



Social Intelligence and Organizational Innovation in Oil and Gas Firms in Rivers State, Nigeria

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Abstract

This study was conducted to examine the relationship between social intelligence and organization innovation in oil and gas firms in Rivers state, Nigeria. Social identity theory was adopted for this study. The study employed the survey research design. A population size of registered 53 oil and gas firms were adopted with operational offices in Rivers state, with a population element of 208 respondents comprising of managers, supervisors, project managers/engineers and Equipment operators of oil and gas firms in Rivers state, Nigeria. The main data collection instrument for the study was a structured questionnaire. A total of two hundred and eight (208) copies of the questionnaire were distributed and they were all returned in usable form. The data was presented using tables, mean and standard deviation while Spearman's Rank Order Correlation Coefficients was used to determine the relationship between social intelligence and innovation of oil and gas firms in Rivers state, Nigeria. Findings from the study showed that social intelligence dimension of self-awareness have a strong and positive relationship with innovation measures of process innovation, product innovation and management innovation. Therefore, it was concluded that managers of the studied firms need to be socially intelligent enough to understand both the external and internal factors within their environment that is

capable of creating innovation among employees and proactively address them. As recommendation, management of these oil and gas firm should take into cognizance the factors capable of brewing innovative attitudes and harmoniously engage employees to harnessing them.

Keywords: *Social Intelligence, Product innovation, Process innovation, Management innovation, Oil and gas firms*

I. Introduction

Modern business environment is characterized with intense global competition and operations which has made many to go out of operations or merge with other organization. These challenges are associate with a lot of technological advancement and digitalization which determines the operations of many businesses in the 21st organization (Ozene, 2014). Organizations that can compete favorably and remain in business are the ones vested with social intelligence. Rahim, Civelek and Liang (2016) defined social intelligence as the ability to be aware of social situations, how to handle situational challenges effectively by understanding other people's concerns, feelings, emotions, building and maintaining positive relationships in social settings that promote and enhance productivity. Social intelligence goes beyond understanding moods, emotions of



employees, psychology of work environment, human relations to purposeful and productive engagement with the external environment.

The external environment influences the operations of every organization both its internal functions and outside relationship with stakeholders. The forces in the external environment such as political, economic, socio-cultural, technological, physical surrounding and customers' preferences are key elements that should be taken into consideration in the process of decision making. Every decision affects employee positively or negatively. If a decision affects employee negatively, it has the tendency to provoke cynicism in the mind of such employee. But when the managerial process of such decision is fair and equitable enough, then it may invoke organizational citizen behavior among the employees which is desired for the growth and progress of the organization. Imagha and Ebieme (2024) opine that social intelligence can be operationalized into the following dimensions; self-awareness, social awareness and social facility. This study is only concerned with self-awareness dimension of social intelligence.

Self-awareness can also be known as self-consciousness. A manager must have self-consciousness and internal capacity to first and foremost understand his/her emotions, skills, ability, strength and weaknesses before they can think of understanding others. Very crucial and significant is the ability of managers to be aware of social events in their domains and the emotions of others as it affects their performance in the workplace. Social awareness emphasis the individual's ability to identify, perceive and react to other's emotions in way that doesn't damage relationships and destroy performance (Fubara, 2020). The skill to understanding nonverbal dispositions and body language as regards to feedback in any situation is very important. A robust tripartite communication relationship among organization, employees and the external environment may enhance manager's ability to be socially aware of social events that may require them to act wisely. Inability to act wisely within the circumference and diameter of internal and external events could signal the beginning of the demise of such organization and its vision attainment drives. Effective relationship is crucial to the survival and sustainability of most organization in this 21st century. Human and social relationships are an integral component of organization's strategy to succeed in this contemporary era (Parry, 2018). The seeming insensitivity of the management of organization amidst harsh economic difficulties is really causing wave of agitations among employees

in the workplace, thereby making the workplace inhabitable for employees and subordinates to co-habitat. In the name of cutting costs, many businesses have accepted and participated in work casualization to an extent that is so irrational that it is harmful to workers' health and welfare. Casualization is the deliberate substitution of contract and/or agency labor for permanent employees, according to Tamunomiebi and Bagshaw (2018). A transition from the predominance of permanent and pensionable work to phases of non-pensionable contract work circumstances is known as casualization (Kazeem, 2004; Munn, 2004). This change has primarily been attributed to employers' increasing demands to cut organizational expenses, as well as to the rise in the unemployment rate and organizational uncertainty, particularly in the post-Covid-19 era, according to Oyeshola (2008). To liberate organization from this menace created by insensitivity of the managers to create a business environment where creativity and innovative mindset will thrive among employees and provide rooms for independent work environment, there is a need to engage managers with emotional awareness about the work setting and how to relate with them to resolve the challenges created.

Some studies had been carried out on social intelligence and organizational innovation separately at various time using different measures and dimensions (Sadiku, Alam & Musa, 2019), Toheed, Turi & Raya (2019), and Abdelsali, (2018) (Polychroniou & Trivellas, 2018) but no research has actually been carried out on social intelligence and organizational innovation adopting the dimensions and measures of this study. Bohlander and Chruden, (2019) investigated the impact social awareness on the product innovation of manufacturing firms in Ukraine, Sadiku, Alam and Musa, (2019) examined the empirical relationship between social intelligence and innovativeness in telecommunication industry in Japan. Imagha et al, (2023) explored the influence of Work Environment on Employees' Commitment in Selected Oil Servicing Firms in Rivers State. Toheed, Turi & Rayan, (2019) conceptually review the concept of emotional intelligence and its relationship with employee commitment in Nigeria organization. Similarly, Abdelsali, (2018) evaluated the influence of social facility on organizational performance of oil and gas companies in Nigeria and Polychroniou and Trivellas, (2018) empirically reviewed the impact of social awareness on administrative innovation of private universities in Ghana. Despite the identified empirical research work on the study variables, there is still a deficiency identified in the



methodology used, study variables as in dimensions and measures, location, organization of study carried out differs, which creates a vacuum in literature between. Base on the identified gap in literature, triggers the Cruz for further research which this present study intends to fill by investigating the conceptual relationship between social intelligence and organizational innovation.

