Productive Participation of the Physically Challenged through Technical Vocational Education Training Programmes in Rivers State

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Authors’ contributions

This work was carried out in collaboration among all authors. Author TFA designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors PCO and DMBTB managed the analyses of the study. All authors read and approved the final manuscript.

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ABSTRACT

The study examined the productive participation of the physically challenged through Technical Vocational Education Training programmes in Rivers State. A population of 387 registered mobility impaired and visually impaired persons were used for the study while a sample of 284 was selected through purposive sampling technique. Three research questions were answered, and three null hypotheses were tested at 0.05 level of significance. The instrument for data collection was a self-structure questionnaire developed by the researchers that was structured in the pattern of 5-point Likert rating scale of agreement and extent. The instrument was face and contents validated by three experts. The reliability of the instrument was established through Pearson Product Moment Correlation (PPMC) which yielded correlation coefficient of 0.86. Mean and standard deviation were used to analyse the research questions while z-test was used to test the hypotheses. The study found among others that unwillingness of the participant to training, discrimination, lack of jobs after training and high technical fees were some of the barriers for implementing TVET to the physically challenged persons in Rivers State. It was recommended among others that at least two TVET
special schools and training centres should be built (setup) in each senatorial zone in Rivers State, trained technical teachers should be employed, TVET programmes should be free for productive participation of the physically challenged in Rivers State.

Keywords: Productive participation; physically challenged; TVET; visually impaired; mobility impaired.

1. INTRODUCTION

Participating productively by people living with physical challenges (disabilities) may be a challenging task. Participation is the process in which two or more parties influence each other in the making of decisions [1]. In the decision-making, each individual member has equal power to determine the outcome of decisions in order for it to be productive. The concept, productive is defined as having the quality or power to yield results, benefits or profits especially in abundance, to the satisfaction of wants [2]. Productivity is a relationship between outputs and inputs. It rises when an increase in output occurs with a less than proportionate increase in inputs, or when the same output is produced with fewer inputs [3]. Productive participation, therefore, involves activities with which the individual contributes his or her resources to individuals or groups in the society through involvement in voluntary and/or political organizations and associations (Klumb & Baltes as cited in [1]). Based on the definitions above, productive participation could be viewed as the process in which a person has the power to yield results or contribute efficiently and live freely in the society. But the physically challenged persons may not participate productively in the society because of their disability’s conditions.

As a concept, physically challenged (disability) has been defined by different authors. The [4] defined physically challenged persons as disadvantaged or deficient persons, especially persons that are physically and mentally impaired, that are prevented or restricted from normal achievement. [5], defined disability as the process that turns impairment into negative by creating barriers to access. [6] stated that the Americans with disability Acts defines disability to mean a physical and mental impairment that substantially limits one or more major life activities of an individual. According to Disabled Person Act of 1992 as cited in [7], a disabled person or people with disabilities means a person with a physical, mental or sensory disability, including a visual, hearing or speech functional disability, which gives rise to physical, cultural or social barriers inhibiting such an individual from participating at an equal level with other members of society in activities, undertakings or fields of employment that are open to other members of society. In this study, physically challenged people are viewed as people that are incapacitated, unable, impaired or crippled by several factors that limit them from participating productively in the society.

The category of the impairments according to [3] include ‘cannot talk’, hemiplegia, epilepsy, diabetes, asthma, heart condition, cerebral palsy, amputations, and so on. There are many different types of disabilities which loosely fall into four separate categories - intellectual, physical, sensory, and mental illness. An intellectual disability may mean difficulty in communication, learning, and retaining information. They include Down syndrome, Fragile X syndrome, Prader-Willi syndrome, and developmental delays. Physical disability may affect, either temporarily or permanently, a person's physical capacity and/or mobility. They include MS, cerebral palsy, spina bifida, brain or spinal cord injury, epilepsy, and muscular dystrophy. Sensory disabilities affect one or more senses, sight, hearing, smell, touch, taste or spatial awareness. They include autism, blindness, and hearing loss. A mental illness affects a person's thinking, emotional state and behaviours. They include bipolar, depression, schizophrenia and eating disorders [3]. The present study is limited to only two categories of disabilities, namely the physical (mobility impaired) and sensory (visually impaired) disabilities.

The State, Federal Vocational Rehabilitation Program classifies people with disabilities into three major disability groups (sensory/communicative, physical, and mental impairments). Physically challenges can be congenital, that is, someone being born with the handicap or it could be acquired soon after birth or at any stage of life. It could result from disease or infections and could result from an accident [8]. According to [9], poverty, ignorance, war, disease and harmful traditional practices have been known to be the major causes of impairments. These physically challenged persons therefore need special ancillary services like Technical and Vocational Education and
Training (TVET) programmes help them develop, progress and participate productively in the society according to their abilities. TVET encourages skill acquisition, knowledge and attitudes needed by individuals for survival in the society.

