

6-13-2024

# Strategies for Human Capital Development in an Oil and Gas Organization

David Ebamije Akpieyi  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

David Ebamije Akpieyi

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

Review Committee

Dr. Kathleen Andrews, Committee Chairperson, Doctor of Business Administration  
Faculty

Dr. Irene Williams, Committee Member, Doctor of Business Administration Faculty

Chief Academic Officer and Provost  
Sue Subocz, Ph.D.

Walden University  
2024

Abstract

Strategies for Human Capital Development in an Oil and Gas Organization

by

David Ebamije Akpieyi

MSc, University of Liverpool, 2019

Higher National Diploma (HND), Petroleum Training Institute, 1990

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

June 2024

## Abstract

Some oil and gas (O&G) leaders lack strategies to promote human capital development (HCD) training to increase employees' productivity in their organizations, impacting their overall productivity. Therefore, O&G organizational leaders need to take deliberate steps to monitor and improve their human capital productivity continuously. Grounded in human capital theory, the purpose of this qualitative pragmatic inquiry was to explore strategies O&G leaders use to promote HCD training. The participants comprised six business leaders from O&G multinational organizations who successfully implemented strategies to promote HCD training to increase employees' productivity. Data were collected using semistructured interviews and analyzed through thematic analysis. Three emerging themes were: (a) skill gaps, competency, and training need assessments; (b) on-the-job and off-the-job training; and (c) overcoming barriers to HCD. A key recommendation is for O&G leaders to provide an enabling environment through adequate funding of training and development programs. The implications for positive social change include the potential to create local employment opportunities for community residents and increase local taxes to advance community projects.

Strategies for Human Capital Development in an Oil and Gas Organization

by

David Ebamije Akpieyi

MSc, University of Liverpool, 2019

Higher National Diploma (HND), Petroleum Training Institute, 1990

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

June 2024

## Dedication

I dedicate this doctoral study to my best friend, my loving wife, and soulmate, Faith for her support and understanding all through my dissertation journey. I can remember how fervently you waited on lonely nights alone, during the times I was always at the reading table. I also dedicate this accomplishment to my children, Michelle, Stephanie, Justin, and Jennifer, for standing up for me most times. I could never have come this far, and not have been able to be the person I am today without you all.

## Acknowledgments

I must first thank the Almighty God for granting me the grace and resilience to make it to the finish line. I thank my chair, Dr. Kathleen Andrews, for her continuous encouragement. Dr. Andrews, you were incredibly supportive in your lead on my doctoral journey. Although I came into your watch in the middle, you took my work with great enthusiasm and never wavered in correcting the wrongs, and speaking up on my good works in your feedback. I would also like to thank my committee co-chair, Dr. Irene Williams, whose double checking of my work added value in producing a quality study.

I also express my gratitude to Dr. David Blum who started this journey with me, before leaving halfway for another assignment. My acknowledgment also goes to my participants, who in their tight schedule allowed me their time to do the interview. Luiz Maia, my academic advisor, thank you for helping in the administrative requirements of what the faculty expected of me during my doctoral journey. Finally, I thank my classmates, friends and work colleagues for their unflinching support and encouragement all through.

## Table of Contents

List of Tables .....	v
Section 1: Foundation of the Study.....	1
Background of the Problem .....	1
Problem and Purpose .....	3
Population and Sampling .....	4
Nature of the Study .....	5
Research Question .....	6
Interview Questions .....	6
Theoretical or Conceptual Framework .....	6
Operational Definitions.....	7
Assumptions, Limitations, and Delimitations.....	8
Assumptions.....	8
Limitations .....	8
Delimitations.....	8
Significance of the Study .....	9
A Review of the Professional and Academic Literature.....	10
Conceptual Framework.....	11
Innovation in Human Capital.....	34
Measurement of Human Capital .....	35
Implications of HCD to Training and Development.....	37
Importance of HCD to Employee Productivity .....	42



Nigerian Oil and Gas Industry .....	48
Transition .....	55
Section 2: The Project.....	56
Purpose Statement.....	56
Role of the Researcher .....	56
Participants.....	59
Eligibility Criteria.....	59
Strategies for Gaining Access.....	60
Strategies for Establishing a Working Relationship .....	61
Research Method and Design .....	63
Research Method .....	63
Research Design.....	65
Population and Sampling .....	67
Ethical Research.....	69
Data Collection Instruments .....	71
Data Collection Technique .....	73
Data Organization Technique .....	75
Data Analysis .....	76
Compiling .....	76
Disassembling.....	77
Reassembling .....	78
Interpreting.....	79

Concluding.....	80
Conceptual Software Application Plan.....	80
Reliability and Validity.....	81
Reliability.....	81
Validity .....	82
Data Saturation.....	84
Transition and Summary.....	85
Section 3: Application to Professional Practice and Implications for Change .....	86
Introduction.....	86
Presentation of the Findings.....	87
Theme 1: Skill Gaps, Competency, and Training Needs Assessments .....	88
Theme 2: On-The-Job and Off-The-Job Training .....	90
Theme 3: Providing Mentoring to Employees During Learning and Development Initiatives .....	93
Theme 4: Employee Motivation and Leadership Empowerment .....	94
Theme 5: Overcoming Barriers to Human Capital Development .....	96
Discussion of the Findings.....	98
The Findings Relate to the Conceptual Framework .....	101
The Findings Relate to the Literature .....	102
Applications to Professional Practice .....	104
Implications for Social Change.....	105
Recommendations for Action .....	108

Recommendations for Further Research.....	110
Reflections .....	110
Conclusion .....	111
References.....	113
Appendix: Interview Protocol.....	159

List of Tables

**Table 1** *Emerged Themes* ..... 88

## Section 1: Foundation of the Study

Employee training and their development in the oil and gas (O&G) industry have uttermost importance for improving the productivity of employees in the organizations. Productivity simply refers to the conversion of inputs, such as human resources, money, and time into outputs. Enilolobo and Sodeinde (2019) revealed that human capital development has positive and significant effect on the industrial sector productivity in Nigeria. Productivity is the effectiveness of an organization's factors of production inputted to generate the desired outcomes; the assessment of the effectiveness and efficiency of these outcomes becomes the productivity of the employees (Adegboyega & Olawumi, 2021). According to Iqbal et al. (2019), employee productivity also relates to impersonal trust such that lack of trust between employees and employers can lower the productivity of employees. The productivity of employees in any organization is of paramount importance toward increasing the organization's effectiveness in its area of operation (Siwale et al., 2020). Therefore, since training and development seem to be a prime target for productivity, employees may need it to perform their duties effectively, take on new responsibilities, and adapt to changing conditions. Almost all jobs in organizations, including O&G organizations, are done through human involvement, yet over the years, most organizations have failed to attach necessary importance to employee training and development.

### **Background of the Problem**

The creation of knowledge and the development of a workforce requires leaders who can obtain strategies regarding human capital and the human capital theory (HCT).

Because the HCT relates with the internal resources of a firm that cannot be imitated, easy to obtain, trade, and substituted (Barney, 1991), there is the need for O&G leaders to develop the initiatives to obtain the strategies regarding human capital development (HCD). HCD in an organization should be systematic, strategic, and sustainable, targeted to increasing human knowledge and enhancing employees' skills and productivity (Chijioke & Amadi, 2019). Leaders should therefore specially train and develop personnel manning operating facilities known to be high risks.

Despite the strategic importance of the O&G industry in Nigeria – accounting for the source of the government's revenue and national export earnings, it appears, however, not to have effectively sustained the economy. The analysis of the HCD trend in the Nigerian O&G industry indicated 36 of 61 operating companies failed to promote training activities to increase employees' productivity (Directorate of Planning, Research and Statistics, 2019, slide 25 & slide 18). After the above analysis, the Directorate of Planning, Research and Statistics has not updated this information, indicating that no major improvements have occurred. The Nigerian O&G industry content development act 2010, Act No. 2, stipulates, among other provisions, that Nigerians must be given priority for employment and training in all O&G projects conducted by Nigerian operators (Nigerian Content Development and Monitoring Board [NCDMB], 2016)). According to the NCDMB (2022), most operating companies in the sector have failed to implement and adhere fully to human capacity development programs as directed by the Act. The oil sector constitutes the backbone of the Nigerian economy; hence, it is always regarded as the most viable economic sector in Nigeria. Based on this premise, the

government monitors the HCD training and development activities of the O&G companies, through the NCDMB – an arm of the government regulatory establishments. Most of the industry leaders may lack the strategies to promote employees for training and development as they are reluctant to implement the HCD programs as directed by the Board.

Considering the productivity of the O&G employees, I will expect leaders aiming to ensure human capital growth to implement authentic learning culture composed of a learning climate. O&G organizational leaders in Nigeria should align with the Nigerian government HCD guidelines, the philosophy of the required regulation, and global best practices in the O&G industry (NCDMB, 2022) when considering strategies for HCD programs. Acquiring such strategies may assist O&G leaders in promoting HCD training activities to increase employees' productivity in their organizations. Organizations may also be able to develop key competencies that are difficult to imitate, and thereby gain a sustainable competitive advantage over other organizations. For example, leaders who developed initiatives on off-the-job and on-the-job training strategies can encourage workforce development in their organizations (Huang & Jao, 2016). This research will explore strategies O&G leaders are using to promote HCD training activities to increase employees' productivity.

### **Problem and Purpose**

The specific business problem is that some O&G leaders lack strategies to promote HCD training activities to increase employees' productivity. The research method for this study is qualitative. Therefore, the purpose of this proposed qualitative

study was to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. The research design chosen for this qualitative methodological research is pragmatic inquiry. The population for this study from which six participants were selected, included leaders from O&G companies within Nigeria who had successfully implemented strategies to promote HCD training activities to increase employees' productivity.

### **Population and Sampling**

The population for this study included leaders from O&G companies within Nigeria who had successfully implemented strategies to promote HCD training activities to increase employees' productivity. I used the purposeful sampling technique to find six participants in the Niger Delta region of Nigeria. Purposeful sampling is the technique for selecting participants with experience and or knowledge to provide rich information regarding a phenomenon under study and address the research question (Guetterman et al., 2020). The key eligibility criteria for participants for this study are participants should have at least 3 years working experience in developing successful strategies in training activities and be involved in making decisions on strategies used to promote HCD training activities, to increase employees' productivity. I gained access to the participants through LinkedIn, Facebook, WhatsApp, and a purposeful sample from selected major O&G organizations operating in the Niger delta region of Nigeria. I collected data from semistructured interviews using an interview protocol guide (see Appendix). I also collected data from academic and professional literature on training and development activities from Web sources.



### **Nature of the Study**

The research method chosen for this study is qualitative. Other research methods considered are quantitative and mixed methods. The qualitative method was appropriate for my study as it enabled me to understand the meanings of the underlying reasons, thoughts, opinions, perceptions, and motivations of participants through interviews to address my research question. Cropley (2022) stated that qualitative study investigates how people make sense of their own, real-life experiences in their own minds and in their own words, and it is also concerned with the patterns and forms of variables in the phenomenon. Quantitative, and the quantitative aspects of mixed methods were not necessary to address my research question as they are concerned with the collection of numerical unchanging detailed data dealing in numbers to test hypothesis.

The qualitative research design chosen for this study is the pragmatic inquiry. I selected the pragmatic qualitative inquiry design for this study because it allowed me to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. Other research designs considered were multiple case study, ethnographic, and phenomenological. A pragmatic approach allows the researcher to choose from the wide range of qualitative and/or quantitative methods—a strength of pragmatism that has several advantages for social science research (Kaushik & Walsh, 2019). Because I did not intend to go through gatekeepers to give consent which would have been time consuming, a case study design was not suitable for this study. The ethnographic, and phenomenological designs were also not suitable for this study as I did

not intend to require cultural interactions and gain an understanding of the personal meanings of the lived experiences of the participants, respectively.

### **Research Question**

What strategies do O&G leaders use to promote HCD training activities to increase employees' productivity?

### **Interview Questions**

1. What strategies do you use to promote HCD training activities to increase employees' productivity?
2. What strategies have you found to work the best at promoting HCD training activities to increase employees' productivity?
3. How did you measure the effectiveness of the strategies to promote HCD training activities to increase employees' productivity?
4. What were the key barriers to implementing your strategies to promote HCD training activities to increase employees' productivity?
5. How did you address the key challenges to your strategies to promote HCD training activities to increase employees' productivity?
6. What additional information can you provide on the strategies used to promote HCD training activities to increase employees' productivity in your organization?

### **Theoretical or Conceptual Framework**

The HCT modelled the composite conceptual framework for this study. The HCT framework was first introduced by Mincer (1958) and extended by Schultz (1961).

Becker (1962) stated that human capital is activities that influence future real income through the embedding of resources in people and enable workers to increase their productivity by learning new skills and perfecting old ones while on the job. Education and training are the most important investment in human capital (Becker, 1964). Becker identified key tenets as ways to invest in developing and sustaining human capital. The first one Becker identified was on-the-job training inside the firm as a specific way to gain knowledge to increase earnings. The second tenet was to have schooling as a general type of on-the-job training to increase earnings. The third tenet is that acquiring information about the economic system increases earnings. The fourth tenet is to have productive wage increases to improve the emotional and physical health of employees. Finally, the fifth tenet is providing medical facilities to employees to increase productivity.

### **Operational Definitions**

*Employee productivity:* Refers to the effects of training in the improvement of an individual's productivity and services that bring about the positive change in an organization (Kenny & Nnamdi, 2019, p. 5).

*Human capital:* Is the economic value of a worker's experience and skills that influence future real income through the embedding of resources in people (Becker, 1962, p. 9).

*Human capital development:* Refers to the value and uniqueness of an employee,

associated with the natural inclinations and talents, knowledge, competencies, and experience gained in the process of being in educational and production systems (Kozhevnikov, 2021).

### **Assumptions, Limitations, and Delimitations**

#### **Assumptions**

Assumptions are beliefs a researcher can accept as factual and are supposed to exist without proof or verification in research (Sebele-Mpofu, 2020). For this study, I assumed that all participants would have implemented strategies to answer the research question, would participate during interview sessions, and would provide honest and objective responses to interview questions.

#### **Limitations**

Limitations are potential weaknesses that are out of the researcher's control which can negatively influence and affect the study findings (Munthe-Kaas et al., 2019; Theofanidis & Fountouki, 2019). One of the study's limitations was that purposefully sampled interviewees' views and opinions may not have provided a full representation of all O&G organizations in the Nigeria Niger Delta region. Participants may not have felt comfortable in disclosing information due to organizational policies that do not encourage disclosure of strategies to promote HCD training activities to increase employees' productivity.

#### **Delimitations**

Delimitations refer to the process where researchers deliberately set boundaries such as selecting participants, geographical area, and type of industry related questions

(Alpi & Evans, 2019). For this study, one delimitation was leaders from multinational O&G organizations with experience in implementing successful strategies for HCD training and development activities located in the Niger Delta region were going to be the participants. I delimited the geographic location to the Nigeria Niger Delta and focused on Zoom video conference, to limit the time participants needed to invest in providing their perspectives.

### **Significance of the Study**

The findings of this study will be valuable to businesses because the researcher has identified strategies for leaders to promote HCD training activities to increase employees' productivity. This can help leaders in the O&G organization to anticipate and offer solutions to challenges that may be inimical to employees' productivity and prevent financial losses to their organization's business. Another potential value to businesses is that the findings can assist O&G leaders to gain an understanding of a necessary component of strategic planning that provides for the increase of HCD training activities to increase employees' productivity. Findings from this study might contribute to effective business practice by providing leaders with strategies to develop and train current and future employees, making them more productive. My findings may expose internal and external barriers that affect workforce development, productivity, and thus enable business profitability. The organizational leaders may gain competitive advantage if they consider more effective strategies in promoting HCD training activities.

The derivative implications for positive social change include raising the standard of living of local communities' residents through the promotion of developmental

programs in healthcare, educational opportunities, and the potential to create local employment opportunities for community residents and increase local taxes to advance community projects. These implementations would be conducted by the direct intervention of a developed workforce. The results of successful community development programs could also enable and catalyze the effective collaboration between community residents and company employees regarding safety and social issues. The success of community development programs by an organization to its host communities can only be supervised by a highly informed and developed workforce, such that the value of the organization's corporate social responsibility can be sustained.

### **A Review of the Professional and Academic Literature**

The purpose of this generic pragmatic qualitative inquiry was to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. When employees are committed and motivated through HCD training programs, they improve their knowledge, working skills and abilities which in turn makes them more productive on the job (Abdow et al., 2018). The O&G industry's investment in HCD is critical for advancing technologies and enables organizations to remain productive and competitive. Researchers have given considerable attention in the literature to the importance of formulating strategies for promoting HCD training activities. However, most of these strategies have failed to address this problem encountered with employee productivity (Onyebuchi, 2018). Onyebuchi (2018) noted that most technological development and innovations taking place daily render current skills and methods for the

future obsolete. This study provides the enabling strategies to increase employee productivity, and organizational success.

References to the literature review for the study were from 85% peer reviewed sources, and 85% of these references are current within 5 years of publication. The most significant results from my search were obtained from sources using the key words *human capital development, human capital theory, human capital management, human capital, training, training and development, employee productivity, employee retention, organizational earnings, and organizational performance.*

### **Conceptual Framework**

This section includes the review of supporting literature, other theories considered for the study, implications of HCD to training and development, the importance of HCD training to employee productivity, including information on the Nigerian O&G industry and concepts that address the study's problem statement. I reviewed the application to the applied business problem, including stating the relevancy of the literature from resource articles retrieved from academic sources from the internet, and through the Walden University Library, ProQuest Central, Google Scholar, and Business Sources Complete works. Other database sources included are: ScienceDirect, Sage journals, academic search complete/premier and journals of Emerald management. Other journals involved in my study were: ResearchGate, SpringerLink, Eric, Jstor, Scopus, African Journals Online, and Ebsco Information Services.

HCT is the framework for this study through which the human capital, HCD, and employee productivity concepts in resolving the research question were discussed.

Human capital in an organization contributes to enhanced employee effectiveness, and therefore increases employee performance (Bodovski et al., 2019). Human capital is an asset resulting from the collective sum of attributes, life experience, knowledge and skills acquired from training, physical health, and overall competence employees invest in their work routines. Human capital in the perspectives of the organization, encompasses formal training, social boundaries, work processes and culture, including individual self-endeavors, contribute to shaping workforce core competence (Islam & Amin, 2022). Employee productivity relates to the employee's work behaviors while performing their duties, especially in the way in which their accumulated knowledge and skills boost their productivity and income, thus increasing the productivity and income of the society in whole (Sakher et al., 2019). Therefore, human capital is a key element in improving firms' assets and employees to increase productivity and sustain competitiveness. As human capital and HCD refer to processes relating to employees and the organization, I examined the research question through the lens of the HCT.

### ***Human Capital Theory***

The introduction and history of the HCT by early researchers are vital to understanding the theory concept and use in this study. The HCT was first introduced by Mincer (1958), extended by Schultz (1961), and developed as HCT by Becker (1962). The HCT suggests that the whole set of human knowledge, skills, abilities, and motivations is the individual capital (Galiakberova, 2019). The HCT refers to individual characteristics such as knowledge, general information, and general capabilities employees convey within in a firm when hired (Fényes & Mohácsi, 2020). Mincer



developed the foundation of the HCT through its model of earnings that differences in training, education, occupation, and age result in differences in levels of earnings and patterns of personal income distribution. Nevertheless, Becker is widely acknowledged as a founder of the HCT in which he stressed that human capital increases the productivity of workers (Diebolt & Hippe, 2019). This theory emphasizes the value addition of people being contributors to organization.

The tenets of the HCT are the foundation of the theory. In the account by Becker (1994), HCT was developed and named as a formal theory. According to Becker, the emphasis on the analysis of human capital rests on the premise that education and on-the-job training raise earnings and productivity as it enables workers to gain knowledge, skills, problem-solving techniques, and more work experience. The key tenets of HCT to increase earnings and productivity as instituted by Becker are (a) on-the-job training inside the firm is a specific gain of knowledge, (b) schooling is a general type of on-the-job training, (c) investments in other knowledge, and (d) productive wage increase improves the health of employees. The HCT relates to all activities that can influence future real income through the embedding of resources in people and can also enable workers to increase their productivity through the learning of new skills and perfecting of older ones while performing a task.

The HCT theory suggested by Schultz's (1961) account emphasizes that employee's value in the marketplace can best be increased by the skills obtained through training and firsthand experience. Schultz described investment in human capital as direct expenditures on education, health, and internal migration to take advantage of better job

opportunities; it also involves earnings foregone by mature students leaving jobs to attend school and by workers acquiring on-the-job training. Schultz contended that the unprecedented rise in earnings of a worker signifies an investment in human capital where an individual makes the best use of leisure time to improve skills and knowledge, which also improves the individual's quality of human efforts and enhanced its productivity. Alternatively, Schultz's (1993) definition of human capital was in respect to the firm as a critical element for enhancing its assets including employees thereby increasing the overall productivity of the firm. Human capital became widely used as Becker (1964) initiated the HCT in a theoretical and empirical analysis where it was emphasized that investment in higher education will increase future productivity thereby leading to greater earnings. The relationship between education and earnings originated from the understanding that employers pay educated people more because they are regarded to be more achievement-motivated and self-reliant.

Human capital is dynamic as it can increase or decrease according to the investment in the employee's skill, which should be constantly updated. Becker (1962) noted that a more educated and better-trained employee would be more productive than those with less education and training. Schultz (1961) explained that people who invest in education such as on-the-job training, health, and nutrition would have their level of human capital increased. Chijioke and Amadi (2019) noted that the proponents of the HCT regarded education— a productive investment in human capital to be equally or much more important than physical capital to an organization. The well-being of an organization can reflect the good health of its workers. According to Becker (1993),

HCT requires that people should rationally evaluate activities, such as education, training, and expenditures on health, migration, and formation of habits before engaging in them and consider the gains, the risks, and the costs. Human capital is a key component for the improvement of employee productivity and increased organizational earnings. When human capital is viewed within the context of education quality, better health conditions, and HCD index, it can grow the economy in more productive ways such as the apprentice learning a new skill (Becker, 1964). Therefore, organizational leaders need to recognize that in an economic theory environment, the HCT explains the significance of labor maximization, and the expectation for the organization to grow and update employees' knowledge skills and capacity-building abilities.

People can be more productive in their organizations with successful educational investment. According to Obi et al. (2019), by implementing the HCT tenets workers can gain cognitive skills to increase productivity and efficiency through education and that people invest in education to increase the stock of human capabilities. Obi et al. further stated that the World Bank revealed how education raises people's productivity, creativity, and promotes entrepreneurship and technological advances in countries like Malaysia, Bolivia, and China. Hence, with educational successes workers, earnings can increase, and they can become more financially supportive to their families, building stronger economies, and becoming more useful to society. In HCT, a sustained human capital accumulation is an engine of growth (Fadila & Olure-Bank, 2019), suggesting real value in investing in education and training within the context of the individual, organization, and nation. The ways to invest in human capital can therefore include

schooling, on-the-job training, medical care, wage increase, and acquiring information about the economic system as each of these differs in the relative effects on earnings and consumption.

**On-The-Job Training is a Specific Gain of Knowledge.** On-the-job training is the learning process employees receive in the workplace under the supervision of more experienced individuals. On-the-job training is the training an employee receives while performing daily tasks in the organization's job site, under work instructions and supervision from an experienced coworker (Fred et al., 2021). Tasks of this nature may include developing and practicing specific managerial, leadership, technical, manual, and administrative skills required in an organization for improving competitiveness. The environment for this form of training should be conducive to learning, such that the employees can easily practice the acquired knowledge and skills from the training (Daramola & Daramola, 2020). All organizations want their workforces to be safer, more efficient, and better prepared than ever before and have discovered the need for effective training to achieve these goals.

As an alternative to on-the-job training, another form of job training that can take place in an organization is off-the-job training. In Becker's (1962) concept of human capital, learning from on-the-job and off-the-job is included along with training and schooling, and both exist in the development of a workforce. An off-the-job training strategy requires that the training takes place outside the employee area of primary work responsibilities, while on-the-job training exists when the training is done in the employee area of primary responsibilities to perform work on a particular task (Huang &

Jao, 2016). In off-the-job and on-the-job training, the knowledge and skills gained by the employees because of the training can be applied in their daily work routines. The trainers involved in both training types can be a senior worker who is knowledgeable, and more experienced in the task at hand, as a mentor in the organization, or an invited external instructor or professional. Employees are encouraged to share knowledge and develop the attributes of knowledge sharing, as they are an important predictor of knowledge hiding behaviors in organizations (Yuan et al., 2021). Daramola and Daramola (2020) stated that off-the-job and on-the-job training strategies can be applied together by organizations in developing their workforce. Workforce development should be a continuous process in any organization.

On-the-job training can be general or specific. General on-the-job training provides some benefits to the individual more than the firm, as the employee can market self to other firms. Firms align more with specific on-the-job training as this form of training can be tailored to their products for more earnings through increasing productivity (Becker, 1964). On-the-job training and higher educational level of employees would not only have a significant and positive impact on innovation, such as in new technological breakthrough but would make more workers increase their productivity by learning new skills and perfecting old ones while on the job (Becker, 1962; Na, 2021). Moreover, the effects of investments in the perspective of the employees further buttressed Mincer's (1962) standard approach that on-the-job training can be observed as an investment in future wages. However, considering the perspective of the firm, the interpretation of on-the-job training can be an investment when the

employee gives back to the organization such as in skills and knowledge on the job, and as a cost when revenue is spent on training. Meanwhile, Becker (1962) affirmed that because on-the-job training primarily affects earnings, general skills obtained from a general on-the-job training is risky to the firm as employees may take the human capital gained and expected returns to the firm from the training investment to rival organizations. Hence employers will prefer to fund the development of specific competencies that only benefit companies that provide training and may augment the perceived switching cost of an employee for changing jobs (Tang et al., 2021). Training in firm-specific skills would therefore be more beneficial or valuable to that specific firm, such that the risk of a return on investment not being attained by the firm would be minimal.

