

**AN EXPLORATION OF THE PREDICTION OF RESOURCE AVAILABILITY,
ALLOCATION AND UTILISATION ON ORGANISATIONAL PERFORMANCE
IN THE NIGERIAN ADULT AND NON-FORMAL EDUCATION SECTOR**

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Abstract

The eradication of illiteracy is a continuing challenge for Nigeria; a trend been attributed to the problems of availability, allocation and utilisation of limited resources. The issue of having adequate human, materials and financial resources to work with has always been a major constraint. This therefore raised the concern about the efficient usage of the available resources, to avoid wastages in resource utilisation in the adult and non-formal sector. Most previous studies on resource variables (availability, allocation and utilisation of the limited resources) concentrated efforts on the formal education system, where the non-formal sector were targeted, efforts are not made to link the resource variables to organisational performance in the sector. This study, therefore, explored the predictive level of resource availability, allocation and utilisation on organisational performance in the adult and non-formal sector. The study adopted the descriptive survey research design of the ex-post facto type. Lagos, Ondo and Osun states agencies for adult and non-formal education were purposively selected from the South-west. The proportionate stratified random sampling technique was used in selecting six directors, 47 supervisors and 1,344 literacy instructors/facilitators used. Four main instruments were used for data collection, namely Resource Availability ($r=0.81$), Resource Allocation ($r=0.78$), Resource Utilisation ($r=0.75$) scales and Organisational Performance Evaluation Questionnaire ($r=0.69$). Data were analysed using multiple regression and Pearson product moment correlation at 0.05 level of significance. The linear joint effect of resource availability, resource allocation and resource utilisation on organisational performance in adult and non-formal education sector was significant ($F_{(6,191)} 52.420$; Adj. $R^2 = 0.181$), they accounted for 43.0% in the prediction of organisational performance. Resource

utilisation ($\beta = .071$), resource allocation ($\beta = .055$) and resource availability ($\beta = .053$) had positive relative significant predictions on the organisational performance of the state agencies for mass education used in the South-west, Nigeria. There is the need for the agencies to ensure efficiency within the system to avoid wastages, control cost and to achieve rational allocation of the limited resources available to them in the delivery of their mandates.

Key words: Nigerian adult and non-formal education sector, State agencies for mass education, Organisational performance, Resource variables

Introduction

Efficient management of educational resources, including the physical facilities is mandatory in order to make the system pleasant, safe and comfortable for the learners as well as the facilitators (Akinsolu, 2012). Plecki, Alejano, Knapp and Lochmiller (2006) submit that “the purposeful and productive allocation of resources to support equitable access to high-quality learning opportunities becomes a major component of education policy and leadership at the federal, state, and local levels”. This is because public funds will continue to be allocated in support of educational programmes, and the rationale for these investments will likely continue to be made in terms of creating social equity alongside excellence. Therefore on a constant basis researches has been carried out on resource allocation between different activities and the cost-effectiveness of particular interventions (Oseni, 2012).

Succinctly, Cobb-Clark and Jhay (2013) opine that resource management has taken centre stage in the ongoing debate about educational reform globally. Policy initiatives are also increasingly motivated by a desire to ensure that educational resources are organised, managed, and used effectively so that educational systems can deliver better outcomes. Literature have shown that the way educational resources are organised, monitored, and managed has clear links to student outcomes, even in the adult learning processes (Bishop, 1997; Fuchs & Woessmann, 2007; Hanushek, 2006 & 2010; Hanushek & Woessmann, 2011; Schneeweis, 2011; Van de Werfhorst & Mijs, 2010).

