Workplace Learning and Organizational Sustainability in Manufacturing Firms in Port Harcourt, Nigeria

Olorunmola, A.¹, Hettey, H.D.² and Sule, O.E.³

¹,²,³Department of Management Faculty of Management Sciences University of Port Harcourt

Accepted 7 October, 2019

Organizations and even the society if faced with challenges that are draining its resources at all levels, which is why firms no longer find it easy to meet their obligations to all her stakeholders. One of the several ways to overcome this ugly trend is to boost knowledge at all levels. This work investigates the influence of workplace learning on organizational sustainability. The proxies used to measure this effect are experiential learning and empowerment as against economic and environmental sustainability, and technological culture as a control factor. Data were obtained from 198 managers and supervisors of 32 registered manufacturing firms in Rivers State. The outcome of the findings shows that there is a substantial link amid all the variables. Therefore, continuous experiential learning and empowerment should be followed strictly to ease sustainable administrative activities. Hence, it was recommended that workplace learning stimulates good conduct and attitudinal change that advances success and thusly prompts the achievement of the categorized objectives of the firm.

Key words: Economic sustainability, Empowerment, Environmental sustainability, Experiential learning, Organizational sustainability, Technological culture, Workplace learning.

INTRODUCTION

Strategic decisions made on a daily basis to help sustain businesses and keep them afloat are on the rise. Organizations that seem to be proactive in this light have appeared to be reaping significantly from the benefits of having sustainable policies and practices. In the light of this, the concept of sustainability seem to have become prominent in management, environment, and socio-political issues, especially in press release, the political space, management meetings, and the milieu of academics. This may be one of the reasons, Mohrman & Worley (2010) noted that debates and conversations about what it truly is, how essential it is, how to go about it, what should be done about it, and how rapidly and aptly society should respond to it are everywhere and on an upward trajectory.

In reality, scholars seem to have conducted studies on workplace learning and organizational sustainability separately; yet, there seem to be scanty empirical evidence of workplace learning influencing organizational sustainability (Lopez, Peon and Ordas, 2005), mainly in Port Harcourt, Nigeria. Therefore, this investigation seeks to close the gap observed. That is, the attempt to filling this gap in literature gives the right view and take-off point to departure from how previous studies have viewed these concepts. In the light of this, the focus of this research is to examine the relationship between workplace learning and organizational sustainability in manufacturing firms in Port Harcourt, Nigeria.

In a bid to prevent the eventual folding of the industry, this research seeks to investigate whether the appropriate harnessing of workplace learning within the industry could leverage the unsustainable manufacturing practices in the country and place it at the verge of quick recovery.

Aim and Objectives of the Study

The main aim of this study is to establish the relationship between workplace learning and organizational sustainability in manufacturing firms in Port Harcourt. The
following objectives are designed to achieve the main aim:

i. Investigate the relationship between experiential learning and economic sustainability of manufacturing firms in Port Harcourt.
ii. Ascertain the relationship between experiential learning and environmental sustainability of manufacturing firms in Port Harcourt.
iii. Investigate the relationship between empowerment and economic sustainability of manufacturing firms in Port Harcourt.
iv. Ascertain the relationship between empowerment and environmental sustainability of manufacturing firms in Port Harcourt.
v. Determine whether technological culture moderates the relationship between workplace learning and organizational sustainability of manufacturing firms in Port Harcourt.

Research Questions

The following research questions were developed to guide the study.

i. What is the relationship between experiential learning and economic sustainability of manufacturing firms in Port Harcourt?
ii. What is the relationship between experiential learning and environmental sustainability of manufacturing firms in Port Harcourt?
iii. What is the relationship between empowerment and economic sustainability of manufacturing firms in Port Harcourt?
iv. What is the relationship between empowerment and environmental sustainability of manufacturing firms in Port Harcourt?
v. How does technological culture significantly moderate the relationship between workplace learning and organizational sustainability of manufacturing firms in Port Harcourt?

Research Hypotheses

The following null hypotheses were formulated in furtherance of the study.