II. Objectives of the study

The major objective of this study was to investigate the relationship between social intelligence and organizational innovation. The specific objective includes to:

- i. examine the relationship between self-awareness and product innovation in oil and gas firms in Rivers state, Nigeria;
- ii. determine the relationship between self-awareness and process innovation in oil and gas firms in Rivers state, Nigeria;
- iii. To investigate the relationship between self-awareness and management innovation in oil and gas firms in Rivers state, Nigeria.

Research Questions

- i. What is the relationship between self-awareness and product innovation in oil and gas firms in Rivers State, Nigeria?
- ii. What is the relationship between self-awareness and process innovation in oil and gas firms in Rivers State, Nigeria?
- iii. What is the relationship between self-awareness and management innovation in oil and gas firms in Rivers State, Nigeria?

Research Hypotheses

The following research hypotheses were formulated and stated in the null form

H₀₁: There is no relationship between self-awareness and product innovation in oil and gas firms in Rivers state, Nigeria.

H₀₂: There is no relationship between self-awareness and process innovation in oil and gas firms in Rivers state, Nigeria.

H₀₃: There is no relationship between self-awareness and management innovation in oil and gas firms in Rivers state, Nigeria.

III. Literature Review

Concept of Social Intelligence

According to Goleman (2006), social intelligence is the capacity to get along with people and persuade them to work with you to accomplish a desired outcome. Once more, managers must have a thorough understanding of the social context and the

individuals involved. Having good social skills is essential for getting along at work. Social intelligence, according to Moss and Hunt (2002), is the capacity for interpersonal harmony. Understanding social situations and the cognitive structure of individual traits is necessary in order to relate to humans. Because human beings are wired differently, no two people behave the same, even in similar situations. Also, our perception of the world differs hence people react and respond to issues and situation based on their thinking and perception. From the environment we all grew up, people formed form certain traits that identified who they really are. Social intelligence, according to Rahim, Civelek, and Liang (2016), is the capacity to recognize social situations, manage situational difficulties by comprehending the worries, emotions, and feelings of others, and establish and preserve constructive relationships in social contexts that foster and improve productivity. Social intelligence goes beyond understanding moods, emotions of employees, psychology of work environment, human relations to purposeful and productive engagement with the external environment (Fubara, 2019).

Frankovsky and Birknerová (2014) asserted that, social intelligence is the science of relationships. This relationship is among organization, employees and the external environment. Daft (2001) explained clearly that, the key element of an organization is not the building or a set of policies and procedures; organization is made up of people and their relationships with one another. Also, Organization constantly interacts with the external environment in the form of input-output relationship. In another vein, Understanding situations and the social dynamics that influence them, as well as interaction styles, tactics, and methods that can help one accomplish their goals when interacting with others, are all components of social intelligence.(Albrecht, 2003). It takes a whole lot of skills to get along with others and manage human beings. Many scholars have argued that, the most difficult resources to relate with and manage are human beings. Considering the reality of the environment, social intelligence is the ability to understand political and legal forces, economic forces, socio-cultural forces, technological forces and preference of those the organization seeks to serve, the aspiration and behavioral pattern of its most available assets and manage wisely to create a favorable outcome.



Social-Awareness

As the name implies, self-awareness, also referred to as social awareness, is the capacity to comprehend the social environment. The emotions, actions, and responses of people in a social setting are all part of the social world. The second aspect of social intelligence is social awareness, which is the capacity to comprehend and show empathy for the thoughts, feelings, and difficulties of others. Goleman (1998) defines social awareness as the capacity to perceive, comprehend, and respond to the feelings and patterns of behavior of others in a social setting on social networks. The capacity to read nonverbal clues for negative emotions, especially fear and anger, and to assess the reliability of others are all part of social awareness, which includes the empathy competency. It's about recognizing other people's emotions rather than going through. It is merely placing oneself in another person's shoes or situations to comprehend why people act, react, and are motivated by particular things that might not motivate others. The ability to recognize, understand, and respond to others' emotions in a way that doesn't strain relationships or impair performance is emphasized by social awareness. Understanding people's needs and showing concern for them are two aspects of social awareness. It also involves comprehending how social context affects people's actions and output. Self-aware people are not naively optimistic or excessively critical of themselves (Ebieme et al., 2024). No two people on the planet are alike because everyone is wired differently. Our perception of reality and the proper way to treat others is sometimes shaped by the events in our lives. Organizational managers must be able to see things from other people's perspectives.

The capacity to comprehend the thoughts, feelings, and emotions of coworkers, as well as to identify and know how to support them, is known as social awareness. It necessitates taking other people's feelings into account, particularly when making decisions and treating people based on their emotional responses. Being service-oriented and putting the organization first are further aspects of social awareness. Victoroff and Boyatzis (2012) define social awareness as the collective consciousness of individuals within a society. In describing how social awareness affects employee job performance, it is more likely to be influenced by how long individuals have been interacting with one another to gain a better understanding of who they are dealing with and how they can approach particular individuals in particular circumstances. Therefore, if an employee spends more time on

orientation, they will perform better on daily tasks; if not, the relationship will inevitably be task-oriented. Additionally, compared to quiet and so-called anti-social groups, high performance is more likely to be found among employees or people with very high social relationships among their coworkers. It was thought that these socially conscious people could ask knowledgeable superiors or subordinates for advice on matters pertaining to their jobs.