Organisational resources refer to the sum of total of all inputs that go into the production of goods or rendering services to achieve the stated objectives of an organisation. Behind this is the managerial philosophy of objectivity, efficiency and effectiveness (Oguntoye & Alani, 1998). According to Umobong (2000), resources are important factors that determine the quality of an educational system. The availability and utilisation of resources in terms of quality and quantity are essential ingredients for the effective functioning of every organisation. The Nigeria Educational Research and Development Council (NERDC) has stressed the import of resources as contributing factors to qualitative education (Owojuyigbe, 2013). Aghenta (1984) contends that the success of any educational programme depends on available resources. Adedeji (1998) opines that it is important to establish that the level of resources available and its utilisation at any educational level, whether formal or non-formal, will determine to a very large extent, the performance of such educational system. Saint, Teresa and Erich (2003) state:

all organisations, no matter their dissimilarities in nature, orientation, size and activities, have certain features that are common to them and all which are clearly stated in their goals depend on the effective and efficient management of their resources which could be financial, human or physical (Owojuyigbe, 2013:2).

This viewpoint supports Oni (1995) who notes resources constitute a very important factor in the functioning of the educational system, since the success of a system depends on the manpower and materials made available to it. Golani (1998) as well as Crelany and Tamir (1995) suggest a model that emphasises the importance of resource allocation as a means of improving performance.

Omoregie (1981) remarks that educational resources are the inputs into the operation of the school, upon which school records are kept as evidence of performance. In essence, evaluating an educational system or organisation requires relating the inputs to the output to determine the performance rate, which when compared with the standard rate gives a picture of the level of efficiency. Thus, educational resources juxtaposed against its output will serve as evidence of performance in any education system.

Availability of adequate funds and other resources is a *sine qua non* for the good running of any educational programme (Oseni, 2012). That is why Olelewe, Nzeadibe and Nzeadibe (2014) assert that the importance of educational resources cannot be over emphasized. The resources in any educational system can be categorised into human, physical, material, time and fund (Mohammed, 2006). Fabunmi (1997) asserts that the resources of an educational establishment include students, personnel, physical facilities, curriculum and finance; while Borode (2003) contends that resources to adult and non-formal education can be classified under three broad headings (human, financial and physical). The Institute for International Cooperation of German Adult Education Association (2006) as cited in Owojuyigbe (2013) identifies three kind of resources needed in the non-formal education programme to include human, physical and financial for effective adult literacy learning programme.

The human resources are very essential in any educational system (Taiwo, 1983); the quality of any educational system depends on the quality of its human resource (Hallak, 1990). They are the people who interpret the aims, goals and plans of education and ensure that the learners are educated in the direction of those aims and goals. He argues that the learners are educated in the direction of those aims and goals. Therefore, adequate number of qualified facilitators should be employed to cope with the constant increase in students' enrolment; they should be sufficiently trained and selected for their duties.

Further, a number of researchers (Adedeji, 1998; Durosaro, 1987; Adeboyeje, 1994; Olutola, 1989; Bowles, 1974; Hallak, 1990; Oni, 1994) have pointed out that the availability of physical and material resources are very important to the success of any worthwhile educational endeavour. These scholars are also of the opinion that the availability of adequate school buildings, classrooms, chairs, desks, laboratories and other instructional facilities are imperative for the attainment of any educational objective.

According to Adeboyeje (1994), effective management of school physical facilities brings about the following facilitation of education development programmes; educational process, boosting of the morale of teachers and pupils, usefulness in the determination of the worth of school, influence on the relationship between the school

and the community and usefulness as cultural, civic, recreational as well as youth centre. Hallak (1990) identifies educational facilities as the main factor contributing to academic achievement in the school system. These facilities include the school buildings, classrooms, furniture, libraries, laboratories, recreational equipment, apparatus and other instructional aids. Olutola (1989) opines that buildings and equipment are often regarded as part of the most essential tools designed to facilitate and stimulate educational programmes. Fabunmi (1997) also argues that school buildings are very important inputs into the educational system; noting that expensive ones may not necessarily improve educational achievement.

Asides the human and physical material resources, the financial resources are also of utmost important. Finance, according to Oyeniran (1989), has always been the major problem inhibiting successful implementation of adult and non-formal education (ANFE), not only in Nigeria, but throughout developing countries where formal and adult education are in perpetual competition for funding. Incidentally, priority is always given to formal education. The amount of fund available determines the level of performance of any ANFE programme in a given society. Lack of sufficient fund will adversely affect recruitment of qualified personnel, provision of materials and construction of structures.

