
KNOWLEDGE SHARING AND CORPORATE RESILIENCE OF MANUFACTURING FIRMS IN RIVERS STATE, NIGERIA

By

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Abstract

This study examined the relationship between knowledge sharing (KS) and corporate resilience (CR) of manufacturing firms in Rivers State, Nigeria. The cross-sectional survey was adopted in the study. The population of 125 managers and supervisors of manufacturing firms were identified. However, a total sample size of 92 was derived. Thus, questionnaire was distributed to 92 managers and supervisors of the selected firms. The systematic sampling technique was used in this study, from the questionnaire administered, only 86 copies which represented 93% were correctly filled and retrieved. The data was analyzed using the Pearson product moment correlation statistical tool in order to ascertain the relationship between the variables. It was observed from the analysis that there is a significant positive relationship between the dimensions of knowledge sharing with the measures of corporate resilience. Hence, it was concluded that knowledge sharing culture and practice helps to improve the success of business by helping it to anticipate key events from emerging trends and rapidly bounce back from disaster, when it occurs. It was recommended among others that manufacturing firms in Rivers state should continue to invite experts to train their employees so that they will learn from internationally recognized best practices, knowledge management and organizational resilience.

Key Words: Knowledge Sharing, Organizational Communication, Training and Development, Corporate Resilience, Adaptability, Robustness.

1.0 Introduction

Resilience qualities, according to management literature, have an impact on an organization's performance (Lengnick-Hall, et al 2011). Some scholars view organizational resilience as simply the ability to bounce back from unexpected, stressful, and adverse situations and pick up where they left off, while others see organizational resilience as encompassing the development of new capabilities and an expanded ability to keep up with and even create new opportunities (Frelas, 2017). "The resilient organization creates and conducts effective activities to progress the organization, hence enhancing the possibility of its own survival," according to Mallak (1998). Amid a competitive climate, a company that understands its resilience characteristics is better positioned to uncover opportunities in a crisis. Organizational resilience, according to Bell (2002), is "the capacity to adjust quickly to unanticipated events, even catastrophic upheaval." It's the capacity to bounce back—and, more importantly, bounce forward—with elegance, determination, and accuracy." Resilience is defined as an organization's ability to maintain and even grow turnover in the face of a crisis. Organizational resilience is a changing objective that contributes to performance in both normal and emergency conditions (Mitroff, 2005). It necessitates businesses' adaptability and dependability (Weick & Sutcliffe, 2007), as well as their ability to deal with disruptive circumstances (Durodie, 2003).

It's worth noting that the global economy is shifting toward a knowledge-based economy, in which knowledge is the most valuable resource, surpassing the traditional managerial resources of land, money, and labor (Drucker, 1993). Despite the fact that knowledge has always existed in many organizations, civilizations, and people. Knowledge, on the other hand, was formerly considered as an afterthought, as something that was always there and assumed (Zack 1999). Today, knowledge is regarded as one of the most valuable strategic assets capable of generating and retaining a competitive advantage (Zack, 1999).

Knowledge Sharing (KS) is a critical component of achieving organizational goals and being more competitive in the marketplace. Organizational resilience is recognized to be enhanced by knowledge management (Fani, et al., 2007). Knowledge management, for example, has been proven to be favorably and substantially connected to organizational resilience in empirical investigations. Manufacturing sectors are being pushed to expand and improve their business excellence via the use of knowledge management initiatives (AlAmmary et al., 2008). The manufacturing sector is important to the economy because it motivates the whole country. This is because the sector is a component of an economy's protective and restoration system, and its good functioning may provide energy to other sectors and economic development (Abate, 2012). Throughout history, human wealth has been intrinsically related to the capacity to utilize and work with the available resources and tools.