In contrast to antisocial coworkers who only think about themselves, it will encourage employees to look forward to completing their tasks well and interacting with colleagues in order to improve their own performance (Treadway et al, 2013). Whether internal or external, relationships are crucial to the success of organizational operations. Our internal connections, including those with our employers and coworkers, are just as significant. They make or break us, and the effectiveness of an organization's organizational cultures is determined by the caliber of its internal relationships. Additionally, we enhance our life experience, generate chances for better work-life balance, develop empathy for others, enhance our capacity to adapt to change, and rejoice in a less critical and more accepting workplace (Goleman, 2001). One element of competency and the cornerstone of establishing strong professional relationships is social awareness. It entails attentive observation and listening, frequently at the same time. The ability to identify employees' feelings in the moment while still participating fully in the discussion or dialogue is a constant challenge for leaders. High levels of empathy, situation awareness, service orientation, and empowerment are necessary to accomplish this successfully.

Organizational Innovation

According to Plessis (2007), innovation is the process of developing new information and concepts to support new business outcomes, enhance internal business procedures and organizational structures, and produce goods and services that are driven by the market. Research on innovation shows that there are many different kinds of innovation (Damanpour, 2009), such as radical and incremental. Administrative and technical, product and process, and radical and incremental are the three primary categories into which some researchers divide the various forms of innovation (Yang, 2007). Environmental conditions, organizational factors, innovation generation processes, and organizational sector are the reasons why organizations adopt various kinds of



innovations. Despite the fact that innovation is a multifaceted activity, the current study will follow the findings of earlier research that identified technological, administrative, radical, and incremental innovation as the primary drivers of an organization's ability to survive and grow (Oke, 2007).

The ability to connect procedures, elements, and methods to produce a product or service within an organization is known as organizational innovation (Popadiuk & Choo, 2006). Changes in organizational structure and procedures, such as authority, task organization, hiring, resource allocation, and rewards, are referred to as administrative innovation (Lin et al., 2010). According to Pedersen and Dalum (2004), radical innovation is a significant shift that entails a new technological pattern and calls for greater organizational skills and a deeper level of knowledge (Darroch & McNaughton, 2003). The cumulative and gradual nature of technological changes in an organization to produce goods or services is known as incremental innovation (Pedersen & Dalum, 2004). As a result, it requires less organizational capacity than incremental innovation (Darroch & McNaughton, 2003).

Dimensions of Organizational Innovation

Process Innovation

The introduction of new technologies, management strategies, and production techniques that can be applied to enhance managerial and production processes is associated with process innovation. Implementing radically new, drastically enhanced, or more effective techniques for creating, manufacturing, and distributing the company's products is known as process innovation. Additionally, process innovation entails making major advancements in supporting functions like purchasing, accounting, maintenance, and computing, as well as in production and logistics techniques (Polder et al., 2010). Process innovation, according to the OECD (2005), is the application of a new or greatly enhanced production or delivery method. Process innovation involves making major advancements in the tools, software, and technology used in the production or delivery process. Businesses implement innovative production and delivery techniques to increase business efficiency. Therefore, in order to improve their supply chain operations or production processes and boost reliability or cut costs, telecommunications

companies can implement process innovation (Susman and Warren, 2006).

The organization must be unfamiliar with the new approach or have never used it before. The company can work with another company or independently to develop a new process (Polder et al., 2010). Businesses use process innovation to create novel products, and they also modify their existing processes to create the new products (Adner and Levinthal, 2001). Businesses try to introduce process innovation to lower production costs. The product's price reflects the process innovation (Olson et al. 1995). Businesses must implement innovative processes to satisfy their clients in order to compete with other businesses. Process innovation can significantly affect a company's productivity, particularly in manufacturing organizations. Historical case studies demonstrated that automating production processes has improved organizations' productivity and efficiency (Ettlie and Reza, 1992).

Management innovation:

Theoretically, concept of management innovation is broad and includes behavioral, structural, and strategic aspects. "The application of a new organizational method in the firm's business practices (including social intelligence), workplace organization, or external relations that has not been used by the firm previously" is what the OECD (2005) defines as a management innovation. It must be the outcome of management's strategic choices. The majority of research has concentrated on the idea that management innovation typically follows technological innovation. The role of management innovation in fostering creativity and flexibility, which in turn promotes the growth of technological innovation, has been highlighted more recently by an emerging research stream. For example, Lam (2005) makes the case that management innovation might be a prerequisite for innovation. According to Bharadwaj and Menon (2000), management innovation refers to the strategic processes that managers create and implement in order to manage the organization. Businesses that effectively use strategic skills to manage their administrative processes are more proactive and resilient in terms of the organization's long-term viability.

Product innovation

Businesses that engage in comparatively fewer R&D activities tend to attribute their innovation performance to strategies that emphasize product innovation, which focuses on competitiveness, product, pricing, and distribution channels. According to Rust et al. (2004), there are



three aspects of product innovation: product strategy, strategies for pricing and promoting. Changes in design or packaging, adjustments to sales or distribution channels, advertising, or permanent exhibits are examples of tactical marketing actions that result from these strategies. The goal is to expand into new markets and/or make the company's products more appealing. The third edition of the Oslo Manual defines marketing innovation as "the implementation of a new marketing concept or strategy that differs significantly from the enterprise's existing marketing methods and which has not been used before." Product innovation, on the other hand, includes technical specifications and functional properties. It involves major adjustments to product placement, promotion, pricing, packaging, or design (OECD, 2005).