**Ho1**: There is no significant relationship between experiential learning and economic sustainability of manufacturing firms in Port Harcourt.

**Ho2**: There is no significant relationship between experiential learning and environmental sustainability of manufacturing firms in Port Harcourt.

**Ho3**: There is no significant relationship between empowerment and economic sustainability of manufacturing firms in Port Harcourt.

**Ho4**: There is no significant relationship between empowerment and environmental sustainability of manufacturing firms in Port Harcourt.

**Ho5**: Technological culture does not significantly moderate the relationship between workplace learning and organizational sustainability of manufacturing firms in Port Harcourt.

LITERATURE REVIEW

Concept of Workplace Learning and Organisational Sustainability

Argyris and Schon (1978) characterized workplace learning as the discovery and revision of mistakes. Fiol and Lyles (1985) characterized it as "the way toward improving activities through better information and comprehension", while Dodgson (1993) portrays workplace learning as the manner in which firms manufacture, supplement and sort out learning and schedules around their exercises and inside their societies and adjust and create authoritative productivity by improving the utilization of the expansive abilities of their workforce. Marsick (1994) consider it to be procedure of facilitated frameworks change, with systems worked in for people and gatherings to access, assemble and utilize hierarchical memory, structure and culture to grow long haul authoritative limit, and Huber (1991) states that learning happens in an association if through its preparing of data, the scope of its potential practices is changed. In reality, scholars seem to have conducted studies on workplace learning and organizational sustainability separately; yet, there seem to be scanty empirical evidence of workplace learning influencing organizational sustainability (Lopez, Peon and Ordas, 2005).

Experiential learning can in like manner be portrayed by the highlights it exhibits its students. Experiential learners that are powerful are consistently anxious to overhaul or change how they envision a subject. This oversees them the opportunity to think for themselves engaging them to illuminate their position successfully. While actualizing any program, they perceive that to achieve current task and how to regulate themselves to work adequately and autonomously all in all. Experiential learners know about the "rules" overseeing their control or the way in which they work, yet what's more have an open standpoint, and can work with people with different ends. Becker and Huselid (1999) observed that the experiential learning has strong impact on environmental sustainability of the organization to the internal, connected, and the external environments. Finally, experiential learners are in charge of their voice - they can perceive the activity and ponder on how they go to the core of the matter of getting that new data (Moon
Individuals take an interest in building up and playing out another and regular viewpoint in association, so they are urged to realize what they should do. Empowerment is viewed as a vital property of a learning association by the current writing. Armstrong and Laschinger (2006) noticed that Empowerment learning in this sense hints the way toward giving cutting edge workers the specialist to settle on choices once saved just for administrators. Associations are commonly working with less tyrant initiative style and endeavoring to get representatives effectively engaged with business forms. Such huge numbers of associations are based on top-down correspondence from the board in an offer to accomplish this (Bass and Avolio, 1994). Representatives in this condition feel there is no reason in standing firm, since they have no immediate channel and don't feel they'll have an effect. Bass (1997) opined that pioneers may have clear heading and more experience, yet that doesn't refute input and thoughts from representative on the cutting edges. Basically, pioneers give workers organized approaches to make their musings, sentiments and perceptions known effectively and routinely so as to enable them to comprehend that their info is esteemed regardless of whether you choose to go an alternate way. Johnson (1998) further expressed that learning associations are not those that lie in pausing; they are proposed to start and make an empowering domain for their business to flourish since they ought to be intended for making information at a speed that will profit them to cruise through ecological turbulences.

The idea of Sustainability started from the 1987 report of the World Environmental and Development Commission, famously known as the Brundtland Commission, name after its administrator, Gro Harlem Brundtland, who happened to be the Norwegian Prime Minister at that point (Nkamnebe and Nwankwo, 2010). The idea has advanced in the course of the most recent couple of decades, from being simple administrative need. It has developed to unmistakable quality in vital administration and basic leadership today, particularly in the assembling division (Hawken, Lovins and Lovins, 1999; Anderson, 1998; Prahalad and Hammond, 2002; UN Global Compact, 2004; Scientific American, 2005).

