ASSESSMENT OF PROFESSIONAL TRAINING PROGRAM ON OPERATIONAL PERFORMANCE AMONG FREIGHT FORWARDERS IN LAGOS PORTS, NIGERIA

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ABSTRACT

This research investigated the confluence between the utilization of the maritime education training (MET) program by the International Federation of Freight Forwarders Associations (FIATA) for freight forwarders and the achievement of improved operational performance among freight forwarders in Lagos port. The study equally filled a gap on how socioeconomic situations (SES) of freight forwarders predicted their attitudinal dispositions toward the training program. Theories of Knowledge Management and Experiential Learning are used in the derivation of the study’s hypotheses. 181 freight forwarders who were randomly sampled participated in the study. The result showed that the respondents do not believe that going through the FIATA-organized training significantly improved their operational performance. On the other hand, SES variables of age, work experience, and literacy significantly predicted freight forwarders’ attitudinal dispositions to the training program. Suggestions that border on the alignment of the existing curriculum of the program to reflect local challenges associated with the profession are made. In a similar vein, the introduction of MET into secondary schools and university curricula to attract young minds into the profession is suggested.

Keywords: Maritime Education and Training, Freight Forwarders, Operational Performance, Attitudinal Disposition, and Experiential Learning Theory.
1.0 Introduction

A critical determinant of competitive advantage for the entire maritime logistics architecture is the unique ability of freight forwarding personnel to offer timely and professionalized services to their customers at reasonable costs (Sorgeti, 2014; Pantouvakisa and Vlacho, 2020; Skiba and Karas, 2022). Indubitably, the achievement of a consistent result-oriented operational performance by this group of maritime professionals makes the role of cutting-edge capacity development of the workforce central to the overall success of SC activities on the national, regional, or global scale (United Nations Conference on Trade and Development, 2021; Skiba and Karas, 2022).

In the Supply Chain Management (SCM) sector, research outcomes have established some measure of causality between the attainment of optimal supply chain performances (which often entails the achievement of cost maximization, lead time, reduction in fuel consumption, improvement in environmental performances, trade facilitation) and the quality of training that personnel manning different nodes of the chain possess (Ajayi, 2020, Sellberg, 2020 & Ajayi, 2023). Research findings have also proven that capacity enhancement programs are essential avenues to reduce unprofessional conduct in the maritime sub-sector of the logistics industry (Sorgeti, 2014; Čižiūnienė et al, 2016; Skiba and Karas, 2022).

Incidentally, the freight forwarding sector of the maritime industry is not immune from the twin dangers imperiling the entire industry in recent times. These are problems associated with the bridging of the human capacity gaps in the sector (Facanha et al, 2012; Delgado and Mills, 2018; Skiba and Karas, 2022) and the devastating effects of COVID-19 on the operational performance of SC (Swanson and Suzuki, 2020; Gavalas et al, 2022; Ajayi, 2023). A large number of scholarly papers have focused on the disturbing trend of shortages of the young, virile workforce being attracted into entry positions in the larger body of the maritime sector in recent times (Ceasar et al, 2015; Delgado and Mills, 2018; Behforouzi et al, 2020; Leboutz, 2021). Available pieces of evidence showed that one of the excoriating fallout of the failure of the sector to attract young, virile, educated, and enterprising hands into its fold is the bleak future outlook of the profession (Sorgeti, 2014; International Federation of Freight Forwarders Association, 2017).

Relatable empirical shreds of evidence indicate that the attraction and retention of the best among the youthful population into the field of SCM could be influenced by the quality of training programs available to professionals (Lankau and Scandura, 2002; Opengart, 2015; Troung et al, 2017; Bodjrenou et al, 2019). Opengart (2015) asserted that accessibility to periodic training regimes by chain members can improve the overall performance of the chain by making it more agile, and this deepened job satisfaction among such members. This reality is also mirrored in the freight forwarding sector as a constituent of the SCM. FIATA (2017) posited that it has ordered its Advisory Board for Vocational Training (ABVT) [mandated with the provisions of training programs and setting of minimum operational standards for FIATA association members in different countries] to improve the quality of professionalism in the sector through its training program. The body posited that the professional training program has 'reduced poverty among freight forwarding professionals, thereby contributing to the
achievement of one of the Sustainable Development Goals (SDGs)'.