As a consequence of the many situations confronting today's manufacturing companies, knowledge creation has emerged as a source of long-term competitive advantage. The capacity to utilize KS inside a manufacturing company helps management to continue their efforts in generating inventive and creative employees. Its purpose is to guarantee that the company can generate a more lucrative new product or concept. According to Mura et al. (2013), sharing best practices and failures helped professionals to first socialize the concept with colleagues and build a field to draw their attention to its benefits, and then to transform the new idea and intuition into a feasible solution.

The influence of knowledge strategy on resilience has been studied in a number of ways. Knowledge is linked to organizational resilience, according to Ali and Hassan (2015). Wobodo et al. (2018) investigated the relationship between KS and employee resilience at a

tertiary institution in Port Harcourt, River state. The connection between knowledge management and organizational resilience is investigated by Amah and Umoh (2013). According to Hammerslery (2000), there is a link between the kind of incentive given and performance based on knowledge distribution. As a consequence, human resource managers must ensure that any remuneration policy is aligned with the organization's KS goal, and employee loyalty must be maintained to minimize undesirable attrition as a result of a lack of resilience. Despite these multiple research, there is a paucity of evidence on how KS affects Nigerian manufacturing enterprises' CR. This research examines the link between KS and CR of manufacturing enterprises in Rivers State, Nigeria, in order to close the gap that has been identified.

Statement of the problem

With the growing importance of building resilience skills in a company, the issue of how to build resilient businesses in order for them to prosper and survive in unpredictable situations where change is constant becomes more important. The notion of organizational resilience arose from the necessity for businesses to stay on top of threats that might jeopardize their very existence and, as a result, adopt necessary preventative actions, also known as anticipatory measures. The necessity of organizational resilience has far-reaching implications for the company's overall position. Fortunately, we are presently seeing significant transformation, which Thurow (2003) refers to as the third industrial revolution. In this context, knowledge is acknowledged as a key aspect in assisting businesses in enhancing their resilience capacities by providing enough knowledge resources (Fani et al, 2015). In developing nations, policymakers often favor the industrial sector (LDCs). It is seen as a key driver of modernisation and skilled job development, as well as a major source of beneficial spillovers. Most manufacturing companies still struggle to comprehend the knowledge resource, and they lack an adequate theoretical framework for comprehending the manufacturing industries' activities in the knowledge-based economy. One of Green's (2006) concerns with KS is that retrieving information from repositories and making sense of the received data must take place inside the domain context and with the intended use in mind. While it is widely agreed that fear of offering incorrect information, fear of being viewed as a show off, and other factors inhibit employees' willingness to share knowledge. Majid and Yeung (2007) take it a step further and incorporate the concept of social ties. They claim that a lack of depth in employee connections is one factor leading to KS hurdles. "It is the group members' unique behaviors and the dynamics of their interaction that play a significant role in the KS process." Soller (2004) appears to concur with this view. Two impediments to social networking were identified by Chen and Yang (2007). The difficulty in getting relevant knowledge and the difficulty in finding suitable colleagues to communicate with are the two impediments. It may be argued that these hurdles were created by a lack of social interactions among students, as Majid and Yeung observed (2007). Despite several corporate studies on how to improve CR in Nigeria, empirical evidence on how KS affects the resilience of manufacturing firms in Nigeria is lacking. This research is based on the observation of a gap in the area of knowledge management. As a result, the primary goal of this research is to look at the link between knowledge sharing and manufacturing corporate resilience in Rivers State, Nigeria.

Objectives of the Study

The specific objectives are to examine the relationship between

- i. organizational communication and adaptability.
- ii. organizational communication and robustness.

- iii. training and development and adaptability.
- iv. training and development and robustness.

Research Question

The following research questions were proffered as guide;

- i. What is the relationship between organizational communication and adaptability?
- ii. How does organizational communication relate with robustness?
- iii. How does training and development relate with adaptability of manufacturing firms in Rivers State, Nigeria?
- iv. What is the relationship between training and development and Robustness?