Adequate financing is an essential ingredient for the implementation of any programme. This is why Imhabkhai and Onyeozu (2005) state that finance is necessary for the employment of all categories of ANFE, personnel, procurement of instructional materials, development of infrastructural facilities. They further explain that when funds are not adequately provided, there will be insufficiency of the essential inputs and consequently, poor programme performance. Ozigi (1978) affirms that no organisation can survive or carry out its function effectively without adequate financial resources at its disposal. Money is needed to pay staff, maintain the plant and sustain services.

It is, therefore, a trite knowledge that the importance of resources allocation and utilisation in organisation cannot be overemphasised. To increase the effectiveness and efficiency in an organisation, firms will support and benefit from the more effective use of resources. This is more important because every work organisation is concerned with being effective and efficient, especially in a difficult

economic environment and in the face of fierce world competition (Mullins, 1996).

In determining the efficiency in any organisation, resource allocation and utilisation need critical attention. Resource allocation efficiency requires that it should not only be used judiciously but also structured to achieve the desired result. Adedeji (1998) observes that the term resources allocation could be used in many different ways. Allocation of resources is the ways in which fiscal and non-fiscal resources are divided between competing needs and expended for educational purposes (Pan, Rudo, Schneider & Smith-Hansen, 2003). Utilization according to Ngurukwem (2005) cited in Olelewe, Nzeadibe and Nzeadibe (2014) is the proportion of the available time a system is operating. In terms of educational resources, it could refer to the extent of available resources that are put to use. It therefore becomes imperative that availability and adequate utilization of educational resources such as human, material, physical and financial are very essential to educational attainment, adult education inclusive. According to Plecki, Alejano, Knapp and Lochmiller (2006) of critical importance is a resource allocation practice which must reflect an understanding of the imperative to eliminate existing inequities and close the achievement gap.

In the free market and globalised economy, efficiency in resource allocation has taken on strategic approaches, which will determine the results or expectations in terms of internal and external efficiency drive. Efficiency in resources allocation in the view of Skaggs and Carlson (1996) requires that the resources be shared up to the point at which marginal revenue product and marginal resource costs are equal. McConnell and Brue (1996) observe that resources are being devoted to that combination of goods and services most wanted by individuals or society through the application of the available resources, to achieve this efficiency expectation. All educational establishments need some inputs like men, money, materials and machines to enable them function effectively. The importance of these resources calls for a judicious management to sustain the organisation and make it run smoothly.

Generally, the resources provided by government for the execution of education projects in Nigeria are inadequate, and often leading to frequent low educational performance and attainment

across the country (Olelewe, Nzeadibe & Nzeadibe, 2014). More specifically, Moja (2000) contends that government funding of the adult and non-formal education sector has been inadequate due to budgetary allocations that have been in flux during the last two decades. Overall, there has been a drop in the funding level of the sector, making the sector to suffered from similar problems to those encountered in the formal sub-sector or even worst.

Akintoye (2005) submits that organisations may not have all the funds it needs for optimal operations and no human organisation can ever have enough funds but it is the efficient utilisation of the available fund that usually distinguish good and effective organisations from another. The method by which resources are allocated and managed within any educational system can serve as an important instrument for achieving desired improvements in levels of educational attainment, social equity and other social policy targets (David-Hadar & Ziderman, 2010). Utilisation implies the degree or extent to which an item has been put into effective use, in other words, it is the extent of usage of resources (physical, financial and human material), if resources are not used maximally, this is under-utilisation but if maximally used, they are considered to be effectively utilised (Oguntoye & Alani, 1998). Curzon (1980) maintains that when resources are well-selected and skillfully used, they multiply and widen the channel of communication between the teacher and the learner. In meeting the literacy need of the people, resources must be allocated for the payments of allowances to the instructors and the human, materials and financial resources must be adequately supervised and controlled to avoid wastage. This will lead to improved and efficient performance of the States Agencies for Mass Education (SAMEs). Akintoye (2005) states:

Modern management theory has summarized the needs of all organisations in three Ms – Money, Men and Material. The right application of these three factors will determine the success of any organisation. An organisation may not have all funds it requires for operations and where it has, bad men (manager) in such an organisation may misuse the funds and throw the organisation into a serious mess. At times, what is required to make an organisation perform well may not be too much money. Little fund that are well managed could turn an organisation round thereby

attracting more funds and materials into it, whereas much funds without efficient management could prove a real albatross to an organisation (P. 42).

This therefore shows that developing and allocating resources to support improvement in the adult teaching and learning process thus become a fundamental leadership challenge (Plecki, Alejano, Knapp and Lochmiller, 2006).

Statement of the Problem

The major challenges facing the delivery of literacy programme include the availability, allocation and utilisation of the limited resources. Resource mobilisation and utilisation in the adult education sector is becoming problematic; the issue of having adequate human, materials and financial resources to work with has always been a major constraint on the performance of the National Commission for Mass Education (NMEC) and SAMEs.

What is apparent from this is that the eradication of illiteracy is a continuing challenge for Nigeria and more has to be done if the Education for All (EFA) goals must be achieved. Stakeholders in the sector have to realise that, unless aggressive measures are taken to scale up illiteracy, the EFA goals related to learning and life skills for all young people, and 50 per cent reduction of adult illiteracy by 2015 will not be achieved. This therefore raises concern about the efficient usage of the available resources, to avoid wastages in resource utilisation in the ANFE sector.

Most previous studies on resource variables (availability, allocation and utilisation of the limited resources) have concentrated effort on the formal education system at the expense of ANFE sector. Where studies focus on ANFE, efforts are not made to link the resource variables to organisational performance in the sector. This study, therefore, explored the predictive level of resource availability, allocation and utilisation on organisational performance in the Adult and non-formal sector by looking at the predicting effects of the resource variables on organisational performance of three SAMEs in the Southwest Nigeria.

Methodology

The study adopted the descriptive survey research design of the *ex-post facto* type. Lagos, Ondo and Osun SAMEs were purposively selected from the six states of the Southwest, due to their centrality in the provision and delivery of ANFE programmes in the region. The proportionate stratified random sampling technique was used in selecting six directors, 47 supervisors and 1,344 literacy instructors/facilitators involved in the study.

Four main instruments were used for data collection, namely Resource Availability Scale, Resource Allocation Scale, Resource Utilisation Scale and Organisational Performance Evaluation Questionnaire. The scales were subjected to pilot testing using a sample size of 25 supervisors and literacy instructors in Iddo Local Government Area of Oyo State. The reliability coefficients obtained were 0.81, 0.78, 0.75 and 0.69, respectively for the four instruments. Data were analysed using multiple regression and Pearson product moment correlation at 0.05 level of significance.

Results and Discussion:

Table 1a: Joint effect of resource availability, allocation and utilisation on organisational performance

Model	Sum of Squares	DF	Mean Square	F	Sig
Regression	40242.876	6	6707.146	52.420	.000
Residual	177850.66	1391	127.950		
Total	218093.53	1397			

R=.43, R²=0.185, Adj. R² = 0.181

Table 1b: Relative effects of resource availability, allocation and utilisation on organisational performance

Model	Unstandardised Coefficient	Standardised Coefficient	T	Sig.	
(Constant)	13.433	5.850		2.296	.024
Resource Availability	.138	.053	.215	2.597	.011
Resource	6.365E-02	.055	.100	1.154	.251

Allocation					
Resource	.377	.071	460	5.316	.000
Utilisation					

Table 1a shows that the linear joint effects of resource availability, resource allocation and resource utilisation on organisational performance is significant ($F_{(6,191)} = 52.420$; $R = .43$, $R^2 = 0.185$, $\text{Adj. } R^2 = 0.181$; $p < 0.05$). About 43% of the variation was accounted for by the independent variables. The result on Table 1b shows the relative contributions of each independent variables on the dependent variables, resource availability ($\beta = .053$, $p < .05$), resource allocation ($\beta = .055$, $p < .05$) and resource utilisation ($\beta = .071$, $p < .05$). On the relative contributions of the independent variables to the organisational performance, resource utilisation ($\beta = .071$, $p < .05$) contributed more than the two other resource variables. The result reveals that resource utilisation had the greatest impact on organisational performance than the two other variables (resources allocation and availability).