Economic Sustainability has extraordinary ramifications for assembling firms, as put together by Hami, Muhamad and Ebrahim (2015) the rise of maintainable assembling idea demonstrates a rising change in corporate world strategies, this has guarantee that assembling firms needed to re-strategized and figure approaches that are pair with the worldwide reasoning of supportable assembling. The present conditions and constant mindfulness been made about manageable assembling, has appeared any firm that plan to remain monetarily applicable, need to rethink its generation strategies by teaching maintainable assembling rehearses into their arrangements.

Kamara, Coff and Wynne (2006) opine that the idea of Environmental Sustainability can be followed as far back as the thirteenth century, anyway it has re-surfaced in the board and natural writing beginning 1970's and from that point forward it has drawn wide spread consideration from a few researchers with contrasts feeling however all concurring on it essential to the support of the eco-framework.

**OPERATIONAL FRAMEWORK - Fig. 1**

METHODOLOGY

The research adopted a cross-sectional survey; a type of quasi-experimental design because the element of study is not under control and the investigation was conducted across different location at that point in time. The population consists of all the managers and supervisors of manufacturing firms in Rivers State. The Manufacturing Association of Nigeria (MAN) of Rivers and Bayelsa States Chapter on her official website (http://phmanufacturersnigeria.org), recognize 32 registered manufacturing firms in Rivers State. For ease of accessibility, 13 of these firms clustered around Port Harcourt Metropolis, specifically Trans-Amadi Industrial area makes up the target population. The Table 1 demonstrates the number of staff reviewed based on the reports from various human resource (HR) units of these firms. The entire elements that make up the population of the study being 217 managers and supervisors were adopted as the sample size for this study.

**Population Distribution**

**Test of Hypotheses**

The Spearman’s Rank Correlation was used to test the correlations and strength of relations between the predictor variable (Workplace Learning) and the criterion
Table 1: Population Distribution

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Name of Manufacturing Firm</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>De Limited Foods Ltd.</td>
<td>21</td>
</tr>
<tr>
<td>2.</td>
<td>Sun Flour Manufacturing Company Ltd</td>
<td>19</td>
</tr>
<tr>
<td>3.</td>
<td>Polo Packaging</td>
<td>19</td>
</tr>
<tr>
<td>4.</td>
<td>Pabod Breweries</td>
<td>28</td>
</tr>
<tr>
<td>5.</td>
<td>Rivers vegetable Oil Co. Ltd.</td>
<td>22</td>
</tr>
<tr>
<td>6.</td>
<td>Nigerian Engineering Work Ltd.</td>
<td>13</td>
</tr>
<tr>
<td>7.</td>
<td>Riv Buscuit, Company Nig. Ltd</td>
<td>20</td>
</tr>
<tr>
<td>8.</td>
<td>Eastern Enamelwere Factory Ltd</td>
<td>24</td>
</tr>
<tr>
<td>9.</td>
<td>PH Floor Mill Ltd</td>
<td>19</td>
</tr>
<tr>
<td>10.</td>
<td>Air Liquide Nigeria Plc.</td>
<td>25</td>
</tr>
<tr>
<td>11.</td>
<td>Fire Brand Industries Ltd</td>
<td>18</td>
</tr>
<tr>
<td>12.</td>
<td>Ace and foot-wear manufacturing Ltd</td>
<td>28</td>
</tr>
<tr>
<td>13.</td>
<td>First Aluminum Nig. Ltd</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>271</strong></td>
</tr>
</tbody>
</table>


Table 2: Correlation

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Experiential Learning</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,000</td>
<td>.372**</td>
<td>198</td>
</tr>
<tr>
<td></td>
<td>Economic Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.372**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

*Source: SPSS Output, 2019.*

variable (Organizational sustainability). Partial correlation was used to examine the influence of technological culture on the relationship between workplace Learning and Organizational sustainability. The decision rule is: if $p < 0.05$ significant level, reject the null hypotheses; if $p > 0.05$ significant level, accept the null hypotheses.