Research Hypotheses

These under listed hypotheses serve as tentative answer to the research questions;

HO₁: There is no significant relationship between organisational communication and adaptability

HO₂: There is no significant relationship between organisational communication and Robustness

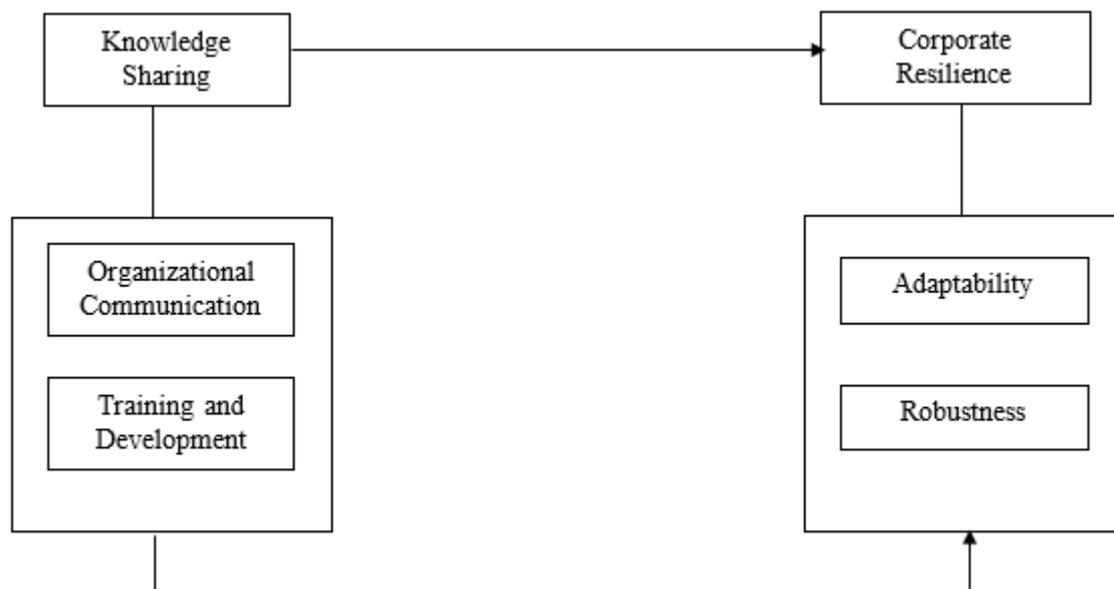
HO₃: There is no significant relationship between training and development and adaptability

HO₄: There is no significant relationship between training and development and Robustness

2.0 Review of Related Literature

The research relies on a knowledge-based approach to knowledge management. The knowledge-based view (KBV) is a concept that arose from the RBT and claims that knowledge entrenched in people is the sole source of competitive advantages in the end (Grant, 1996). According to Chou (2011), a "knowledge-based vision of a business" implies that knowledge is one of the firm's most valuable resources and that the organization's goal is to integrate and develop useful knowledge. This idea applies to this study because sharing knowledge among workers increases the richness of knowledge in the company, which may assist and strengthen the organization's resilience.

Research model



Source: Adapted from Ramayah, Yeap and Ignatius (2014); and Annareui, Battistella and Nonino (2020)

Concept of Knowledge sharing (KS)

Knowledge sharing is an activity in which individuals, friends, families, communities (for example, Wikipedia), or organizations share knowledge (specifically, information, skills, or expertise) (Serban and Luan, 2002). KS's ultimate purpose is to provide the appropriate stuff to the right people at the right time. As a result, the system must allow us to access relevant information and knowledge quickly and efficiently so that we can make better decisions and solve problems, according to Bukowitz and Williams (2007). In today's corporate world, KS has become a profit-generating resource (Cheng, Ho and Lau, 2009).

KS, according to Davenport and Prusak (1998), is a novel change in behavior. He said that just having knowledge in an organization is insufficient for it to be transferred and valued. To expand its value and produce new behavioral changes, it must be absorbed and utilized.