Further, the result in Table 1b shows that resources availability, allocation and utilisation relatively predicted the performance of the SAMEs. These findings corroborate the position of extant literature (Hallak, 1990; Obemeata, 1995; Ogunniyi 1996; Fabunmi, 1997; Golani & Tamar, 1998; Adedeji, 1998; Fabayo, 1998; Umobong 2000; Mohammed, 2006; Jedo 2007; Oseni, 2012; Cobby-Clark & Jhay, 2013; Owojuyigbe, 2013) that resource constitutes a very important factor in the functioning of the educational system. The success of a system depends on the resources available, allocated and utilized. These scholars depict consensus on the availability of resources being imperative to the attainment of any educational objective.

On resource availability, 646(46.2%) respondents strongly agree that the resources supplied help to achieve organisational goals, 557(39.9%) agree, while 416(3.3%) disagree and 148(10.6%) strongly disagree. Some 572(40.9%) respondents indicated that the establishment should be provided with everything it needs in terms of materials; human, financial and managerial resources to enable it achieve its objectives. A total of 442(31.6%) respondents agree qualified personnel were recruited for the adult and non-formal education programme. With respect to this, 285(20.4%) respondents

strongly agree, while 350(25.1%) disagree and 320(22.9%) strongly disagree. This reveals that the quality of staff that should man ANFE programmes are very important. Some 501(35.9%) respondents agree that the quantity of equipment and materials supplied to ANFE programme though regular is inadequate to the needs of the SAMEs, 344(24.6%) strongly agree while 403(28.8%) disagree, and 149(10.7%) strongly disagree. These findings corroborate Mojo (2000) Adedeji, (1998); Durosaro, (1987); Adeboyeje, (1994); Olutole, (1989); Bowles, (1974); Hallak, (1990) and Oni (1994) who in various studies established that the availability of physical and materials resources are very important to the success of any worthwhile educational endeavour. These scholars also expressed similar viewpoint that the availability of adequate resources is imperative for the attainment of any educational objective. This is also in line with the opinion of Umobong (2000), that resources are important factors that determine the quality of educational system. This also corroborates Oni (1995) that contends that resources constitute very important factors in functioning of the educational system. This is because the success of the system depends on the manpower and materials made available. Further, the result of the correlational analysis that was used to support the multiple regression revealed that the relative relationship between the resource availability and the indices of organisational performance were as follows: use of technology ($r=.537$), synergisation of management/employees efforts ($r=.292$), satisfying the literacy need of the people ($r=.072$), decision-making ($r=.109$), planning and management ($r=.013$) as well as organisational structure ($r=.003$).

Concerning the allocation of resources, 572(40.9%) respondents agree that in ANFE programmes have helped in increasing and maintaining literacy activities in the three states under surveyed, 308(22.0%) respondents strongly agree while 87(6.2%) respondents disagree and 430(30.8%) respondents disagree. Some 494(35.5%) respondents agree that financing and authority are done at state level, 613(43.9%) strongly agree, while 160(11.5%) respondents disagree, and 441(31.6%) strongly disagree. A total of 487(34.9%) respondents agree that the SAMEs need additional resources to improve adult literacy activities, 599(42.8%) respondents strongly agree while 164(11.7%) disagree, and 147(10.5%) respondents strongly disagree. This is in line with the view of Ozigi (1978) that no organisation can either survive or

