The long hours I do at work worries me					
Eiv	My job is repetitive and it worries me					
Ev	I feel the organisation where I work uses me to my full potential (skill and ability)					
Evi	The day/night shift rotation causes me stress					
Evii	There is friction or anger between colleagues					
Eviii	My work objectives are clear to me					

No.	STATEMENTS	STRONGLY	DISAGREE	NEITHER AGREE	AGREE	STRONGLY
		DISAGREE		NOR DISAGREE		AGREE
Eix	I am subject to personal harassment in the form of unkind words or behaviour					
Ex	I am always sure who to report to when I have concern at work.					
		LIVING CO	ONDITION			
Fi	We eat an unhealthy diet offshore					
Fii	There is no space to unwind when offshore					
Fiii	There is inadequate leisure facilities to occupy free time					
Fiv	The offshore accommodation is comfortable					
Fv	We have inadequate facilities for physical exercise					
Fvi	The noise in my offshore accommodation causes nuisance					
Fvii	The harsh weather offshore makes me anxious					
Fviii	I do not enjoy privacy in my offshore accommodation					

	STATEMENTS	STRONGLY	DISAGREE	NEITHER AGREE	AGREE	STRONGLY
		DISAGREE		NOR DISAGREE		AGREE
No.						
	UNPRE	DICTABILITY (OF WORK PAT	TERN		
Gi	I am often recalled to work offshore at short notice					
Gii	I get paid each time I'm recalled to work					
Giii	I have a fixed shift pattern					
Giv	My work pattern helps my planning					
		GANIZATION	AL STRUCTUR	E		
Hi	I would be happier if there was a strong trade union fighting for my rights					
Hii	I would be happier if we had unions offshore					
Hiii	The managers in my organisation often cause more work stress than they remove					
Hiv	If I do not know something or need to get a job done that I cannot do myself, I know who to ask					
Hv	Sometimes I have to bend a rule to get my task done					
Hvi	I am aware of the employment law and protection legislation that relates to my work.					
Hvii	My team works effectively together					
Hviii	Sometimes, I am criticized by one supervisor for doing something ordered by another supervisor					
Hix	The relationship between managers and workers in my organisation is good					

S/N	STATEMENTS	STRONGLY	DISAGREE	NEITHER AGREE	AGREE	STRONGLY
		DISAGREE		NOR DISAGREE		AGREE
Hx	Different groups at work demand things from me that are hard to combine					
Hxi	I enjoy paid leave					
		WORK	LOAD			
Ii	I get the resources I need to do my job					
Iii	My colleagues help out when I have a lot of work to do					
Iiii	My workload is too much and it worries me					
Iiv	My manager is accommodating when I cannot manage all the task I am assigned.					
Iv	I am assigned to more work than I can complete in the time available.					
Ivi	I have to neglect some tasks because I have too much to do					
		AIR TRANSP	ORTATION			
Ji	Regular helicopter travel we make is not safe					
Jii	I feel safe travelling to and from the rig					
Jiii	The security is adequate around transportation					
Jiv	Worrying about travel affects my work					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Jv	Helicopters are readily available to us any time we want to travel					
Jvi	Worrying about travel affects my home life					
Jvii	The helicopters are flown by professionals.					
Jviii	There is an increase in the number of mechanical failures on helicopters flying to rigs					
		PA	Y			
Ki	My pay levels are appropriate for the risks I take					
Kii	There is equal pay between expatriates and indigenous workers?					
Kiii	I experience pay cuts due to recession					
Kiv	I always get paid on time					
		COPI	ING			
Li	My friendships with colleagues help me deal with work stress					
Lii	I have people I can talk to about my problems and concerns at work.					
Liii	I've made a plan of action towards coping with the stress I face at work and followed it					
Liv	Knowing I have colleagues who face the same challenges as me makes me feel I am not alone					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Lv	I've been trying to find comfort in my religion or spiritual beliefs					
Lvi	I've been using alcohol or other drugs to make myself feel better					
Lvii	I've been turning to other activities such as reading, sleeping or watching TV to keep my mind off things					
Lviii	I've been trying to come up with a strategy about what to do about the stress I face					
Lix	I've been getting emotional support from others					

Do you have additional comments? If yes, please use the space below. Thank you.					