**Schooling Complements On-The-Job Training.** School is a type of institution that specializes in providing training in specific ways different from those in the firm that offers training and produces goods and services at the same time. However, job skills requiring specialization and experience to develop can be accessed partly from the organization and partly from schools (Becker, 1964). Globally, rapid changes in learning when transitioning from school to work, are now more challenging to youths, simply because education has been identified as an important factor of personal development as well as country's growth and development (Pilav-Velić et al., 2019). Among the challenges that the youth face today is the transition from school to work, also known as education to employment path (Pilav-Velic et al., 2019). Education acquired from schools is regarded as a source and an outcome of development, is crucial to the wider idea of

expanding innovation capabilities in the organization (Al Dulaimi et al., 2022). Whether online or physical schools, education as human capital resources can raise productivity as in other human capacities.

There are efficient adult learning arrangements besides on-the-job training, and one type of these arrangements may be massive open online courses and computer-assisted and computer-based training. Some advantages of online programs are flexibility of accessing education, reaching rural and remote areas (Dhawan, 2020). Online programs are an inexpensive mode of education with regards to the overall cost of institution-based learning, and lower cost of transportation (Dhawan, 2020). The above advantages can provide opportunities for workers to take online training courses in almost any profession without changing their location. Human capital is constantly being refreshed, refined, polished, and upgraded by the advantages provided by online training to meet educational challenges (Mingyue et al., 2020). Despite the benefits attached to online education, disadvantages include issues with audio, video, or connection issues, extensive time staring at digital screens resulting in poor posture and or headaches, suffering from concentration loss, and lack of self-discipline (Dung, 2020; Ghoshal, 2020). The use of mobile phones and its advantages in online schools, is also not totally free of fear of interruptions.

Schooling is no longer confined to an institution-based classroom environment as work and career are becoming borderless. Though on-the-job training raises future productivity within the organization, school training takes place in an institution that specializes in teaching, further stressing the need for formal education (Becker, 1962).

Although skills needs are changing and academic skills development are fundamental, but not sufficient, hence aligning business practices, public policies, and education and training systems with the necessary skills is essential in today's global market (Silva & Garcia, 2019). According to Silva and Garcia (2019), formal education represents an intentional commitment for learners and the learning process leading to the award of a final certificate. Global competitiveness is a factor for the redefinition of the international labor market towards contributing to the establishment of a knowledge-building society. Education and training are the most important investments in human capital, key resources for the development of the human mind, and effective tools for nation-building (Becker, 1993). In the case of Nigeria, this is achieved through the technical vocational education and training (TVET) program for the O&G organization (Ogundu et al. 2019). Technical skills include, for example, wiring or installations, pipe fitting or welding. TVET is mostly for post school leavers or those with some college education which includes apprenticeships.

The importance of school training or formal education compared to on-the-job training to the individual is encountered when facing an employment organization. Oladejo (2019) noted that skills shortage in Nigeria's Oil and Gas sector is a pointer of the fact that TVE education is not yet comprehensive and effective. Hence, multinational organizations operating in the O&G industry in Nigeria should make efforts to focus more on developing the skills of their current and future employees through TVET programs. Rahman and Akhter (2021) singled out the systematic training of employees, advancing their educational level, and improving knowledge and skills that influence the



organization's effectiveness. The TVET system in Nigeria and learning of technical subjects make it irrelevant for industrial growth (Oladejo, 2019). Also, the country's financial policy instituted in 1986 brought about the rise in inflation from 5.4% to 40.9% in 1989, leading to the removal of social subsidies in schools and contribute to various effects (Danladi & Naankiel, 2016). An example of these effects were the students' unrests, the lecturers' strike actions, and about 341 trade disputes, out of which 253 resulted in a strike that disrupted academic activities in different parts of Nigeria (Danladi & Naankiel, 2016). In the southern part of Nigeria where most of the O&G multinationals operate, the TVET system was neglected due to the government's continuous focus on crude oil after independence creating a shortage of skilled personnel (Allen, 2020; Oladejo, 2019). The lack of skilled personnel can easily be addressed by the number of government technical schools and private skill training centers in the region (Allen, 2020). Meanwhile, TVET issues relating to HCDs are not synonymous with Nigeria alone. The Asian Development Bank (2017) revealed that in southern Asian countries, skills development policies and TVET systems vary but share similar weaknesses and problems regarding limited access to education and skills training, lack of qualified technical teachers, and equipping the young workforce with skills industries require to meet rapidly changing skill demands. The effect of human capital on earnings, employment, and other economic variables was clearly illustrated by the extensive discussions of on-the-job training and schooling and has also paved the way to consider other kinds of investments in human capital with regards to persons.

**Investments in Other Types of Knowledge.** There are different types of knowledge depending on the complexity of codification. Becker (1994) asserted that the analysis involving on-the-job training leads to general results that apply to other kinds of investment in human capital. According to Becker, on-the-job training, and schooling to increase knowledge are not the only investment activities that can raise real income for people. Other investment activities that can raise real income for people or firms are information on increasing the knowledge about the economic system, and the political or social system of a nation (Becker, 1994). In this study, however, the effects of the political or social system of a nation regarding information on increasing income for people will be discussed in other sections of the study.

**Knowledge of the Economic System of a Nation.** An economic system refers to the configuration of institutions and organizations that prioritize private and public properties in each society, or the channeling and influencing of goods and services distribution of a nation (Pryor, 2006). Becker (1964) noted that increased knowledge through on-the-job and school training are not the only activities that raise real income or wages. Having information on a country's economic system, increase in production and per capita income, and changes in the economic and socio-cultural structure of society can also raise incomes (Becker, 1964; Hatipler, 2014). Among the causes of economic development and growth in an economic system such as income inequality, land inequality, and human capital accumulation, an increase in the human capital accumulation may improve economic development through the channel of innovation

(Diebolt & Hippe, 2019). The nature of growth within the world economy may not be unconnected to innovation speed.

Schultz's (1961) account on HCT established a unique relationship between skills and knowledge people acquired as a form of human capital that is a product of deliberate investment and its growth may be the most distinctive feature of the economic system. For example, human capital and technological factors were among issues that affected the economic growth of northeast China since the country's reforms toward opening to world markets. According to Yu and Liu (2021), the reform and opening of China has rapidly improved economic growth, however, the northeast region suffered stagnation compared to other regions of the country after the establishment of the planned economic system. One reason, noted by Tasawar (2019), was that human capital became a new factor of production playing a critical role in the northeast region's economic growth. That the inability of the region to maintain the pursuit of high-income talents and to retain new ones led to a talent drain.

Information on higher wages from other firms may assist a person to seek employment with a company of choice located in different regions. According to Opone and Kelikwuma (2021), besides wage increases, the income stability of the working class has a chain impact on the country's business community and society at large. Therefore, organizations should have a standard for evaluating the efficacies of their human capital information systems for human capital costs, performance effectiveness, and other reports of value with regards to earnings. Becker's (1964) HCT tenet on the economic system suggested that workers' knowledge on prices of commodities and higher wage paying

companies including information on the political or social system of a country could significantly increase their income. The business community and society at large are part of a country's economic system, and the knowledge of it, involving information on wages, commodity prices, and political or social system of a country can raise workers' income as Becker noted. Human capital and technology are production factors that are pivotal to the development of a nation's economy and are solely dependent on the educational and training skills of people (Hatipler, 2014). The importance of people's knowledge towards the proficiency of a country's economic system is also a vital resource to the individuals of that country.

Therefore, the need for people to acquire information about a country's economic system to increase earnings cannot be over-emphasized. Education provides knowledge and skills that enable people to generate and apply new ideas and innovations for technological progress and overall growth in an economic system (Hanushek & Woessman, 2020). The levels of educational attainment of college graduates can adjust to and influence the demands of the economic system. Overall economic growth and technological progress can also be achieved by generating and applying new ideas and innovation from knowledge and skills acquired by persons through education (Hanushek & Woessman, 2020). The attainment of higher educational levels may also encourage higher economic growth rates in sectors with advanced technological innovation and easy access to jobs.

However, after getting employed, the organization may need to have in place a periodic wage increase plan as an employee retention strategy to keep the employee in

the organization long term. The World Bank (2022) reported that wages were observed to have accelerated in advanced economies mostly in sectors that have continuous labor shortages, and in the economy of nations with emerging market and developing economies. This observation, however, has not been obvious in the O&G sector. Despite this wage acceleration, the World Bank noted that the slow regional growth forecast between 2.6% in 2022 and 2.7% in 2023 has created slow growth in the world economies. Examples of this were the slow integration of workers into the labor market and the negative effects of the high commodity prices of 2021. Baccaro and Tober (2021) revealed that wage inflation is related to price inflation which aligns with the oligopolistic labor and product markets principle, where prices are formed through the addition of mark-up to unit costs. Labor wages, commodity prices, and inflation are among the determining factors relating to a country's economic system.

**Productive Wage Increase Improves the Health of Employees.** The use of productive wage increases can be an effective motivational mechanism for organizations and nations to increase employees' productivity, wellbeing, emotional, and physical health. According to Becker (1962), employees' productivity depends not only on the employee's ability and the investment from the organization towards on and off the job training, but also on their motivation. Learning through on and off the job training and other activities appears to have been observed to have the same effects on observed earnings as do education, training, and other traditional investments in human capital (Becker 1962). Among strategies employers use to foster employee physical health and well-being includes the provision of periodically paid leave and opportunities for higher

wages (Adams, 2019). Improving the physical health of employees in an organization involves investing in human capital, while emotional health is considered a determinant of earnings (Becker, 1964). Poverty and limited or no access to education and healthcare are among the known hindrances to HCD, and at the same time, it is the HCD that can be used in addressing these inequalities (Cafferkey et al., 2021). Hence one can admit that increased workers' wages and good health are panacea to the success of investing in HCD.

Understanding the effect of wage increase on workers is important, as such increases can leave workers in better health. An employee in good health and having better education may not be much liability to an organization as less cost would be spent on on-the-job training (Becker, 1964). Moreover, it would be equally rewarding to workers and employers when wages are increased periodically as a motivated worker can be maximally productive. The Irish government considered wage increase during the COVID-19 pandemic for health workers because of the added health risk of Covid spread (Redmond, 2020). The Irish government responded to job losses associated with COVID-19 by introducing the pandemic unemployment payment for those who lost their jobs due to the crisis (Redmond, 2020). Nevertheless, contrary to the Irish government action, the World Bank (2022) business pulse survey data indicated that about one-quarter of the firms reported a reduction in wages of workers due to pandemic crises. Gagliardi et al. (2021) noted that wages are higher for workers employed in firms operating in the high seas. Although having information on wages and commodity prices can raise employee earnings by seeking higher paid jobs and negotiating cheaper commodity prices

respectively, tastes, knowledge, and social amenities have control over the way wages are spent (Becker, 1964). Therefore, the assumption that greater productivity does, in fact, result in higher wages for individuals and earnings for businesses may not be wrong.

Motivation can be any work-related factor that can influence the maintenance of positive work behaviors expected to enhance productivity. The productivity of employees also depends on how motivated they are, and the level of funding invested in them within and outside the job area (Becker, 1964), which may also include wage increases. Nevertheless, employees need to be allowed to enhance and improve their skills through various training programs (Girdwichai & Sriviboon, 2020), even if they are satisfied with periodic wage increases. There is no employee who does not require a wage increase in an organization. Wage increases can improve the health of a worker through the influence of certain health habits. Examples are increased consumption of fruits and vegetables, and increased leisure time or job satisfaction for better mental or emotional health (Avila, 2021). However, Narain and Zimmerman (2019) argued that the association between increased wages and increases in fruit and vegetable consumption is not true with all populations, especially with Black and Hispanic communities in low-pay occupations such as construction, and agriculture. In the United States, while discussions on the increase in minimum wage centered around economic benefit effects on low-wage workers, the health benefits of the populace are also a concern to the government (Avila, 2021). Understanding the effect of a wage increase on workers is important, as such increases leave workers in better health. Therefore, there is a need to be a balance

between job demand and job resources to promote the health and wellbeing of employees in the workplace.

**Providing Medical Facilities to Employees Increase Productivity.** The productivity level of employees can be raised when company-promoted medical facilities and recreational programs are provided. Improving the emotional and physical health of a workforce is an investment in human capital involving the provision of medical examination programs, lunches, recognizing their needs, and providing them a healthy work environment (Becker, 1964; Girdwichai & Sriviboon, 2020). The effectiveness of workplace health promotion has a positive correlation between a worker's good health and organization's prosperity, hence understanding this relationship may enable the facilitation of developing a better workplace program that may promote employee's productivity and organizational success (Phillips et al., 2022). When health promotion is effective, more employees could be medically fit, preventing absenteeism from work and avoiding losses in production. Absenteeism affects employees' job performance.

Organizational leadership should endeavor to promote a healthy workforce for high productivity gain in their business. Because workplace conditions can affect employees at the physical, mental, or emotional level—enhancing or harming their economic, social and health aspects, employers should provide supporting strategies involving improved employees' happiness, wellness, and access to health care coverage. According to Becker (1964), as with knowledge, people's health can be improved and a decline in the death rate of people who are of working age may improve earnings by lengthening their working years. Persons of working age should have a better diet to



enable them to build strength and stamina for increased earning capacity (Becker, 1964). In a study involving the improvement of hospital performance and influencing the level of employee organizational commitment, Baird et al. (2019) suggested in respect to medical facilities that management should consider and incorporate the latest technology and up-to-date equipment. Employers can assist workers with access to the full range of medical and psychotherapeutic treatments, by leveraging interventions that are well-established and evidence based. Health facilities are part of a country's important infrastructure for national development, an important factor of human capital to facilitate the productive use of human skills (Qomariah et al., 2020). Every nation in the concept of providing better services to the citizens should embrace health facilities as among the key provisions.

#### ***Other Theories Considered in the Study***

**Resource-Based View Theory.** The resource-based view (RBV) theory is a theory considered for use in this study. The RBV was initially promoted by Penrose (1959) and later expanded by Barney (1991), Conner (1991), and Wernerfelt (1984). The RBV theory was expanded for the development of basic economic tools required to provide an analysis of firms' strategic management resource position including the relationship between resources and profitability. Penrose introduced the theory of the RBV by examining how firms create sustainable competitive advantage and considering how they manage and deploy internal resources. Internal resources assist organizations to exploit external resources in establishing competitive advantage instead of focusing on the competitive environment. To manage and deploy external resources in the form of

mobilizing external knowledge, technology and expertise into a business, organizations take the risks that might manifest in that business (Kariv et al., 2021). The use of external resources in the RBV provides a bridge between the external resources and internal innovation, which adequately reflects the value of entrepreneurial motivations, ambitions, and cognitive processes (Zahra, 2021). Resources in an organization are heterogeneous and are grouped as either tangible or intangible resources and can be internal or external to the organization (Miller, 2019). Organizations should therefore strive to mobilize all resources to their advantage.

Organizational leadership deploys tangible resources in the form of equipment and intangible resources as skills for the advancement of their organization's growth, and survival. As revealed by Barney (1991), considering the perspective of knowledge used in service firms, intangible resources are the most asset (Denicol & Davies, 2022). While the RBV involves the use of tangible and intangible resources exceptional to organizational leadership to gain competitive advantage, the HCT focuses on intangible resources for employees' development through the perspective of HCD. In the identification of firm resources as the basic principle of the RBV, human capital is emphasized as a resource that could help firms gain competitive advantage, and superior firm-level performance (Barney, 1991). In the light of Barney's statement above, a relationship between human capital resources and competitive advantage may be assumed rightly.

The importance of the RBV to organization is not limited to create, nurture, and maintain competitive advantage, but also enables the leaders to recognize the collective

resources needed to compete favorably in a globalized and highly competitive market (Akwesi, 2019). Although, the RBV consists of human, physical, and organizational assets, the RBV and the HCT have similar characteristics in ensuring a sustainable competitive advantage for an organization, such as specific skills as part of intangible assets, used by firms to influence organizational outcomes\_ (McCoy et al., 2019).

Nevertheless, Naik (2019) noted that the RBV extant literature revealed that human capital resources provide the main source of sustainable competitive advantage to firms.

Within the core of the RBV, the basic principle is that the collective resources or the bundles of resources a company possesses are the basis for achieving competitive advantage. Hence, human capital combines the entirety of available knowledge to an individual, its professional abilities, and managerial effectiveness (Borshch et al., 2023).

According to Mara (2021), a team's collective human capital contributes to both individual and organizational productivity, national wealth, and long-term sustainability.

HCT and the competitive advantage from the RBV point of view enable an organization to improve performance, competitive edge in the market, and aligns human capital's role to focus on employees' development (Tahir et al., 2015). As a result of this significant role of the human capital towards employee development, I consider the HCT a better choice to be used as the conceptual framework for this study than the RBV theory.

**Knowledge-Based View Theory.** Another theory considered for use in this study is the knowledge-based view (KBV) theory. The KBV theory of the firm refers to the various knowledge-based actions and resources that can enable the building of firm's internally oriented knowledge capabilities to be able to compete externally (Kaplan et al.,

2001). KBV theory also emphasized that resources and capabilities based on knowledge are indeed critical in achieving sustained competitive advantage. The KBV theory arose from the seminal works of Drucker and Nonaka that led to modern organizations adopting a knowledge inclined strategy (Mbhalati, 2012). The modern organizations' adoption from the strategic management literature builds upon and extends the RBV theory initially promoted by Penrose (1959) and later expanded by (Wernerfelt, 1984; Barney, 1991; Conner, 1991). The RBV theory as noted by the above authors relates strategy formation with competitive advantage, and the need to understand an organization's environment.

Strategy is required in the organizations including multinationals in implementing HCD programs to develop their employees. Hence when KBV is used as a theory of strategy, knowledge is conceptualized as resources that can be acquired, transferred, or integrated to achieve competitive advantage. For example, knowledge transfer stands out to be the key process of creating knowledge that can generate innovation and corporate value (Novianti, 2019). However, organizations can only generate innovation and corporate values when they can create, transfer, and use knowledge (Rezaei, 2021). Organizations would have to create the appropriate conditions to encourage employees to transfer their tacit, and explicit knowledge in the knowledge management process of the firm (Marques, 2019). In knowledge management practices, the tacit and explicit knowledge approaches exist (Lee, 2016) in identifying and managing knowledge in organizations. Tacit knowledge is unique compared to explicit knowledge, and more beneficial to organizations that want to be innovative (Kucharska, 2021, 2022). Tacit

knowledge can be converted into explicit knowledge as codified instructions to promote the sharing of knowledge across the organization (Linda et al., 2020). Hence, organizational factors such as abusive supervision (Farooq & Sultana, 2021), and unhealthy leadership styles should be discouraged to prevent knowledge hiding by qualified employees (Mubarak et al., 2021). Organizational leadership needs to encourage highflyer employees for them to share knowledge with others through reinforcements.

Organizations can make better use of the tacit knowledge of individuals when identified as being specific and personal, produced and stored in people's minds. According to Cammeraat et al. (2021), with the proper entrenchment of human capital, learning-by-doing is expected to happen more. Because the human capital represents the knowledge and skills people bring to an organization, developed through education and personal experience, it provides both tacit and explicit knowledge (Masoud & Nasrin, 2013). Tacit and explicit knowledge approaches are both important in knowledge dissemination in the organization, and hence align with human capital management. Knowledge management philosophy in each organization can be improved when tacit knowledge is synthesized with knowledge management practices. The focus of the KBV theory is to assist organizations gain competitive advantage by converting tacit knowledge to explicit (instructions) knowledge (Zhao, 2019). And the HCT focuses on the investments in people through training and developmental programs, such as education, to increase workers' productivity and skillsets (Robinson & Pope, 2023).

Because this study focuses on employees' HCD initiatives, HCT is more preferred for my chosen framework than the KBV theory.

### **Innovation in Human Capital**

Education is one area that can promote innovation by improving the quality of workers, thereby increasing their human capital capacity. Innovative human capital is an important factor when considering the current global rapid development of knowledge economy and technology (Widarni & Bawono, 2021). Stewart (1997) stated that the primary purpose for an organization to venture into a human capital project is the innovation of new products, rendering of new services, and establishing timely business processes. To further emphasize the importance of human capital factors to innovation, Barney (1991) and Kogut and Zander (1992) revealed that the main factor driving innovation in firms is knowledge. Meanwhile, Barney noted that the success or failure of a business is basically determined by competition, that requires a company's innovative and positive workplace operational culture to be accurately structured (Lubis, 2022). The RBV theory for example considers human capital a critical resource for firms to sustain competitive advantage and innovation (Barney, 1991; Fonseca et al., 2019; Sun et al., 2020). The ability to use knowledge and focused it towards solving problems to generate solutions that supports productivity in gaining competitive advantage is termed innovation (Romero-Hidalgo et al., 2021). Innovation comes because of a problem-solving process where an organization develops some knowledge to resolve the identified problem.

Innovation is typical of any industry across the regions of the world. In the O&G industry, innovation is a critical component in managing major disruptions to the movement of people, products, and services across the globe (Chinonso & Olaniyi, 2022). Romero-Hidalgo et al. (2021) noted that innovation is the result of organizational knowledge management and collectively, amplify and accelerate the creation of value for the organization, better than any other strategy or business model. Linda et al. (2020) stated that, though knowledge management is not a critical determinant in the creation of innovation, its consideration as an input after implementing human capital to improve innovation is particularly important. Highly educated and skilled human capital plays an important role in an organization's innovation and maintains a crucial relationship with its processes (Sun & Ghosal, 2020). According to De Winne and Sels (2010), Belgian startups relied mostly on general and specific on-the-job training as the main human capital factors that contributed to innovation. If a region's market is to attain a higher level of productivity that is driven by innovation, the quality of its human capital must be more effective. According to Olusegun (2019), when an employee becomes productive, its contributions in the organization would not only enhance efficiency, growth and innovation but also foster the employee's trust in the organization. Hence, it is important to measure the overall effects of human capital in an organization.

### **Measurement of Human Capital**

Measuring human capital in an organization may assist the leaders to establish a conceptual base for job evaluation, aimed at improving the remuneration system in the organization. However, inconsistent measurements and inadequate standards of

evaluation to gauge the impact of human capital interventions are major issues surrounding human capital measurement in organizations (Bontis, 2001; Stiles & Kulvisaechna, 2003). Yeh and Kung (2013) noted that in a firm, the value of human capital can be measured in the context of productivity and its contribution to the firm's operational performance. According to Yeh and Kung, in a typical industry, the value of human capital can be assessed by human capital indicators such as employee rewards, sales revenue, education, and the number of professional personnel in the industry in each period. Nevertheless, other organizations may approach human capital measurement differently.

Whatever implementation procedure an organization may use to measure human capital, it should be better done for proper accountability. Meanwhile, Guest et al. (2000) affirmed that most organizations measure human capital investment by taking into financial measurement, customer satisfaction, productivity, job type, grade, gender, location, and measure of time as in terms of punctuality, and speed of attaining results, in line with the HCT. To buttress Guest's affirmation, Marr's et al. (2003) three reasons why organizations measure human capital are concerned with improving internal decision support. According to Marr et al., the first reason is to assist organizational leaders in formulating strategies centered on human capital key competencies which can be used to build a competitive advantage. The second reason is to improve the evaluation of strategy execution. And the third reason is concerned with determining the remuneration of senior leadership persons through integrating non-financial aspects aligned to human capital. Nevertheless, the major problem encountered in measuring human capital involves the



difficulty in performing such measurements due to its several individual components among which are, education, working experience, capacity, and motivation (Mariz-Perez, et al., 2012). As difficult as it is to measure, it is still important for every organization to understand the outcomes of its human capital interventions.

## **Implications of HCD to Training and Development**

### ***Improvement of Quality Service Delivered by Employees***

HCD is evident in the improvement of the quality-of-service employees deliver for an organization to acquire increased productivity. Isiramen (2020) stated that employees feel they have some moral obligation to their organization to deliver quality services after being invested in training and development. Isiramen also revealed that if organizations want to increase productivity, they will need to continue training and developing their employees to be more capable of rendering quality service. As a result of this, training employees should be a good investment in an organization, and the survival of a business is also strongly determined by the quality of service provided to customers. Therefore, organizational leadership should implement HCD such that employees are seen as resources instead of burdens (Amodu et al., 2017), and this is possible through the value creation of human capital and knowledge-/based initiatives.

Value creation through human capital initiative is the direct involvement of human resources in the development of managerial talents, and organizational culture. Combining leadership and knowledge management process will enhance the development of human capital, an inimitable asset of any organization (Sakher, 2019). Hence, employees' value creation initiatives should be able to reduce company's cost and

increase company's revenue for such initiatives to be regarded as valuable. Adagbabiri and Okolie (2020) agreed that the selection process for new employees needs to be thorough for efficient service delivery. Al-Bdareen and Khasawneh (2019) noted that workers' knowledge positively affects business performance, enables the achievement of company goals and objectives, and assists employees provide quality service to customers. Training can also enable employees to provide quality service.

### ***For Sustainable Literate and Experienced Workforce***

Training and development should help bridge workers' knowledge and skill gaps, to gain experience and skill commensurate with the duties performed. Itam and Ghosh (2020) explained that organizations can identify better workplace practices through employee experience to better their ability in knowing the real needs of customers. The training and development programs in an organization can involve transforming their employees into a more literate and experienced workforce through on-the-job and off-the-job training programs. In an organization, the source of training and development of skilled employees can arise from a professional environment that stimulates employees' knowledge as well as their competitiveness (Huselid & Becker, 2011). Morgan (2018) referred to employee experience as the sum of all interactions that existed between the workforce and the organization, and influenced by the employee's daily physical space, working tools, and the culture of the organization. The loss of job-specific skills and experience can have an impact on productivity.