Reciprocity, along with trust, increases KS, according to Majid and Yeung (2007). The concept of reciprocity as a component of KS establishes a difference between KS and knowledge transfer; Lockspeiser et al. (2006) characterized the latter as peer tutoring. In terms of the function and value of knowledge management in an organization, Gehl (2015) points out that in the environment of big data, tensions and frictions emerge between the knowledge management process of KS and the output of the knowledge worker. The knowledge worker looks to be in a 'reciprocal and incompatible' conflict with KS, according to Koopman (2013), since "the knowledge worker is someone who is hard to share, while the knowledge is something that cannot exist until it is shared." Another source of friction and tension is the fact that, according to Husted and Michailova (2002), "individuals in organizations are naturally antagonistic to KS" and engage in "knowledge hoarding" (the refusal of the knowledge worker to share their knowledge). Ghel (2015) observes that until corporate data and knowledge are seen as key corporate assets, they will not be widely shared by firms.

Knowledge, according to Jelena et al., (2012), is made up of three components: strategy, cultural values, and process. A shift in strategy, procedures, organizational culture, and technology is required to optimize these values. This means that businesses must foster a knowledge-sharing culture among their workers, as well as implement a motivating approach that encourages individuals to share their knowledge rather than hoard it. According to Daghfous (2004), KS culture and practice aids in corporate success.

Organisational Communication

Since guaranteeing open engagement with a free flow of information, controlling communication processes, and developing an open and flexible communication system brings large-scale advantages, effective communication is considered as a top priority at every firm today (Eisenberg et al, 2009). According to Kreps (1986), organization communication is a social collective in which individuals establish ritualized patterns of contact in order to coordinate their actions and efforts in the pursuit of personal and group objectives. When it comes to the interaction of people inside an organization, communication becomes critical. To achieve a shared understanding of the information supplied to each other, communication inside the company becomes critical (Szukala, 2001).

Communication is a social process that facilitates interaction and information exchange between the organization's departments and units, as well as its surroundings, for the purposes of the organization's operation and achievement of its goals. Members acquire relevant information about their organization and the changes that are taking place inside it, and they discuss crucial experiences in order to achieve the objectives of individuals,

collective groups, and the company as a whole (Cornelissen and Christensen (2010). communication is defined by Tourish and Hargie (2004) as the sending and receiving of messages among associated persons within a certain environment or setting in order to accomplish individual and collective objectives.

Training and Development (T&D)

Learning, according to Dodgson (1993), is the process by which businesses build, supplement, and organize knowledge and routines around their activities and within their cultures, as well as adapt and develop efficiency by improving the use of their workforce's broad skills.

According to Drummond (2000), training entails the use of both formal and informal methods to transfer knowledge so that employees get the necessary abilities to deliver. On the other hand, development entails acquiring the skills, knowledge, and other behaviors required for or relevant to a project or activity (Australian Film Television and Radio School AFTRS, 2011). Employee development prepares them for roles inside the company and aids them in obtaining future employment (Drummond, 2000).

Organizations must invest heavily in T&D. T&D, according to Kum, Cowden, and Karodia (2014), allows an organization to adapt to changes in order to match the tastes and preferences of clients. It also promotes staff morale and enhances employee abilities, making them more efficient, eliminating waste and improving output. Additionally, T&D reduces staff turnover and allows for little oversight. Nonetheless, it decreases new employee learning time, lowers learning expenses, and encourages workers to stay loyal to the company (Armstrong, 2003). According to Desmone, Werner, and Harris (2002), the T&D process has four phases or steps. These include training needs assessment, training design, training execution, and training monitoring and evaluation.

Concept of Corporate resilience

Resilience, according to Zaato and Ohemeng (2015), is "an organization's capacity to foresee significant events from developing patterns, continually adapt to change, and quickly bounce back from catastrophe when it comes." Adoptability, creativity, and adaptability are three main attributes that contribute to an organization's resilience, according to Vossen (1998). 'Resilience is a system's ability to withstand the stresses of environmental loading based on the combination/composition of the system pieces, their structural inter-linkages, and the way environmental change is transmitted and spread throughout the entire system,' according to Horne (1997). Resilience is a basic attribute present in individuals, groups, organizations, and systems in general to varied degrees. It provides for a good reaction to considerable change that breaks the anticipated sequence of occurrences without causing regressive or nonproductive behavior.'