There is a shortage of studies that analyzed how the confluence of certain Socioeconomic Situations (SES) predicts the attitudinal dispositions of freight forwarders to an on-the-job training program designed to improve their operational performance. Key SES factors like age, level of educational attainment, marital status, and years of working experience have been found to have a directional impact on the attitudinal dispositions of professionals (American Psychosocial Association, 2017: Ajayi and Mazinyo, 2020). Based on the established concatenation between SES and some subjective perceptions like financial security, and social status (APA, 2017), there is a need for an empirical investigation that could shed light on the claim by FIATA that the training provided by its ABVT (through the national affiliates) "has been able to contribute to the achievement of SDGs" or the objective perception of improvement in operational performance. This paper leveraged existing methods used in performance evaluation in SCM enterprises to measure and evaluate the alignment between human capacity development and the achievement of an improvement in operational performance (Lankau and Scandura, 2002; Opengart, 2015: Troung et al, 2017: Bodjrenou et al, 2019).

The remainder of this paper is structured thus: In the next section, a brief literature review on the interaction between capacity development, attitudinal dispositions of workers in the transport industry, their operational performances, and job satisfaction are provided. The research method used is outlined in section 3. Section 4 provides the results of the analyses conducted. Section 5 concludes and formulates future research directions.

2.0 Literature Review

Analysts in the field of Maritime and Education Training (MET) have observed that the combination of the pedagogy and andragogy approach to learning is critical for optimal performance in the industry (Manuel, 2017: Sellberg, 2020; Boonadir et al, 2020). The thinking is that the blend of in-depth cognitive skills (acquire through academic training) with traditional hands-on task-oriented practical training is germane for the optimal development of human capacity in the industry (Manuel, 2017: FIATA, 2017: Boonadir et al, 2020). Research findings have shown that there is a nexus between the socioeconomic situations of professionals in the transport and logistics industry as a whole and their willingness to accept the opportunity available for career advancement through educational training programs (Lankau and Scandura, 2002; Ajayi and Mazinyo, 2020).

The reality in the maritime sector however is that there is a scarcity of studies dedicated to how certain SES factors incentivized the attitudinal dispositions of a homogeneous professional group like the freight forwarders to embrace on-the-job training programs. Sliskovic et al (2021) in a study that provided a descriptive assessment of the motivational factors behind the choice of pre-university students pursuing degree courses in MET, discovered that the respondents perceived economic factors and occupational choice as critical determinants. The study which is one of the few on the discourse, however, had its focus on respondents who were trained under the pedagogical approach.

Research findings have shown that the needs of young students learning in the 'normal schooling' environment are structurally different from those of professionals who are undergoing on-the-job training programs (Manuel, 2017:
This present study, therefore, filled a gap in the body of discourse by providing an empirical analysis of the confluence between some SES factors and the desire to embrace on-the-job training programs as a means to improve their operational performance among a homogenous group (freight forwarders) in the maritime industry. There are relatable shreds of evidence that training influences operational capacity in the field of SCM (Lankau and Scandura, 2002 and Opengart, 2015). Opengart (2015) asserted that accessibility to periodic training regimes by chain members can improve the overall performance of the chain by making it more agile.

Similarly, Troung et al (2017) also established the possibility of a causal relationship between process control and improvement in Operational Performance (OP). Existential proof from the application of the Experiential Learning Theory (ELT) has also shown that curricula that epitomize praxis ideological construct is more suitable for adult education because there is usually an inimitable nexus between the ideas, insights, techniques, and skills learned within the classroom environment, and real-life experiences of the learner (McCarthy, 2016: Peterson and Kolb, 2017). Results from empirical research have established a nexus between learning in a classroom environment, achievement of the high success rate of assimilation, and the student’s positive attitudinal dispositions to learning (Lovelace and Brickman, 2013: Nashon and Madera, 2013). Nashon and Madera, (2013), in a study that investigated East African (EA) students’ ways of understanding the nuances of scientific concepts, underscored the relevance of attitudinal disposition to learning by developing a research tool called the Instrument for Assessing Disposition for Contextual Learning of Science (I-ADCLOS. The instrument that had three-dimensional testing criteria found that attitudinal attributes of personal awareness, attitude toward science learning, and orientation towards personal learning strategies aided students’ learning outcomes in scientific concepts (Nashon and Madera, 2013).

Another study that focused on the linkage between attitudinal dispositions and successful learning performances also affirmed that the ability of scholars to gain mastery in science courses is dependent on their perceptions of the courses (Lovelace and Brickman, 2013). Kearney et al (2020) also provided useful insight into the interrelationship between attitudinal dispositions and learning by focusing on a humanistic subject (the use of the English language). Kearney et al work was a departure from other similar works (Lovelace and Brickman, 2013: Nashon and Madera 2013), which focused on sciences courses. Generally, sciences courses often involve a blend of theoretical and practical curricula, while humanistic courses are mainly theoretical. Research findings proved that students’ attitude to learning the two courses differs’ (Lovelace and Brickman, 2013: Nashon and Madera 2013; Kearney et al 2020). Results from Kearney et al (2020) work reflected striking similarities in the predictive role that attitudinal dispositions have on learning even when the course of focus is not within the scientific domain.