carry out its functions effectively without adequate financial resources at its disposal. Money is needed to pay staff, maintain plants and keep services running. This implies that there is the need for the SAMEs to generate more funds to improve their literacy programmes and activities. There are a number of ways in which resource allocation plays a vital role. The importance of resource allocation cannot be overemphasised when an organisation is equipped with resources (financial, physical and material). Money is needed to carry out the functions of the SAMEs. Further, the correlation analysis revealed that the resource allocation had significant relative relationship with the indices of organisational performance as follows: planning and management ($r=.570$), decision-making ($r=.278$), organisational structure ($r=-.134$), satisfying the literacy need of the people ($r=.073$), synergisation of management/ employees efforts ($r=.016$) and use of technology ($r=.018$).

With respect to resource utilisation, 742(53.1%) respondents strongly agree that there are no wastage and time delays by human resource allocated to their organisation, 611(43.7%) respondents agree, while 38(2.7%) respondents disagree and 6(0.4%) respondents strongly disagree. The respondents were also asked if the resources supplied to ANFE programmes are well-applied, 553(39.6%) agree, 402(28.8%) respondents strongly agree while 267(19.1%) respondents agree and 175(12.5%) respondents strongly disagree. These findings establish that there is a significant relationship between resource allocation, availability, utilisation and organisational performance. Five hundred and eighty-four (41.8%) respondents also agree that the senior management group fight hard for its interest in matter such as resource utilisation, 756(54.1%) respondents strongly agree while 214(3.1%) respondents disagree and 13 (0.9%) respondents strongly disagree. About thirty-six percent of respondents agree that managerial capacities are well developed as regards the utilisation of resources in the SAMEs; with 513(43.9%) respondents strongly agree, while 160(11.5%) respondents disagree and 130(9.3%) respondents strongly agree. A total of 446(33.4%) respondents agree that there is optimum use of resources in their organisation, 686(49.1%) respondent strongly agree on this, while 92(6.5%) respondents disagree and 154(11.0%) respondents strongly disagree. Also, 487(34.9%) respondents agree that all equipment and aids are in good working condition, 337(27.1%)

respondents strongly agree, while 360(25.8%) respondents agree and 213(15.2%) of the respondents strongly disagree. This result is in consonance with the position of Farombi (1998) who reports that effective management of educational resources could foster improved learning outcome among students. From this finding, effective allocation and use of resources is pertinent for a better understanding of organisational performance ANFE programmes in the Southwest Nigeria as contended in the literature (Plecki, Alejano, Knapp & Lochmiller, 2006; David-Hadar & Ziderman, 2010; Oseni, 2012; Olelewe, Nzeadibe & Nzeadibe, 2014).

These findings also agree with the underlining principles of the System Theory which is based on the input-output model, which explains the essentiality of having efficient allocation and utilisation of resources in order to achieve optimum level of performance. The more efficient SAMEs are, the fewer funds it will require to fulfil their goals. When resources are available and appropriately allocated, they must be efficiently applied by the SAMEs. Succinctly, the more effective the SAMEs in allocating and utilising the limited resources available to them, the higher would be the attainment of literacy among the citizenry of the three states. The correlation result on the relationship between the resource utilisation and the indices of organisational performance showed that satisfying the literacy need of the people ($r=-.645$), synergisation of management/employees efforts ($r=.355$), organisational structure ($r=.326$), planning and management ($r=.251$), decision-making ($r=.137$) and use of technology ($r=.46$) had significant relative relationship with resource utilisation.

Conclusion

It is evident from this study that the three resource variables, namely resource availability, allocation and utilisation positively predicted organisational performance of the State agencies for mass education surveyed in the Southwest, Nigeria. Meanwhile, resource utilisation had the greatest impact on organisational performance than resources allocation and availability. This shows that regardless of whatever level of resources is available to the state agencies, what matters most is how effectively and optimally such resources can be allocated, managed and utilised. There is the need for the agencies to ensure efficiency within the system, avoid wastages, control cost and achieve

efficient allocation of the limited resources available to them in the delivery of their mandates.

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