Theoretically, firm performance is determined by tactical actions and intangible resources, such as product innovation. Businesses that concentrate on marketing initiatives are probably better able to boost customer satisfaction than their rivals (Baker & Sinkula, 1999). They are also likely to be able to successfully adjust to shifting market demands, find and seize business opportunities, and obtain new data and resources to create competitive new products (Rust et al., 2004). Additionally, when it comes to learning from external relationships like clients or competitors—which are a component of organizational innovation—market orientation results in increased business profitability. Although their role in process innovation is unknown, universities are frequently a significant source of product innovations in emerging technologies (Zucker et al., 1998). The significance of regulation as a source of knowledge innovation has been established (Laursen & Salter, 2006), despite the fact that its role in the innovation process is still up for debate (Porter, 1991; Jaffe and Palmer, 1997).

Theoretical framework

Social Identity Theory

Tajfel and Turner came up with this theory in 1986. According to the theory, people frequently group themselves into social categories that hold significance for them, which influences how they interact with members of both their own and other groups (Tajfel & Turner, 1986). The following are the main claims of this theory: (i) People want to be a part of groups in which they have unique and fulfilling identities. (ii) Social identification with a particular group results in behaviors that support

stereotypical views of oneself and group members and are consistent with the collective aspirations of the group. (iii) By comparing the in-group and out-group socially. Members of the in-group will try to keep up their superiority over an out-group member. (iv) merely classifying results in in-group favouritism. In accordance with Tajfel and Turner (1986). Social identity is derived from classifying people's uniqueness and the group's prestige; our group's prominence and the elements that are typically connected to group formation are crucial to employees' success or failure.

The study of group is very crucial and significant to the all managers in organizations because of the fact that groups drive the achievement of set goals and it serve as a level of analysis providing information on the dynamic of the organizational life and activities (Inyang, 2012). Identity of individuals into social categories provide the framework upon which every employee associates, relate and communicate. According to Ahiauzu and Asawo (2016) man is the social animal which always seek to interact and relate with other people. Relationship is very key in group bonding and goal accomplishment. Employees identify and belong to groups in the workplace to informally coordinate themselves and protect their interest collectively. The emphasis here is identification and belonging into groups to protect their interest. Understanding the behaviors' of group members, their interactions, structure, processes, functions and the degree of their cohesiveness will help manager to know the best way to give directives, assuage them to work in unison for the achievement of the organizational goals. Consequently, this makes workers to demonstrate constructive attitudes and behaviours (Imagha, Ugunwanyi and Akpaetor, 2021).

Empirical Framework

Susan and Kasim (2010) investigated the impact of social desirability on organizational performance of employees in Ukraine. The purpose of the study was to evaluate the impact of social desirability on the performance of the organization. The study adopted a descriptive research design with a population size of 15 management staff that constitute the respondent for the study. From empirical review, it was found that social desirability is an essential element that enhance performance in the organization, the result shows that the level of social desirability were important criteria for determining and improving organizational performance in contemporary organization. From the empirical review, the study



concluded that social desirability has a positive impact on the element of organization. The study differs in variables and organization, while the present study will focus social intelligence and organizational innovation.

A study on the self-awareness and organizational innovation of manufacturing firms in Rivers State was conducted by Fubara and Asawo (2020). This study looked into the connection between organizational innovation and self-awareness in Rivers State's manufacturing industry. A cross-sectional research design was used in the study. The population of the study consisted of ninety-seven (97) management personnel, including chief executive officers and department heads of the twenty (20) manufacturing companies that are registered and operating in Rivers State. The small sample size led to the adoption of the census sampling method. A structured questionnaire served as the primary data collection tool for this study. Six (6) of the 97 copies of the questionnaire that were distributed were not returned, while 91 (91) were recovered. To ascertain the relationship between self-awareness and organizational innovativeness, data was presented, analyzed, and hypotheses were tested using tables, percentages, Spearman's Rank Order Correlation Coefficients, and the Statistical Package for Social Science version 23. The study found a strong and positive correlation between organizational innovation and self-awareness. The study found that knowing one's emotional stability, how others feel about their work performance, and being aware of organizational procedures, abilities, and product performance could encourage businesses to be creative and create profitable goods and services that satisfy customers. Therefore, the study suggested that in order to foster a sense of belonging among their employees, top managers should learn how to understand what motivates them at work and start and encourage innovation with employee input.

Chang and Chaung (2011) examined the influence of self-awareness as a predictor of social intelligence and showed empirically the effectiveness of knowledge management processes

from the roles of infrastructure capability and business strategy in enhancing firm performance. The objective of the study was to examine the impact of emotional intelligence on process innovation. It adopted the descriptive research design with population size of 20 management staff that constitute the respondent for the study. From empirical review, it was found that emotional intelligence plays a significant role in the relationship between the element of emotional intelligence and process innovation. From the empirical review, the study concluded that emotional intelligence has a positive relationship with process innovation. It further argued that one of the benefits of introducing emotional intelligence strategy in organizations is its positive impact on organizational performance hence, organization with knowledge management strategy tends to achieve its better performance.

IV. Methodology

For this study, survey research design was adopted. The population of this study comprised of 53 registered oil and gas firms with operational offices in Rivers state, Nigeria. Since the study was a macro study which focused on the organization, the population element of four (4) representatives each was drawn from the departmental heads, supervisors and managers as the respondent. Therefore, the population element for the study was 208 management staff of the organization. (Human Resource Department Record, 2023). Source of data was from primary data. Questionnaire was the instrument for data collection. Copies of questionnaire were administered to the respondents from the 53 oil and gas firms with operational offices in Rivers state, Nigeria under study. The questionnaire was rated using 5-point Likert scale. According to Imaghaet *al.* (2023), this method was necessary to ensure that every member of the study was provided an equal chance of being selected for the study. Spearman's Rank Order Correlation Statistics tool was used in analyzing the stated hypotheses.