Test of Hypothesis 1

**Ho1**: There is no significant relationship between experiential learning and economic sustainability in manufacturing firms in Port Harcourt. The result of the analysis in Table 2 demonstrates a significant level $p < 0.05$ ($0.000 < 0.05$), $\rho = 0.372$. This means that there is a significant positive relationship between experiential learning and economic sustainability in manufacturing firms in Port Harcourt. The null hypothesis is rejected.

Test of Hypothesis 2

**Ho2**: There is no significant relationship between experiential learning and environmental sustainability in manufacturing firms in Port Harcourt. The result of the analysis in Table 3 demonstrates a significant level $p < 0.05$ ($0.000 < 0.05$), $\rho = 0.868$. This means that there is a significant positive relationship between experiential learning and environmental sustainability of manufacturing firms in Port Harcourt. The null hypothesis is rejected.

Test of Hypothesis 3

**Ho3**: There is no significant relationship between empowerment and economic sustainability in manufacturing firms in Port Harcourt. The result of the analysis in Table 4 demonstrates a significant level $p < 0.05$ ($0.000 < 0.05$), $\rho = 0.382$. This means that there is a significant positive relationship between empowerment and economic sustainability in manufacturing firms in Port Harcourt. The null hypothesis is rejected.

Test of Hypothesis 4

**Ho4**: There is no significant relationship between
**Table 3:** Correlation

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Experiental Learning</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental</td>
<td>Correlation Coefficient</td>
<td>Sig. (2-tailed)</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spearman’s rho**  
**Experiental Learning**  
**Correlation** Coefficient  
**Sig. (2-tailed)**  
**N**  
1,000  
.868**  
.000  
198  
198  
198  
1,000

**Environmental Sustainability**  
**Correlation** Coefficient  
**Sig. (2-tailed)**  
**N**  
198  
198  
198  
1,000

**Correlation is significant at the 0.01 level (2-tailed).**  
Source: SPSS Output, 2019.

**Table 4:** Correlation

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>Empowerment</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Economic</td>
<td>Correlation Coefficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sustainability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spearman’s rho**  
**Empowerment**  
**Correlation** Coefficient  
**Sig. (2-tailed)**  
**N**  
1,000  
.382**  
.000  
198  
198  
198  
1,000

**Economic Sustainability**  
**Correlation** Coefficient  
**Sig. (2-tailed)**  
**N**  
198  
198  
198  
1,000

**Correlation is significant at the 0.01 level (2-tailed).**  
Source: SPSS Output, 2019.

**Table 5:** Correlation

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>Empowerment</th>
<th>Correlation Coefficient</th>
<th>SIG. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Environmental Sustainability</td>
<td>Correlation Coefficient</td>
<td>SIG. (2-tailed)</td>
<td>N</td>
</tr>
</tbody>
</table>

**Spearman’s rho**  
**Empowerment**  
**Correlation** Coefficient  
**Sig. (2-tailed)**  
**N**  
1,000  
.382**  
.000  
198  
198  
198  
1,000

**Environmental Sustainability**  
**Correlation** Coefficient  
**Sig. (2-tailed)**  
**N**  
198  
198  
198  
1,000

**Correlation is significant at the 0.01 level (2-tailed).**  
Source: SPSS Output, 2019.

Empowerment and environmental sustainability in manufacturing firms in Port Harcourt. The result of the analysis in Table 5 demonstrates a significant level $p < 0.05$ ($0.000 < 0.05$), $\rho = 0.382$. This means that there is a significant positive relationship between empowerment and environmental sustainability in manufacturing firms in Port Harcourt. The null hypothesis is rejected.