The training and development programs in an organization involves transforming their employees into a more literate and experienced workforce through on-the-job and

off-the-job training programs. On-the-job training involves coaching by more experienced trainers in the plant or workshop, while off-the-job training is done outside the primary work area of employees to get their full attention (Huang & Jao, 2016). Both forms of training would enable employees to gain knowledge and work experience at the same time and make them more useful to the organization. The efficiency of employees may also be achieved through transfers within departments or branches and can enable knowledge exchange in the organization. Alomari et al. (2020) recommended that organizations be more focused on attracting experienced employees with higher degrees in their chosen fields and those more knowledgeable through working experiences in the bid to improve their human capital. Some problems that can work against employee retention, participation, engagement, and possibly reduce firm productivity are traceable to non-involvement of employees in decision making by organization's leadership, loss of workers with job-specific skills and experience (Hoffman & Tadelis, 2021; Friebel et al., 2021; Moscelli et al., 2022; OECD., 2023). Poor people management skills can also increase employee quit rates leading to disruption to the production or services they provide, thereby making firms incur the costs of hiring and training new workers as older ones quit. Employee experience therefore may be the ultimate level of fulfilment that an employee can feel and derive from their day-to-day interactions with work in the organization.

### ***Encourage Employee Participation***

HCD initiatives can support employees' empowerment leading them towards active participation in the workplace. Employee participation refers to the opportunity of

involvement, extended to workers in the affairs of authority, operational activities, and decision making within an organization's management (Ibini & Okonta, 2023). An organizational environment where employees can influence decisions and actions that can affect productivity in their line of work by allowing them to have their voice and contribute to the organization's successes. Expectedly, employees shall appreciate being empowered and heard while operating in a rewarding environment. Robbins (2003) affirmed that employee participation is part of an overall concept of employee involvement referring to a participative process that uses the employee's total capacity designed for supporting increased commitment to the company's success. The employee would be part of the organizational workforce set for achieving company objectives and goals, hence his participation is among the factors that can improve organizational performance. Cooper-Thomas et al. (2014) stated that setting a high level of expectations including performing frequent performance reviews can increase employee participation in the organization. HCD involves formal education and job training according to Becker (1964), while Silva and Garcia (2019) agreed that to ensure participation in global markets that can evolve into sound economic and social outcomes, nations must invest in peoples' skills. The greatest organization's resources are its people.

### ***Support Employee Retention***

Company leaders should make employee retention a priority to attract and retain the best talents on the job. Company benefits, employee attitude and job performance, including encouraging employees to remain in the organization for a long time can be termed as employee retention (Asikhia et al., 2022). According to Asikhia et al. (2022),

though skill retention is a strategic issue for the Nigeria's O&G industry, the attitude and behavior of employees in the O&G sector in Nigeria signifies absence of skills retention. Talent retention is indeed a growing concern for today's dynamic organizations, and its importance is linked to the huge cost involved to a company in recruiting a replacement when an employee leaves (Ashraf & Siddiqui, 2020). Workplace culture and leadership have a positive effect on engagement. Organizations may strive to lower the costs associated with employee recruitment and retention by creating a suitable environment that engages employees for the long term.

Employee retention is a systematic effort that organizations use to ensure their working environments encourage their workforce to remain in their employment by providing policies and practices for a favorable working culture (Mathimaran & Kumar, 2017). According to Mathimaran and Kumar (2017), employee retention strategies are important to organizations to prevent loss in investments of HCD components such as time spent in training, knowledge drain, and recruitment. Organizations that embrace HCD programs such as training and development practices can retain employees, and stakeholders, and continuously maintain improving their employee retention strategies. When organizational leaders make employee retention a priority it may increase productivity and gain a competitive advantage.

Oseghale (2018) implicitly stated that O&G organizations in Nigeria should strive to create and sustain a competitive advantage in the competitive oil industry by attracting and retaining qualified talented employees through training and development programs. Oseghale further stated that retaining qualified talented employees is part of a long-term

retention strategy training plan in the oil industry. In the O&G industry, organizations have been known to compensate workers for employee retention through financial incentives (Friday & Mlanga, 2019). According to Friday and Mlanga (2019), the industry would need to do more in this regard to prevent talent drain, by being more aware of available compensation strategies. Employee retention can be achieved through increased learning and development opportunities (Friday & Mlanga, 2019), which are the components of HCD. Organizations can be successful if positive and motivated employees are retained.

### **Importance of HCD to Employee Productivity**

#### ***Having Employees Become Highly Productive***

The productivity of skilled and qualified employees in an organization might increase due to their qualifications, experiences, and tacit knowledge, making them efficient human capital. Productivity along with job performance is the strong outcome of effective motivational factors and can be increased when employees are motivated (Uka & Prendi, 2021). Becker's (1964) HCT involves the development of employee skills through education, and the effect of wage differentials influence workers' productivity. According to Kampelmann et al.'s (2018) review of Becker's work, a highly educated worker is assumed to be more productive, and hence earns more wages when compared to less-educated counterparts in the same organization. Education is a key component of HCD and contributes to productivity, as it enables the employee to improve in their quality and capabilities through effective use of knowledge. Aligned with HCT, formal education is accepted as productive investment in human capital (Becker, 1964). In a

typical organization, a highly skilled worker can perform any job role, however, the employee would be more productive in high-skill job types.

In a high-risk industry environment such as found in the O&G sector, high-skill jobs are expected to be performed by highly skilled employees. Training and development is an effective tool to help increase employee's productivity. A well-trained and developed employee can become more skilled, knowledgeable, and confident in his or her abilities, leading to higher productivity levels. Imandojemu et al. (2020) suggested that countries need to strengthen their human capital thereby preparing their workforces for higher skilled jobs of the future, and to be able to compete effectively in the global economy. In the case of Nigeria, to sustain economic growth, the nation's economy needs to reinvigorate investment in improving the level of HCD. The federal government of Nigeria would need to scale up the budget to provide enough capital for the education and health sectors respectively Imandojemu et al. also called for the sensitization of the public for the people to understand the danger of overpopulation and the benefits of family planning, including sex education to control fertility rate. This is based on the premise that employees would have peace of mind to excel in their daily routines and work balance, making them more productive. Hence, efforts of organizations to increase employees' knowledge, enhance skills, productivity and stimulate resourcefulness of individuals can improve HCD. Hence, HCD can be any activity that can improve employees' productivity such as advancing educational knowledge and obtaining on-the-job learning experiences at the workplace.

### ***Increased Organizational Productivity***

HCD is an important component of productivity which also involves the use of and a tangible asset towards the realization of a company's products. Productivity of an organization can be increased through the continuous emphasis and improvement of its firm-specific skills from on-the-job training (Becker, 1962). Productivity of employees increases through training and development programs, and in turn increases the overall company's productivity (EL Hajjar & Alkhanaizi, 2018). Therefore, organizations should promote HCD programs to empower their workforce. Olusegun (2019) established that management of the O&G companies may decide to enhance human capital systems and hence employees' productivity if the workforce is willing to challenge workplace issues and decision. To increase organizational productivity, even the domestic firms including the indigenous O&G companies are tempted to adopt new and advanced technology and upgrade the skills of their workers (Dao et al., 2023). For skilled labor, Human capital is a determinant of productivity level in an organization, and hence HCD is a catalyst for innovation and the attainment of organizational set goals. Okunade et al. (2022) noted that suitable investment in human capital accumulation encourages productivity growth, through improvement of research and development to spur growth in physical capital.

Productivity is the ratio between output and input, and hence to attain higher productivity, the organization would have to reduce its input resources. Musgrove et al. (2014) affirmed that when the productivity of an organization is determined by the efforts and engagement of its workforce, to achieve ultimate business success from their operations, organizations' leaders may have to make plans for increased productivity



(Osborne & Hammoud, 2017). Employee productivity is fundamental to the growth, profitability, and continued existence of any organization, and it is impacted by the quality and practices of the leadership style of its leaders (Olayisade & Awolusi, 2021). To increase productivity, Konings and Vanormelingen (2009) suggested that organizations should consider training as a fundamental and effective instrument to meet set goals and objectives. The suggestion from Konings and Vanormelingen confirms the interwoven relationship between the HCD training component and productivity. HCD is a catalyst for innovation and the attainment of organizational set goals, and according to Benhabib and Spiegel (2003), for skilled labor human capital is a determinant of productivity level in an organization.

### ***Increased Organizational Profitability***

When employees are well trained and developed operationally, they will attain job satisfaction that can lead to organizational productivity and profitability. Profitability in an organization can be impacted by employee productivity, which is a function of input resources that relates to the level of production and business success (Oluoch, 2019). Improvements in employee participation can increase overall profitability leading to successful organizational goal attainment. Hansson (2009) stated that human capital is a productive capacity for national growth towards the improvement of the living standard of the people over time, an individual's earning capacity, and for the organization's value creation and profitability.

Organizations may experience enhanced profitability from their operations when equipped with a well-trained and operationally developed workforce. The quality of

employees and level of development attained from training and education are essential components in determining long-term profitability (Ethelmary et al., 2019). Obiekwe and Nwaeke (2017) agreed employee training and development is a work activity when carried out by organizations can contribute to the overall effectiveness and profitability of an organization. To determine the extent of training involvement in an organization and its impact on profitability, a proper evaluation of the training quality and cost should be conducted by leadership (Pineda, 2010). Agbi et al. (2020) revealed that human capital efficiency has a key role in determining the profitability of O&G firms in Nigeria. Agreeing with the writer, when proper investment is made in human capital, the resultant effect is maximum efficiency, which increases profitability.

#### ***Provides Sustainable Organizational Development***

With advanced technological changes, increased global awareness, and market uncertainty, organizations may want to consider options for their future development. Development is defined as the process of impacting the building capacity and capability on an employee and hence the whole organization to meet standard performance levels (Antonacopoulou, 2000). According to Daniel (2019), organizations operate in a difficult and competitive market environment considered to be engulfed in rapid changes and are therefore encouraged to embrace human capital resources to face the challenge. Okumoko et al. (2018) noted that HCD has been described as an end of development, and hence investing in human capital would be a critical factor for long-term economic growth and improved productivity. Daniel (2019) encouraged organizations to review the pace of their developmental efforts toward ensuring better performance management

practices. According to Seleim et al. (2007), the elements of HCD such as training and team-work practices are evident in superior performances such that increased productivity can be translated as overall organizational performance and development in a firm. As long as people are still regarded as the most important intellectual capital, organizations should ensure that values and perceived differentiations are well driven to meet organizational objectives. Value and uniqueness are two critical dimensions of a firm's human capital resources that may be used to neutralize threats through improved effectiveness and opportunities.

***Encourages the Development of Competitive Advantage***

Organizations should strive to implement strategies that will encourage employees to remain in employment. Employee retention in an organization is a function of its competitive advantage, which depends on the importance of HCD and the level of its contribution towards its attainment. Schultz's (1993) definition of human capital relates its importance as a key element in the improvement of a firm's assets and employee development towards increasing productivity as well as sustaining competitive advantage. According to Wright et al. (2005), to gain a competitive advantage, an organization must embrace the recommended strategies within its strategic plan to encounter and overcome external threats to be able to position itself in the marketplace. Wright et al. also suggested that such an organization would require its human capital as an internal resource for the realization of its competitive advantage. Sakis and Serafeim (2020) affirmed that the HCD is also an essential factor when considering hiring, train, manage, and retain high performing employees regarded as one of the key drivers of

corporate success and sustained competitive advantage. The HCD programs involve training and development of human resources to perform active roles in the organization.

Competition has become a common phenomenon among companies in the global market, regardless of industry types. Marimuthu et al. (2009) stated that for an organization to develop a competitive advantage, the workforce should be leveraged as the essential tool in developing the strategy to drive higher value for the firm. To achieve this strategy, the workforce skills and knowledge should be comprehensively optimized through the involvement of HCD programs, which would enable the achievement of company goals and long-term survival. In the development of competitive strategies, the importance of HCD aligns with Porter (1980) for a firm to maintain a competitive edge, based on employees' skills and training to produce the lowest-cost products, and to offer the lowest-priced services. According to Porter, the firm can also modify its products and services to meet the specific needs of customers with regards to quality, characteristics, and the related product differentiation strategy. Hence organizations should be interested in developing key product lines as one of the means to develop their key competencies.

## **Nigerian Oil and Gas Industry**

### ***Overview of the Nigerian O&G Industry***

Nigeria system of governance and the advent of O&G explorations as an African nation have been an important part of the country's history to researchers. Nigeria is a democratically governed nation in sub-Saharan Africa with a total area of 923, 770 sq. km (Nigeria High Commission, 2022), and a population of 225,082,083 (United States Census Bureau, 2022). Nigeria has geographical borders with the Republic of Benin with

the Republic of Cameroon, with Republic of the Niger, Republic of Chad, and to the south with the Gulf of Guinea (Nigeria High Commission, 2022). The presence of oil in Nigeria in 1908 came from the exploratory activities in the Araromi area, located in western Nigeria by a German entity named Nigerian Bitumen Corporation (Nigerian National Petroleum Corporation [NNPC], 2021). The efforts of the company were later interrupted by the outbreak of World War I in 1914 (NNPC, 2021). According to the Nigerian National Petroleum Corporation (NNPC), when oil prospecting activities resumed in 1937, it was interrupted again by the Second World War. After the resumption of oil prospecting activities a decade later in 1947, concerted efforts led to the first commercial discovery in 1956 at Oloibiri in the Niger Delta (NNPC, 2021). Shell Petroleum made a direct investment of over 30 million naira, which is the Nigerian currency resulting in a monopoly of oil extraction at the time. Oil production and export activities in the Oloibiri field started in 1958 with a production rate of 5,100 barrels of crude oil per day (NNPC, 2021). The successful reentry into the oil mining activities and discovery of the first oil at Oloibiri opened the Nigerian oil industry in 1961 through the active involvement of multinationals such as Mobil, Agip, Safrap (now Elf), Texaco, and Chevron respectively (NNPC, 2021). The arrival of new entrants among the multinationals and domestic companies were given concessionary rights by the Nigerian government to explore and produce oil (NNPC, 2021). This increased to 2.0 million barrels of oil per day in 1972, and 2.4 million in 1979 leading to Nigeria attainment of the status of a major oil producer, maintaining 7th position globally in 1972, and graduated to 6th position of largest oil producing country of the world in 2021 (NNPC, 2021).

Nigeria is among the O&G producing nations of the world, located in the western part of the continent of African. Nigeria is the largest oil producer in Africa and has the largest natural gas reserves on the continent ranked as the world's fifth-largest exporter of liquefied natural gas in 2018 (U.S. EIA, 2020). As at the end of 2019, Nigeria had an estimated confirmed crude O&G reserve of 37.0 billion barrels which made it the second largest volume amount behind Libya (U.S. EIA, 2020). Despite its position as a leading crude oil and natural gas producer in Africa, which is the mainstay of the country's economy, production is affected by sporadic supply disruptions. Due to the country's dependence on O&G revenue, its economy is noticeably affected by crude oil price changes, while its non-oil revenue comprises only 3.4% of GDP, one of the lowest in the world (U.S. EIA, 2020). Most of the oil reserves in Nigeria are located along its Niger River Delta and offshore in the Bight of Benin, the Gulf of Guinea, and the Bight of Bonny (Effiong, 2010). Exploration continues, however, in other regions like Lake Chad basin for the hope of new discoveries.

Nigeria has a gas-to-liquids plant at Escravos in the Niger Delta that started production in 2014 and operated by Chevron in partnership with NNPC under a production sharing agreement of (75%) and (25%) respectively U.S. EIA (2020). The name plate capacity is 33,000 b/d and can convert about 475 million cubic feet per day (MMcf/d) of natural gas into diesel, liquefied petroleum gas, and naphtha products primarily for export consumption (U.S. EIA, 2020). However, scant volume of the produced diesel is currently being blended with certain additives to run electrical generators and as fuel source in some vehicles used for field operations.

### *Concepts of Employee Training and Development in Nigeria*

The concepts of employee training and development in Nigeria may not be different from those of other countries that produce O&G. For example, an organization may need to embrace the concept of developing their managerial staff in specific areas such as having knowledge on the business environment, management principles and techniques, human relations, and specific industry analysis to better manage the organization (Badom & Girigiri, 2021), notwithstanding its location. However, the ability to optimally harness and make use of available and acquired resources may be different from country to country. As the most critical determinant of a nation's economic development Nations should strive to develop and improve the potential of their human capital resources.

Training has been a popular tool that has always been utilized by nations to encourage the development of its citizens. However, Steinmetz (1969) noted that training involves the use of a short-term training process specially designed to train non-managerial personnel to acquire specific skills and technical knowledge for a particular job-related purpose. Steinmetz also noted that development involves the use of a long-term training process specially designed to train managerial personnel to acquire conceptual and theoretical knowledge for general purpose activities. According to Campbell (1971), training refers to instructions in technical and mechanical operations, while development refers to philosophical and theoretical educational concepts. Training and development are the key components of HCD strategies. In Nigeria, the O&G industry is very much involved in training and development programs. Training and

development are a component of succession planning, making employees become fit to accept role in any organization within the industry (Hamilton & Oparanma, 2008).

However, Obisi (2011) suggested that Nigerian organizations should invest more in training and development and should be based on business needs of the organization directed towards improving employees' performance and increasing their knowledge thereby also benefiting the organization. The concept of training and development in Nigeria is a performance program that is professional, and competency based.

### ***Training and Development in the Nigerian Oil and Gas Industry***

The fuel scarcity or shortages of petroleum products are the results of inefficiencies in the downstream sector of the petroleum industry in Nigeria. The Nigerian educational system lacks basic amenities such as educational knowledge and technical training required to generate and provide its citizens the human capital skills needed for efficient operation and development of the O&G industry (Monday, 2015; Olukoju, 2014). The lack of required skills to efficiently and effectively manage the affairs of the Nigerian O&G industry to enhance petroleum sustainability to the economy has impacted negatively on the downstream sector operations in Nigeria (Olukoju, 2014). Among these inefficiencies are the lack of operational and administrative skills in running the refineries, securing pipelines and infrastructures to prevent exposing them to vandals, smugglers, corrupt officers, and involvement of rich oil mafia or cartels to name but a few (Adelabu, 2012; Chigbu et al, 2016). The country needs to do more in security for O&G facilities.



The involvement of HCD should be felt all over the Nigerian O&G industry. The evidence of a positive HCD in the Nigerian O&G industry can only be attained through the sustenance of increasing number of personnel with the required education, skill level, and problem-solving abilities necessary for industrial performance and economic growth (Monday, 2015). In Nigeria, the schools charged with training for skills acquisition are technical colleges established to prepare individuals to acquire practical technical skills and basic scientific knowledge (Ogundu et al., 2019). According to Ogundu et al. (2019), the partnership between schools and the industries in skills training of students in Nigeria has been recognized by industry stakeholders as an alternative option to achieve meaningful, and transferable skills. A petroleum training institution was among established training outlets to provide the much-needed technical manpower for the country's O&G sector.

### ***Roles and Responsibilities of Oil and Gas Leaders in Nigeria***

The O&G industry consists of various forms of environmental and industrial risks that are inimical to its operations. As a result of this, Zuofa and Ochieng (2017) suggested that in managing offshore O&G projects, effective leadership in safety should be encouraged to decrease human errors and incident rates. The industry risks and uncertainties are characterized by extreme locations, harsh environmental conditions with large number of participants from diverse orientations including environmental and human challenges, hence effective management of safety regulations are in place and need to be followed (Zuofa & Ochieng, 2017). According to Ahmad et al. (2016), organizational management should provide regular training and education to their

personnel on operational systems so that they can create efficiency in operations and be backed with leadership commitment and development strategies. Leadership should develop safety incentive programs to inspire employees to embrace safety training and development in their area of operations. The management of human resources and its professionals in any organization are effective tools for leadership to enhance HCD for its teaming workforce (Navimipour et al., 2015). The human resource's role is vital to people's development in any industry.

Organizations need to understand the level of empowerment each employee should be given to enhance an individual's productivity. In terms of employee empowerment, developing an understanding of leadership strategies can assist Nigerian organizations to resolve issues and enhance capacity to achieve goals (Kesting et al., 2015). According to Kesting et al. (2015), to be able to communicate an organization's concerns for employees and discover new talents and organizational effectiveness, leadership needs to be initiative-taking with actionable plans. In most O&G companies in Nigeria, there have been complains of employees about restrictive and delayed promotional prospects of colleagues who believed had performed well over the appraisal period (Adagbabiri & Okolie, 2020; Baridula et al., 2019; Oduntan, 2020). Adegboyega and Olawumi (2021) hinted that some leadership styles support the improvement of employee productivity, while others impair productivity. Hence, it would be more beneficial for organizations to determine the prevalent leadership styles to maximize their employee productivity.

### **Transition**

In Section 1, I discussed the general and specific problem statements followed by the nature of the study, research question, and the interview questions. In this section, I also elaborated on the HCT as the conceptual framework in which the study is based. Next, I made use of the operational definitions to further explain and clarify key terms used in the study, and highlighted the assumptions, limitations, and delimitations subsections. I discussed the significance of the study followed by the review of the professional and academic literature, and the section ends with the transition of section 1.

In Section 2, I reintroduced the purpose statement for the study and reviewed my role as the researcher, and the participants. Section 2 includes the research method and design, population and sampling, and ethical research. I presented the data collection instruments, and stated the data collection technique, including the data organization technique, and data analysis in this section. Next, I outline and discuss the study reliability and validity, and the section ends with a transition and summary of Section 3.

In Section 3, the application to professional practice and implications for change consists of the introduction for the section, presentation of the findings, applications to professional practice, implications for social change, recommendations for action, and recommendations for further research. Section 3 also involves discussions on the study reflections and conclusion.

## Section 2: The Project

### **Purpose Statement**

The purpose of this generic pragmatic qualitative inquiry was to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. The targeted population consisted of six leaders from several O&G organizations in the Niger Delta, Nigeria who had successfully implemented strategies to promote HCD training activities to increase employees' productivity. The implications for positive social change include O&G leaders increasing productivity, which can attract capital investment to create employment opportunities for residents and increase local taxes to enable the increase of investments in communities' projects to benefit citizens.

### **Role of the Researcher**

My role as the researcher was as the data collection instrument. I collected data by interacting with the research participants during the data collection process. My role further included designing open-ended interview questions, recruiting participants, and the collection and analyzing of data. The role of the researcher as the current instrument is fundamental to the idea of collecting data, as the researcher is also the interviewer developing the data (Collins & Stockton, 2022). Hence, the researcher should understand self and the boundary limits of the researcher's role. The researcher serves as the main instrument when conducting qualitative studies (Merriam & Grenier, 2019). I engaged participants through semistructured interviews, allowing the participants to respond effectively to the interview questions. I had no existing direct relationship with the prospective participants of this study. The only significant relationship I have had related

to the topic has been through my 25 years working career as field operations specialist / coordinator involved in training and development of employees, but not directly making the strategic decisions across the organization in Nigeria.

My role as a researcher with regards to ethics was to conduct my research study in an ethical manner, and to adhere to the guidelines of *The Belmont Report*. The purpose of *The Belmont Report* is to establish three basic ethical principles ethical guidelines for researching human subjects, and they are (a) respect for persons, (b) beneficence, and (c) justice (Office for Human Research Protections, 1979).

Respect for persons requires that the researcher should view people as individuals of self-determination who can make decisions for themselves and provide protection to others (Office for Human Research Protections, 1979). Respect for persons also requires that the researcher should engage participants who are willing to participate in research involving human subjects voluntarily (Office for Human Research Protections, 1979). As the researcher, I provided the participants informed consent to help ensure participants understand that the research is voluntary.

The principle of beneficence requires that persons are treated in an ethical manner by protecting them from harm and by making efforts to secure their well-being (Office for Human Research Protections, 1979). In this study, I ensured the protection of study participants by maintaining confidentiality. The study participants were represented by codes such as P1 without mentioning details that can lead to their identity.

The principle of justice requires that participants in research should have a sense of fairness in distribution of any research benefits or what is deserved with regards to

equal treatment (Office for Human Research Protections, 1979). I ensured that my selection of research participants was done fairly by giving organizational leaders fair and equal chances in no specific order of positions or title to voluntarily accept to participate in the study. Bias in research is the tendency to prevent unprejudiced consideration of a question and can occur at any phase of research such as in study design choice, data gathering, and data interpretations and results (Pannucci & Wilkins, 2010). Therefore, researchers should endeavor to mitigate bias during data collection and data interpretation. As the researcher, I mitigated researcher bias using an interview protocol and the member checking technique to limit the use of my personal lens during the data collection process in this study. I could also mitigate bias by reaching data saturation with five semistructured interviews. According to Yin (2018), three-to five participants sample from a population may enable the researcher to get to data saturation. The interview process for this study included an interview protocol. Interview protocol (see Appendix) is a step-by-step guide for conducting a series of interviews so that there is consistency during data collection process (Hunter, 2012). As the researcher, I made use of the interview protocol as a guide to engage in meaningful dialogue between the participants and myself during the interview process. I also used the same interview questions in the same order with all participants. According to Yin (2018), an interview protocol supports the establishment of a dialogue between the researcher and each participant and is used to help mitigate bias.

## **Participants**

The participants for this study consisted of six HCD leaders involved in developing strategies for training activities to increase employees' productivity from O&G multinational organization operating in the Niger Delta region of Nigeria. I selected participants from Lagos, Warri, and Port Harcourt operational areas of the Niger Delta region. My research participants included six leaders from O&G organizations actively involved in exploring strategies to promote HCD training activities to increase employees' productivity.

### **Eligibility Criteria**

Participant eligibility criteria gave me, the researcher, an opportunity to develop recruitment strategies for research participants. The eligibility criteria for participants for this study were, participants should have at least 3 years working experience in developing successful strategies in training activities to increase employees' productivity, be involved in making decisions on strategies used to promote HCD training activities to increase employees' productivity, be a full-time employee at an O&G organization located in the Niger Delta region of Nigeria, and be willing and agree to participate in the study without expecting compensation in return. Participants eligibility categorization for data quality and high-quality research, is aptly required of a qualitative researcher, as it can effectively encourage the recruitment of research participants and enhance the design of eligibility criteria (Zong et al., 2021). Only the participants who met my eligibility criteria participated in this study.

### **Strategies for Gaining Access**

Following the step-by-step guide below helped me gain access to prospective participants. Gaining access to an organization is essential to the goal of recruiting participants. According to Peu et al. (2020), it is important for researchers to identify constituted authorities, obtain required consent, and gain access to research locations and participants through proper negotiations in a research project. However, I gained access to the participants through the following social media: LinkedIn, Facebook, and WhatsApp. I also used a purposeful sample from three major O&G organizations operating in the Niger delta region of Nigeria, by reading the profiles of network participants directly from their pages and grouped them according to their organizations. I communicated with the participants after identifying each of them from the social media networks mentioned above and their organizations' websites, got their contacts, and then requested their voluntary participation in the study. I established communication with all participants online and maintained an open channel of communication. I followed up with all potential participants as needed until six participants were identified.