V. Data analysis and Interpretation

Table 1.1: Questionnaire distribution on Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	165	79.3	79.3	79.3



Female	43	20.7	20.7	100.0
Total	208	100.0	100.0	

SPSS output, Version 21 – Research data, 2024

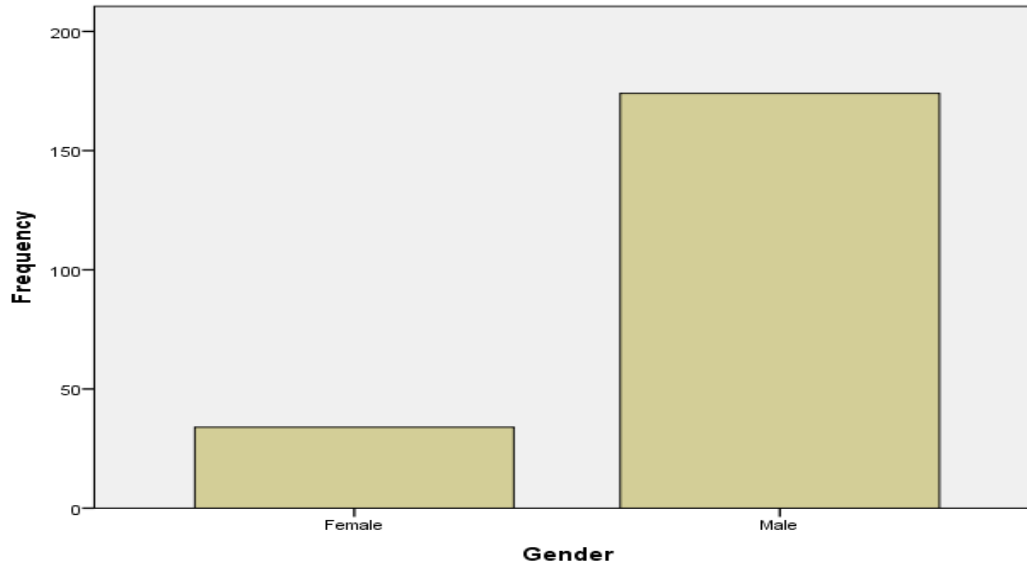


Figure 1.1: Distribution on Gender Respondents

The frequency distribution on gender respondents is reported in Table 1.1 with the highest distribution on male respondents – 165 (79.3%), followed by female respondents – 43 (20.7%). This is suggestive of the, majority of the managerial employees are male in oil and gas firms in Rivers state.

Table 1.2 Education Qualification of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid SSCE	47	22.6	22.6	22.6
ND/HND	47	22.6	22.6	45.2
B.Sc/B.Tech or equivalent	49	23.6	23.6	68.8
M.Sc/MBA or equivalent	36	17.3	17.3	86.1
PhD/DBA	29	13.9	13.9	100.0
Total	208	100.0	100.0	

Source: Research data, 2024.

Table 1.2 showed education qualification of respondents. The table above indicated that forty-seven (47) respondents representing 22.6% of the respondents hold Senior Secondary Certificate of Education (SSCE), while forty-seven (47) respondents representing 22.6% of the respondents hold National Diploma and Higher National

Diploma. Forty-nine (49) respondents representing 23.6% of the respondents hold B.Sc/B.Tech, while thirty-six (36) respondents representing 17.3% of the respondents hold M.Sc/MBA and twenty-nine (29) respondents representing 13.9% hold Ph.D/DBA.

Table 1.3: Work Experience of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 0 - 5 years	49	23.6	23.6	23.6
6 - 10 years	56	26.9	26.9	50.5
11 - 15 years	39	18.8	18.8	69.2
16 - 20 years	32	15.4	15.4	84.6



25 years and above	32	15.4	15.4	100.0
Total	208	100.0	100.0	

Source: Research data, 2024.

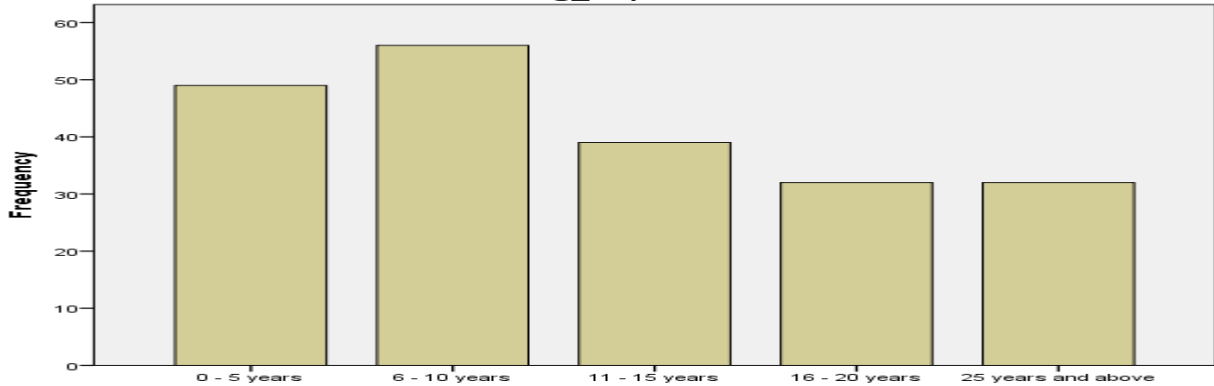


Figure 1.2: Work experience of respondents

Table 1.3 showed the number of years the selected employees have work in their various firms. The years were grouped as shown in the table above. The table showed that from 0–5 forty-nine (49) respondents representing 23.6 percent of the total respondents have 0–5 years work experience in their organizations. While fifty-six (56) respondents representing 26.9% of the respondents have 6–

10 years of work experience. Thirty-nine (39) respondents representing 18.8% of the respondents have 11–15 years of work experience. Thirty-two (32) respondents representing 15.4% of the respondents have 16–20 years of work experience and thirty-two (32) respondents representing 15.4% of the respondents have 25 and above years work experience.