IJet International Inc., a resilient organization, constantly monitors the world for changing threats and opportunities (e.g., risks, changes, and market changes) so that the negative consequences of destructive events can be avoided by acting appropriately before people and assets are harmed (2008). According to Mallak (1998), resilient companies take effective steps to advance. Furthermore, resilient businesses swiftly employ positive adaptive practices to adjust to the current environment, development and human resource development professionals, according to Reivich et al., (2002), can guide and strengthen employee resilience through training, mentoring, coaching, and other methods to maximize effective employee commitment, keeping in mind that resilience is dynamic in nature and can be improved. Madni (2007) defines resilience as the capacity to predict a perturbation, adjust to

it, and recover as much as feasible to the pre-perturbation condition. Many notions come from definitions of resilience, according to McManus et al. (2008), including knowledge of the environment, degree of preparedness, anticipation of disturbances, adaptability, capacity to recover, and so on. The capacity of organizations to absorb shock or create resilience in the face of environmental perturbations is a reflection of their preparedness. Managers of resilient businesses, according to Alastir (2010), should comprehend the environment in which they operate at the board level, and be aware of changes that may pose a risk to their people, facilities, activities, services, and supply chains. Managers, he claims, must comprehend the increasingly complex cultural, political, legal, regulatory, economic, technological, natural, and competitive context in which they operate, as well as monitor key issues and trends that may affect the organization's objectives and the perceptions and values of external stakeholders. According to Erica (2006), organizations that are unprepared for a crisis have severe economic consequences.

Adaptability

Adaptability has recently been recognized as an important response option worthy of investigation and evaluation, not only to guide the selection of the best mitigation policies (Smit & Pilifosova, 2001). The ability of a system to adjust its structure in order to accommodate itself with the business environment is known as adaptability. Robustness, resilience, and agility are all aspects of adaptability.

Adaptability is defined by Dalziell and McManus (2004) strong leadership and a culture that promotes clear communication, solid working relationships, and a common goal across the firm. People are able to continually and continuously act to equal or surpass the demands of the company's operational environment in anticipation of, or in reaction to change, since the organization is inventive and creative. The capacity of an organization to adjust its behavior, structures, and processes in order to survive in the face of environmental change is referred to as adaptability (Denison, 2007). The capacity to translate the needs of the corporate environment into action is referred to as adaptability. Organizations operate as open systems in a complicated and unpredictable world. Organizations must constantly adjust to various degrees of environmental (Amah and Baridam, 2012). For the structure of an organization and its internal behaviors, environmental unpredictability is a significant variable (Daft, 1998). Organizations must have a good match between their internal structure and their surroundings. Adaptability helps organizations develop and use knowledge that is well-suited to changing environmental needs by facilitating various knowledge management activities such as knowledge generation, KS, and knowledge acquisition (Shahzad et al, 2013). To sustain high performance, adaptive organizations might change their processing processes and structure.

Robustness

Given the nature of volatility, unpredictability, and speed, they must continually maintain and strengthen their robustness. Robustness is the study of how systems may maintain their stability in the face of uncertainty. The capacity of a system to revert to an equilibrium state after being perturbed is referred to as robustness. This concept posits that a system has an equilibrium state (an attractor) to which it will return naturally. Without needing to modify their structure, robust firms may retain acceptable performance in a changing environment. This is often accomplished by including redundancies in task-resource allocation, which makes organizations more resilient to environmental changes and/or decision/processing failures. Because the issue characteristics, available resources, and agent skills may vary over

time, achieving robustness in dynamic and semi-dynamic contexts is extremely difficult (Decker & Kamboj, 2009).