After getting participants' willingness on their voluntary participation in the study, receiving their names and contact information based on the eligibility criteria, I sent them invitation letters including the informed consent form. Participants who met the eligibility criteria, having understood the information in the consent form, and willing to participate in the study, were asked to respond to the invitation email with the phrase "I consent." All participants who responded to the consent form as described above were contacted to participate in the study. The method for informing participants about their



involvement in a study is the use of an informed consent form containing information related to the purpose of the study, and it is the formalized standard in terms of giving information to and obtaining consent from research participants (Klykken, 2022; Miller & Boulton, 2007). The informed consent form was a mandatory requirement for this study.

### **Strategies for Establishing a Working Relationship**

I developed a working relationship with the participants who responded to my letters of invitation containing the consent forms with the phrase “I consent,” by reintroducing myself and reaffirming the purpose of the study. Marshall and Rossman (2016) affirmed that the informed consent process raises the level of trustworthiness, which allows researchers to have adequate cooperation from participants. I built trust with the participants by protecting their names and those of their organizations and eliminating any identification tags that could identify them in the study. To further build working relationships with participants, I shared data by providing a summary of my interpretations of the participants’ responses for validation purposes during member checking. Though most qualitative researchers may not support data sharing due to concerns to not negatively affecting existing relationships between researchers and participants (Mozersky et al., 2020, 2021), it is however different when it is shared during member checking processes. Nevertheless, Mozersky et al. (2022) noted that, despite the concerns regarding breaching participants’ trust when data is shared, most research participants may want and expect their qualitative data to be shared. I only shared data during member checking activities.

I built trust by encouraging open communication with all participants. Sometimes, researchers may show some emotional display to build rapport and establish trust, though, empathy in professional settings can be experienced as a burden (Sterie et al., 2023), hence it is usually discouraged. I ensured open communication and dialogue with the participants via phone, email, and Zoom video conference. However, the interview process was by Zoom video conference only. According to Zaugg and Davies (2013), to have a trusting relationship and increase participants willingness to participate in a research study, the researcher should make efforts to ensure open communication and dialogue with participants. My communication with participants remained open throughout the development of the study. Another step to improve my working relationship with participants was to provide the participants with an informed consent form prior to the interview in line with Walden University's Institutional Review Board (IRB) requirements. The participant and researcher relationship during the research process needed to have confidentiality and trust. The researcher needed to provide early, clear explanations on the research objectives and confidentiality protection details. The researcher adhered to interview protocol guidelines while setting times and location for interview as agreed with participants. Interview protocol serves as a guide containing interview procedures, script with introduction and conclusion statements to be used at the interviews, interview questions, and alerts to remind the researcher to obtain informed consent from participants (Braaten et al., 2020). The personal identification information of participants and identification of the organizations remain confidential. I clearly communicated the research objectives to participants. I used the interview protocol

during the interview process. I also scheduled the interviews at days and times suitable to me and the participants.

## **Research Method and Design**

### **Research Method**

The research method I chose for this study is qualitative. Qualitative, quantitative, and mixed methods are used to conduct research studies (Yin, 2018). Qualitative researchers attempt to gain an understanding of meanings of underlying phenomena through exploring the thoughts, opinions, motivations of participants related to the phenomenon under study (Faryadi, 2019). Qualitative study investigates how people make sense out of their own, real-life experiences in their own minds and words. Busetto et al. (2020) noted though some research critics highly criticize qualitative research, it helps to answer questions that cannot be answered quantitatively. Researchers use the qualitative research method to access its richness and depth, which can allow the researcher to gain insights into how participants interpret and make sense and meaning of their own experiences (Bleiker et al., 2019). Qualitative research is an important approach when revealing the feelings, perceptions, attitudes, values, and beliefs of people whose feelings and experiences on phenomena can only be done through the narration of their own stories, and cannot be quantified (Mwita, 2022). The qualitative method was appropriate for my study, as it enabled me to understand the meanings of underlying reasons, thoughts, opinions, perceptions, and motivations of participants through interviews to address my research question. Through data gathering techniques such as interviews, observations, and field notes, qualitative researchers seek to understand

phenomenon by observing the natural context and listening to the perspectives of the various research participants (Taguchi, 2018). I chose the qualitative research method because it enabled me to explore context of my research question and the meaning and behavior of the phenomenon through in-depth, open-ended, interpretive questions by gaining perspectives of participants.

Quantitative researchers collect numerical unchanging detailed data dealing in numbers, logic, and an objective stance, to quantify and analyze data as variables for testing hypothesis to establish cause and affect relationships (Mohajan, 2020). In the quantitative research method, researchers ask closed-ended questions and test hypotheses through quantitative measurements and statistical analysis. Therefore, as my study did not involve testing hypotheses, the quantitative method was not suitable for this research project.

Researchers use the mixed method by integrating quantitative and qualitative components in the same study (Yin, 2018). I did not use mixed method as the quantitative aspects of mixed method are not necessary to address my research question, and not appropriate for the interpretive and explorative approaches this study required. Mixed method research was also not a suitable choice for my study. Mixed method researchers combine quantitative and qualitative research methods elements in the same study (Hewlett & Brown, 2018). These elements are best suited to answer the research question where the qualitative or quantitative method alone is insufficient.

## **Research Design**

The qualitative research designs I considered were pragmatic inquiry, multiple case study, ethnographic, and phenomenological. The qualitative research design chosen for this study was the pragmatic inquiry. I selected the pragmatic inquiry design for this study because it allowed me to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. A pragmatic approach allows the researcher to choose from the wide range of research methods—a strength of pragmatism that has several advantages for social science research (Kaushik & Walsh, 2019). The pragmatic qualitative inquiry design refers to an empirical inquiry for the investigation of a contemporary phenomenon, through actionable knowledge and the recognition of the link between participants' experiences (Kelly & Cordeiro, 2020). Among the central tenets of pragmatic inquiry, is the perspective that research should emanate from a desire to produce useful and actionable knowledge with relevance to the researcher's line of action, as a response to a problem (Kelly & Cordeiro, 2020). As the researcher, I needed to have a general understanding of human experience towards the study's phenomenon.

The multiple case study design was not suitable for this study, as I did not intend to go through gatekeepers to give consent before assessing participants, which would have been time-consuming. Yin (2018) defined case study as an empirical inquiry to investigate an in-depth contemporary phenomenon in its real-world context—where there are no clear boundaries between the phenomenon and the context. Researchers use multiple case study designs to explore in depth a program, an event, an activity, and a

process bounded by time and place from one or more individual's perspectives (Yin, 2018). The case study design was not used for this study.

Researchers use an ethnographic research design to collect data from prolonged observations and interactions with participants' culture or social group under study and analyze data from a population in their social group and cultural setting (Sharma & Sarkar, 2019). I did not use the ethnographic research design for this study as a focus on social and cultural interactions of participants was not aligned with the proposed study's research question. Kruth (2015) also affirmed that ethnographic researchers observe human behavior, investigate human experiences, and explore cultural phenomenon on a long-term basis. Hence, ethnographic research design was not suitable for my study as I did not plan to investigate extended participants social relationships and cultures to answer my research question.

Researchers use the phenomenological design to understand the personal meanings of the lived experiences of the participants related to the phenomenon under study (Sibeoni et al., 2020; Tomaszewski et al., 2020). The focus of phenomenological researchers is on the study of lived human experiences to understand how people interpret these experiences. The phenomenological design was not appropriate for my study, as I did not seek to gain an understanding of personal meanings of the lived experiences of the participants in providing answers to my research question.

Data saturation was a critical aspect of my data gathering process in this study. According to Fusch and Ness (2015), data saturation is that point in a data collection process where the research produces no new information regarding the phenomenon

under study. To help ensure data saturation the researcher performed member checking by requesting the interview participants to review the researcher's summary interpretations of their responses for accuracy, completeness, and as part of the study's data validation (Birt et al., 2016). I used member checking for data saturation by providing a summary of my interpretations of the participants' responses for validation purposes.

### **Population and Sampling**

This study's population consisted of six leaders from O&G companies who are involved and had successfully implemented strategies to promote HCD training activities to increase employees' productivity. I used the purposeful sampling technique to find participants from the Niger Delta region of Nigeria. Purposeful sampling is the technique for selecting participants with experience and or knowledge to provide rich information regarding a phenomenon under study and address the research question (Guetterman et al., 2020). Purposeful sampling enabled me to identify six participants based on the study criteria and on their knowledge on the phenomenon which helped me to answer my research question.

Purposeful sampling technique was the choice for this study. Purposeful sampling technique is appropriate for qualitative research and case studies as it allows researchers to identify participants who share the same experience of a central phenomenon of study (Kalu, 2019). I used purposeful sampling to recruit at least six leaders from three organizations having in-depth knowledge and experience in training and development, providing enough information to collect strategies to promote HCD programs. Kegler et

al. (2019) noted that in purposeful sampling, a participant's knowledge of the study phenomenon are important attributes to consider by researchers when selecting research subjects who can best respond to the research question. Data saturation occurs when researchers do not identify new information, codes, insights, categories, or themes from participant responses and within the sampling group (Champagne et al., 2014; Lincoln & Guba, 1985). I did not seek more data as new information, codes, insights, categories, or themes from participant responses were not identified.

To achieve data saturation with six participants, I asked open-ended questions, followed-up on any new information from participants' responses, reviewed company documents such as training and development bulletins, and further insights on the phenomenon that might have emerged during and after the interviews. I reached data saturation with six participants with the volume of information I encountered in the study. If data saturation was not reached with six participants due to new information, I would have conducted further interviews until saturation was reached. During a study, researchers should conduct additional interviews as required until saturation is reached (Brod et al., 2009; Rubin & Rubin, 2012). According to Robinson (2014), between three and 16 participants in a qualitative study is sufficient to achieve data saturation. Noohi et al. (2016) emphasized that the number of participants for a study may change during data collection process depending on the volume of data on the study phenomenon required to answer the research question. In line with Noohi et al.'s assertion, Roy et al. (2015) also affirmed that in a qualitative study, a researcher could achieve data saturation with three to five participants. Hence, I conducted six interviews to reach data saturation.



The interview setting for this study was Zoom conferencing, which made participants more comfortable, encouraged greater participation, and enhanced confidentiality. Zoom is a virtual communication platform that allows users to connect by video, audio, phone, and chat with the aid of supported devices through a downloadable Zoom Client for Meetings portal, after creating personal accounts in the network (Zoom Support, 2022). I established communication and solicited participation with selected participants by emailing the letter of invitation to have an information session via Zoom. With regards to the meeting medium, I asked the participants to be in a location that was quiet, private, and free from interruptions, which further enhanced the quality of interactions with participants. According to Cairney and St. Denny (2015), interview settings can enhance a participant's response and quality of information. I informed participants that I would be recording the audio interviews to guarantee the accuracy of the collected data when transcribing and conducting data analysis. Sutton and Austin (2015) noted researchers are more committed to an interview with participants and manage data collection effectively when the audio interview session is recorded. The interview session for each participant was planned to last 60 minutes, which was subject to change depending on the interview process flow.

### **Ethical Research**

To adhere to ethical requirements in this qualitative study, I arranged separate meetings with each prospective participant to introduce the consent form concerning their participation in the study. Marshall and Rossman (2016) affirmed that the informed consent process raises the level of trust and allows adequate cooperation between

researchers and participants during the interview. Daku (2018) noted that it is the responsibility of qualitative researchers to adhere to ethical standard principles in participants' recruitment, when obtaining informed consent from participants, protecting participants' privacy and confidentiality, and minimizing harm and conflicts of interest. I adopted *The Belmont Report* to guide the ethical representations for my study.

*The Belmont Report* established basic ethical principles to provide protection for researching human subjects (Office for Human Research Protections, 1979). In this study, I began the collection of data after receiving approval from Walden University IRB, identified, and obtained contacts from all participants. I sent the informed consent form and the letter of invitation to each potential participant by electronic mail for them to indicate their acceptance and consent to participate in the study before conducting the interviews. After emailing the informed consent form to the prospective participants, only those who acknowledged their agreement with the consent form were allowed to participate in this study. Kamp et al. (2019) stated that a mandatory requirement of the researcher in the informed consent form process is to clearly state that participation is voluntary, and that participants can withdraw from the study at any time and for any reason by emailing me at my Walden email account. All participants in this study were interviewed, and none among the six participants was withdrawn. According to Gu et al. (2019), ethical research practices allow participants to withdraw from a given study at any time without saying the reason. Other information that needed to be made clearer in the consent form process were the study's purposes, potential risks, and possible benefits to participants. I informed participants that there will be no monetary incentives for

participating in the research. Participants only received emails expressing my appreciation for participating in the study after the interview and member checking process.

In this study, I ensured the protection of study participants by maintaining confidentiality. The study participants were represented by codes such as P1 without mentioning details that can lead to their identity. Lee (2018) maintained that confidentiality of participants can be ensured with unique identifiers. The companies' names for this pragmatic inquiry shall not be represented by any codes, and no mention of details that can lead to their identity. According to Moustakas (1994), ethical standards in research involve the establishment of clear agreements with the participants and recognition of the importance of informed consent and the significance of confidentiality. I stored collected data in password protected flash drive only accessible to me. The flash drive is stored in a locked fireproof safe located in a private room at my residence to further protect confidentiality of participants. After 5 years, the data will be permanently deleted. Electronic data will be deleted from my flash drive by reformatting the flash drive to permanently erase all data, and the paper data will be shredded.

### **Data Collection Instruments**

I was the primary data collection instrument for this pragmatic inquiry. I collected data through semistructured interview using an interview protocol guide (see Appendix), academic and professional literature on training and development activities. The semistructured interview is a process that allows interviewees to have flexibility when responding to follow-up questions on new ideas encountered during an interview (Ergul

Sonmez & Koc, 2018). I used semistructured interviews because it allowed me to use predetermined questions, asked probing questions, and followed-up to new ideas that emerged from participant's responses.

The researcher being the primary data collection instrument in the interview process ensures collected data reflects the participant's views and not the researcher's (Carlson, 2010; Kawulich, 2005). I developed an interview protocol document (see Appendix) that served as a guide for me when conducting the semistructured interviews. The interview protocol consisted of procedural steps that helped in facilitating the interview process with each participant in a consistent manner. The steps ensured the participant responses aligned with the research questions during data collection. Also, included in the interview protocol were the interview questions, my contact information, the purpose of the study, the interview medium, the action steps to take during the interview to encourage and sustain participants' participation, and script of what to ask before and after the interview. According to Goodell et al. (2016), the interview protocol contains outlined procedures interviewers should follow to ensure consistency in an interview process. I adhered to the interview protocol guidelines and performed member checking, to ensure collected data reflected the participant's views and not the researchers, which helped mitigate bias.

I performed member checking with each participant to enhance reliability and validity of the data, to validate information obtained during the semistructured interviews. Member checking involves requesting the interview participants to review the researcher's summary interpretations of their responses for accuracy, completeness, and

as part of the study's data validation (Birt et al., 2016), and to reach data saturation. I provided my interpretations of the participant responses for review. I followed-up with email reminders to each of the participants for a period of 2 weeks after transcribing and interpreting the transcripts. I did this for them to further discuss and update any inaccuracy observed between their responses and my interpretations and validate the collected data through the member checking process. All participants responded with email messages to validate the collected data by the member checking process. If there were no responses from participants that were asked to review my summary interpretations for changes in respect of their answers to the interview questions within a period of 2 weeks, I would have sought for the replacement of that participant. Qualitative researchers commonly use member checking method to increase the validity, evaluate the credibility of study results through participant's checks for accuracy and quality on interpreted data (Birt et al. 2016; Raskind et al. 2018). The quality of interpreted data is vital to the development of a successful research study.

### **Data Collection Technique**

The primary data collection technique for this study was semistructured interviews to enable me to meet the objectives of the research question. After receiving IRB approval, I contacted prospective participants selected through purposeful sampling and who met the eligibility criteria for participation in the study. I invited the interview participants to participate in the semistructured interview and provided each of them with the informed consent form. Participants who emailed me back with the phrase "I consent" were contacted to participate in the study. The semistructured interview lasted for about

60 minutes with each participant and was conducted using Zoom video conferencing application.

The interview protocol (see Appendix) was used as a guide during the interview process. The interview protocol guide further assisted me to focus on the interview with each participant and maintained consistency with the questions during the entire interview process. To maximize interview consistency, qualitative researchers should develop and follow the guidelines of an interview protocol, which can lead to greater reliability of the qualitative research process (Goodell et al., 2016; Larrinaga, 2017). The semistructured interview technique is more beneficial to the qualitative researcher when guided by an interview protocol.

The advantages of the semistructured interview technique are to (a) assist the researcher to gain insights into participants' perspectives, experiences, and knowledge to answer the research question, (b) allows participant flexibility when responding to probing or follow-up questions that emerged during the interview, and (c) to clarify unclear interpretations from participants responses (Castillo-Montoya, 2016; Yin, 2018). The semistructured interview has disadvantages such as (a) time constraints to conduct the interviews, (b) interviewees can be emotionally biased and provide responses on what they think the interviewer wants to hear, and (c) there can be disagreements between both parties regarding the choice of time and place (Cridland et al., 2015; Turner, 2016).

The semistructured interview was conducted by Zoom video conferencing as agreed by both parties. I recorded the participant interview sessions using the Zoom built-in audio recorder through my personal laptop computer. In the Zoom video conference, I

will click off the video to do only the audio recording in order to be in compliance with Walden University IRB requirements. I used my Samsung Galaxy J6 plus smart mobile phone as a back-up audio recording device. I transcribed the interview via a Microsoft Word 365 document a few days after the interview was completed. After the data collection and my field notes were reviewed to identify similar themes, I drafted a summary of my interpretations and emailed to the participants to verify and clarify my interpretations with their responses to the interview questions.

### **Data Organization Technique**

I categorized and organized data in the flash drive and labelled the data as participants, public, academic, and professional literature folders accordingly. Korhonen (2014) noted that a critical component of research data management is data organization along with the flexibility of how researchers can access, store, evaluate, and communicate research findings. I categorized and organized data by establishing a main folder on my computer with sub-folders for each participant named P1 to P5, public document, academic, and professional literature respectively for faster accessibility before transferring them to the flash drive. Most written information is stored as word or pdf files accordingly, while other documents were scanned. The approach for the creation and identification of central and sub folders to store and organize raw data in a research study is an important resource for researchers (Nowell et al., 2017). I stored collected data in password protected flash drive only accessible to me. The flash drive shall be stored in a locked fireproof safe located in a private room at my residence to which only I will have access for a period of 5 years to further protect confidentiality of participants,

after which the data can be permanently deleted. Electronic data will be deleted from my flash drive by formatting it to permanently erase all data, and the paper data will be deleted by my shredding machine.

### **Data Analysis**

I used methodological triangulation to obtain data credibility for the qualitative validity of the study. Methodological triangulation refers to the collection of data using different data collection methods to help gain multiple perspectives of the same phenomenon (Denzin, 2017). I collected data from semistructured interviews, academic and professional literature on training and development activities. I used Yin's (2018) five phase data analysis process in this study. Yin's five phases consist of (a) compiling, (b) disassembling, (c) reassembling, (d) interpreting, and (e) concluding. Yin's five phase data analysis process is focused on the categorizing of data and coding to identify emerging themes –popularly referred to as thematic analysis.

#### **Compiling**

The collected data for this study was compiled using Microsoft Word 365. Yin's data analysis model commences with the first step, which is to compile collected data into a format that enables researchers use in determining meaningful themes, patterns, and descriptions that answer the research question (Castleberry & Nolen, 2018). Castleberry and Nolen (2018) defined compiling to involve the process of organizing raw data for analysis in qualitative research. To effectively compile the collected data from the interview process using Microsoft Word, the semistructured interview responses were organized and transcribed into usable texts formats using Microsoft Word 365 editions.



When researchers review collected data repeatedly, it will facilitate their familiarity with the data, a critical characteristic of the compiling process (Castleberry & Nolen (2018). I reviewed collected data repeatedly and transcribed the semistructured interview responses the same day of the interview, and few days after. This was done to prevent loss of information and ensure correct transcription for the member checking review sessions to maintain quality data analysis. In addition, I organized the data in groups according to their data sources after reviewing the transcribed interview files, member checked interview interpretations, publicly available documents on HCD, academic, and professional literature on training and developments. As soon as the compiling process of the data was ended, I proceeded to disassemble the data.

### **Disassembling**

In this phase, data was disassembled in codes of similar identities. Disassembling of the data in qualitative research refers to separating or taking apart specific groupings of themes, concepts, or ideas and code them in similar identities (Castleberry & Nolen, 2018; Wulansari, 2019). Coding involves the conversion of raw data into usable data, allowing researchers the opportunity to identify common themes from various text interpretations (Austin & Sutton, 2014; Belotto, 2018). I disassembled the data into common themes, and similar word phrases, and I did this manually to further improve my familiarity with the data. The common themes, and similar word phrases were identified by color codes according to their similarities and representations on strategies for HCD, and answers to the research question. This coding process was repeated on all categories

of themes and similar word phrases until data saturation was reached, before reassembling of the data took place in the next phase.

### **Reassembling**

In this phase, data was reassembled for identification. The third phase in structuring data analysis is reassembling data to identify patterns and themes (Tuapawa, 2017). Cox and McLeod (2014) declared reassembling as the process of rearranging data. Reassembling consists of grouping codes to create themes, which may represent a patterned response or meaning within the collected data (Castleberry & Nolen, 2018). After data from semistructured interviews, publicly available documents on HCD, academic, and professional literature on training and developments have been transcribed, organized, and sorted by keywords and concepts, repeated themes emerged from coded data. Percy et al. (2015) noted that qualitative researchers can identify themes for data analysis by the repetition of words and phrases. After completing several iterations of coding, I highlighted keywords and themes, and then transferred the themes into a Microsoft word table of rows and columns. I created a reference list to compile, organize, and summarize the main concepts derived, and compared participants' responses and any common relationships and themes that answered the research question. Tuapawa (2017) suggested that researchers break down data into smaller categories and focus on each category. I assigned each type or theme a name and, later, grouped the themes that support the research question. I used grouping to highlight the common themes of the participants to the phenomenon. When the coding and synthesizing of data was completed, I noted alignment by reviewing and comparing the data to the literature

and the conceptual framework. During the reassembling phase, I observed themes to answer my research question.

### **Interpreting**

In this phase, data were interpreted to be familiar with their meanings. The fourth phase in structuring data analysis is interpreting data (Tuapawa, 2017). The goal of the interpreting phase is to become familiar with the meaning of the data (Castleberry, 2014; Tuapawa, 2017). Haines et al. (2015) specified that interpretation is extracting the meaning from and describing the implications of the data. After reassembling the data into patterns and themes, I continued to interpret the data. Researchers interpret the codes and develop themes in an analytical narrative of the significance of the findings concerning answering the research question findings (Castleberry & Nolen, 2018). Castleberry and Nolen (2018) cautioned researchers from simply restating codes or themes as interpretations and suggested identifying and aligning the interpretations with the research question. I reviewed all the identified codes and themes and discussed the relationships between the themes by ensuring the interpretations align with the research question. Qualitative researchers seek to correlate themes to the conceptual framework to ensure alignment between evidence from the data to conceptual framework tenets used in the research (Morse, 2015; Trainor & Graue, 2014). Vaughn and Turner (2016) surmised that to bridge the gap of knowledge to theory and practice, qualitative researchers should correlate the relationship between the evidence and the tenets of the conceptual framework. I confirmed alignment by reviewing and comparing evidence from data, literature, and conceptual framework as detailed in Section 3 of the study.

## **Concluding**

This was the concluding phase in the data analysis structure in the study. The last phase in structuring data analysis is concluding data where researchers represent their findings and conclusions using the concluding step (Tuapawa, 2017; Yin, 2015). Castleberry and Nolen (2018) explained researchers present their findings and conclusions as the final summation in response to the research question. To draw conclusions, I provided readers with text and tables from my interpretations and examples from data supporting my findings. In this qualitative study, I sought alignment between the findings and conceptual framework. After I developed my findings, I reviewed the extant literature for newly published articles related to my findings and to conceptual framework. I correlated my research evidence with the literature and any significant new changes to conceptual framework to support my study. After ProQuest might have published the study, I will provide each participant with a summary of the findings via email.

## **Conceptual Software Application Plan**

I used Microsoft Word to organize and code the transcribed data. I used the Microsoft Word comments, tracking features, and macros to create coded text from the transcribed data. I created a table to contain the coded Microsoft text using Microsoft Word as well. I did not use the features of a Microsoft Excel spreadsheet, because it was possible for me to manually use the Microsoft Word-coded text tables to classify, sort, and analyze the data. This method gave me the great privilege to be more familiar with the data.

I selected the HCT as a conceptual framework and identified themes from semistructured interviews to understand the strategies leaders use to promote HCD in an O&G organization. Correlating the research findings with existing literature and the conceptual framework may help close the knowledge gap between theory and practice (Van Rijt & Coppen, 2017). I used Microsoft Word color functions to group, review, and compare similar codes to correlate the themes to HCT and the existing literature findings to analyze and interpret the data.

### **Reliability and Validity**

#### **Reliability**

For this study, I discussed reliability by addressing dependability. However, Lincoln and Guba (1985) affirmed that dependability for qualitative research is synonymous with reliability for quantitative research. Dependability refers to the consistency and reliability of the research findings and the degree to which research procedures are documented, allowing someone outside the research to follow, audit, and critique the research process (Castleberry & Nolen, 2018; Korstjens & Moser, 2018). I used methodological triangulation to ensure dependability by obtaining information from multiple data sources. Among the sources were interview data, public documents, academic and professional literature reviewed to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. Guba and Lincoln (1989) also noted that dependability in a qualitative study can be attained by researchers using triangulation. I also used the member checking process for accuracy, completeness, and as part of the study's data reliability by requesting the interview participants to

review the researcher's summary interpretations of their responses. The use of member checking of interpreted data by a qualitative researcher can also enhance a study's dependability (Hadi & José Closs, 2016; Hays et al., 2016). The member checking approach was successfully used for this study.