**Test of Hypothesis 5**

**Ho5:** Technological culture does not significantly moderate the relationship between workplace learning and organizational sustainability in manufacturing firms in Port Harcourt. Table 6 demonstrates the relationship between the independent and the dependent variable with and without a moderating variable. Without a moderating variable, the relationship between workplace learning and organizational sustainability is at a significant value $p = 0.000$, and a correlation of $\rho = 0.880$. With the influence of a moderating variable (Technological culture), the significance still remains at $p = 0.000$, at $\rho = 0.632$. The partial correlation analysis demonstrates that technological...
Table 6. Text for Hypothesis

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>Workplace Learning</th>
<th>Organizational Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>1.000</td>
<td>.800</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>-</td>
<td>.000</td>
</tr>
<tr>
<td>Df</td>
<td>0</td>
<td>196</td>
</tr>
<tr>
<td>Correlation</td>
<td>.800</td>
<td>1.000</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.000</td>
<td>-</td>
</tr>
<tr>
<td>Df</td>
<td>196</td>
<td>0</td>
</tr>
<tr>
<td>Correlation</td>
<td>1.000</td>
<td>.632</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.000</td>
<td>-</td>
</tr>
<tr>
<td>Df</td>
<td>195</td>
<td>0</td>
</tr>
</tbody>
</table>

a. Cells contain zero-order (Pearson) correlation
Source: SPSS Output, 2019

culture significantly moderates the relationship between the both variables.

DISCUSSION OF FINDINGS

The study examined the relationship between workplace learning and organizational sustainability. Five hypotheses stated in null form were formulated and tested to obtain the empirical measure. The findings from Ho1 revealed that there is a positive relationship between experiential learning and economic sustainability at 0.372, when the p-value is 0.000 < 0.05. This work supports the conclusion of Lopez, Peon and Ordas (2005) that experiential learning has a positive effect on the probability of the sustainability of the firm. The findings from Ho2 revealed that there is a positive relationship between experiential learning and environmental sustainability at 0.868, when the p-value is 0.000 < 0.05. Becker and Huselid (1999) observed that the experiential learning has strong impact on environmental sustainability of the organization to the internal, connected, and the external environments.

The findings from Ho3 demonstrated that there is a significant relationship between empowerment and economic sustainability at 0.382 when the p-value is 0.000 < 0.05. Johnson (1998) empowerment has a significant impact on economic sustainability. The findings from Ho4 demonstrated that there is a significant relationship between empowerment and environmental sustainability at 0.382 when the p-value is 0.000 < 0.05. Thus, the null hypothesis was rejected and concludes that there is significant and a positive relationship between both variables. This is in line with the findings of Chonko, Dubinsky, Jones and Roberts (2003) that empowerment has strong impact on the innovativeness and environmental sustainability of the organization. The findings from Ho5 ascertained the influence of the moderating role of technological culture on the relationship between workplace learning and organizational sustainability, revealed that technological culture significantly moderates the relationship between workplace learning and organizational sustainability at a significant level 0.000 < 0.05, rho = 0.632. Dodgson (1993) held that as the technological culture can enhance the success of workplace learning organization to enhance its organizational sustainability.

SUMMARY

The study examined the relationship between workplace learning and organizational sustainability in the manufacturing sector in Port Harcourt. Four null hypotheses were formulated, texted, and rejected. The fifth hypothesis was designed to ascertain the influence of the moderating variable on the relationship between both the predictor and criterion variable. However, the moderating variable show a significant influence on this relationship and it's acceptable.

CONCLUSION

Learning in the workplace has the potential to influence the survival of firms within the manufacturing industry. Therefore, continuous learning should be adhered to strictly, to facilitate sustainable organizational activities. Thus, firms through its technological culture should create an enabling environment for the adoption and implementation of workplace learning as it would encourage economic and environmental Sustainability of the firm, and the society at large.

RECOMMENDATIONS

From the research analysis and conclusions above, the
following recommendations were made to enhance the activities of manufacturing firms:

i. Management should ensure that proactive steps are taken to ensure experiential learning is introduced to enhance the knowledge capability which can drive the firm’s sustainability.

ii. Management should plan appropriate learning programmes to enhance the proficiencies of its human resources, which will eventually ensure environmental sustainability of the firms.

iii. Newer and advance procedures should be developed to ensure individuals are empowered to improve economic sustainability for the firm.

iv. Individual coming with novel ideas should be encouraged so as to help secure the economic, social and environmental sustainability of the firms.

v. All embracing policies should be articulated to guide in the usage of technology to conduct activities of the firm with the aim to achieving sustainability.

REFERENCES