Table 1.4 Job Position of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Managers	101	48.6	48.6	48.6
	Supervisors	49	23.6	23.6	72.1
	Project Manager/Engineers	27	13.0	13.0	85.1
	HSE Managers	20	9.6	9.6	94.7
	Equipment Operators	11	5.3	5.3	100.0
	Total	208	100.0	100.0	

Source: Research data, 2024

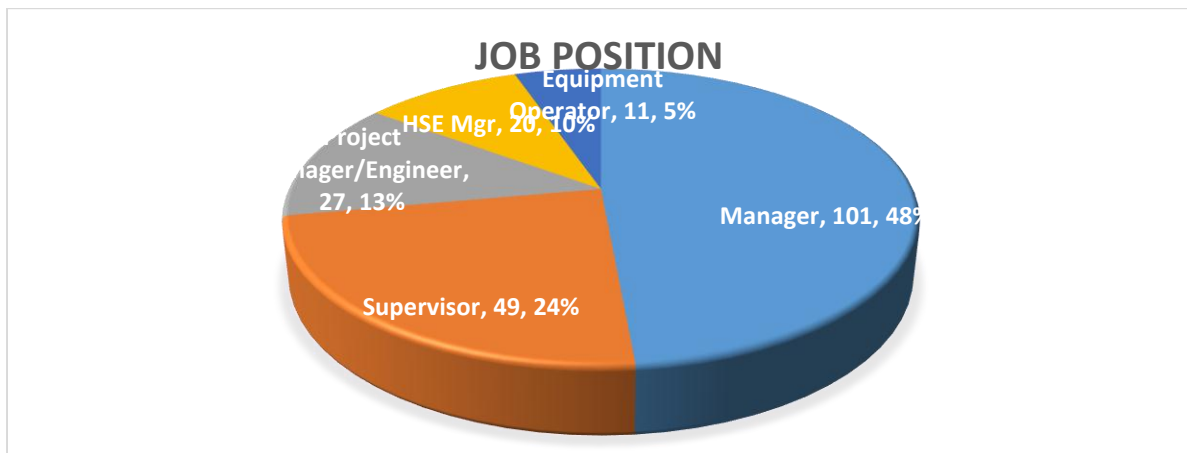


Figure 1.3 Job Position of Respondents



Table 1.4 above showed the job position of respondents. The data shows that one hundred and one (101) respondents are managers representing 48.6% of the respondents, while forty-nine (49) respondents representing 23.6% of the respondents are supervisors. Twenty-seven (27) respondents

representing 13.0% of the respondents are project managers/engineers. Twenty (20) respondents representing 9.6% of the respondents are HSE managers and eleven (11) respondents representing 5.3% of the respondents are equipment operators.

Table 1.5: Respondents rate on Self-Awareness

	N	Min.	Max.	Sum	Mean	Std. Deviation
I am sensitive to the feelings and emotions of my colleagues	208	1.0	5.0	825.0	3.966	.8702
I have good understanding of the emotions of my colleagues around me.	208	1.0	5.0	957.0	4.601	.9578
I am a self-motivated person	208	1.0	5.0	834.0	4.010	1.2118
I always know my colleagues' emotions from their behavior.	208	1.0	5.0	931.0	4.476	.6876
Valid N (listwise)	208					

Source: Research data, 2024.

Table 1.5 showed the respondents rate on Self-Awareness. Self-awareness is the first dimension of social intelligence. Question one showed that the employee (selected respondents) are sensitive to the feeling and emotions of their colleagues with a mean of 3.97 and standard deviation of 0.8702. Question two indicated that the employees have good understanding of the emotion of their colleagues around them with a mean of 4.60 and

standard deviation of .9578, Question three showed that majority of the employees are self-motivated with valid mean of 4.01 and standard deviation of 1.2118 and lastly Question four stated that the employees always knows their colleagues emotions from their behavior with a mean of 4.48 and standard deviation of 0.6876. The mean value for the questions above fall within the categorization of being high.

Table 1.6: Relationship between Self-Awareness and Product innovation

		Self-Awareness	Product innovation
Spearman's rho	Correlation Coefficient	1.000	.933**
	Sig. (2-tailed)	.	.000
	N	208	208
Product innovation	Correlation Coefficient	.933**	1.000
	Sig. (2-tailed)	.000	.
	N	208	208

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research data, 2024.

Table 1.6 showed the relationship between Self-awareness and Product innovation of Oil and Gas Firms in Rivers state, Nigeria. The Correlation significance between Self-Awareness and Product innovation yielded ($r = 0.933$) above the average of correlations coefficient of ($r = 0.5$). The probability of correlation was significant at ($\rho = 0.01 < 0.05$). This showed that there is significant high positive

relationship between Self-Awareness and Product innovation of Oil and Gas Firms in Rivers state, Nigeria. Based on this result, the null hypothesis **H₀₁**: There is no relationship between self-awareness and product innovation in oil and gas firms in Rivers state, Nigeria was rejected and the alternate hypothesis is accepted.

Table 1.7: Relationship between Self-Awareness and Process innovation

		Self Awareness	Process innovation
Spearman's rho	Self	Correlation Coefficient	1.000
			.890**



Awareness	Sig. (2-tailed)	.	.000
	N	208	208
	Correlation Coefficient	.890**	1.000
Process innovation	Sig. (2-tailed)	.000	.
	N	208	208

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research data, 2024.