### **Validity**

To address the question of validity for this research various ways were available to the researcher. Noble and Smith (2015) stated qualitative researchers seek to ensure a research's validity through its credibility, confirmability, and transferability. Validity refers to the state of integrity and appropriateness of the research process and data to which the findings represent an accurate interpretation of the experiences of the participants, by establishing the trustworthiness of the study based on credibility, transferability, and confirmability (Lincoln & Guba, 1985; Spiers et al., 2018). Qualitative researchers use the term validity to judge the quality of the findings (Yazan, 2015). Bashir et al. (2008) stated that validity in qualitative research is dependent on implementing verification strategies to ensure data is credible and trustworthy. Birt et al. (2016) noted that member checking and triangulation helped support trustworthiness and validity. I ensured trustworthiness in my study and presented accurate reflection and representation of my research data through methodological triangulation and performing member checking.

### ***Credibility***

As the researcher, I used methodological triangulation to ensure credibility of my study findings. Credibility refers to the level or degree of confidence the qualitative

researcher has in the truth of the findings that have emerged from the research study (Anney, 2014; Lincoln & Guba, 1985). Triangulation is a strategy a researcher can use to attain and enhance credibility of a research study (Smith, 2018; Yin, 2018). I also conducted member checking to ensure the quality of my data interpretation to attain credibility. Researchers perform member checking to increase the credibility of qualitative research (Raskind et al., 2018). Member checking is a means of validating participant responses and establish credibility from data interpretations to ensure accuracy of participants' viewpoints (Madill & Sullivan, 2018). Considering the feedback from the member checking process, I adjusted the accuracy by using their changes to validate my interpretations to improve the study's credibility.

### ***Confirmability***

I used methodological triangulation to enhance confirmability in my study. Confirmability refers to the degree study findings that could be confirmed or verified by others based on participant responses and not on the bias or personal inspirations of the researcher (Anney, 2014; Marshall & Rossman, 2016). Triangulation can be used to ensure confirmability in qualitative research (Cypress, 2017; Johnson et al., 2017). I ensured that my study findings reflected the shared perspectives and experiences of the participants. I reviewed all interview responses, transcripts with data interpretations, and performed member checking with each participant to ensure confirmability of my research findings.

### ***Transferability***

I ensured transferability by using purposeful sampling to ensure a representative sample and data saturation. Sarma (2015) revealed transferability in qualitative research refers to how the researcher demonstrates that the research study findings are applicable to a similar situation, similar population, or similar phenomenon. Purposeful sampling helps qualitative researchers to establish transferability through the selection of participants who can provide rich information on the phenomenon to improve the research findings (Gentles et al., 2015). A purposeful sampling approach was more appropriate for my study to ensure effective transferability of my study findings.

### **Data Saturation**

I verified data saturation after the collected data were coded and analyzed, and determined if no new themes, categories, insights, or perspectives for coding are apparent. Data saturation refers to that point in a data collection process where the research produces no new information regarding the phenomenon under study (Fusch & Ness, 2015). Champagne et al. (2014) and Lincoln and Guba (1985) also affirmed that data saturation occurs when researchers do not identify new information, codes, insights, categories, or themes from participant responses and within the sampling group. Meanwhile, according to Birt et al. (2016), qualitative researchers can achieve data saturation if they perform member checking. To further ensure data saturation in my study, I continued to interview participants until no new themes, categories, insights, or perspectives from coding participant responses and within the sampling group emerged.



### **Transition and Summary**

In Section 2, I discussed the following subsections: (a) purpose statement, (b) role of the researcher, (c) participants, (d) research method, (e) research design, (f) population and sampling, (g) ethical research, (h) data collection instruments, (i) data organization techniques, (j) data analysis, (k) reliability and validity, and (l) transition and summary.

In Section 3, I discuss the following subsections: (a) introduction, (b) presentation of findings, (c) application to professional practice, (d) implication for social change, (e) recommendation for action, (f) recommendation for further research, (g) reflections, and (h) conclusions.

### Section 3: Application to Professional Practice and Implications for Change

#### **Introduction**

This qualitative pragmatic inquiry study was to explore the strategies O&G leaders use to promote HCD training activities to increase employees' productivity. The population for this study includes six leaders from O&G companies within Nigeria who had successfully implemented strategies to promote HCD training activities to increase employees' productivity. I selected the HCT as a conceptual framework and identified themes from semistructured interviews to understand the strategies leaders use to promote HCD in an O&G organization, and the research's implementation approaches may help reveal these strategies. The study data were collected through semistructured interview using open-ended questions, and an interview protocol guide (see Appendix). Data were also collected from academic and professional literature on training and development activities.

To assist in collecting data, I conducted Zoom video conference interviews with six participants who are business leaders in their various organizations. For ethical reasons, only the audio content from each of the Zoom video conference interviews was recorded. The process of authenticating the validity and reliability of the collected data was by member checking and methodological triangulation. I used Microsoft Word 365 automatic transcribing facility to organize and transcribed the audio data into usable text formats. To be more familiar with the data, I manually extracted the codes from the transcripts and arranged them in table formats under codes, groups of codes, categories, group of categories, and recurrent themes.

### **Presentation of the Findings**

The research question that guided this study is: What strategies do O&G leaders use to promote HCD training activities to increase employees' productivity? The study findings were grouped into recurrent themes transcribed from interviews and field notes and by listening to the audio recordings at various times. The six participants were represented individually as P1, P2, P3, P4, P5, and P6 to secure their identities. After analyzing the transcribed texts, the extracted codes and categories, the findings indicate five themes as the strategies O&G leaders use to promote HCD training activities to increase employees' productivity. These strategies are (a) skill gaps, competency, and training needs assessments, (b) on-the-job and off-the-job training, (c) providing mentoring to employees during learning and development initiatives, (d) employee motivation and leadership empowerment, and (e) overcoming barriers to HCD. Table 1 indicates the themes that emerged from the interview, and the participants and response rates in percentages to each interview question answered leading to development of the themes.

**Table 1***EmergEd Themes*

Theme	Participants	Questions	Response rate
<b>Skill Gaps, Competency, and Training</b>			
Needs Assessments	6	5	100%
On-The-Job and Off-The-Job Training	6	5	100%
Providing Mentoring to Employees	6	5	100%
<b>During Learning and Development</b>			
<b>Initiatives</b>			
Employee Motivation and Leadership	6	5	100%
<b>Empowerment</b>			
Overcoming Barriers to Human Capital	6	5	100%
<b>Development</b>			

**Theme 1: Skill Gaps, Competency, and Training Needs Assessments**

The participants discussed the skill gaps, competencies, and training needs to identify areas for employees' training and developments in the O&G industry. Skill gaps, competency, and training needs assessments as related by the participants, indicated the inability of employers to provide the required skills to the employees as at when needed for the employee's productivity growth, and improvement in other performance enhancements. The most distinct statement that emerged from all the participants was that this theme is a strategy for leaders to reinforce the use of feedback process, performance management process, learning management system, and competency

management system, for HCD. Participants P1, P2, P3, and P4, focus on the feedback process and the performance management process, while P6 and P5 focus on feedback process, and the learning management system respectively in actualizing this theme in their individual organizations.

Meanwhile, P1, P2, P3, and P4 strategies are similar regarding the use of feedback process from employees and supervisors, and the performance management process to achieving this theme. P1 said, “one thing we look at within my organization or within my team is the deployment of what we call the 360° feedback, as well as customer survey exercise.” According to P1, “We use the feedback from this survey as a means to establish areas that will require some improvements in terms of skill development and technology support.” A similar view was explained by Participant P4 who said,

If an individual is working under the mentorship of a senior colleague, once in a while we get feedback from that colleague to know how you are doing. Then if you are also working, you always get feedback from the customer you have sent out to go and render service to. We get feedback from your peers.

Although P6 uses the feedback process in a similar way to P1, P2, and P3, they also go further in identifying employees’ strengths and opportunities. P6 said “the organization’s team-supervisors, coach, observe the strengths, weaknesses, opportunities and threats and overall performance of employees, and provide feedback to leadership.”

The competency management system, and the learning management system platform are similar tools to identify employees’ skill gaps, competency levels, and training needs. These tools are computer-based training programs that enable employees

carry out self-assessments on recommended soft skills courses to determine their skill gaps, competency levels, and training needs. P2 and P5 make use of these tools in similar ways within their respective organizations. P2 stated that,

We carry out an assessment to determine the actual competency gaps of the employees as it is related to their jobs and prioritize those gaps to be able to deploy learning initiatives that would improve performance. Additionally, P5 revealed that, the training modules for these soft skills are domiciled in the learning management system platforms where the employees can actually go and conduct and undergo the training and acquire those soft skills and be able to apply them.

Respondents P1, P2, P3, and P4 held similar opinions on the use of the performance management system for this theme. P2 emphasized that, “the performance management system is a structured approach of appraising efforts and results of an employee, on how it relates to addressing business needs.” Participant P3 expressed employee performance ranking based on set goals, using the PMP. The outcomes are based on the performance metrics obtained yearly and identify employees who require training based on their capabilities. P3 noted the goals as, “alignment, inspired and alignment, building capacity, growth capability and getting results.”

## **Theme 2: On-The-Job and Off-The-Job Training**

All participants in the interview recognized that online computer-based training, local and international training, in-field training, and equipment manufacturers’ vendors coming into site to train are among the training types that exist in their organizations

towards the development of their human capital. These training types form the components of on-the-job and off-the-job training programs. Though the level and scope of involvement may differ between organizations, P1, P2, P3, P4, P5, and P6 accepted on-the-job and off-the-job training programs to encompass all that their organizations do to develop their human capital. The participants in each of their responses during the interview session suggested that employees cannot be effectively trained without first assessing their skill gaps and competencies to identify training needs, as presented in theme one.

In terms of scheduling employees for training, P3 ensures that training courses are designed to enable employees to function well on tasks. P3 said, “We will not just form a team where all the teams are deficient of a particular training or a particular knowledge.” The employees’ numbers that will go for training for a particular year are prioritized in order not to deplete the workforce. P3 stated,

Employees are scheduled for training from a pathway that they are going to follow and ensure that they are rotated, so that we will have a mix, like an on-the-job-training and those on off duty, and still go for external training too.

The human resources training department of P1 organization was responsible for providing computer-based training model, as well as on the job learning program for soft skills learning in relation to the job. P1 said,

We also draw up Road maps for training as well as retraining to cover the entire work group, putting the training into various categories, looking at long-term,

short-term programs. Despite the lean workforce, one or more employees who are off duty attend some of these training courses.

There is a close similarity between P1 and P3 strategies to balance workforce through engaging their employees that are off duty to be trained off-the-job. P4 has articulated their organization's commitment to training as the key to promoting HCD, which is identified as preparing people for achieving organizational goals. Therefore, P4 sources and extends their training search from local to international trainers to obtain quality vendors anywhere in the world. P4 then confirmed that,

Once that is identified, the leadership will also determine whether to bring the vendor into the country to train the personnel or to send the personnel abroad for the training, to the vendors location for training.

Meanwhile, in contrast to the strategies of the other participants for this theme, P6 reflected its years of experience in dealing with employees and boosting their productivity. To ensure their minds are refreshed and improved P6 said, "we position them or send them for courses sometimes - Local courses, and sometimes, international courses." "I have to use three key strategies to build our workforce in their productivity because these areas affect a lot of their behavioral system to our organization." P6 presented their three key strategies as "knowledge capital development, social aspect of the human capital development, and emotional human capital development."



### **Theme 3: Providing Mentoring to Employees During Learning and Development**

#### **Initiatives**

Participants discussed the provision of mentoring to employees during learning and development initiatives. All participants in the interview sessions acknowledged that mentoring employees in a learning and development program is among the best ways to develop human capital in their organizations. The responses of the participants suggested that employees training others in an on-the-job training, soft learning initiatives, exchange of ideas in employee swap programs, and the encouragement of teamwork are effective mechanisms for mentorship in O&G organizations. In P4 organization, mentorship exists among employees of the same rank working as peer groups in their organization. Participant P4 defined mentorship,

Mentorship is when you are working under the guidance of somebody who has a better understanding of the task. So, the person is like supervising you, allowing you to do the task, telling you what to do. Give you the kind of coaching that you need to enable you to perform such task unsupervised.

Coworkers with more experience and training should be able to train and share the knowledge for others to apply and use in their jobs.

P1 stages employee swap program for exchange of ideas between work groups or units in a mentorship program in their organization. P1's idea of mentorship through group approach was like that of P4. However, the difference between their group approaches is that while P4 focuses on peer groups, P1 refers to work groups.

P1 organization also relies on those personnel who attended international training to share knowledge in the mentorship program on their return. P1 commented as follows:

We do some employee swap program to see how we can have what we call exchange-of-ideas. So, swap programs means that you look within the organization and see where you can deploy knowledge and apply in other units and then have the employee from that unit deploy to my units, and then we use that opportunity to exchange ideas.

P6 noted that what they do most in mentoring employees “is to encourage teamwork, and division-of-labor amongst their workforces.” The importance of teamwork was emphasized in the interview sessions with participants. However, P6’s emphasis on teamwork suggested that creating division of labor in a workplace can lead to team effectiveness. P6 said,

Now when you create the division of Labor, we structure people in such a way that they can work as a team and then bring their emotions into play, all right! The labor breaks them down to their specialty that allows them to build their emotional connectivity to the best that they can do.

#### **Theme 4: Employee Motivation and Leadership Empowerment**

Participants discussed employee motivation and leadership empowerment, focusing on the theme’s benefits in various ways. The most prominent benefits from participants’ responses are employees’ health and wellbeing, compensations, employee feedback, and education support. Others are diversity and inclusion, and team building. In discussing this theme, the participants agreed to the opinion that employees are motivated

when their voices are heard by leadership through employee feedback, and when their health and wellbeing is cared for. The feedback processes from employees filling out feedback forms involves their observations and experiences after attending training. P1's comment on employee feedback as a motivation factor, "is for people to share their opinion about how you have performed, how you are faring in your operation, how you are faring on the job. And then you use that to also give back your own feedback and then maybe see where you also need to align with that feedback."

Another area of employee motivation, though contrary to P1's strategy, is to compensate employees who attend training in their free time when on off-duty, and to also invest in their health and wellbeing. The nature of jobs in mostly every O&G industry is field related, where employees have time-offs from job after spending time in the field locations. P2 organization compensates employees who attend training at their private time instead of company's time. According to P2, "if you use your time off for training instead of being with your family, we use monetary rewards as an incentive to get employee buy-in." Employees are also encouraged by providing them with rewards. In similar circumstances as with P2, P3 organization provides 'recognition and award' to employees for excellent performance as an encouragement in their organization, while performing tasks: "As they are performing, as they are working on their work on their daily life, we try to recognize performance and award them. So, when you do that, you motivate them."

On employee's health, and wellbeing, participants P6 stated, "We look at the part of their social human capital to invest in their health. We ensure that their well-being is

taken care of and encourage on steps that must be taken to improve their general well-being.” P6 strategy of investing in their employees’ health and wellbeing is related to that executed in P1 organization, but in different form of benefits. P1 said “one thing that we also do within my team that I ensure that we get going is to ensure that we provide the support for employees’ education, and continued learning to help enhance their knowledge and growth within the organization.” The responses from the participants on this theme suggest that when employees are better motivated and encouraged by leadership, will perform at their best.

### **Theme 5: Overcoming Barriers to Human Capital Development**

The greatest contributing factor to the growth and development of a nation’s economy and its citizens’ welfare has been human capital. The importance of the human capital has long been a subject of discussions by many researchers. Schultz (1993) defined human capital as a key element in improving a firm’s assets and increasing employee productivity to sustain competitive advantage. Therefore, the importance of overcoming every barrier that would pose as a challenge towards HCD in these organizations, should be vehemently resisted and overcome.

Considering the responses of participants in the interview held with them, most of the barriers provided are similarly related. Among the similar ones are budget constraint and funding, personnel constraint, and identification of a trainer. Other barriers are communication, non-visible leadership presence, and government policy. Participants’ most prominent responses suggested that training and development of employees is good, however, their working units and work groups need to keep their overhead costs under

control. They also agreed that leadership of their organizations should make more efforts to improve fundings of HCD programs in their establishments by reviewing the training and development budgets and providing for exigencies periodically. P2 mentioned,

A very key part of a successful campaign to develop human capital is leadership, providing an enabling environment and leadership visibility. If you do not have the funding of these programs, or if it is not adequately funded for execution even though you have good intentions, to have these programs with the strategy in place, the strategy will not be able to take off from the ground. Visible leadership presence to show commitment to developing human capacity in training events by lending their voice to say, 'we believe in it', is also key in overcoming barrier such as employee buy-in.

Additionally, regarding personnel constraints, participants opinions suggest employees nominated for training and development activities be prioritized in a manner not to deplete workforces at every given time. Also, the inability of the leaders to identify a trainer to execute a training course can be very challenging, especially if that training is very key to improving the productivity of your personnel. P4 said, "such key training can be moved to a subsequent year."

Communication was identified among the key barriers in P6 organization even though it is not distinct with other participants. According to P6, "not getting proper feedback from the unit leaders working directly with the workforce is one of the aspects of communication challenges they are facing." To overcome this barrier, "workers are sent on courses in communication and interpersonal relationships." Another key barrier

was observed by P5 with regards to government policies that may prevent bringing in international trainers from overseas. P5 commented,

Government policies can impede the insurance of visas to operating equipment manufacturers to come and deploy training on site. Sometimes instead of sending people abroad to go and train because of all the hitherto mentioned challenges, you see that it will be cheaper to bring one person from abroad back to your site to train many people at the same time. Due to some government policies that can delay visa issuance, trainers may not be on ground, and you keep on talking about the same training repeatedly time after time.

### **Discussion of the Findings**

The participants discussed skill gaps, competency, and training needs assessments as a consistent and important focus in promoting HCD training activities to increase employees' productivity. All the participants were able to provide responses that may be collective, effective, and enabling strategies for leaders at the global stage. These strategies may assist leaders to promote HCD training activities to increase employees' productivity, especially in O&G organizations. Skill gaps do not seem to have a clear definition as a standard because of its concepts that are ambiguous and difficult to define and measure by researchers (Rikala et al., 2024). Rikala et al. (2024) proposed a simple definition that suggested skill gaps to be gaps between training outcomes (that employees possess) and industry-specific skill needs (necessary to the organization). The researchers suggested that the skill gap may relate to the inability of employers to provide the

required skills to the employees as at when needed for the employee's productivity growth, and improvement in other performance enhancements.

Training employees to become more skillful and competent can encourage organizational development (Nuraeni et al., 2022). Since the purpose of training is to enhance employees' competency, more training programs should be encouraged by organizations. Training needs can only be ascertained therefore after a thorough employees' skills and competency assessment must have been completed. Competency approach is the bedrock for intensive training and assessment towards identifying various abilities and knowledge gaps amongst its workforces.

The participants discussed on-the-job and off-the-job training, including other trainings affiliated with industries, including O&G organizations. Any process by which the skills, talents, and capabilities of the employees of an organization are increased should be regarded as training. New and current employees of an organization require training, to be updated on technological advances and the latest developments. According to Trávníčková and Maršíková (2023), there are various methods and wide range of training and development activities categorized or divided into two main groups – on-the-job and off-the-job. Nevertheless, with the aid of global technology in our world today, online training can be realized as well.

Mentoring as a means of training refers to the training extended to one employee by another employee. The receiving employee (the mentee) expectedly is less experienced than the employee (the mentor) giving the training in that task. Mentoring is a learning activity or training based on the advice of an expert to an employee

(Trávníčková & Maršíková, 2023). This form of training is quite common and useful in the O&G organizations, where continuity of knowledge dissemination in developing employees is taken seriously.

Motivation is human resources including human capital, knowledge, skills, attitudes, and behavior that are properties of an organization engaged to fulfill its objectives and to enhance the quality of life of its workforce. Purnama et al. (2021) opined that leadership style is a behavioral norm used by leaders to influence the behavior of persons, and when done right can lead to that person's motivation to excel. Purnama et al. defined motivation as the drive, effort and desire humans use to activate, empower, and directs behavior to perform tasks within work scope. Any effort to increase human knowledge, enhance skills and productivity is an effort in HCD. Motivation at work affects and stimulates employees differently to give their best in the organization despite their cultural aspects of employee behavior, and linked to some benefits (Kaunda & Yangailo, 2023; Ruiz-Palomino et al., 2021).

Human motivation may be categorized as extrinsic and intrinsic (Pink, 2009, as cited in Tesmer & Oxenford, 2021). The type of compensation given to an employee for attending a training program is an example of an extrinsic motivation. Intrinsic motivation originates from the individual, suggesting that employees are motivated by the satisfaction derived from taking part in an activity, and it is the most powerful human drive as it can enable employee follow mastery (Pink, 2009, as cited in Tesmer & Oxenford, 2021). An employee going the extra mile to mentor people can be intrinsically motivated because he or she may enjoy doing that kind of task.



In a comment on barriers from the World Economic Forum (WEF, 2023), the key barriers identified by organizations to prevent global industry transformation are skills gaps and an inability to attract talents. However, the report also stated that investing in learning and training on the job is the most promising workforce strategy these industries can explore for achieving their business goals. The O&G industry is not exempted from this challenge, as the industry is among frontline businesses that see training as a better means to reskilling and upskilling for talent acquisition and retention.

The barriers of political infractions, government policies, talent acquisition, technical expertise, and funding within the O&G industry as a global challenge are quite popular, and of more concerns in the case of Nigeria of today. Opusunju and Akyuz (2022) noted that as long as multinational corporations operating in the Nigerian O&G industry continue importing their technology, it will always be a very sensitive barrier for Nigeria in respect to technological transfer. According to the researcher, Nigerians cannot copy and internalize these technologies even if they have the capacity, because of propriety issues. Therefore, the O&G Indigenous workers in Nigeria would continue to be trained on the use and operations of these equipment and facilities through the original equipment manufacturer and their accredited vendors.

### **The Findings Relate to the Conceptual Framework**

The conceptual framework for this study is the HCT and it agrees with the themes of the study. The HCT tenets formed the foundations from which the theory is built, and the themes of the study were identified in alignment with the participants responses based on the theory tenets. Some key training and developmental components associated with

the conversations and discussions with participants P1 to P6 are education, mentoring, motivation, health and well-being, on-the-job and off-the-job training, skills, and competency. These components build up towards enhancing the individual to meet organizational challenges before and after employment. In the literature, Becker (1994), noted that human capital rests on the premise that education and on-the-job training raise earnings and productivity as it enables workers to gain knowledge, skills, problem-solving techniques, and more work experiences. This claims by Becker as regards education and on-the-job training agree with the themes of the study.

The HCT through its tenets agrees with the interwoven relationship between HCD and individual skills and characteristics towards organizational success. Still in the literature, Becker's (1962) concept of human capital relating to on-the-job and off-the-job learning in the development of a firm's workforce involving training and schooling also satisfy the findings of the study as covered in the identified themes. Also, the findings from the study agree with the perspective of Galiakberova (2019) that the HCT comprises of the whole set of human knowledge, skills, abilities, and motivations as the individual capital. Also, in support of the findings from the study, the comments of Fényes & Mohácsi (2020) asserted that the HCT refers to individual characteristics such as knowledge, general information, and general capabilities employees convey within a firm when hired. The findings thus align with the conceptual framework for the study.

### **The Findings Relate to the Literature**

According to Ochei et al. (2023), employees will not only have their income salary boosted when they are exposed to training, education, and development while in

employment, but will also assist the organization gain competitive advantage and hence improved its performance. Ochei et al.'s perception agrees with the existing literature, that development of an employee can assist organizations in gaining competitive advantage (Romero-Hidalgo et al., 2021; Sakis & Serafeim, 2020). Theme two findings agree with the current literature Trávníčková and Maršíková (2023), and the existing literatures with respect to on-the-job and off-the-job training (Daramola & Daramola 2020; Fred's et al. 2021). Both forms of training prepare employees on and off the job and may run concurrently as required by the organization, and usually under mentorship of a knowledgeable colleague, or an invited external instructor or professional. The existing literature of Friday and Mlanga (2019) and Yuan et al. (2021) also supported the findings of theme three regarding employee's encouragement through knowledge sharing, and increased learning and development opportunities as forms of employees' development.

Motivation and empowerment are functions of leadership style and behavior and leadership style considered as an influencer to employee motivation to excel (Purnama et al., 2021). Also, the existing literature Uka and Prendi (2021), and Bini and Okonta (2023) agreed that motivation of employees can increase their productivity and performance, and employee empowerment can encourage their participation and decision making respectively in an organization. In the significance of the study section earlier, I affirmed that my findings may expose internal and external barriers that affect workforce development, productivity, and thus enable business profitability. Evidence from theme five findings must have suggested that it is possible this affirmation may be achieved.

### **Applications to Professional Practice**

The findings of this study are applicable to the professional practice of business in the O&G industry for strategies to promote HCD training activities to increase employees' productivity. Employee productivity is an important consideration for businesses because most of the successes of any organization rely upon the productivity of its workforce (Ajayi, 2020). This can be evaluated in terms of the output of an employee in a specific period doing similar work. The strategies leaders of O&G organizations can use to promote HCD training activities to increase employees' productivity include (a) skill gaps, competency, and training needs assessments, (b) on-the-job and off-the-job training, (c) providing mentoring to employees during learning and development initiatives, (d) employee motivation and leadership empowerment, and (e) overcoming barriers to HCD.

Training employees to become more skillful and competent can encourage organizational development (Nuraeni et al., 2022). Because the purpose of training is to enhance employees' competency, more training programs should be encouraged by the organization. Identifying areas for employees' training and development can only be ascertained after a thorough employees' skills, competency, and training needs assessment must have been completed.

According to Shet (2024), competency-based development programs integrated with gaps identifications have been in force in most O&G organizations but needs continual improvements. Gulikers et al. (2018) suggested that for competency-based assessments, its effectiveness may depend on the level of understanding of what

competency is, and how it can be best assessed, given that they are complex to measure and cannot be determined merely by displaying technical skills. However, employee competency can benefit the organization's success in terms of increasing profitability, thereby strengthening competitiveness.