Appendix IV: Survey Categorized as per forms of disconnectedness

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QUESTIONNAIRE FOR OIL OFFSHORE WORKERS IN NIGERIA

This questionnaire is for a student of University of Leeds Business School who is undertaking a research in partial fulfilment of a post graduate degree. This survey seeks to understand the different stressors in the Nigerian offshore work environment and to know if offshore workers in the Niger Delta region of Nigeria have novel coping strategies.

Kindly tick the five point scale accordingly as it measures the different sources of stress that you encounter at work. There are no wrong and right answers to any of the questions so kindly tick answers truthfully as you feel they apply to you. Your answers will be treated confidentially and will be used only for the purpose of this study. For further enquiries, kindly contact the researcher via this email – bn07nne@leeds.ac.uk

Please make every effort to provide complete and accurate information on this questionnaire. The accuracy of my measurement of your sources of stress depends on it. Thank you.

Background How old are you? _____ No Are you married? Yes No Do you have children? Yes If yes, how many? What is your gender? Male Female What is your nationality? What is your state of origin? What is your highest educational qualification? Please tick only one. WAEC University Degree other, please specify What is the name of the organisation where you work? ____ How long have you worked for this organisation? Years Months How long have you worked offshore? What is your specific role in the company (please describe) What is your job type? (Please tick only one) Permanent ☐ Temporary Contract What is your work status? Full Time Part Time What is your work pattern? (Please tick only one box) Day/night shift rotation Work/leave patterns Irregular work patterns

How many hours do you work in a typical working week?

In the following sections, you will be provided with a list a statements – please indicate the extent to which you agree or disagree with each statement by putting a tick or cross in the column that most closely records how you feel about a particular statement.

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
		Sources of Stre	ess			
	Labo	ur Market Discon	nectedness			
Pay and	d Rewards					
A1	I get paid each time I'm recalled to work					
A2	I enjoy paid leave					
A3	My pay levels are appropriate for the risks I take					
A4	There is equal pay between expatriates and indigenous workers					
A5	I always get paid on time					
A6	I experience pay cuts due to recession					
						318