Table 1.7 showed the relationship between Self-Awareness and Process innovation of Oil and Gas Firms in Rivers state, Nigeria. The Correlation significance between Self-Awareness and Process innovation yielded ($r = 0.890$) above the average of correlations coefficient of ($r = 0.5$). The probability of correlation was significant at ($\rho = 0.01 < 0.05$). This showed that there is significant high positive

relationship between Self-Awareness and Process innovation of Oil and Gas Firms in Rivers state, Nigeria. Based on this result, the null hypothesis, **H₀**: There is no relationship between self-awareness and process innovation in oil and gas firms in Rivers state, Nigeria is hereby rejected and the alternate hypothesis accepted.

Table 1.8: Relationship between Self-Awareness and Management innovation

		Self Awareness	Management innovation
Spearman's rho	Correlation Coefficient	1.000	.877**
	Sig. (2-tailed)	.	.000
	N	208	208
	Correlation Coefficient	.877**	1.000
	Sig. (2-tailed)	.000	.
	N	208	208

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research data, 2024.

Table 1.8 showed the relationship between Self-Awareness and management innovation of Oil and Gas Firms in River state, Nigeria. The Correlation significance between Self-Awareness and management innovation yielded ($r = 0.877$) above the average of correlations coefficient of ($r = 0.5$). The probability of correlation was significant at ($\rho = 0.01 < 0.05$). This showed that there is significant high positive relationship between Self-Awareness and Management innovation of Oil and Gas Firms in River state, Nigeria. Based on this result, the null hypothesis, **H₀**: There is no relationship between self-awareness and Management innovation in oil and gas firms in Rivers state, Nigeria was rejected and the alternate hypothesis accepted.

VI. Discussion of Findings

Hypothesis one tested the relationship between Self -Awareness and Product innovation. The Correlation significance between Self-Awareness and Product innovation was ($r = 0.933$) above the average of correlations coefficient of ($r = 0.5$). The probability of correlation was significant at ($\rho = 0.01 < 0.05$). This showed that there is

significant and strong positive relationship between Self-Awareness and Product innovation of Oil and Gas Firms in Rivers state, Nigeria. This assertion is in agreement with the works of İnceoğlu (2004) which opined that the attributes of self-identity, self-recognition and appraisal are the ingredients for effective self-awareness in the organization that are manifested among employees in the organization.

Hypothesis two tested the relationship between Self-Awareness and Process innovation of Oil and Gas Firms in Rivers state, Nigeria. The Correlation significance between Self-Awareness and Process innovation was ($r = 0.890$) above the average of correlations coefficient of ($r = 0.5$). The probability of correlation was significant at ($\rho = 0.01 < 0.05$). This showed that there is significant and strong positive relationship between Self-Awareness and process innovation of Oil and Gas Firms in Rivers state, Nigeria. Hypothesis three tested the relationship between Self-Awareness and management innovation of Oil and Gas Firms in Rivers state, Nigeria. The Correlation significance between Self-Awareness and management innovation yielded ($r = 0.877$) above the average of correlations coefficient of ($r = 0.5$). The probability



of correlation was significant at ($\rho = 0.01 < 0.05$). This showed that there is significant and strong positive relationship between Self-Awareness and management innovation of Oil and Gas Firms in Rivers state, Nigeria.

These findings are consistent with the reviewed literature, as demonstrated by Fubara and Asawo (2020), who believed that self-awareness is the ability to recognize one's own emotions and behavioral patterns, comprehend their causes, and consider the patterns of behavior that result from those emotions. Some people are inspired and motivated by particular things, but not everyone is. Managers must consciously recognize that individuals differ and that emotions influence particular actions. Certain behaviors and practices have the power to incite conflict and annoyance among coworkers, and vice versa. According to the study, companies that uphold integrity, fairness, and sincerity and are trusted will inspire workers to perform better because they value involvement and self-improvement. It is natural to every human being, they expect that the organization should carry them along in the process of critical decision making (Urbany, 2005). When action of managers consistently shows betrayal of employee cause and welfare, they find it pretty difficult to trust such system or management. So, it is the function and duty of managers to sincerely uphold good sense of practice and justice in distribution of organization's advantages. Therefore, the null hypothesis was rejected and the research hypotheses are stated below.

VII. Conclusion and Recommendations

The findings show that there is relationship between self-awareness and organizational innovation of oil and gas firms in Rivers state, Nigeria. The correlation significance between self-awareness and product innovation was ($r = 0.933$) above the average of correlations coefficient of ($r = 0.5$), while the correlation significance between self-awareness and process innovation was ($r = 0.890$) above the average of correlations coefficient of ($r = 0.5$), and the correlation significance between self-awareness and management innovation was ($r = 0.877$) above the average of correlations coefficient of ($r = 0.5$). These results are in line with the literature reviewed as exemplified by Fubara and Asawo (2020) who opined that, self-awareness is being aware of personal emotion, behavioural pattern and understanding their cause and reflecting on the patterns of behaviour which you or others display as a consequence of that emotion. Certain things inspire and motivate some people but all

people are not motivated by certain things. Managers need to consciously understand that people are moved by feelings and certain events in the organization provoke certain behaviours. Certain practices and behaviour have the capability to engineer strife and frustration among employees and vice versa. Based on the findings made in the course of this study, it is recommended that the key factors causing some lack of innovative attributes among employees are lack of recognition, rising organizational complexity, low work autonomy, poor strategic drives, big gaps in salaries, conflict roles, feelings of nepotism, existence of bias, feelings of ostracism, disagreement with organizational values, unachievable organizational goals, too much work load, stress and inadequate social support. Management should take into cognizance the factors capable of brewing innovative attitudes and harmoniously engage employees to harnessing them.