A recent global survey statistic of the WEF (2023) for the future of jobs suggested that before the year 2027 six in 10 workers will require training. The WEF survey also revealed that, giving a year of investment on skills training, two-thirds of companies expect to see a return on their investment which could be from any of enhanced cross-role mobility, increased worker satisfaction or enhanced worker productivity. The report further noted that these expectations are already challenging as only half of workers are seen to have access to adequate training opportunities today. However, the specific business problem of this study is in clear alignment with the WEF survey report, and this is why the study findings are relevant to improved business practices. The specific business problem is that some O&G leaders lack strategies to promote HCD training activities to increase employees' productivity. The purpose of this study was to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. Hence, its findings may provide much-needed assistance to leaders of O&G organizations.

### **Implications for Social Change**

Social change is the outcome of an effective corporate social responsibility. Social change refers to the transformations of a society in respect to the values systems, social organization, and practices (Wagoner & Power, 2021). Among great institutions

presumed to be capable of the greatest social change are businesses and are expected to front social concerns in situations where government and nonprofits come short (Fyke et al., 2016). However, social change and CSR are entities that are often being discussed together – with social change identified as an off shoot of effective CSR (Gaither et al., 2018). The derivative implications for positive social change include raising the standard of living of local communities' residents through the promotion of developmental programs in healthcare, educational opportunities, and provision of job opportunities. Though the industrialization and economic development in Nigeria are results of the gains of oil exploration and production, they are yet to be properly managed (Nriagu,2019). The impacts of the O&G organizations in Nigeria in terms of social change can be classed as positive and negative.

Among the positive impacts are the main source of revenue generation for Nigeria, which serves as a means of foreign exchange to the country's economy, and job creation for Nigerians Iyanam et al. (2021). However, the negative impacts very much outweigh the positive impact due to the role the organizations play in the development of the industry and the economy of Nigeria. The oil producing communities receive the negative impacts directly from the effects of the oil explorations activities of the O&G organizations by way of impacting their agricultural land and messing up the eco-system. The negative impacts from the activities of O&G organizations can be ended by effective utilization of the findings from this study towards the development of their workforces. This can be certain if the organizations embark on corporate social responsibilities in respect to jobs, infrastructural development, economic empowerment, and HCD. (Iyanam

et al., 2021). Other strategies included the O&G organizations to ensure cordial relationship and improve communication with host communities, and for the Nigerian government and the companies to work together to prevent oil spill and provide prompt cleaning if any occurred. When the findings of the study relating to feedback and communication are comprehended, may assist organizations to improve on the mentioned expectations.

To further promote social change for sustainable community development in host communities, This study findings may assist the O&G organizations to (a) understand the social settings in the host communities of their areas of operations, (b) be able to identify relevant stakeholders in the host communities, prior to promoting sustainable community development projects (c) give priority on discussing benefits to society, rather than removing organizational barriers only, (d) strive to establish social value as a key driver of the business, rather than business profits alone, and (e) at all times demonstrate genuine, authentic engagement with stakeholders and the public (Gaither et al., 2018; Ugwu & Aruma, 2021). These implementations would be conducted by the direct intervention of a developed workforce within the O&G organizations by utilizing the findings of this study, as detailed in the identified themes. The results of successful community development programs could also enable and catalyze the effective collaboration between community residents and company employees regarding safety and social issues.

The success of community development programs by an organization to its host communities can only be supervised by a highly informed and developed workforce, such

that the value of the organization's corporate social responsibility can be sustained. The involvement of society and the stakeholders of companies as key players in CSR projects has ensured that companies can no longer hide from irresponsible businesses practices (Aagaard, 2022). The implications for positive social change applying these findings, therefore, include O&G leaders increasing productivity, which can attract capital investment to create employment opportunities for residents and enable the increase of investments in communities' projects to benefit citizens.

### **Recommendations for Action**

The purpose of this study is to explore strategies O&G leaders use to promote HCD training activities to increase employees' productivity. The identified themes in the study support the participants' recommended actions that leaders might use to promote HCD training activities to increase employees' productivity. The study participants indicated the need for leaders to increase their communications through leadership visibility at training venues, and requests for feedback with employees. The leaders should provide an enabling environment through adequate funding of training and development programs. The participants conveyed that leaders should motivate and encourage employees with social and monetary benefits, and to enable diversity inclusion programs.

I recommend that leaders review the study findings to understand the importance of how effective leadership strategies can promote HCD training activities to increase employees' productivity. O&G business leaders can disseminate organizational surveys to determine employee satisfaction while in employment and when exiting. Ingels et al.



(2020) suggested leaders of organizations build close relationships with employees and line managers to produce relevant survey tools that can be used to predict employees' satisfaction, retention, and exiting. O&G organizational leaders should also constantly improve their understanding of the intricacies, flexibility, and importance of on-the-job and off-the-job training to enable an overall benefit for their employees and the organizations.

On-the-job training refers to the training an employee receives in the course of doing their job in the organization, sometimes studying from an appointed person with experience and knowledge in a particular task. On-the-job training methods often involve mentoring, coaching, job rotation, counselling, apprenticeship, task assignment, work instructions, meetings, learning by doing, and self-directed or self-managed learning (Trávníčková & Maršíková, 2023). This training usually takes place at the job site within the organizational areas of operation. This form of training is prevalent in the O&G organization where safety concerns are of highest priority because of its complex operations and terrain.

Off-the-job training refers to training extended to employees outside the normal work environment within or away from the organization. This can either be by external trainers from third party affiliate vendors, or experienced and knowledgeable coworkers from across functional departments within the organization. Organizations adopt training programs based on the requirements and skills required to perform jobs in their work locations (Anuradha & Ramesh, 2020). This training happens most often in groups

arrangements, in a class setting or field environment, at locations away from the employee's immediate work site.

### **Recommendations for Further Research**

I recommend the use of other types of interview methods such as unstructured interviews that may provide a full representation of all participants' views, other than the use of purposeful interviews with standardized questions. In future research scholars could interview participants that may feel comfortable disclosing information that requires organizational disclosure policies. Scholars may investigate other industry types beyond the O&G of this study to compare findings and relevant strategies. I suggest scholars conduct further research beyond the geographic location of this study. Six participants were covered in this study, and in considering future research, scholars could endeavor to use more participants in future research. I used the qualitative research method, and I further suggest other researchers might consider using either quantitative or mixed methods. The qualitative research design I used is the generic pragmatic qualitative inquiry. Future researchers may use one of multiples case study, ethnographic, or phenomenological in future research. I also recommend further research relative to the literature and themes within this study.

### **Reflections**

The knowledge gained during my DBA doctoral study is vast, I can say. The doctoral journey, however, was not an easy one, to be honest. The journey was indeed a tasking one in terms of personal sacrifices, finance, and time. In retrospect, it becomes a journey I appreciate. Reflecting on my experiences during the literature review and the

data gathering process brings joy to me for being able to successfully complete the doctoral writing journey. The participants involved in my study displayed some level of enthusiasm and kept all interview appointments accordingly. They humbly replied to all my members checking correspondences in good time and certified my interpretations of their responses as accurate.

The DBA doctoral study did not affect any personal biases from the participants and I but was able to place importance on the strategies developed to address the study's specific business problems. Through the help of God Almighty, and the support of my immediate family members, friends, colleagues, and my Walden chair, I was able to sustain and complete the doctoral journey. I fervently hope to use my study findings to help business leaders wherever the opportunity comes by. Considering the numbers of literature resources I read during the program, I have acquired great experiences with different formats of publications in scholarly writing. I can confidently explore these advantages to further my writing experience as a DBA graduate. I give my consent to Walden University to publish this study on the ProQuest/UMI dissertation database. I will seek opportunities to share the results of the study at business conferences and in academic forums. I also wish to share this study with my participants.

### **Conclusion**

The creation of knowledge and the development of a workforce requires leaders who can obtain strategies regarding human capital and the HCT. There is the need for O&G leaders to develop the initiatives to obtain strategies regarding HCD. Therefore, it is important that personnel manning operating facilities known to be high risks need to be

properly trained and developed. Hence, this study's findings may assist the O&G leaders a great deal to be able to put together the necessary strategies they will need to achieve these expectations in developing their workforce's HCD to increase employees' productivity. This study's findings can also be a reference point for businesses, and for the global academic community.

## References

- Aagaard, A. (2022). CSR in society and in the future. *Sustainable Business*, 163–175.  
<https://doi.org/10.1201/9781003339656-9>
- Abdow, A. I., Guyo, W., & Odhiambo, R. (2018). Influence of human capital development on organizational change in the petroleum industries in Kenya. *European Journal of Business and Management*, 10(4), 9–14.  
<https://www.iiste.org/Journals/index.php/EJBM/article/view/40957>
- Adagbabiri, M. M., & Okolie, U.C. (2020). Human resource management practices and organizational performance: An empirical study of oil and gas industry in Nigeria. *RUDN Journal of Public Administration*, 7(1), 53–69.  
<https://doi.org/10.22363/2312-8313-2020-7-1-53-69>
- Adams, J. M. (2019). The value of worker well-being. *Public Health Reports*, 134(6), 583–586. <https://doi.org/10.1177/0033354919878434>
- Adegboyega, O., & Olawumi, D. A. (2021). The effect of leadership styles on employee's productivity in the Nigerian oil and gas industry. *Information Management and Business Review*, 13(1), 47–64.  
[https://doi.org/10.22610/imbr.v13i1\(I\).3194](https://doi.org/10.22610/imbr.v13i1(I).3194)
- Adelabu, N. S. (2012). The political economy of oil deregulation in Nigeria's fourth republic: Prospects and challenges. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3, 193–198.  
<https://hdl.handle.net/10520/EJC140957>

- Agbi, E. S., Popoola, A., & Edem, D. P. (2020). Human capital efficiency and profitability of listed oil and gas firms in Nigeria. *International Journal of Accounting & Finance*, 9(1), 47–68.  
<https://ideas.repec.org/a/ris/ijafic/0032.html>
- Ahmad, W. N., Rezaei, J., Tavasszy, L. A., & de Brito, M. P. (2016). Commitment to and preparedness for sustainable supply chain management in the oil and gas industry. *Journal of Environmental Management*, 180, 202–213.  
<https://doi.org/10.1016/j.jenvman.2016.04.056>
- Ajayi, S. (2020). The impact of leadership styles on employee productivity in Nigerian oil & gas industry a case study of Nigeria LNG limited. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3532749>
- Akwesi, A. (2019). The resource–based view: A tool of key competency for competitive advantage. *Problems and Perspectives in Management*, 17(3), 143–152. [https://doi.org/10.21511/ppm.17\(3\).2019.12](https://doi.org/10.21511/ppm.17(3).2019.12)
- Al Dulaimi, A. M. Z., Al Marzooqi, S. M., Lubis, A., Siren, N. B. H., & Kassim, S. B. (2022). Innovation capabilities and human development competitiveness in education sector: Evidence from UAE. *Frontiers in Psychology*, 13.  
<https://doi.org/10.3389/fpsyg.2022.933432>
- Al-Bdareen, R., & Khasawneh, H. (2019). Human resources staffing process and its impact on job involvement: Irbid district electricity company as a case study. *Problems and Perspectives in Management*, 17(2), 254–266.  
[https://doi.org/10.21511/ppm.17\(2\).2019.19](https://doi.org/10.21511/ppm.17(2).2019.19)

- Allen, J. E. (2020). Challenges and prospect of vocational technical education and training in tertiary institution in South-South, Nigeria. *Vocational and Technical Education Journal*, 2(1), 273–278.  
<https://acjol.org/index.php/votej/article/view/397>
- Alomari, M., Mohammad, A., Ibrahim, H., & Alwaqfi, A. (2020). Impact of human capital in quality and strategic excellences. *International Journal of Advanced Science and Technology*, 29(7), 11702–11710.  
<http://sersc.org/journals/index.php/IJAST/article/view/27622>
- Alpi, K. M., & Evans, J. J. (2019). Distinguishing case study as a research method from case reports as a publication type. *Journal of the Medical Library Association*, 107(1), 1–5. <https://doi.org/10.5195/jmla.2019.615>
- Amodu, L., Alege, P., Oluwatobi, S., & Ekanem, T. (2017). The effect of human capital development on employees' attitude to work in insurance industry in Nigeria. *The Journal of Organizational Management Studies*, 2017(2017), 1–12.  
<https://doi.org/10.5171/2017.494914>
- Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), 272–281.  
<https://www.scirp.org/reference/referencespapers?referenceid=3077301>
- Antonacopoulou, E.P. (2000). Employee development through self-development in three retail banks. *Personnel Review*, 29, 491–508.  
<https://doi.org/10.1108/00483480010296294>

- Anuradha, T.S., & Ramesh, H.N. (2020). Training as an effective tool for developing performance of MSMEs-An empirical evidence. *Management Science*, 7, 82-88.  
<https://doi.org/10.34293/management.v7i3.1630>
- Asian Development Bank. (2017). Human capital development in south Asia achievements, prospects, and policy challenges. *Education*, 1–152.  
<http://doi.org/10.22617/TCS179082>
- Asikhia, O. U., Makinde, G. O., Akinlabi, H. B. & Ajani, W. B. (2022). The effect of employee mobility on skills retention in upstream oil and gas companies in Nigeria. *Journal of Strategic Management*, 6(4), 26–41.  
<https://doi.org/10.53819/81018102t4053>
- Austin, Z., & Sutton, J. (2014). Qualitative research: Getting started. *The Canadian Journal of Hospital Pharmacy*, 67(6), 436–440  
<https://doi.org/10.4212/cjhp.v67i6.1406>
- Avila, C. J. (2021). Raising the minimum wage and public health. *JAMA Health Forum*, 2(1), 1–3. <https://doi.org/10.1001/jamahealthforum.2020.1587>
- Ashraf, T., & Siddiqui, D. A. (2020). The impact of employee engagement on employee retention: The role of psychological capital, control at work, general well-being, and job satisfaction. *SSRN Electronic Journal*.  
<https://doi.org/10.2139/ssrn.3683155>
- Baccaro, L., & Tober, T. (2021). The role of wages in the Eurozone. *Review of International political economy*, 29(4), 1263–1286.  
<https://doi.org/10.1080/09692290.2021.1888143>



- Badom, P. M., & Girigiri, B. W. (2021). Training cum development and productivity of workers in Nigeria Agip oil company, Port Harcourt, Rivers state. *African Journal of Sciences and Humanities Research*, 4(4), 49–67.  
<https://doi.org/10.52589/AJSSHR-9IOMPQJF>
- Baird, K. M., Tung, A., & Yu, Y. (2019). Employee organizational commitment and hospital performance. *Health Care Management Review*, 44(3), 206–215.  
<https://doi.org/10.1097/HMR.0000000000000181>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Baridula, V., Adanma, M.-N. J., & Vincent, W. I. (2019). Servant leadership and organizational success of deposit money banks of rivers state, Nigeria. *Strategic Journal of Business & Change Management*, 6(2), 2444–2457.  
<https://doi.org/10.61426/sjbcm.v6i2.1279>
- Bashir, M., Afzal, M. T., & Azeem, M. (2008). Reliability and validity of qualitative and operational research paradigm. *Pakistan Journal of Statistics and Operation Research*, 4(1), 35–45. <https://doi.org/10.1234/pjsor.v4i1.59>
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy*, 70(5), 9–49. <https://doi.org/10.1086/258724>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis with special reference to education* (1st ed.). NBER.  
<https://ideas.repec.org/b/nbr/nberbk/beck-5.html>

- Becker, G. S. (1993). The economic way of looking at behavior. *The Journal of Political Economy*, 101(3), 385–409. <http://www.jstor.org/stable/2138769>
- Becker, G. S. (1994). *Human capital: A theoretical and empirical analysis with reference to education* (3rd ed.). <http://www.nber.org/books/beck94-1>
- Belotto, M. J. (2018). Data analysis methods for qualitative research: Managing the challenges of coding, interrater reliability, and thematic analysis. *The Qualitative Report*, 23(11), 2622–2633. <https://doi.org/10.46743/2160-3715/2018.3492>
- Benhabib, J., & Spiegel, M. (2003). Human capital and technology diffusion. *Federal Reserve Bank of San Francisco, Working Paper Series*. 1–49  
<https://doi.org/10.24148/wp2003-02>
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26, 1802–1811. <https://doi.org/10.1177/1049732316654870>
- Bleiker, J., Morgan-Trimmer, S., Knapp, K., & Hopkins, S. (2019). Navigating the maze: Qualitative research methodologies and their philosophical foundations. *Radiography*, 25(1), S4–S8.  
<https://doi.org/10.1016/j.radi.2019.06.008>
- Bodovski, K., Chykina, V., & Khavenson T. (2019). Do human and cultural capital lenses contribute to our understanding of academic success in Russia. *Journal of Sociology of Education*, 40(3), 393–409.  
<https://doi.org/10.1080/01425692.2018.1552844>

- Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International Journal of Management Reviews*, 3(1), 41–60.  
<https://doi.org/10.1111/1468-2370.00053>
- Borshch, V., Sheremet, O., Mykolaichuk, I., Hanna, B., Olena, P., & Danilko, M. (2023). Investment strategy for the development of human capital of the enterprise. *Wseas Transactions on Business and Economics*, 20, 1517–1526.  
<https://doi.org/10.37394/23207.2023.20.134>
- Braaten, B., Kramer, A., Henderson, E., Kajfez, R., & Dringenberg, E. (2020). Accessing complex constructs: Refining an interview protocol. *2020 IEEE Frontiers in Education Conference (FIE)*. <https://doi.org/10.1109/fie44824.2020.9274260>
- Brod, M., Tesler, L. E., & Christiansen, T. L. (2009). Qualitative research and content validity: Developing best practices based on science and experience. *Quality of Life Research*, 18(9), 1263–1278. <https://doi.org/10.1007/s11136-009-9540-9>
- Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and Practice*, 2(1), 1–10.  
<https://doi.org/10.1186/s42466-020-00059-z>
- Cafferkey, K., Harney, B., Townsend, K., & Winterton, J. (2021). Guest editorial. *Employee Relations*, 43(4), 829–841. <https://doi.org/10.1108/ER-06-2021-545>
- Cairney, P., & St Denny, E. (2015). Reviews of what is qualitative research and what is qualitative interviewing. *International Journal of Social Research Methodology: Theory and Practice*, 18, 117–125.  
<https://doi.org/10.1080/13645579.2014.957434>

- Cammeraat, E., Samek, L., & Squicciarini, M. (2021). The role of innovation and human capital for the productivity of industries. *OECD Science, Technology and Industry Policy Papers*, 103, 1–30. <https://doi.org/10.1787/197c6ae9-en>
- Campbell, J. P. (1971). Personnel training and development. *Annual Review of Psychology*, 22, 565–602. <https://doi.org/10.1146/annurev.ps.22.020171.003025>
- Carlson, J. A. (2010). Avoiding traps in member checking. *The Qualitative Report*, 15(5), 1102–1113. <https://doi.org/10.46743/2160-3715/2010.1332>
- Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report*, 21(5), 811–830. <https://doi.org/10.46743/2160-3715/2016.2337>
- Castleberry, A. (2014). NVivo 10 [Software program]. Version 10. QSR international, 2012. *American Journal of Pharmaceutical Education*, 78(1), 1–2. <https://doi.org/10.5688/ajpe78125>
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching & Learning*, 10(6), 807–815. <https://doi.org/10.1016/j.cptl.2018.03.019>
- Champagne, F., Lemieux-Charles, L., Duranceau, M.-F., MacKean, G., & Reay, T. (2014). Organizational impact of evidence-informed decision-making training initiatives: a case study comparison of two approaches. *Implementation Science*, 9(1), 1–25. <https://doi.org/10.1186/1748-5908-9-53>

- Chigbu, U. S., Ubah, C. P., & Chigbu, E. E. (2016). Deregulation of the petroleum downstream sector and Nigerian economy: An econometric investigation. *International Journal of Business and Applied Social Science*, 2(9), 16–27.  
<https://core.ac.uk/download/pdf/234626365.pdf>
- Chijioke, A. K., & Amadi, A. I. (2019). Human capital investment as a catalyst for sustainable economic development in Nigeria. *International Journal of Management Science and Business Administration*, 5(5), 13–22.  
<http://doi.org/10.18775/ijmsba.1849-5664-5419.2014.55.1002>
- Chinonso, O. U., & Olaniyi, T. K. (2022). Analysis of business sustainability strategies for Nigeria oil and gas industry. *International Journal of Sustainable Energy Development*, 10(1), 482–491.  
<https://doi.org/10.20533/ijsted.2046.3707.2022.0058>
- Collins, C. S., & Stockton, C. (2022). The theater of qualitative research: The role of the researcher/actor. *International Journal of Qualitative Methods*, 21, 1–9.  
<https://doi.org/10.1177/16094069221103109>
- Conner, K.R. (1991). A historical comparison of the resource-based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of Management*, 17(1), 121–154.  
<https://doi.org/10.1177/014920639101700109.S2CID142831045>

- Cooper-Thomas, H. D., Paterson, N. L., Stadler, M. J., & Saks, A. M. (2014). The relative importance of proactive behaviors and outcomes for predicting newcomer learning, well-being, and work engagement. *Journal of Vocational Behavior, 84*, 318–331. <https://doi.org/10.1016/j.jvb.2014.02.007>
- Cox, D. D., & McLeod, S. (2014). Social media marketing and communications strategies for school superintendents. *Journal of Educational Administration, 52*, 850–868. <https://doi.org/10.1108/JEA-11-2012-0117>
- Cridland, E. K., Jones, S. C., Caputi, P., & Magee, C. A. (2015). Qualitative research with families living with autism spectrum disorder: Recommendations for conducting semistructured interviews. *Journal of Intellectual and Developmental Disability, 40*, 78–91. <https://doi.org/10.3109/13668250.2014.964191>
- Cropley, A. J. (2022). *Introduction to qualitative research methods: A practice-oriented introduction*. Editura Intaglio. <https://www.edituraintaglio.com/en/product-page/introduction-to-qualitative-research-methods-ebook>
- Cypress, B. S. (2017). Rigor or reliability and validity in qualitative research. *Dimensions of Critical Care Nursing, 36*(4), 253–263. <https://doi.org/10.1097/dcc.0000000000000253>
- Daku, M. (2018). Ethics beyond ethics: The need for virtuous researchers. *BMC Medical Ethics, 19*(42), 21–96. <https://doi.org/10.1186/s12910-018-0281-6>

- Daniel, C. O. (2019). The effects of human capital development on organizational performance. *International Journal of Scientific Research and Management*, 7(1), 952–958. <https://doi.org/10.18535/ijssrm/v7i1.em03>
- Danladi, A., & Naankiel, P. (2016). Structural adjustment programme in Nigeria and its implication on socio-economic development, 1980–1995. *The Calabar Historical Journal*, 6(2), 1–17.
- Dao, T. B. T., & Khuc, V. Q. (2023). The impact of openness on human capital: A study of countries by the level of development. *Economies*, 11(7), 175, 1–13. <https://doi.org/10.3390/economies11070175>
- Daramola, L., & Daramola, A. A. (2020). How impactful is employee training on employee? *International Journal of Emerging Engineering Research and Technology*, 8(1), 1–10. <https://www.ijeert.org/papers/v8-i1/1.pdf>
- De Winne, S., & Sels, L. (2010) Interrelationships between human capital, HRM and innovation in Belgian start-ups aiming at an innovation strategy. *The International Journal of Human Resource Management*, 21(11), 1863–1883. <https://doi.org/10.1080/09585192.2010.505088>
- Denicol, J., & Davies, A. (2022). The megaproject-based firm: Building programme management capability to deliver megaprojects. *International Journal of Project Management*, 40(5), 505–516. <https://doi.org/10.1016/j.ijproman.2022.06.002>
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods* (3rd ed.). Prentice Hall. <https://doi.org/10.4324/9781315134543>

- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22.  
<https://doi.org/10.1177/0047239520934018>
- Diebolt, C., & Hippe, R. (2019). The long-run impact of human capital on innovation and economic development in the regions of Europe. *Applied Economics*, 51(5), 542–563. <https://doi.org/10.1080/00036846.2018.1495820>
- Directorate of Planning, Research and Statistics. (2019, September 14). *Analysis of human capital development trend in the Nigerian oil & gas industry 2015–2019*.  
<https://ncdmb.gov.ng/images/RD/HCD-Analytics-in-Nigeria-Oil&Gas.pdf>
- Dung, T. H. D. (2020). The advantages and disadvantages of virtual learning. *IOSR Journal of Research & Method in Education*, 10(3), 45–48.  
<https://doi.org/10.9790/7388-1003054548>
- Effiong, J. (2010). O&G Industry in Nigeria: The paradox of the black gold. *Research in Social Problems and Public Policy*, 18, 323–349.  
[https://doi.org/10.1108/S0196-1152\(2010\)0000018013](https://doi.org/10.1108/S0196-1152(2010)0000018013)
- EL Hajjar, S. T., & Alkhanaizi, M. S. (2018). Exploring the factors that affect employee training effectiveness: A case study in Bahrain. *SAGE Open*, 8(2), 1–12.  
<https://doi.org/10.1177/2158244018783033>
- Enobong, U. F., Ugwulebo, L. N., & Ekwutosi, C. C. (2021). Training and job security in oil and gas companies in Rivers State, Nigeria. *European Journal of Business and Management*, 13(23), 95–105. <https://doi.org/10.7176/ejbm/13-23-08>