A noticeable gap from the review of these studies on the interaction between attitudinal disposition and learning outcome is that most of these works derived their findings from studies carried out using the pedagogical approach. While the pedagogical approach is an education method in which the learner is dependent on the teacher for guidance, evaluation,
and acquisition of knowledge. The andragogical methods, on the other hand, are approaches used in adult education and are designed for self-actualization, getting hands-on experience, and acquiring problem-solving skills. This present work is contributing to the available literature MET by providing an empirical assessment of the influence that the SES of freight forwarders have on their attitudinal dispositions to the FIATA training program.

Incontrovertible evidence from some studies which employed the qualitative technique of literature review suggests that SES among young learners influenced their attitudinal disposition to learning (Buckingham et al, 2013: McLaughlin and Sheridan, 2016). This present research attempted to ascertain the veracity of this claim by providing an objective assessment of how the confluences of Social Economic Situations (SES) of freight forwarders (educational status, marital status, years of working experience, age, family size) influence their attitudinal dispositions to the FIATA training program. The paper equally provides insights into how the freight forwarders perceived the extent of success of the training program in the achievement of personal economic benefit (higher earning capacities) and whether they are significant differences in this perception across the three categories of the FIATA training program (Certificate, International Diploma in Freight Forwarding and International Higher Diploma in Supply Chain Management).

With respect to the theoretical Review on the Influences of Knowledge-Based Economy Concepts, the Experiential Learning Theory, and the quest to achieve improved Operational Performance, Powell and Snellman (2004) and Troung et al, (2017) observed that the paradigm shift from the traditional to a knowledge economy towards the end of the twentieth century has increased the demand for sophisticated scientific innovations derived from research-intensive activities. Knowledge Management (KM) espouses the inimitable benefits of novel discoveries and their practical applications in different sectors of the economy (Alkhaldi et al, 2006: Bawono et al, 2022). KM has been described as the process behind the formalization of knowledge acquisition, access to new knowledge, experience, and expertise that is designed for the birthing of new capabilities, provision of room for improved performance, and the achievement of a holistic enhancement of customer's value (Gloet and Terzirovski, 2004: DuPlessis, 2007: Dweiri and Shatat, 2021).

KM theorists believed that its effective deployment is hinged on the seamless flow through the Knowledge Management Life Cycle (KMLC). It is argued that KM goes through the four stages of knowledge creation, its capture, organization, and dissemination (Satyadas et al, 2001: Gloet and Terzirovski, 2004: DuPlessis, 2007:Dweiri and Shatat, 2021: Bawono et al, 2022). Proponents of KM avouched that for an idea to become generally accepted as being able to extend the frontier of operational performance in any sector of the economy, it must pass through each of these stages, and, must also have validated tangible results (Satyadas et al, 2001: Gloet and Terzirovski, 2004: DuPlessis, 2007: Islam et al, 2011: Dweiri and Shatat, 2021).

Some antagonists of the adoption of the KM thesis often pointed out the difficulty associated with the objective measurement of 'tangible results' of each stage as a drawback of its construct (Satyadas et al, 2001: Gloet and

Findings from different research indicate that the application of KM has proven a credible model for many organizations in the evolvement of new strategies, robust decision-making processes, and the building of knowledge-enabled customer relationships (Satyadas et al, 2001: Gloet and Terziovski, 2004: Lai et al, 2004: DuPlessis, 2007: Li et al, 2020: Pham et al, 2021). While there has been no shortage of studies that demonstrated the capabilities of KMLC as a modeling construct for the achievement of improved performance in public and public organizations, its potential in the provision of similar guidance for the evaluation of the activities of a globalized professional body (like FIATA) on the operational proficiency of members of its national affiliates like the Council for the Regulation of Freight Forwarding in Nigeria (CRFFN) is generally lacking.

Another popular theoretical construct that provides an understanding of the intense interaction between the andragogical learning approach and operational performance is the Experiential Learning Theory (ELT). The popularity of the ELT has increased significantly among the academic community in contemporary times because of its robust constructs that provide overarching modeling of the learning process. Advocates of the ELT posited that the application of its constructs ensures’ that learning processes go beyond the narrow confines of theoretical expositions to the broader domain of the praxis conditionality (Kolb, 2014: Peterson & Kolb 2017: Kayes and Yoon 2020). ELT strength is derived from the distinctive emphasis it places on the learner’s or student’s experience in the learning process. Shred of evidence has shown that curricula that epitomize praxis ideological construct are more suitable for adult education: because there is usually an inimitable nexus between the ideas, insights, techniques, and skills learned within the classroom environment, and real-life experiences of the learner (Peterson and Kolb 2017: Kayes and Yoon, 2020).