References

- [1]. Ahiauzu, I.A. & Asawo, P.S. (2016). *Advanced Social Research Methods*. Port Harcourt: CIMRAT Publications
- [2]. Bari, M, Toheed, Q, and Raya, M (2019). Employees' responses to psychological contract breach: The mediating role of organizational cynicism. *Sage Journals*, 43(2), 76-86
- [3]. Bohlander, G. and Chrudden, S. (2019), *Principles of Human Resource Management*, Mason: Cengage Learning
- [4]. Chang and chaung (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & Management*, 48(1):9-18
- [5]. Damanpour, F., Walker, R.M. and Avellaneda, C.N. (2009). Combinative Effects of Innovation Types and Organizational Performance: A Longitudinal Study of Service Organizations. *Journal of Management Studies*, 46, 650-675.
- [6]. Darroch, J. and McNaughton, R. (2003) Beyond Market Orientation: Knowledge Management and the Innovativeness of New Zealand Firms. *European Journal of Marketing*, 37, 572-593
- [7]. Ebieme E. E., Imagha O.A., Robert O.G. and Atakpo E.U. (2024) Self-Awareness and Business Educators' Job Performance in Federal Universities, South-South, Nigeria, *International Journal of Business and Management Review*, 12(3), 18-38



- [8]. Frankovsky, M. and Birknerova, Z. (2014). Measuring Social Intelligence-The MESI Methodology. *Asian Social Science*, 10 (6).
- [9]. Gardner, H. (2009). *Multiple intelligences around the world*. New York: Basic Books.
- [10]. Goleman, D. (2001). An EI-Based Theory of Performance. In C. Cherniss, & D. Goleman (Eds.), *The Emotionally Intelligent Workplace*. San Francisco, CA: Jossey-Bass
- [11]. Goleman, D. (2006). *Emotional Intelligence: The 10th Anniversary Edition*. New York
- [12]. Goleman, D. (2006). *Social Intelligence*. New York: Random House Publishing Group
- [13]. Kazeem, A. (2014). Determinants of Economic Growth in Nigeria. *CBN Journal of Applied Statistics (JAS)*, 5(2)
- [14]. Imagha O.A., Okon M.G., Akpaetor U.A., Nkanor W.N. and Umana E.S. (2023) Technological Skills and the Performance of Managers of Small and Medium Scale Enterprises in Uyo, Akwa Ibom State, Nigeria, *International Journal of Small Business and Entrepreneurship Research*, 11(1),40-53
- [15]. Imagha, O., Akpaetor, U., Akpan, S. and Atakpo, E. (2023). Exploring the influence of Work Environment on Employees' Commitment in Selected Oil Servicing Firms in Rivers State Nigeria. *International Journal of Economics and Business Management*, 9(10), 145-171
- [16]. Imagha, O., Ugunwanyi, A. and Akpaetor, U. (2021). Career Management Practice and its Influence on Organizational Citizenship Behavior amongst Non-Teaching Staff in Federal University, Otueke, Bayelsa State, Nigeria. *AKSU Journal of Administration and Corporate Governance*, 1(2), 57-70
- [17]. Imagha, O. and Ebieme, E. (2024). Evaluating the Influence of Self-Regulation on Job Performance in Champion Brewery, Plc, Uyo, Akwa Ibom State, Nigeria. *International Journal of Research and Scientific Innovation*, 11 (6), 440-456
- [18]. Oke, A. (2007), "Innovation types and innovation management practices in service companies", *International Journal of Operations & Production Management*, Vol. 27 No. 6, pp. 564-587
- [19]. Jaffe, A. and Palmer, K. (1997) *Environmental Regulation and Innovation: A Panel Data Study*. *The Review of Economics and Statistics*. 79(4), 610-619
- [20]. Laursen K. and salter A. (2006), *Open for Innovation: The Role of Openness in Explaining Innovation Performance Among U.K. Manufacturing Firms*. *Strategic Management Journal*, 27(2):131 – 150.
- [21]. Popadiuk, S., & Choo, C. W. (2006). Innovation and Knowledge Creation: How Are These Concepts Related. *International Journal of Information Management*, 26, 302-312
- [22]. Plessis, M. (2007), The role of knowledge management in innovation. *Journal of Knowledge Management*, 11(4):20-29
- [23]. Porter M. (1991) *Towards a dynamic theory of strategy*. *Strategic Management Journal* 12(2), 95-117
- [24]. Sadiku, M., Alam, S. and Musa, M. (2019). *Social intelligence: a primer*. *International Journal of Research*, 7(9), 213-217.
- [25]. Susman, G., and Warren, A. (2006). Product and service innovation in small and medium-sized enterprises. Research Sponsored by United States Department of Commerce-The National Institute of Standards and Technology *Manufacturing Extension Partnership*.
- [26]. Tamunomiebi, M.D., & Bagshaw, K.B. (2018). Managing casualization and redundancy of workers: Its effect and implication to sustainable development in Nigeria business environment. *IIARD International Journal of Economics and Business Management*, Vol. 4(1):72-79.
- [27]. Tajfel, H. and Turner, J.C. (1986). *The Social Identity Theory of Intergroup Behavior*. In: Worchel, S. and Austin, W.G., Eds., *Psychology of Intergroup Relation*, Hall Publishers, Chicago.
- [28]. Yang, J. (2007). The impact of knowledge sharing on organizational learning and effectiveness. *Journal of Knowledge Management*, 11(2):83-90
- [29]. Zucker et al (2012), *Developmental, Biopsychosocial Model for the Treatment of Children with Gender Identity Disorder*. *Journal of Homosexuality*, 59(3):369-97