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Trainin	ng and Progression	1				
A7	I get adequate training to do my job					
A8	Prospects for promotion makes me happy					
A9	I have adequate opportunity to progress my career					
A10	Safety training courses are not updated regularly enough					
A11	I get the resources I need to do my job					
Autono	my/Discretion/Labour Process					
A12	I sometimes lack the freedom necessary for me to do my job.					
A13	It is impossible to make changes concerning my job					
A14	I have a say in my work speed					
A15	My job is repetitive and it worries me					
A16	I am often recalled to work offshore at short notice					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
A17	My workload is too much and it worries me					
A18	I am assigned to more work than I can complete in the time available.					
A19	I know how to go about getting my job done					
A20	My work objectives are clear to me					
A21	Different groups at work demand things from me that are hard to combine					
A22	The long hours I do at work worries me					
A23	When changes are made at work, I am clear how they will work out in practice.					
A24	If I do not know something or need to get a job done that I cannot do myself, I know who to ask					
A25	I have a fixed shift pattern					
Job Sec	curity	,	'		•	<u>'</u>
A26	My job security gives me a sense of wellbeing					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Relatio	nship with Colleagues	,		,		
A27	Relationships with colleagues can be a source of stress					
A28	There is friction or anger between colleagues					
A29	I am subject to personal harassment in the form of unkind words or behaviour					
Relatio	nship with Management					
A30	The managers in my organisation often cause more work stress than they remove					
A31	The relationship between managers and workers in my organisation is good					
A32	Sometimes, I am criticized by one supervisor for doing something ordered by another supervisor					
A33	I am always sure who to report to when I have concern at work.					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Flexibi	lity		1			
A34	My working time can be flexible					
A35	The day/night shift rotation causes me stress					
A36	My work pattern helps my planning					
Law an	d Representation					
A37	I would be happier if there was a strong trade union fighting for my rights					
A38	I would be happier if we had unions offshore					
A39	I am aware of the employment law and protection legislation that relates to my work.					
A40	Our health and safety policies are always adhered to					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Outcon	ne					
OA1	I have trouble getting to sleep and staying asleep					
OA2	I often take time off due to pressure at work					
OA3	I have had ailments associated to the kind of work I do					
0A4	I feel I am able to cope in the event of accidents at work					
OA5	I would know how to cope if someone has an accident.					
OA6	My team works effectively together					
OA7	There is an increase in the number of mechanical failures on helicopters flying to rigs					
OA8	I feel the organisation where I work uses me to my full potential (skill and ability)					
OA9	Sometimes I have to bend a rule to get my task done					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
OA10	Helicopters are readily available to us any time we want to travel					
OA11	I work below my ability					
OA12	I am often bored whilst working					
OA13	I have to neglect some tasks because I have too much to do					
OA14	I find my job a challenge					
	Geog	graphical Disconn	ectedness			
Home a	nd Family					
B1	My job keeps me away from my family too much					
B2	I worry about my family when I am working away from home					
В3	I hardly meet my family needs because of my job					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
B4	I face problems of unwinding when I return home					
B5	Worrying about travel affects my home life					
Social	Life					
В6	My job interferes with my social life					
Relatio	nships					
В7	My personal relationships with spouse, family or friends are negatively affected by my work.					
В8	I am at risk of a marriage/relationship breakdown because I work offshore					
Living	Condition	ı				
В9	We eat an unhealthy diet offshore					
B10	The noise in my offshore accommodation causes nuisance					
B11	I don't enjoy privacy in my offshore accommodation					
B12	The offshore accommodation is comfortable					

Work E	Work Environment						
B13	The harsh weather offshore makes me anxious						
B14	We have inadequate facilities for physical exercise						
B15	There is no space to unwind when offshore						
B16	There is inadequate leisure facilities to occupy free time						
B17	My dangerous working environment makes me anxious						
B18	The environment where I work is safe						
	Socio	Economic Disconn	ectedness				
Security	over Transportation						
C1	The security is adequate around transportation						
C2	Worrying about travel affects my work						
C3	I feel safe travelling to and from the rig						
C4	Regular helicopter travel we make is not safe						

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Safety in	the Region		,	1	,	
C5	Kidnapping and hostage taking associated with my industry make me worry.					
Outcom	e					
OC1	The helicopters are flown by professionals.					
	En	notional Focused (Coping			
D1	My friendships with colleagues help me deal with work stress					
D2	I have people I can talk to about my problems and concerns at work.					
D3	Knowing I have colleagues who face the same challenges as me makes me feel I am not alone					
D4	I've been trying to find comfort in my religion or spiritual beliefs					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
D5	I've been using alcohol or other drugs to make myself feel better					
D6	I've been turning to other activities such as reading, sleeping or watching TV to keep my mind off things					
D7	I've been getting emotional support from others					
	P	roblem Focused C	oping			
E1	I've made a plan of action towards coping with the stress I face at work and followed it					
E2	I've been trying to come up with a strategy about what to do about the stress I face					
ЕЗ	My friends and extended family help my partner and children cope whilst I am away.					

S/N	STATEMENTS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
E4	My colleagues help out when I have a lot of work to do					
E5	My manager is accommodating when I cannot manage all the tasks I am assigned.					

Do you have additional comments? If yes, please use the space below. Thank you.						