Historically the emergence of ELT could be traced to the scholarly presentations of various theorists (James, 1975: Dewey, 1999). It was however Kolb who synthesized the major philosophical viewpoints on learning styles, such as Dewey’s (1999) pragmatic tradition of learning, James’ radical empiricism of learning processes, and other psychological theoretical viewpoints of learning processes into the ELT. For the ease of its application, Kolb theorized that ELT constructs best-exemplified learning process when compartmentalized into four integrative stages. The four-step learning process according to Kolb, involves concrete learning, reflective observation, abstract conceptualization, and active experimentation stages (Kayes, 2021).

Kolb posited that learning should be viewed as a cycle that begins with the student’s experiencing a new concept or challenge, it continues with a period of reflection on how best to resolve the new challenge, and this later evolves to the abstract conceptualization stage, where the
student relies on logic and ideas gotten from earlier resolved challenges rather than feelings to understand problems or situations. Also at the abstract stage, the student now relies more on the use of systematic planning and theories to solve the encountered challenge. The last stage of the cycle is the active experimentation stage, at this stage, the learner has developed confidence in his ability to resolve challenges through active experimentation that provides practical solutions to the encountered problems (Kolb, 1984; Rogers, 1971; Kolb, 2014; Peterson & Kolb 2017; Kayes and Yoon, 2020).

As beneficial as the application of ELT has proven in the adoption of novel strategies among professionals in the logistics industry (Gravis and Farris, 2013; Salinas-Navarro et al, 2022), its applicability as an explanatory model on how professionals evaluate skill acquisition programs in MET has been surprisingly sparse. Few of the available studies which employed its constructs in analyzing the achievement of learning outcomes in the sector include that of Wang and Wang (2018) that provided conceptual guidance on the confluence between task experiential teaching mode (TETM) and the development of critical maritime professional skills among learners in ship structure and equipment course under pedagogical learning environment of a university. The application of ELT in this work also deepened the understanding of the roles which respondents' SES plays in the achievement of operational performance. Empirical pieces of evidence showed that causality exists between SES, brain development, empathy, and subjective well-being among adolescents (Romero, 2019: Chan et al, 2021). The use of ELT as done in this study provides a valuable framework to assess how influential is the ELT’s praxis ideological construct in the achievement of improved operational performance among professionals in the maritime industry.

The theoretical review provides a framework for the understanding of the interrelationships among the various concepts identified in this study, and, how this interrelationship affects the achievement of the study objectives. This review also contributes to the determination of the two hypotheses:

H1: Socioeconomic Situation (SES) variables of age, marital status, educational qualification, work duration, and family size do not significantly predict respondents' attitudinal disposition to the Task Experiential Teaching Mode (TETM) of the FIATA professional training program.

H2: There are no significant differences in the belief of freight forwarders about the relevance of the Knowledge-Based-Economy approach (through the FIATA certification program) on their operational performance across the levels of degrees available (Certificate, International Diploma, and International Higher Diploma).
Table 1 Analysis of how variables used in the study are derived and employed

<table>
<thead>
<tr>
<th>S/N</th>
<th>Name of Concept</th>
<th>Nature of Utilization of Concept as a Variable in the Present Research</th>
<th>How Variables are Developed/Used in Extant Studies</th>
<th>References</th>
</tr>
</thead>
</table>

For hypothesis one, a multiple regression analysis based on equation (1) below was used to test if the Socio-Economic Situation of respondents significantly predicted their attitudinal disposition to the FIATA professional training program.

A multiple regression model

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \ldots + \beta_nX_n + e \] (1)
Empirical Model Specification

The empirical model estimated to address hypothesis one is given as

\[ ATD = \beta_0 + \beta_1 AG + \beta_2 MS + \beta_3 EDUC + \beta_4 WRD + \beta_5 FMS + e \] (2)

Where:

\( \beta_0 \) is intercept, \( \beta_1 \ldots \beta_2 \) are regression coefficients and \( e \) = regression error

Dependent Variable:

ATD = Attitudinal Disposition

Independent Variables: Social-economic characteristics:

AG = Age
MS = Marital Status
EDUC = Educational Qualifications
WRD = Work Duration
FMS = Family Size

Table 2: Development of Constructs and Scales from Previous Works

<table>
<thead>
<tr>
<th>S/N</th>
<th>Concepts Applied in the Study</th>
<th>How Previous Measurements/Constructs are Developed/Used</th>
<th>References</th>
</tr>
</thead>
</table>
3.0 Materials and Methods