- Phillips, W., Dufresne, E., Hafner, M., Stepanek, M., Kotzen, D., Subel, S., & Stolk, C. (2022). Employee wellbeing, work behaviours and work outcomes in a hybrid work context: A study of the relationship between work, health and performance using novel workplace data. *RAND Corporation*, 1–71.  
<https://doi.org/10.7249/rra2083-1>
- Enilolobo, O. S., & Sodeinde, O. (2019). Human capital development, infrastructural development and industrial sector productivity in Nigeria. *Archives of Business Research*, 7(1), 122–136. <https://doi.org/10.14738/abr.71.5917>
- Ergul Sonmez, E., & Koc, M. (2018). Pre-service teachers' lived experience with taking courses through learning management system: A qualitative study. *Turkish Online Journal of Distance Education*, 19(2), 101–116.  
<https://doi.org/10.17718/TOJDE.415823>
- Ethelmary, D., Emeakayi, H., & Maria, A. (2019). Effect of employee training on performance of selected multinational corporations in Nigeria. *British Journal of Management and Marketing Studies*, 2(2), 53–71.  
[https://abjournals.org/british-journal-of-management-and-marketing-studies-bjmms/wp-content/uploads/sites/3/journal/published\\_paper/volume-2/issue-2/BJMMS\\_XRBAjkAR.pdf](https://abjournals.org/british-journal-of-management-and-marketing-studies-bjmms/wp-content/uploads/sites/3/journal/published_paper/volume-2/issue-2/BJMMS_XRBAjkAR.pdf)
- Fadila, K. U., & Olure-Bank, A. (2019). Effect of human capital development on economic growth of Ecowas member states. *Advances in Sciences and Humanities*, 5(1), 27–42. <https://doi.org/10.11648/j.ash.20190501.14>

- Farooq, R., & Sultana, A. (2021). Abusive supervision and its relationship with knowledge hiding: The mediating role of distrust. *International Journal of Innovation Science*, 13(5), 709–731. <https://doi.org/10.1108/IJIS-08-2020-0121>
- Faryadi, Q. (2019). PhD Thesis writing process: A systematic approach—how to write your methodology, results and conclusion. *Creative Education*, 10(4), 766–783. <https://doi.org/10.4236/ce.2019.104057>
- Fényes, H., & Mohácsi, M. (2020). Do students take the predictions of human capital theory into account? An analysis of motives behind further studies in higher education. *Hung. Educ. Res. J.* 10, 74–84. <https://doi.org/10.1556/063.2020.00006>
- Fonseca, T., De Faria, P. and Lima, F., (2019). Human capital and innovation: the importance of the optimal organizational task structure. *Research Policy*, 48(3), 616–627. <https://doi.org/10.1016/j.respol.2018.10.010>
- Fred, E. U., Ugwulebo, L. N., & Chima, C. E. (2021). Training and job security in oil and gas companies in Rivers state, Nigeria. *European Journal of Business and Management*, 13(23), 1–11. <https://doi.org/10.7176/ejbm/13-23-08>
- Friday, E. O., & Mlanga, S. (2019). Talent management and workers' commitment to oil & gas firms in Nigeria. *SEISENSE Journal of Management*, 2(3), 1–15. <https://doi.org/10.33215/sjom.v2i3.138>
- Friebel, G., Heinz, M., & Zubanov, N. (2021). Middle managers, personnel turnover, and performance: A long-term field experiment in a retail Chain. *Management Science*, 68(1), 211–229. <https://doi.org/10.1287/MNSC.2020.3905>

- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *The Qualitative Report*, 20(9), 1408–1416.  
<https://doi.org/10.46743/2160-3715/2015.2281>
- Fyke, J. P., Feldner, S. B., & May, S. K. (2016). Discourses about righting the business society relationship. *Business and Society Review*, 121(2), 217–245.  
<https://doi.org/10.1111/basr.12086>
- Gagliardi, N., Mahy, B., & Rycx, F. (2021). Upstream, wages and gender: Equal benefits for all? *British Journal of Industrial Relations*, 59(1), 52–83.  
<https://doi.org/10.1111/bjir.12486>
- Gaither, B. M., Austin, L., & Schulz, M. (2018). Delineating CSR and social change: Querying corporations as actors for social good. *Public Relations Inquiry*, 7(1), 45–61. <https://doi.org/10.1177/2046147x1774354>
- Galiakberova, A. A. (2019). Conceptual analysis of education role in economics: The human capital theory. *Journal of History Culture and Art Research*, 8(3), 410–421. <https://doi.org/10.7596/taksad.v8i3.2256>
- Gentles, S. J., Charles, C., Ploeg, J., & McKibbin, K. (2015). Sampling in qualitative research: Insights from an overview of the methods literature. *The Qualitative Report*, 20(11), 1772–1789. <https://doi.org/10.46743/2160-3715/2015.2373>
- Ghoshal, B. (2020). Advantages and disadvantages of online teaching learning during pandemic. *International Journal of Creative Research Thoughts*, 8(8), 982–985.  
<https://ijcrt.org/papers/IJCRT2008120.pdf>

- Girdwichai, L., & Sriviboon, C. (2020). Employee motivation and performance: do the work environment and the training matter? *Journal of Security and Sustainability Issues*, 9, 42–54. [http://doi.org/10.9770/jssi.2020.9.J\(4\)](http://doi.org/10.9770/jssi.2020.9.J(4))
- Goodell, L. S., Stage, V. C., & Cooke, N. K. (2016). Practical qualitative research strategies: Training interviewers and coders. *Journal of Nutrition Education and Behavior*, 48(8), 578–585. <https://doi.org/10.1016/j.jneb.2016.06.001>
- Gu, C., Ye, M., Wang, X., Yang, M., Wang, H., & Khoshnood, K. (2019). Nurse researchers' perspectives on research ethics in China. *Nursing Ethics*, 26, 798–808. <https://doi.org/10.1177/0969733017720848>
- Guba, E., & Lincoln, Y. (1989). *Fourth generation evaluation*. Sage Publications.
- Guest, D. E., Michie, J., Sheehan, M., Conway, N. & Metochi, M. (2000). *Effective people management: Initial findings of the future of work study* (1st ed.). Chartered Institute of Personnel and Development.
- Guetterman, T. C. (2020). Qualitative, quantitative, and mixed methods research sampling strategies. *Education*. <https://doi.org/10.1093/obo/9780199756810-0241>
- Gulikers, J., Runhaar, P., & Mulder, M. (2018). An assessment innovation as flywheel for changing teaching and learning. *Journal of Vocational Education and Training*, 70(2), 212–231. <https://doi.org/10.1080/13636820.2017.1394353>
- Hadi, M. A., & José Closs, S. (2016). Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. *International Journal of Clinical Pharmacy*, 38(3), 641–646. <https://doi.org/10.1007/s11096-015-0237-6>

- Haines, S. J., Summers, J. A., Turnbull, A. P., Turnbull, H. R., & Palmer, S. (2015). Fostering Habib's engagement and self-regulation a case study of a child from a refugee family at home and preschool. *Topics in Early Childhood Special Education, 35*(1), 28–39. <https://doi.org/10.1177/0271121414552905>
- Hamilton, D. I., & Oparanma, A. O. (2008). Training, development and employee performance in the oil and gas industry in Nigeria. *European Journal of Scientific Research, 19*(3), 501–509. <http://www.eurojournals.com/ejsr.htm>
- Hansson, B. (2009). Employers' Perspectives on the roles of human capital development and management in creating value. *OECD Education Working Papers, 18*, OECD Publishing. <http://doi.org/10.1787/227353534651>
- Hanushek, E., & Woessman, L. (2020). The economic impacts of learning losses. *Education Working Papers, (225)*, OECD Publishing. 1–24. <https://doi.org/10.1787/21908d74-e>
- Hatipler, M. (2014). Development economics and education; New searches. *IIB International Refereed Academic Social Sciences Journal, 5*(16), 96–114. <https://doi.org/10.17364/iib.20151610999>
- Hays, D. G., Wood, C., Dahl, H., & Kirk-Jenkins, A. (2016). Methodological rigor in journal of counseling & development qualitative research articles: A 15-year review. *Journal of Counseling & Development, 94*, 172–183. <https://doi.org/10.1002/jcad.12074>

- Hewlett, D., & Brown, L. (2018). Planning for tranquil spaces in rural destinations through mixed methods research. *Tourism Management*, 67, 237–247.  
<https://doi.org/10.1016/j.tourman.2018.01.011>
- Hoffman, M. and S. Tadelis (2021). People management skills, employee attrition, and manager rewards: An empirical analysis. *Journal of Political Economy*, 129(1), 243–285. <https://doi.org/10.1086/711409>
- Huang, W. & Jao, Y. (2016). Comparison of the influences of structured on-the-job training and classroom training approaches on trainees' motivation to learn. *Human Resource Development International*, 19(2), 116–134.  
<https://doi.org/10.1080/13678868.2015.1096636>
- Huang, W.-R. (2020). Job training satisfaction, job satisfaction, and job performance. *Career Development and Job Satisfaction*, 1–21.  
<https://doi.org/10.5772/intechopen.89117>
- Hunter, M. G. (2012). Creating qualitative interview protocols. *International Journal of Sociotechnology and Knowledge Development* 4(3), 1–16.  
<https://doi.org/10.4018/jskd.2012070101>
- Huselid, M. A., & Becker, B. E. (2011). Bridging micro and macro domains: Workforce differentiation and strategic human resource management. *Journal of Management*, 37(2), 421–428. <https://doi.org/10.1177/0149206310373400>

- Ibini, E., & Okonta, E. C. (2023). Effects of employee voice on organizational commitment of oil and gas companies in Lagos state Nigeria. *International Journal of Management & Entrepreneurship Research*, 5(6), 443–457. <https://doi.org/10.51594/ijmer.v5i6.503>
- Imandojemu, I., Kingsley, K., Ekperiware, E., Moses, C., Babatunde, B., & AINA, J. (2020). Determinants of human capital development in Nigeria: An ARDL methodology. *Journal of Economics and Development Studies*, 8(3), 64–74. <https://doi.org/10.15640/jeds.v8n3a6>
- Ingels, D. J., Keeton, K. E., & Spitzmueller, C. (2020). Writing organizational survey items that predict what matters in organizations. *Employee Surveys and Sensing*, 186–201. <https://doi.org/10.1093/oso/9780190939717.003.0012>
- Iqbal, N., Ahmad, M. and Allen, M.M.C. (2019). Unveiling the relationship between e-HRM, impersonal trust and employee productivity. *Management Research Review*, 42(7), 879–899. <https://doi.org/10.1108/MRR-02-2018-0094>
- Isiramen, O. M. (2020). Capacity enhancement outsourcing and employee commitment of the O&G sector in rivers state, Nigeria. *Global Scientific Journal*, 8(1), 189–212. [https://www.globalscientificjournal.com/researchpaper/Capacity\\_Enhancement\\_Outsourcing\\_and\\_Employee\\_Commitment\\_of\\_the\\_Oil\\_and\\_Gas\\_Sector\\_in\\_Rivers\\_State\\_Nigeria.pdf](https://www.globalscientificjournal.com/researchpaper/Capacity_Enhancement_Outsourcing_and_Employee_Commitment_of_the_Oil_and_Gas_Sector_in_Rivers_State_Nigeria.pdf)

- Islam, M. S., & Amin, M. (2021). A systematic review of human capital and employee well-being: Putting human capital back on the track. *European Journal of Training and Development, 46*(5/6), 504–534.  
<https://doi.org/10.1108/ejtd-12-2020-0177>
- Itam, U. & Ghosh, N. (2020). Employee experience management: A new paradigm shift in HR thinking. *International Journal of Human Capital and Information Technology Professionals, 11*(2), 39–49.  
<http://doi.org/10.4018/IJHCITP.2020040103>
- Iyanam, F. O., Ubi, O. U., & Ero, R. (2021). Impact of multinational oil companies in oil producing communities in Niger Delta, Nigeria. *International Journal of Innovative Research and Development, 10*(2), 123–126.  
<https://doi.org/10.24940/ijird/2021/v10/i2/feb21033>
- Jacob, S. A., & Furgerson, S. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *Qualitative Report, 17*, 1–10. <http://www.nova.edu/ssss/QR/>
- Johnson, M., O'Hara, R., Hirst, E., Weyman, A., Turner, J., Mason, S., Quinn, T., Shewan, J., & Siriwardena, A. N. (2017). Multiple triangulation and collaborative research using qualitative methods to explore decision making in pre-hospital emergency care. *BMC Medical Research Methodology, 17*(1), 1–12.  
<https://doi.org/10.1186/s12874-017-0290-z>



- Kalu, M. E. (2019). Using emphasis-purposeful sampling-phenomenon of interest–context (EPPiC) framework to reflect on two qualitative research designs and questions: A reflective process. *The Qualitative Report*, 24(10), 2524–2535. <https://doi.org/10.46743/2160-3715/2019.4082>
- Kampelmann, S., Rycx, F., Saks, Y., & Tojerow, I. (2018). Does education raise productivity and wages equally? The moderating role of age and gender. *IZA Journal of Labor Economics*, 7(1), 1–27. <https://doi.org/10.1186/s40172-017-0061-4>
- Kaplan, S., Schenkel, A., von Krogh, G., & Weber, C. (2001). Knowledge-based theories of the firm in strategic management: A review and extension. *International Journal of Project Management*, 25, 143–158. [https://doi.org/10.1002/\(SICI\)1097-0266\(200004\)21:4%3C473::AID-SMJ84%3E3.0.CO;2-I](https://doi.org/10.1002/(SICI)1097-0266(200004)21:4%3C473::AID-SMJ84%3E3.0.CO;2-I)
- Kariv, D., Cisneros, L., Kashy–Rosenbaum, G., & Krueger, N. (2022). Does generation matter to innovation development? A new look at entrepreneurial businesses from the perspective of resource–based view (RBV). *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-05-2022-0226>
- Kaunda, M., & Yangailo, T. (2023). Motivation on employee performance through top leadership commitment. *International Journal of Management, Knowledge and Learning*, 12, 143–162. <https://doi.org/10.53615/2232-5697.12.143-162>

- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for social work research. *Social Sciences*, 8(9), 255.  
<https://doi.org/10.3390/socsci8090255>
- Kawulich, B. B. (2005). Participant observation as a data collection method. *Forum Qualitative Social Research*, 6(2), 1–28. <http://doi.org/10.17169/fqs-6.2.466>
- Kegler, M. C., Raskind, I. G., Comeau, D. L., Griffith, D. M., Cooper, H. L. V., & Shelton, R. C. (2019). Study design and use of inquiry frameworks in qualitative research published in Health Education & Behavior. *Health Education & Behavior*, 46, 24–31. <https://doi.org/10.1177/1090198118795018>
- Kelly, L., & Cordeiro, M. (2020). Three principles of pragmatism for research on organizational processes. *Methodological Innovations*, 13(2), 1–10.  
<https://doi.org/10.1177/2059799120937242>
- Kenny, V. S., & Nnamdi, S. O (2019). *Employee productivity and organizational Performance: A theoretical perspective, 1–10*. MPRA Paper 93294.  
<https://mpra.ub.uni-muenchen.de/93294/>.
- Kesting, P., Ulhøi, J. P., Song, L. J., & Niu, H. (2016). The impact of leadership styles on innovation - a review. *Journal of Innovation Management*, 3(4), 22–41.  
[http://doi.org/10.24840/2183-0606\\_003.004\\_0004](http://doi.org/10.24840/2183-0606_003.004_0004)
- Klykken, F. H. (2022). Implementing continuous consent in qualitative research. *Qualitative Research*, 22(5), 795–810.  
<https://doi.org/10.1177/14687941211014366>

- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3), 383–397.  
<http://doi.org/10.1287/orsc.3.3.383>
- Konings, J., & Vanormelingen, S. (2009). The impact of training on productivity and wages: Firm level evidence. *Discussion Paper*, 244  
<https://doi.org/10.2139/ssrn.1487468>
- Korhonen, J. J. (2014). Big data: Big deal for organization design? *Journal of Organization Design*, 3(1), 31–36. <https://doi.org/10.146/jod.3.1.13261>
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120–124. <https://doi.org/10.1080/13814788.2017.1375092>
- Kozhevnikov, O. (2021). Advanced vocational training of workers as a factor in human capital development. *Man and Education*, 4(69), 204–211  
<https://doi.org/10.54884/S181570410018672-4>
- Kruth, J. G. (2015). Five qualitative research approaches and their applications in parapsychology. *The Journal of Parapsychology*, 79(2), 219–233.  
<https://psycnet.apa.org/record/2016-15758-004>
- Kucharska, W. (2021). Leadership, culture, intellectual capital, and knowledge processes For organizational innovativeness across industries: The case of Poland. *Journal of Intellectual Capital*, 22(7), 121–141, <https://doi.org/10.1108/JIC-02-2021-0047>

- Kucharska, W. (2022). Tacit knowledge influence on intellectual capital and innovativeness in the healthcare sector: A cross-country study of Poland and the US. *Journal of Business Research*, 149, 869–883, <https://doi.org/10.1016/j.jbusres.2022.05.059>
- Larrinaga, O. V. (2017). Is it desirable, necessary and possible to perform research using case studies? *Cuadernos de Gestión*, 17(1), 147–172. <https://doi.org/10.5295/cdg.140516ov>
- Lee, M. C. (2016). Knowledge management and innovation management: Best practices in knowledge sharing and knowledge value chain. *International Journal of Innovation and Learning*, 19(2), 206. <https://doi.org/10.1504/ijil.2016.074475>
- Lee, C. (2018). Culture, consent and confidentiality in workplace auto ethnography. *Journal of Organizational Ethnography*, 7(3), 302–319. <https://doi.org/10.1108/joe-06-2017-0032>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications, Inc.
- Linda, M. R., Thabrani, G., & Firman, F. (2020). The role of human capital and knowledge management in innovation. *Proceedings of the 8th International Conference on Entrepreneurship and Business Management (ICEBM 2019) UNTAR*. <https://doi.org/10.2991/aebmr.k.200626.046>
- Lubis, N. W. (2022). Resource based view (RBV) in improving company strategic capacity. *Research Horizon*, 2(6), 587–596. <https://doi.org/10.54518/rh.2.6.2022.587-596>

- Madill, A., & Sullivan, P. (2018). Mirrors, portraits, and member checking: Managing difficult moments of knowledge exchange in the social sciences. *Qualitative Psychology*, 5, 321–339. <https://doi.org/10.1037/qup0000089>
- Marques, J. M. R., La Falce, J. L., Marques, F. M. F. R., De Muylder, C. F., & Silva, J. T. M. (2019). The relationship between organizational commitment, knowledge transfer and knowledge management maturity. *Journal of Knowledge Management*, 23(3), 489–507. <https://doi.org/10.1108/jkm-03-2018-0199>
- Mara, C. (2021). The emergence of risk and return on human capital development. Beyond human resources - Research Paths Towards a New Understanding of Workforce. *Management Within Organizations*. <https://doi.org/10.5772/intechopen.96363>
- Mariz-Perez, R. M., Teijeiro-Alvarez, M. M., & García-Alvarez, M. T. (2012). The relevance of human capital as a driver for innovation. *Cuadernos de Economía*, 35(98), 68–76. [https://doi.org/10.1016/s0210-0266\(12\)70024-9](https://doi.org/10.1016/s0210-0266(12)70024-9)
- Marr, B., Gray, D., & Neely, A. (2003). Why do firms measure their intellectual capital? *Journal of Intellectual Capital*, 4(4), 441–464. <https://doi.org/10.1108/14691930310504509>
- Marshall, C., & Rossman, G. (2016). *Designing qualitative research* (6th ed.). Sage Publications.
- Masoud, P., & Nasrin, P. (2013). Human capital: Access to knowledge, learning capacity. *Journal of Basic and Applied Scientific Research*, 3(6), 715–722.

- Mathimaran, B., & Kumar, A. A. (2017). Employee retention strategies – An empirical research. *Global Journal of Management and Business Research*, 17(1), 1–7. [https://globaljournals.org/GJMBR\\_Volume17/3-Employee-Retention-Strategies.pdf](https://globaljournals.org/GJMBR_Volume17/3-Employee-Retention-Strategies.pdf)
- Mbhalati, O. J. (2012). The genesis of the knowledge-based view. *Journal of Knowledge Management Practice*, 13(2), 1–13. <https://journals.klalliance.org/index.php/JKMP/article/view/122>
- McCoy, N. R., Phillips, B., & Stewart, A. C. (2019). Accounting for human capital: Implications of automation and operational performance. *The Journal of Corporate Accounting & Finance*, 30(4), 111–115. <https://doi.org/10.1002/jcaf.22408>
- Merriam, S. B., & Grenier, R. S. (Eds.). (2019). *Qualitative research in practice: Examples for discussion and analysis* (2<sup>nd</sup> ed.). John Wiley & Sons.
- Miller, T., & Boulton, M. (2007). Changing constructions of informed consent: Qualitative research and complex social worlds. *Social Science & Medicine*, 65(11), 2199–2211. <https://doi.org/10.1016/j.socscimed.2007.08.009>
- Miller, D. (2019). The resource-based view of the firm. *Oxford research encyclopedia of business and management*. *Oxford Research Encyclopedia of Business and Management*. <https://doi.org/10.1093/acrefore/9780190224851.013.4>
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4), 281–302. <https://doi.org/10.1086/258055>

- Mincer, J. (1962). On-the-job training: Costs, returns and some implications. *Journal of Political Economy*, 70(5), (Part 2), 50–79. <https://doi.org/10.1086/258725>
- Mingyue, F., Krampah-Nkoom, A., Manu, B. D., & Oduro, D. (2020). Evaluating the effects of online training on employee self-efficacy. A dilemma from the Banking Industry in Ghana. *Journal of Arts & Humanities*, 09(2), 01–16. <http://doi.org/10.18533/journal.v9i2.1832>
- Mohajan, H. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of Economic Development, Environment and People*, 9(4), 1–30. <http://doi.org/10.26458/jedep.v9i4.679>
- Monday, J. U. (2015). Local content policy, human capital development and sustainable business performance in the Nigerian oil and gas industry. *Journal of Management and Sustainability*, 5(1), 75–83. <https://doi.org/10.5539/jms.v5n1p75>
- Morgan, J. (2018). The technological environment in employee experience. *Leader to Leader*, 2018(87), 28–35. <https://doi.org/10.1002/ltl.20340>
- Morse, J. M. (2015). Data were saturated. *Qualitative Health Research*, 25(5), 587- 588. <https://doi.org/10.1177/1049732315576699>
- Moscelli, G., Sayli, M., and Mello, M. (2022). Staff engagement, coworkers' complementarity and employee retention: Evidence from English NHS hospitals. *IZA Discussion Paper*, 15638, 1–62. <https://doi.org/10.2139/ssrn.4247492>

- Moustakas, C. (1994). *Phenomenological research methods*. Sage Publications, Inc.
- Mozerky, J., Walsh, H., Parsons, M., McIntosh, T., Baldwin, K., & DuBois, J. M. (2020). Are we ready to share qualitative research data? Knowledge and preparedness among qualitative researchers, IRB members, and data repository curators. *Iassist Quarterly*, 43(4), 1–23. <https://doi.org/10.29173/iq952>
- Mozerky, J., McIntosh, T., Walsh, H. A., Parsons, M. V., Goodman, M., & DuBois, J. M. (2021). Barriers and facilitators to qualitative data sharing in the United States: A survey of qualitative researchers. *PLOS ONE*, 16(12), e0261719. <https://doi.org/10.1371/journal.pone.0261719>
- Mozerky, J., Friedrich, A. B., & DuBois, J. M. (2022). A content analysis of 100 qualitative health research articles to examine researcher-participant relationships and implications for data sharing. *International Journal of Qualitative Methods*, 21. <https://doi.org/10.1177/16094069221105074>
- Mubarak, N., Osmadi, A., Khan, J., Mahdiyar, A., & Riaz, A. (2021). What makes people knowledge? Influence of passive leadership and creative self-efficacy. *Frontiers in Psychology*, 12, 740880. <https://doi.org/10.3389/fpsyg.2021.740880>
- Munthe-Kaas, H. M., Glenton, C., Booth, A., Noyes, J., & Lewin, S. (2019). Systematic mapping of existing tools to appraise methodological strengths and limitations of qualitative research: First stage in the development of the CAMELOT tool. *BMC Medical Research Methodology*, 19(113), 1–14. <https://doi.org/10.1186/s12874-019-0728-6>



- Musgrove, C., Ellinger, A. E., & Ellinger, A. D. (2014). Examining the influence of strategic profit emphases on employee engagement and service climate. *Journal of Workplace Learning, 26*, 152–171. <https://doi.org/10.1108/JWL-08-2013-0057>
- Mwita, K. (2022). Strengths and weaknesses of qualitative research in social science studies. *International Journal of Research in Business and Social Science, 11*(6), 618–625. <https://doi.org/10.20525/ijrbs.v11i6.1920>
- Na, K. (2021). The effect of on-the-job training and education level of employees on innovation in emerging markets. *Journal of Open innovation: Technology, market, and complexity, 7*(1), 1–18. <https://doi.org/10.3390/joitmc7010047>
- Naik, K. R. (2019). Strategic human resource management, human capital and competitive advantage: Is the field going in circles? *International Journal of Research and Analytical Reviews, 6*(2), 78–92. <https://www.ijrar.org/papers/IJRAR1AXP005.pdf>
- Narain, K. D. C., & Zimmerman, F.J. (2019). Examining the association of changes in minimum wage with health across race/ethnicity and gender in the United States. *BMC Public Health, 19*(1), 1–20. <https://doi.org/10.1186/s12889-019-7376-y>
- Navimipour, N. J., Rahmani, A. M., Navin, A. H., & Hosseinzadeh, M. (2015). Expert cloud: A cloud-based framework to share the knowledge and skills of human resources. *Computers in Human Behavior, 46*, 57–74. <https://doi.org/10.1016/j.chb.2015.01.001>

Nigerian Content Development and Monitoring Board (2016). *Nigerian oil and gas industry content development act 2010 Act No. 2.*

<http://www.ncdmb.gov.ng/NCACT.pdf>

Nigerian Content Development and Monitoring Board (2022, June 08). *NCDMB to Sanction Companies for Non-compliance with HCD Guidelines.*

<https://ncdmb.gov.ng/ncdmb-to-sanction-companies-for-non-compliance-with-hcd-guidelines/>

Nigeria High Commission. (2022). *About Nigeria.*

<http://www.nigeriahc.org.uk/about-nigeria>

Nigerian National Petroleum Corporation. (2021). *Development of Nigeria's oil industry.*

<https://nnpcgroup.com/NNPC-Business/Business-Information/Pages/Development-of-the-Industry.aspx>

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research.