3.0 Methodology

In order to achieve the earlier stated objectives, a survey was carried out among manufacturing firms in Rivers state. A total population of 125 managers and supervisors from 22 selected manufacturing firms in Rivers state were identified in the study. However, the Krejcie and Morgan (1970) table for sample size determination was used to arrive at a total sample size of 92. Thus, a total of 92 questionnaires was distributed to managers and supervisors of the firms which served as the respondents of this study. The systematic sampling technique was used in this study. This technique was used because it gives a true representation of the entire population and reduces the tendency for researcher bias in selecting the sample case. The independent variable (knowledge sharing) was measured in terms of communication and training and development. Each construct was measured with five items. The test-retest reliability was used to test the internal consistency of the research instrument for the two dimensions, the instrument was deemed to be reliable with a Cronbach alpha value of 0.80 and 0.89 respectively. The dependent variable (corporate resilience) was measured in terms of adaptability and robustness. Each construct was measured with 5 items. The reliability of the items for adaptability and robustness gave a Cronbach value of 0.86 and 0.79 respectively. Items were rated on a 4-point Likert scale ranging from 1-strongly disagreed, 2-disagree, 3-agree and 4-strongly agreed. The Pearson product moment correlation statistical analysis was used in analyzing the earlier state hypotheses through the help of Statistical Package for Social Sciences (SPSS) version 21.

4.0 Result

A total of 92 questionnaires was distributed to respondents, however, only 89 (97%) copies were returned and, only 86 (93%) were well completed and used for the study. The hypotheses test was undertaken at a 95% confidence interval implying a 0.05 level of significance. The decision rule is set at a critical region of $p > 0.05$ for acceptance of the null hypothesis and $p < 0.05$ for rejection of the null hypothesis.

Decision Rule:

Where $P < 0.05$ = Reject the null hypotheses

Where $P > 0.05$ = Accept the null hypotheses

Table 1: Communication and Adaptability

		Correlations	
		Communication	Adaptability
Communication	Pearson Correlation	1	.515**
	Sig. (2-tailed)		.000
	N	86	86
Adaptability	Pearson Correlation	.515**	1
	Sig. (2-tailed)	.000	
	N	86	86

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2021

The data analysis yielded a significant threshold of $p < 0.05$ ($0.000 < 0.05$). The $r = 0.515$ indicates a strong positive relationship between the variables. As a result, the null hypothesis is rejected, whereas the alternative hypothesis is accepted.

Table 2: communication and Robustness

		Communication	Robustness
Communication	Pearson Correlation	1	.499**
	Sig. (2-tailed)		.000
	N	86	86
Robustness	Pearson Correlation	.499**	1
	Sig. (2-tailed)	.000	
	N	86	86

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2021

The data analysis yielded a significant threshold of $p < 0.05$ ($0.000 < 0.05$). The $r = 0.499$ indicates a strong positive relationship between the variables. As a result, the null hypothesis is rejected, whereas the alternative hypothesis is accepted.

Table 3: Training and development and Adaptability

		Training and Development	Adaptability
Training and Development	Pearson Correlation	1	.719**
	Sig. (2-tailed)		.000
	N	86	86
Adaptability	Pearson Correlation	.719**	1
	Sig. (2-tailed)	.000	
	N	86	86

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2021

The data analysis generated a $p < 0.05$ ($0.000 < 0.05$) significant threshold. The $r = 0.719$ suggests that the variables have a significant positive association. The null hypothesis is therefore rejected, whereas the alternative hypothesis is accepted.

Table 4: Training and development and Robustness

		Correlations	
		Training and Development	Robustness
Training and Development	Pearson Correlation	1	.521**
	Sig. (2-tailed)		.000
	N	86	86
Robustness	Pearson Correlation	.521**	1
	Sig. (2-tailed)	.000	
	N	86	86

** . Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2021

The data analysis yielded a significant threshold of $p < 0.05$ ($0.000 < 0.05$). The $r = 0.521$ indicates a strong positive relationship between the variables. As a result, the null hypothesis is rejected, whereas the alternative hypothesis is accepted.