The positivist approach was utilized in this study. The research team got ethical approval for the work from the ethical committee of Redeemer's University. Using the conditions set out in the ethical approval as a basis, all respondents were individually informed of their ethical rights before being sampled. Multistage and random sampling techniques are used in selecting participants for this study. A structured questionnaire was also developed as the research instrument; the questionnaire contained all the pre-tested items which provided a measurement for the objectives of the study. The questionnaire was subdivided into four sections: (i) the first section had the socio-economic characteristics of the respondents. (ii) the second section provided the measurement of respondents' attitudinal dispositions to the FIATA training program (iii) the third section is devoted to the provision of measurement on the achievement of operational performance. (iv) the fourth section had the constructs on the relevance and benefits of KBE in the achievement of better operational performance.

The actual fieldwork was preceded by a pre-field exercise. This was undertaken to ensure the validity and reliability of the research instrument in providing a concise measurement of the different variables used in the research (Table 1). The Cronbach alpha test was carried out on each of the constructed multi items instruments (Table 2). A Cronbach’s alpha lower than 0.60 indicates poor reliability, values between 0.6 and 0.7 are acceptable, and values equal to or higher than 0.70 indicate good scale reliability (Churchhill 1979; Simchi-Levi et al. 2003; Quesada et al. 2012; Ajayi 2016: Ajayi, 2020: Ajayi, 2023). Respondents' perceptions on the possibility of causality between respondents' SES and their attitudinal dispositions to the FIATA training program subscale with 10 items had a Cronbach alpha of .83 (α=.83), The respondents’ views on how impactful has been FIATA certification programs on their operational performance subscale which contained 11 items has a Cronbach alpha of .90 (α=.90), while for the constructs on relevance and benefits KBE in the achievement of better operational performance contained a subscale of 13, with the Cronbach alpha of .81 (α=.81).

Subsequently, the information gotten from these questionnaires was processed by codifying them into a Microsoft Excel (2014) workbook sheet for database management operations. These processed data were later migrated to an IBM Statistical Package for Social Sciences (SPSS) version 23 environment for statistical analyses. For this research, the research sampling frame is the total number of registered freight forwarders who are members of different national associations which are affiliates of the Council for the Regulation of Freight Forwarding in Nigeria (the national body in charge of freight forwarding practice in Nigeria) that have completed their various FIATA certification program by March 2022 (the research took place between March and June 2022). According to CRFFN (2022), the total number of these members was 723. These freight forwarders are members of the six (6) registered associations, they are: National Association of Government Approved Freight Forwarders (NAGAFF), the Africa Association of Professional Freight Forwarders and Logistics of Nigeria (APFFLON), the Association of Registered Freight Forwarders in Nigeria (AREFFN), Association of Nigeria Licensed Customs Agents (ANLCA), National Council of Managing Directors of Licensed Customs Agents (NCMDLCA) and Nigerian Association of Air Freight Forwarders and Consolidators (NAFFAC).
Multistage and random sampling techniques are used in selecting participants for this study. In the first stage of sampling, three out of these associations are randomly sampled from the six. The sampled associations were NAGAFF APFFLON and AREFFN. The official record from the CRFFN showed that the numbers of registered freight forwarders from the three chosen associations who have completed at least one of the three FIATA certification programs at the time the research was carried out are 446, which was 61.68% of the total population of freight forwarders (723). According to ABVT, there are two major levels of FIATA-certified programs for educated trainees (those who possessed at the barest minimum, a secondary school leaving certificate) these are the international diploma and the international higher diploma, FIATA, however, recognizes that there are professionals who could not complete secondary school education and so lacked the school leaving certificate but are experienced hands in freight forwarding activities. This category of professionals is offered an opportunity to start their program at the ‘certificate level’. Participants at the certificate level are tutored in rudimentary freight forwarding practices. The certificate program runs for a calendar year broken into two diets; each covering six months.

At the end of the year training program, a participant who passed the stipulated examinations is allowed to proceed to the international diploma program. The international diploma program runs for 18 months. At the end of the international diploma program, a trained participant who passed the required examinations is admitted into the international diploma higher program. This also runs for another 18 months, it is only after this final stage of the program that a freight forwarder is qualified to be a fully registered member by both the CRFFN and FIATA. Such a member is issued a unique identification number (UIN), this UIN is the operational number peculiar to each freight forwarder. The three associations which were sampled for this research have their national headquarters near the Nigerian and West African biggest port -the Apapa port complex in Lagos. In the second stage of sampling, the register of members was sought from the three associations from which actual respondents for the research were drawn. Every even-numbered name on the registers was selected for the study and efforts were made to sample such members, Table 3 showed the breakdown for the distribution of the research instruments.