*Evidence Based Nursing, 18*(2), 34–35. <https://doi.org/10.1136/eb-2015-102054>

Noohi, E., Peyrovi, H., Goghary, Z. I., & Kazemi, M. (2016). Perception of social support among family caregivers of vegetative patients: A qualitative study.

*Consciousness and Cognition, 41*, 150–158.

<https://doi.org/10.1016/j.concog.2016.02.015>

Novianti, K. R. (2019). Achieving competitive advantage through knowledge management practices: Knowledge-based view (KBV) strategy on Indonesia electricity sector. *Asia Pacific Management and Business Application, 7*(3), 163–176. <https://doi.org/10.21776/ub.apmba.2019.007.03.3>

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis:

Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1–13. <https://doi.org/10.1177/1609406917733847>

Nriagu, J. (2019). Oil industry and the health of communities in the Niger Delta of Nigeria. *Encyclopedia of Environmental Health*, 758–766.

<https://doi.org/10.1016/b978-0-12-409548-9.11443-5>

Nuraeni, N., Nuruly, S., Hafnidar Harun, S., & Susanto, P. C. (2022). Organization development projection: Analysis of leadership style, teamwork, competence employee and recruitment process. *Journal of Economics, Management, Entrepreneurship, and Business (JEMEB)*, 2(2), 139–145.

<https://doi.org/10.52909/jemeb.v2i2.109>

Obi, J.S., Ima-Osagie, P.E., Akpojivi, O.B., & Ulo, E. (2019). Human capital development in the period of economic recession in Nigeria: Implications for counselling practice. *Global Journal of Applied, Management and Social Sciences*, 17, 137–147.

<https://www.gojamss.net/journal/index.php/gojamss/article/view/497>

Obiekwe, O., & Nwaeke, L. I. (2017). Impact of manpower training and development on organizational productivity and performance a theoretical review. *European Journal of Business and Management*, 9(4), 153–159.

<https://www.iiste.org/Journals/index.php/EJBM/article/download/35774/36795>

- Obisi, C. (2011). Employee training and development in Nigerian organizations: Some observations and agenda for research. *Australian Journal of Business and Management Research*, 1(9), 82–91.  
<https://doi.org/10.52283/nswrca.ajbmr.20110109a09>
- Ochei N. F., Omole I. I., & Afolabi C. O (2023) Human resources management and the performance of oil and gas companies in Nigeria. *International Journal of Academic Management Science Research*, 7(4), 46–55.  
<http://ijeais.org/wp-content/uploads/2023/4/IJAMSR230406.pdf>
- OECD. (2023). Retaining talent at all ages, ageing and employment policies. *OECD Publishing*, 1–65. <https://doi.org/10.1787/00dbdd06-en>
- Office for Human Research Protections. (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*.  
[https://www.hhs.gov/ohrp/sites/default/files/the-belmont-report-508c\\_FINAL.pdf](https://www.hhs.gov/ohrp/sites/default/files/the-belmont-report-508c_FINAL.pdf)
- Ogundu, I., Enyiche, C. E., & Obed, O.O. (2019). Partnership between TVET institutions and O&G industries for addressing electrical skills shortage in Rivers State. *International Journal of Innovative Social & Science Education Research*, 7(3), 71–82.  
<https://seahipaj.org/journals-ci/sept-2019/IJISSER/full/IJISSER-S-9-2019.pdf>
- Okumoko, T. P., Omeje, D., & Udoh, F. M. (2018). The dynamics of human capital development and industrial growth in Nigeria. *International Journal of Developing Societies*, 7(1), 41–51. <https://doi.org/10.11634/216817831504916>

- Okunade, S. O., Alimi, A. S., & Olayiwola, A. S. (2022). Do human capital development and globalization matter for productivity growth? New evidence from Africa. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4017651>
- Oladejo, M. T. (2019). Challenges of technical and vocational education and training in Nigerian history. *Makerere Journal of Higher Education*, 11(1), 67–81. <https://doi.org/10.4314/majohe.v11i1.6>
- Olayisade, A., & Awolusi, O. D. (2021). The effect of leadership styles on employee's productivity in the Nigerian oil and gas industry. *Information Management and Business Review*, 13(1(I), 47–64. [https://doi.org/10.22610/imbr.v13i1\(i\).3194](https://doi.org/10.22610/imbr.v13i1(i).3194)
- Olukoju, A. (2014). The challenges of sustainable development in Nigeria. *International Journal of Management Sciences and Humanities*, 2(2), 1–10. <https://www.sciepub.com/reference/261744>
- Oluoch, M. F. (2019). Performance management practices and employee productivity at state department of labour, Kenya. *International Journal of Business, Humanities and Technology*, 9(4), 20–30. <https://doi.org/10.30845/ijbht.v9n4p3>
- Olusegun, E. A. (2019). Employee voice: Speaking up in organisation as a correlate of employee productivity in oil and gas industry- an empirical investigation from Nigeria. *Serbian Journal of Management*, 14(1), 97–121. <https://doi.org/10.5937/sjm14-15308>
- Onyebuchi, O. (2018). Human capital development and organizational survival: A theoretical review. *International Journal of Management and Sustainability*, 7(4), 194–203. <https://doi.org/10.18488/journal.11.2018.74.194.203>

- Opone, P. O., & Kelikwuma, K. O. (2021). Analysing the politics of Nigeria's 2019 national minimum wage: Towards a public policy. *The Indian Journal of Labour Economics*, 64(1), 135–1149. <https://doi.org/10.1007/s41027-021-00347-5>
- Opusunju, M. I., & Akyuz, M. (2022). Causal effect between balance of payment and foreign direct investment in oil and gas sector in Nigeria. *Journal of Global Economics and Business*, 3(8), 57–81. <https://doi.org/10.31039/jgeb.v3i8.41>
- Osborne, S., & Hammoud, M. S. (2017). Effective employee engagement in the workplace. *International Journal of Applied Management and Technology*, 16(1), 1–18. <https://doi.org/10.5590/IJAMT.2017.16.1.04>
- Oseghale, R. O., Malik, A., Nyuur, R. B., Pereira, V., & Ellis, F. Y. A. (2018). Drivers of training and talent development: insights from oil and gas MNCs in Nigeria. *Human Resource Development International*, 21(5), 509–531. <https://doi.org/10.1080/13678868.2018.1472479>
- Pannucci, C. J., & Wilkins, E. G. (2010). Identifying and Avoiding Bias in Research. *Plast Reconstr Surg.*, 126(2), 619–625. <https://doi.org/10.1097/PRS.0b013e3181de24bc>
- Penrose, E. (1959). *The theory and growth of the firm* (3rd ed.). Oxford University Press. <https://doi.org/10.1093/0198289774.001.0001>
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20(2), 76–85. <https://doi.org/10.46743/2160-3715/2015.2097>

- Peu, M., Mulaudzi, F., Rikhotso, S., Ngunyulu, R., & Rasweswe, M. (2020). Reflections on accessing indigenous research settings: Encounters with traditional health practitioners and leaders in Vhembe district, South Africa. *Culture & Psychology*, 27(2), 227–242. <https://doi.org/10.1177/1354067x20971249>
- Pilav-Velić, A., Jahić, H., Okičić, J., & Kokorović – Jukan, M. (2019). The impact of formal and non – formal education on youth employability in Bosnia and Herzegovina. *Croatian Review of Economic, Business and Social Statistics* 5(1), 55–66. <https://doi.org/10.2478/crebss-2019-0006>
- Pineda, P. (2010). Evaluation of training in organisations: a proposal for an integrated model. *Journal of European Industrial Training*, 34(7), 673–693. <https://doi.org/10.1108/03090591011070789>
- Porter, M.E. (1980). *Competitive strategy: Techniques for analysing industries and competitors*. Free Press.
- Pryor, F. L. (2006). Economic systems of developing nations. *Comparative Economic Studies*, 48, 77–99. <https://doi.org/10.1057/palgrave.ces.8100072>
- Purnama, M., Hidayat, A., & Angreni, T. (2021). Employee performance analysis influenced by leadership style, motivation and work discipline. *ECo-Fin*, 3(3), 375–379. <https://doi.org/10.32877/ef.v3i3.530>
- Qomariah, N., Nurul, I., Azhad, N., & Hermawan, H. (2020). How to improve employee performance at level 1 health facilities during the Covid 19 pandemic? *International Journal of Engineering Research and Technology*. 13(9), 2511–2518. <https://doi.org/10.37624/IJERT/13.9.2020.2511-2518>

- Rahman, M. & Akhter, B. (2021). The impact of investment in human capital on bank performance: Evidence from Bangladesh. *Future Business Journal*, 7(1), 1–13. <https://doi.org/10.1186/s43093-021-00105-5>
- Rashid, Y., Rashid, A., Warraich, M. A., Sabir, S. S., & Waseem, A. (2019). Case study method: A step-by-step guide for business researcher. *International Journal of Qualitative Methods*, 18, 1–13. <https://doi.org/10.1177/1609406919862424>
- Raskind, I. G., Shelton, R. C., Comeau, D. L., Cooper, H. L., Griffith, D. M., & Kegler, M. C. (2018). A review of qualitative data analysis practices in health education and health behavior research. *Health Education & Behavior*, 46(1), 32–39. <https://doi.org/10.1177/1090198118795019>
- Redmond, P. (2020). Minimum wage policy in Ireland. *The Economic and Social Research Institute*. <https://doi.org/10.26504/bp202102>
- Robbins, S. P. (2003). *Organisational behavior*. Prentice Hall.
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, 11(1), 25–41. <https://doi.org/10.1080/14780887.2013.801543>
- Robinson, C., & Pope, R. (2023). Minoritized individuals and knowledge-economy. *International Encyclopedia of Education* (4th ed.), 244–250. <https://doi.org/10.1016/b978-0-12-818630-5.08039-8>
- Romero-Hidalgo, J. A., Isiordia-Lachica, P. C., Valenzuela, A., & Rodríguez-Carvajal, R. A. (2021). Knowledge and innovation management model in the organizational environment. *Information*, 12(6), 225. <https://doi.org/10.3390/info12060225>



- Roy, K., Zvonkovic, A., Goldberg, A., Sharp, E., & LaRossa, R. (2015). Sampling richness and qualitative integrity: Challenges for research with families. *Journal of Marriage and Family*, 77(1), 243–260. <https://doi.org/10.1111/jomf.12147>
- Rikala, P., Braun, G., Järvinen, M., Stahre, J., & Hämäläinen, R. (2024). Understanding and measuring skill gaps in Industry 4.0 — A review. *Technological Forecasting and Social Change*, 201, 123206. <https://doi.org/10.1016/j.techfore.2024.123206>
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3<sup>rd</sup> ed.). Sage Publications, Inc.
- Ruiz-Palomino, P., Gutiérrez-Broncano, S., Jiménez-Estévez, P., & Hernandez-Perlines, F. (2021). CEO servant leadership and strategic service differentiation: The role of high-performance work systems and innovativeness. *Tourism Management Perspectives*, 40, 100891. <https://doi.org/10.1016/j.tmp.2021.100891>
- Sakher, A., Rami, H., Belal, B., & Alhareth, A. H. (2019). Leadership, knowledge management, and human capital development. *Economics World*, 7(3), 124–133. <https://doi.org/10.17265/2328-7144/2019.03.002>
- Sakis, K., & Serafeim, G. (2020). Human capital and the future of work: Implications for investors and ESG Integration. *Journal of Financial Transformation*, 51, 115–130. <https://www.hbs.edu/faculty/Pages/item.aspx?num=58541>
- Sarma, S. K. (2015). Qualitative research: Examining the misconceptions. *South Asian Journal of Management*, 22(3), 176–191. <http://www.sajm-amdisa.org>
- Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, 51(1), 1–17. <http://www.jstor.org/stable/1818907>

- Schultz, T. W. (1993). The economic importance of human capital in modernization. *Education Economics*, 1(1), 13–19. <https://doi.org/10.1080/09645299300000003>
- Sebele-Mpofu, F. (2020). Saturation controversy in qualitative research: Complexities and underlying assumptions. A literature review. *Cogent Social Sciences*, 6(1), 1–15. <https://doi.org/10.1080/23311886.2020.1838706>
- Seleim, A., Ashour, A., & Bontis, N. (2007). Human capital and organizational performance: A study of Egyptian software companies. *Management Decision*, 45(4), 789–801. <https://doi.org/10.1108/00251740710746033>
- Setyawati, A., Pahala, Y., & Candra Susanto, P. (2022). Loading and unloading labor performance as a mediation of variables of work motivation, work competence and work behavior that impacts well-being loading and unloading labor. *Journal of Economics, Management, Entrepreneurship, and Business*, 2(2), 146–161. <https://doi.org/10.52909/jemeb.v2i2.112>
- Sharma, H. L., & Sarkar, C. (2019). Ethnography research: An overview. *International Journal of Advance and Innovative Research*, 6(2), 1–5. <http://iaraedu.com/about-journal/ijair-volume-6-issue-2-viii-april-june-2019-part-6.php>
- Shet, S. V. (2024). A VUCA-ready workforce: exploring employee competencies and learning and development implications. *Personnel Review*. <https://doi.org/10.1108/pr-10-2023-0873>

- Sibeoni, J., Verneuil, L., Manolios, E., & Révah-Levy, A. (2020). A specific method for qualitative medical research: The inductive process to analyze the structure of lived experience approach. *BMC Medical Research Methodology*, 20(216), 1–21. <https://doi.org/10.1186/s12874-020-01099-4>
- Silva, M.C.V., & Garcia, A.C.M. (2019). The role of education in the world of work: Fostering learning organisations. *Journal of Siberian Federal University. Humanities & Social Sciences*, 2(12), 231–246. <https://doi.org/10.17516/1997-1370-0391>
- Siwale, J., Chrine, C., Hapompwe, C. K., & Silavwe, D. C. (2020). Impact of reward system on organisational performance: A case study of brentwood suppliers limited in Lusaka, Zambia. *International Journal of Scientific and Research Publications*, 10(07), 281–286. <http://doi.org/10.29322/IJSRP.10.07.2020.p10335>
- Smith, P. R. (2018). Collecting sufficient evidence when conducting a case study. *The Qualitative Report*, 23(5), 1054–1048. <https://doi.org/10.46743/2160-3715/2018.3188>
- Spiers, J., Morse, J.M., Olson, K., Mayan, M., & Barrett M. (2018). Reflection/commentary on a past article: Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 17(1), 1–2. <https://doi.org/10.1177/1609406918788237>
- Steinmetz, L. L. (1969). Age: Unrecognized enigma of executive development. *Human Resource Management*, 8(3) 1–12. <https://doi.org/10.1002/hrm.3930080301>

- Sterie, A.-C., Potthoff, S., Erdmann, A., Burner-Fritsch, I. S., Oyine Aluh, D., & Schneiders, M. L. (2023). Dimensions of researcher vulnerability in qualitative health research and recommendations for future practice. *International Journal of Qualitative Methods*, 22. <https://doi.org/10.1177/16094069231183600>
- Stewart, T.A. (1997). *Intellectual capital - The new wealth of organizations*, Nicholas Brealey.
- Sun, X., Li, H., & Ghosal, V. (2020). Firm-level human capital and innovation: Evidence from China. *China Economic Review*, 59, 101388. <https://doi.org/10.1016/j.chieco.2019.101388>
- Stiles, P., & Kulvisaechana, S. (2003). Human capital and performance: A literature review. *Department for Business, Enterprise and Regulatory Reform*. [http://www.bus.tu.ac.th › sab › dti\\_paper\\_web - Search \(bing.com\)](http://www.bus.tu.ac.th › sab › dti_paper_web - Search (bing.com))
- Sun, X., Li, H., & Ghosal, V. (2020). Firm-level human capital and innovation: Evidence from China. *China Economic Review*, 59, 101388. <https://doi.org/10.1016/j.chieco.2019.101388>
- Sutton, J., & Austin, Z. (2015). Qualitative research: data collection, analysis, and management. *The Canadian Journal of Hospital Pharmacy*, 68(3), 226–231. <https://doi.org/10.4212/cjhp.v68i3.1456>
- Taguchi, N. (2018). Description and explanation of pragmatic development: Quantitative, qualitative, and mixed methods research. *System*, 75, 23–32. <https://doi.org/10.1016/j.system.2018.03.010>

- Tahir, M. (2015). Impact of collective human capital as competitive advantage on performance, 1–35. <http://doi.org/10.2139/ssrn.2768922>
- Tang, L., Sun, S., & Yang, W. (2021). Investments in human capital: The evidence from China's new rural pension scheme. *Research in International Business and Finance*, 55(1), 1–13. <https://doi.org/10.1016/j.ribaf.2020.101345>
- Tasawar, N. (2019). Exploring the nexus between human capital, corporate governance and performance: Evidence from Islamic banks. *J. Bus. Ethics*, 157, 567–587. <https://doi.org/10.1007/s10551-017-3694-0>
- Tesmer, K., & Oxenford, C. (2021). The key to employee motivation: A competitive leadership approach. *Journal of Student Research*, 9(2), 1–8. <https://doi.org/10.47611/jsr.v9i2.808>
- Theofanidis, D., & Fountouki, A. (2019). Limitations and delimitations in the research process. *Perioperative Nursing*, 7(3), 155–162. <https://doi.org/10.5281/zenodo.2552022>
- Tomaszewski, L. E., Zarestky, J., & Gonzalez, E. (2020). Planning qualitative research: Design and decision making for new researchers. *International Journal of Methods*, 19, 1–7. <https://doi.org/10.1177/1609406920967174>
- Trainor, A. A., & Graue, E. (2014). Evaluating rigor in qualitative methodology and research dissemination. *Remedial and Special Education*, 35(5), 267–274. <https://doi.org/10.1177/0741932514528100>

- Trávníčková, H., & Maršíková, K. (2023). On-the-job and off-the-job training in European companies' context. *Hradec Economic Days*.  
<https://doi.org/10.36689/uhk/hed/2023-01-070>
- Tuapawa, K. (2017). Interpreting experiences of students using educational online technologies to interact with teachers in blended tertiary environments: A phenomenological study. *Australasian Journal of Educational Technology*, 33(1), 163–175. <https://doi.org/10.14742/ajet.2964>
- Turner, G. (2016). Teaching and learning qualitative method through the dissertation advising relationship: Perspectives from a professor and a graduate. *Qualitative Social Work*, 15, 346–362. <https://doi.org/10.1177/1473325015626260>
- Ugwu, A. N., & Aruma, E. O. (2021). Interventions of corporate social responsibility of oil companies in promoting sustainable community development in host communities in Niger Delta, Nigeria. *Archives of Business Research*, 9(3), 208–216. <https://doi.org/10.14738/abr.93.9832>
- United States Census Bureau. (2022, June 14). *Population*.  
<https://www.census.gov/topics/population.html>
- U.S. EIA, (2020, June 25). Country analysis executive summary: Nigeria. *Independent Statistics & Analysis*.  
[https://www.eia.gov/international/content/analysis/countries\\_long/Nigeria/Nigeria\\_CAXS\\_2020.pdf](https://www.eia.gov/international/content/analysis/countries_long/Nigeria/Nigeria_CAXS_2020.pdf)

- Uka, A., & Prendi, A. (2021). Motivation as an indicator of performance and productivity from the perspective of employees. *Management & Marketing. Challenges for the Knowledge Society*, 16(3), 268–285. <https://doi.org/10.2478/mmcks-2021-0016>
- Van Rijt, J., & Coppens, P.-A. (2017). Bridging the gap between linguistic theory and L1 grammar education – experts’ views on essential linguistic concepts. *Language Awareness*, 26(4), 360–380. <https://doi.org/10.1080/09658416.2017.1410552>
- Vaughn, P., & Turner, C. (2016). Decoding via coding: Analyzing qualitative text data through thematic coding and survey methodologies. *Journal of Library Administration*, 56(1), 41–51. <https://doi.org/10.1080/01930826.2015.1105035>
- Wagoner, B., Power, S.A. (2021). Social change. In: *The Palgrave Encyclopedia of the Possible*. Palgrave Macmillan, Cham.  
[https://doi.org/10.1007/978-3-319-98390-5\\_143-1](https://doi.org/10.1007/978-3-319-98390-5_143-1)
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171–180. <https://doi.org/10.1002/smj.4250050207>
- Widarni, E. L., & Bawono, S. (2021). Human capital, technology, and economic growth: A case study of Indonesia. *Journal of Asian Finance, Economics and Business*, 8(5), 29–35. <https://doi.org/10.13106/jafeb.2021.vol8.no5.0029>
- World Economic Forum (2023 May). *Future of Job report 2023. Insightreport*.  
[https://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2023.pdf](https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf)

- Wright, P. M., Gardner L. M., Moynihan L.M., & Allen M.R. (2005). The relationship between human resource practices and firm performance: Examining causal order. *Personnel Psychology*, 58(2), 409–446.  
<https://doi.org/10.1111/j.1744-6570.2005.00487.x>
- Wulansari, A. (2019). Teaching descriptive-text writing through flannel doll for eight grade students of junior high school. *English Teaching Journal: A Journal of English Literature, Language and Education*, 7(1), 9–14.  
<https://doi.org/10.25273/etj.v7i1.4544>
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134–152. <https://nsuworks.nova.edu>
- Yeh, C-C., & Kung, F-F. (2013). Aligning human capital measurement with corporate value creation: Evidence from the Taiwan electronics industry, *The International Journal of Business and Finance Research*, 7(5), 35–46.  
<https://ssrn.com/abstract=2262003>
- Yin, R. K. (2015). *Qualitative research from start to finish* (2nd ed.). The Guilford Press.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications, Inc.
- Yu, X., & Liu, M. (2021). Relationship between human capital and technological innovation growth of regional economy and psychology of new entrepreneurs in Northeast China. *Front. Psychol*, 12(731284), 1–10.  
<https://doi.org/10.3389/fpsyg.2021.731284>



- Yuan, Y., Yang, L., Cheng, X., & Wei, J. (2021). What is bullying hiding? Exploring antecedents and potential dimension of knowledge hiding. *Journal of Knowledge Management*, 25(5), 1146–1169. <https://doi.org/10.1108/JKM-04-2020-0256>
- Zahra, S.A. (2021). The resource-based view, resourcefulness, and resource management in startup firms: a proposed research agenda. *Journal of Management*, 47(7), 1841–1860. <https://doi.org/10.1177/01492063211018505>
- Zaugg, H., & Davies, R. S. (2013). Communication skills to develop trusting relationships on global virtual engineering capstone teams. *European Journal of Engineering Education*, 38, 228–233. <https://doi.org/10.1080/03043797.2013.766678>
- Zhao, J. (2019). The knowledge-based view framework: Capability of knowledge integration leads to capability of innovation or imitation. *International Journal of Economics, Commerce and Management*, 7(10), 240–267. <https://ijecm.co.uk/wp-content/uploads/2019/10/71017.pdf>
- Zoom Support. (2022, August03). What is Zoom video conferencing? <https://support.zoom.us/hc/en-us/articles/4420426401037-What-is-Zoom-Video-Conferencing->
- Zong, H., Yang, J., Zhang, Z., Li, Z., & Zhang, X. (2021). Semantic categorization of Chinese eligibility criteria in clinical trials using machine learning methods. *BMC Medical Informatics and Decision Making*, 21(1), 128–139. <https://doi.org/10.1186/s12911-021-01487-w>

Zuofa, T., & Ochieng, E. G. (2017). Senior managers and safety leadership role in offshore oil and gas construction projects. 196. *Procedia Engineering, 196*, 1011–1017. <https://doi.org/10.1016/j.proeng.2017.08.043>

## Appendix: Interview Protocol

Interview Date: \_\_\_\_\_ Total Time: \_\_\_\_\_

**Interview Protocol****What to do****What to say – Script**

1. Welcome participant and introduce the interview session with salutation and introduce self.

2. Give the participant a copy of the consent form to go over the contents and ask the participant if there are questions and or concerns. If participant raises questions or concerns, address them before proceeding.

3. Turn on the audio recorder

4. Introduce participant(s) with a coded identification and note date and time in the journal.

5. Begin interview with question #1 and follow through to the last question.

6. During the interview, observe non-verbal cues and paraphrase as appropriate.

7. Follow up with additional questions – probe questions for more depth.

A. Good day Mr./Mrs./etc. (Title): XXX, My name is David Akpieyi, a Doctoral Student in the Department of Business Administration at Walden University, conducting research on - Strategies for Human Capital Development in an O&G Organization.

B. Thank you for your time to honor the invitation to participate in this study.

Before we proceed, here is the copy of your signed consent form for your record.

C. I believe you have read and understood the contents of the agreement in the informed consent form. If you have questions or concerns, I will be glad to attend to them before the start of the interview.

1. What strategies did you use to promote HCD training activities to increase employees' productivity?

2. How has your organization used strategies to promote HCD training activities to increase employees' productivity?

3. What were the key barriers to implementing your strategies to promote HCD training activities to increase employees' productivity?

4. How did you address the key challenges to your strategies to promote HCD training activities to increase employees' productivity?

8. End interview. Discuss member checking with participant(s).

9. Thank the participant(s) for taking part in the interview. Give contact numbers to participants for follow-up questions and concerns if the need arises.

10. Wrap up the interview and thank the participants for sharing their experience and time.

11. Schedule follow-up member checking interview

5. How did you measure effectiveness of the strategies to promote HCD training activities to increase employees' productivity?

6. What additional information can you provide on the strategies used to promote HCD training activities to increase employees' productivity in your organization?

Thank you for sparing the time to share your experiences with me. I will transcribe the interview data and email to you within the next few days for a review of the process to ensure the correctness of the interview data.

I would appreciate if we agreed on a time to meet and review my interpretations of the interview for approximately 30 minutes or less.

---

### **Follow-Up Member Checking**

12. Introduction of the follow-up e-mail

Thank you again for your time. Did you have time to review the email summary I sent?

13. Share a copy of the brief synthesis for each individual question.

I have recorded the following evidence from your interview session and have summarized my understanding as per my transcription and would like to verify with you any gaps, missing sections, or responses that were hard to understand. The review of the summary to ensure accuracy will take approximately 10-20 minutes of your time to read.

14. At the close of each interview, I will thank the participant for their time, and I will let them know I will send them a copy of the doctoral study once it is completed.

---