5.0 Discussion of Findings

The following emanates from the findings of the study;

Communication and Adaptability

Table 1 revealed a substantial positive association between communication and adaptability. This link exists because the p-value ($p = 0.000 < 0.05$) was lower than the threshold of significance. The null hypothesis was therefore rejected, but the alternative hypothesis was accepted. Furthermore, the spearman correlation coefficient demonstrated a .515 link between communication and robustness. This demonstrates that communication and adaptability have a good connection. As a result, good communicators are required for firms to succeed. This study agrees with Eshraghi and Salehi (2010), who claim that communication aids in acclimating to changes via individual and innovation and adaptability.

Communication and Robustness

Table 2 revealed a substantial positive association between communication and robustness. This link exists because the p-value ($p = 0.000 < 0.05$) was lower than the threshold of significance. The null hypothesis was therefore rejected, but the alternative hypothesis was accepted. Furthermore, the spearman correlation coefficient demonstrated a .499 link between communication and robustness. This demonstrates that communication and robustness have a good connection. Effective communication improves the organization's stability in the face of external changes. Davenport and Prusak (1998) asserted that knowledge sharing is a new change in behavior; Kamboj and Decker (2009) assert that robust organizations can maintain acceptable performance in a changing environment without having to change structure; and Szukala (2001) asserts that communication within the organization becomes important to create a common understanding of the information presented to each other.

Adaptability and Training and Development

Table three revealed a considerable positive association between T&D and adaptability. This link exists because the p-value ($p = 0.000 < 0.05$) was lower than the threshold of significance. The null hypothesis was therefore rejected, but the alternative hypothesis was accepted.

Furthermore, according to the spearman correlation coefficient, T&D correlates with adaptability at a rate of 0.719. This demonstrates a clear link between T&D and adaptability. An organization's ability to adapt to change is aided through T&D. This research supports Dodgson's (1993) findings, which claim that learning is essential since it is a "requirement for adaptability and enhanced efficiency in times of change." Improvements in an organization's capacity to learn will, in turn, boost its ability to adapt. Furthermore, according to Karaevli and Hall (2006), employees' adaptive actions are inextricably tied to their learning, and the combination of these two characteristics is a crucial indicator of great performance.

Robustness and Training and Development

Table 4 revealed a substantial positive association between T&D and robustness. This link exists because the p-value ($p=0.000 < 0.05$) was lower than the threshold of significance. The null hypothesis was therefore rejected, but the alternative hypothesis was accepted. Furthermore, the spearman correlation value of 0.521 demonstrated that T&D are related to robustness. This demonstrates a link between robustness and T&D. Employees who get T&D are more likely to stay steady in the face of adversity. This conclusion is backed up by Ekhsan and Othman (2009), who claim that T&D has an impact on staff productivity and profitability. Furthermore, T&D have an impact on the efficiency and effectiveness of staff.

6.0 Conclusion and Recommendation

Knowledge sharing's ultimate purpose is to provide the appropriate stuff to the right people at the right time. Knowledge sharing culture and practice aids company success by allowing it to predict significant events from developing trends and quickly recover from disasters when they occur. In comparison to other metrics of knowledge sharing, the study's results clearly show that training and development have the greatest impact on corporate resilience. The following suggestions are made by the study;

1. Manufacturing company executives should encourage their employees to be more resilient at work by establishing knowledge-sharing systems inside the company.
2. Nigerian manufacturing firms should continue to improve their knowledge management procedures, particularly knowledge acquisition, knowledge storage, knowledge sharing, and knowledge usage in their daily operations, as this is a definite way to ensure their long-term resilience.
3. Manufacturing companies in the Rivers State should use an effective communication strategy to develop a culture of resilience in their employees at all levels.
4. Manufacturing companies in Rivers state should keep inviting specialists to teach their personnel so that they may benefit from globally recognized best practices in knowledge management and resilience.

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