Table 3: Analysis of Questionnaire Distribution

<table>
<thead>
<tr>
<th>S/N</th>
<th>Association(s)</th>
<th>No of Registered FF</th>
<th>Percentage</th>
<th>Sampled</th>
<th>Percentage</th>
<th>Retrieved</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NAGAFF</td>
<td>258</td>
<td>57.9</td>
<td>131</td>
<td>58</td>
<td>112</td>
<td>61.9</td>
</tr>
<tr>
<td>2</td>
<td>APFFLON</td>
<td>105</td>
<td>23.5</td>
<td>52</td>
<td>23</td>
<td>43</td>
<td>23.8</td>
</tr>
<tr>
<td>3</td>
<td>AREFFN</td>
<td>83</td>
<td>18.6</td>
<td>43</td>
<td>19</td>
<td>26</td>
<td>14.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>446</td>
<td>100.0</td>
<td>226</td>
<td>100.0</td>
<td>181</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Authors’ Analysis 2023
FIATA is a non-governmental organization that today represents an industry covering approximately 40,000 forwarding and logistics firms, employing approximately 10 million people in 150 countries (Sorgeti, 2014; FIATA 2019). FIATA is headquartered in Geneva, Switzerland. FIATA has grown over the years to become the umbrella body for national freight forwarding associations, it performs some specific duties aimed at improving the sector. Some of these include the development of operational documentation for freight forwarding activities and the establishment of a global standard for all freighting transactions. It also provides vocational education for freight forwarders (FIATA, 2021).

CRFFN is the Nigerian government agency responsible for regulating and controlling the practice of freight forwarding in the country. It is the national affiliate of FIATA in Nigeria. It regulates the practice of freight forwarding by the global operational standard as stipulated by FIATA (FIATA, 2021: CRFFN 2022). CRFFN was established through an Act of Parliament (Act No. 16 of 2007) and began the training of freight forwarders in the country in the year 2012 (CRFFN, 2022).

4. Results

Table 4. Socioeconomic Characteristics of Respondents

<table>
<thead>
<tr>
<th>Factors</th>
<th>Options</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association</td>
<td>NAGAFF</td>
<td>112</td>
<td>61.9</td>
</tr>
<tr>
<td></td>
<td>APFFLON</td>
<td>43</td>
<td>23.8</td>
</tr>
<tr>
<td></td>
<td>AREFFN</td>
<td>26</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>181</td>
<td>100.0</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>129</td>
<td>71.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>52</td>
<td>28.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>181</td>
<td>100.0</td>
</tr>
<tr>
<td>Educational Qualification</td>
<td>Primary Sch. Cert</td>
<td>13</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>SSCE</td>
<td>43</td>
<td>23.8</td>
</tr>
<tr>
<td></td>
<td>OND</td>
<td>47</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>First Degree</td>
<td>75</td>
<td>41.4</td>
</tr>
<tr>
<td></td>
<td>Master's Degree</td>
<td>3</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>181</td>
<td>100.0</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>35</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>146</td>
<td>80.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>181</td>
<td>100.0</td>
</tr>
<tr>
<td>Work Duration</td>
<td>1 - 5 years</td>
<td>32</td>
<td>17.7</td>
</tr>
<tr>
<td></td>
<td>6 - 10 years</td>
<td>48</td>
<td>26.5</td>
</tr>
<tr>
<td></td>
<td>11 - 20 years</td>
<td>45</td>
<td>24.9</td>
</tr>
<tr>
<td></td>
<td>Above 20 years</td>
<td>56</td>
<td>30.9</td>
</tr>
</tbody>
</table>
Table 4 which analyzed the socioeconomic characteristics of respondents revealed that a total of 181 respondents participated in this study. NAGAFF had the largest proportion of members 112(61.9%), this was followed by APFFLON, which had 43(23.8%) while AREFFN had the least number of participants 26(14.3%). The analysis of the gender distribution indicates that 126(71.6%) are males while 50(28.4%) are females. This analysis is in tandem with results from similar studies which examined the gender distribution of employees in the logistics industry, there is a preponderance of the male gender in the industry, although there is a marked increment in the numbers of females in the industry in recent times (Ajayi, 2020: Ajayi and Mazinyo, 2020). Recent statistics suggest that the global maritime sector is assailed with the problem of 'retaining good hands' (Delgado and Mills, 2018: Lebovitz, 2021).

The distribution of the respondents' educational qualifications provides critical insight into the import of this study and the directional impact of MET on the maritime sector. A tiny proportion of the sampled respondents had a primary school leaving certificate 13 (7.2%). It is heartwarming that over 83% of the respondents had 12 years and above years of formal educational training. This finding complemented results from similar studies which examined the relevance of a high level of literacy among workers in the logistics industry and its impact on the achievement of improved performance in the sector (Latif et al, 2013: Lau and Ng, 2015: Opengart, 2015: Čižiūnienė et al, 2016: Manuel, 2017: Ajayi and Mazinyo, 2020: Ajayi, 2023: Baum-Talmor and Kitada, 2022). Analysis of the number of years spent in the industry by the respondents showed that 149 (82.32%) of the respondents have spent over 5 years in the industry. 101 (55.80%) of the respondent have spent over ten years on the job. This figure suggests that workers in the freight forwarding industry in Nigeria perhaps 'stay longer on the job than their contemporaries in the Western world (Delgado and Mills, 2018: Lebovitz, 2021). The age distribution of the respondents, on the other hand, bears striking resemblance to the statistics from other climes (Trong et al, 2014: Ajayi and Mazinyo, 2020) 171(94.5%) of the respondents are 30 years and above, factually, the age cohort with the largest population size is 50+, this is an attestation to the salient difficulty associated with the attraction and retention of 'young hands' in the maritime sector in recent times (Ceasar,2015 et al, Delgado and Mills, 2018: Charman, 2019: Behforouzi et al, 2020: Leboutz, 2021).

4.1 Inferential Statistics

Test of Hypotheses

Hypothesis 1: Socioeconomic factors of freight forwarders will not significantly influence their attitudinal disposition towards FIATA training programs.

The breakdown of the multiple regression analysis for the first hypothesis
shows (Table 5) that the SES factor of age significantly predicts respondents' attitudinal disposition of freight forwarders toward training ($\beta = -0.27$, $t = -2.46$, $p < 0.05$), it can be inferred that there are significant differentials in the attitudinal dispositions of freight forwarders' towards FIATA training based on their age groupings. On the other hand, marital status did not significantly predict freight forwarders' attitudinal disposition to the training program ($\beta = 0.028$, $t = 0.39$, $p > 0.05$), this informs that being married, single, divorced, or widowed did not significantly influence respondents’ attitudinal disposition towards the FIATA certification program. An earlier study has shown that the SES variable of marital status has not been a significant influence on attitudinal disposition to a different social issue of substance use among truckers in the region (Ajayi and Mazinyo, 2020).

Table 5. Multiple Regression Analysis showing the influence of freight forwarders' socioeconomic factors on the attitudinal disposition

<table>
<thead>
<tr>
<th>Variables</th>
<th>Beta((\beta))</th>
<th>t-stat.</th>
<th>Prob.</th>
<th>R</th>
<th>R²</th>
<th>Df</th>
<th>F-stat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.27</td>
<td>-2.46</td>
<td>&lt;0.05</td>
<td>0.57</td>
<td>0.27</td>
<td>5, 18</td>
<td>10.9**</td>
</tr>
<tr>
<td>Gender</td>
<td>0.28</td>
<td>0.39</td>
<td>&gt;0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Qualification</td>
<td>-0.46</td>
<td>-6.54</td>
<td>&lt;0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Size</td>
<td>0.13</td>
<td>1.51</td>
<td>&gt; 0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Duration</td>
<td>0.38</td>
<td>3.60</td>
<td>&lt;0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p< 0.01, * p < 0.05. Source; Authors’ Analysis.

The result of the analysis showed that the level of literacy level among the freight forwarders significantly predicts attitudinal disposition to the training program ($\beta = -0.46$, $t = -6.54$, $p >0.05$), this is an indication that the quality of formal education possessed by the freight forwarders is a determinant of their attitudinal disposition towards the FIATA certification program. The family size of the freight forwarders did not significantly predict the attitudinal disposition ($\beta = 0.13$, $t = 1.51$, $p >0.05$), this shows that the number of persons in the family does not determine the attitudinal disposition of freight forwarders toward the FIATA certification program. The last tested socioeconomic factor is the work duration and it can be seen that it significantly predicts respondents’ attitudinal disposition ($\beta = 0.38$, $t = 3.60$, $p >0.01$) to training, the implication of this is that years spent on the job among the respondents is a determinant of their attitudinal disposition towards participating in the FIATA certification program.

Lastly, the result of the regression analysis revealed that all the tested SES factors jointly predict the attitudinal disposition of freight forwarders towards the FIATA certification program [$F (5, 18) = 10.91; p < 0.01$]. This result shows that all the tested socioeconomic factors yielded 57% ($R=0.57$), variance in the measure of attitudinal disposition, this means other variables contribute to variation in the attitudinal disposition of freight forwarders.

Hypothesis 2: There are no significant differences in the belief of freight forwarders about the relevance of the
FIATA certification program on their operational performance across the levels of degrees available (Certificate, International Diploma, and International Higher Diploma).

Table 6. Mean and Standard Deviation of FIATA Certification Program on Operational Performance

<table>
<thead>
<tr>
<th>Items</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>96</td>
<td>17.65</td>
<td>5.60</td>
</tr>
<tr>
<td>International Diploma</td>
<td>36</td>
<td>18.50</td>
<td>6.00</td>
</tr>
<tr>
<td>International Higher Diploma</td>
<td>49</td>
<td>16.60</td>
<td>6.70</td>
</tr>
<tr>
<td>Total</td>
<td>181</td>
<td>17.52</td>
<td>5.99</td>
</tr>
</tbody>
</table>

Source: Authors’ Analysis 2023.

The distribution in Table 6 provides insight into freight forwarders' perceptions as it relates to their operational performances after the acquisition of their degrees. Unsurprisingly, the perceptions vary across the different certification levels. Respondents who graduated in the international diploma class affirmed that they experienced the highest operational performance change (M=18.50, SD=6.00). Respondents who graduated in the professional certificate class reported the second highest change in their operational performance in the FIATA program (M=17.65, SD=5.56), while the least improvement in the operational performance was reported among those in the international higher diploma class (M=16.60, SD=6.70). Further analysis was conducted to confirm if the observed differences were significant. This result is presented below:

Table 7. One-way ANOVA on the relevance of the FIATA certification program on Operational Performance

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>73.879</td>
<td>2</td>
<td>36.939</td>
<td>1.03</td>
<td>.359</td>
</tr>
<tr>
<td>Within Groups</td>
<td>6196.030</td>
<td>178</td>
<td>35.815</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6269.909</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ Analysis 2023.

The result in Table 7 revealed that the respondents do not believe that the acquisition of the FIATA certification has significantly improved their operational performance [F (2, 178) = 1.03, p >0.05].
5.0 Conclusion and Recommendation

Findings from this work have established some critical facts. First, is the incontestable role that the SES plays in the determination of the attitudinal dispositions of freight forwarders to on-the-job training programs. As confirmed from different research results, there exists a semblance of causality between some SES variables and certain subjective perceptions like financial security, substance use disorder, and construction of social reality among the working class in various professions (de Baldini Rocha and Ponczek, 2011: APA, 2017: Ajayi and Mazinyo, 2020). Another salient fact brought to the fore through the findings obtained is the import that SES factors like age, literacy level, and respondents' work experience had on the quest to achieve operational performance through on-the-job-training programs among this group of maritime professionals.

Contemporary research findings showed that the instrumentality of adult literacy programs has a significant impact on workers earning capacity (de Baldini Rocha and Ponczek, 2011) Similarly it has been discovered that aged workers when given opportunities for periodic on-the-job-training programs can improve their productivity potential (IPP) significantly. (Børing and Grøgaard, 2021). It can be inferred, therefore, that the results gotten from this research corroborated this earlier finding. Two of the SES variables, marital status, and family size did not significantly influence the attitudinal dispositions of the respondents to the training program and by extension to work demand. The inference that could be drawn from this is the fact that unlike the situation among seafarers (another category of maritime professionals) where one of their striking occupational hazards is the achievement of the delicate balance between work and family (Hult and Osterman, 2016: Yuan et al, 2016: Yuen et al, 2018), freight forwarders attitudinal dispositions to work demand are not affected by their family lives.

Quite surprisingly, the respondents believed that the provision of the training program has not significantly improved their operational performance as freight forwarders. This contrasted with the position of FIATA which strongly affirmed that the training program has achieved 'capacity development' among recipients (FIATA, 2017). This finding could suggest two things, first, it has been discovered that the development of training courses should not only be based on the needs assessment of the training body, but it is also important that the needs of the workers participating in the training are accommodated, it is debatable if such assessment was done before the design of the curriculum (Al-Mzary et al, 2015). Second, is that statistics show that between 60 to 90 percent of what is learned during on-the-job training programs may not be applied in the workplace (Yuen et al, 2018). Problems associated with skills transfer are not only a result of the inadequacy of the curriculum, sometimes the utilization of a new set of skills may entail the overhauling of the work environment through the provision of a new set of facilities (Børing and Grøgaard, 2021). Achievement of such a feat may not be easy in many organizations in the study area.

Declarations

The authors declared that there is no conflict of interest and no funding was received for this research.
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