The [10] and the International Labour Organization (ILO) recommendations of 2001 on technical and vocational education and training for the twenty-first century, defined TVET as those aspects of the educational process involving in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

According to [11], TVET refers to education which is mainly to lead participants to acquire the practical skills, knowhow and understanding, and necessary for employment in a particular occupation, trade or group of occupations. TVET is any education program organized to orient people (physically challenged persons) into skills acquisition, and as well teach them the attitude and knowledge necessary for the appropriate utilization of such skills to contribute productively in the society and be self-reliant. Hence, TVET can be regarded as technological aspect of education that prepares individuals especially the physically challenged persons to be practically oriented for job opportunities to reduce poverty and unemployment among them through an organized programme. Based on this, [12] opined that poverty and its symptoms dominate as majority of the youths lack the skills for employment or self-employment. Developing the youth which include the physically challenged persons simply means making them to be self-reliant through empowerment or employment. This could be realized through TVET which is the only education that offers skills and knowledge. TVET is not just preparation for work, it is preparation for life, and therefore it is so important to make it accessible to all, even to the disabled persons [13].

Over the years, productive participation of the physically challenged (disabled) has attracted the attention of many researchers. [14], investigated the strategy for skill acquisition and work for people with disabilities and found out that, TVET programmes are not flexible, accessible and are not provided in a way that meets the individual impairment needs of the physically challenged. [15] stressed on inclusion of students with disabilities in formal vocational education programmes in Ethiopia and concluded that individual with disabilities have limited access to education and vocational training opportunities. [8], revealed that technical and vocational education and training programs enhances the employment opportunities of the physically challenged. For [16], TVET broadly refers to deliberate interventions to bring about learning which would make people more productive (or simply adequately productive) in designated areas of economic activity (e.g., economic sectors, occupations, specific work tasks. In this study, TVET is defined as those activities involving 3Hs (Head, Hand and Heart) that if acquire by the physically challenged persons could make them to be functional and productive to earn a living for themselves and contribute meaningfully to the society. TVET thus equips people not only with vocational and technical skills, but with a broad range of knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in work and life. Hence, this study was organized to investigate productive participation of the physically challenged through technical and vocational education and training programmes.

1.1 Statement of the Problem

It has been observed that physically challenged (disabled) persons typically live in extreme poverty and dependency [15]. They are faced particularly with challenges in education and TVET training and are also with the problem of unemployment [17]. UNESCO in [17], observed that globally, physically challenged or disabled people are faced with discrimination and barriers to full participation in skills training and employment opportunity and programmes. Report confirmed that in developing countries, 90% of children with physical challenges continue to lack access to education [18]. Also, [19] estimated that about 98% of children with physical challenges in developing country like Nigeria had no access to school or vocational training. [20] summarized the major factors that continued challenging the participation of students with disabilities, such as type of disability, lack of trained personnel, lack of training and employment opportunities. Another list of barriers presented includes inaccessible buildings, communication systems, infrastructure, lack of assistive devices and psychological barriers in the minds of people with disabilities [21].
Physically challenged people are often debarred (rejected) in work, because of ignorance and discrimination in the society and their inability to compete on the basis of relevant skills or qualifications [17]. They further stated that lack of education in general and technical and vocational education and training in particular is the most frequently mentioned barriers experienced by physically challenged persons which makes them unqualified for employment and skills training courses, un-productive, lack confidence, have low expectations and low achievement. The social exclusion of the physically challenged in work organizations is further intensified by a hostile physical environment. Organizations with a hostile physical environment have enormous potentials to discourage qualified, skilful and capable physically challenged individual from expressing interest to be engaged. In such a hostile environment, materials and devices or equipment necessary to enhance their productivity are usually not available. Their challenging condition(s) also affect the economy of the nation in general because they (the physically challenged) are counted as part of the total number of the population in the State and country. So, the greater number of unemployed physically challenged persons we have in the society, the more unemployed citizens we have in the state’s record, and the higher the poverty rate in the state and country. It is against this backdrop that the researchers decided to investigate the productive participation of the physically challenged persons through TVET programmes in Rivers State.

1.2 Purpose of the Study

The main purpose of this study is to determine the productive participation of the physically challenged through TVET programmes in Rivers State. Specifically, this study sought to;

1. Ascertain the extent to which TVET will enhance physically challenged persons employment opportunities in an open labour market.
2. Identify the barriers on TVET implementation for physically challenged persons for productive participation in Rivers State.
3. Identify the strategies for productive participation of the physically challenged persons through TVET programmes in Rivers State.

1.3 Research Questions

The following research questions guided the study:

1. What is the extent to which TVET enhances physically challenged persons employment opportunities in the labour market in Rivers State?
2. What are the barriers to TVET implementation to physically challenged persons for productive participation in Rivers State?
3. What are the strategies for productive participation of the physically challenged persons through TVET programmes in Rivers State?

1.4 Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance.

1. There is no significant difference between the mean responses of the mobility impaired and visually impaired persons on TVET enhancement of their employment opportunities in the labour market in Rivers State.
2. There is no significant difference between the mean responses of the mobility impaired and visually impaired persons on the barriers to TVET implementation to them in Rivers State.
3. There is no significant difference between the mean responses of the mobility impaired and visually impaired persons on the strategies for their productive participation through TVET programmes in Rivers State.

2. METHODOLOGY

The study adopted a descriptive survey research design. The study was carried out in Rivers State. The population for the study consisted of all the registered mobility impaired (crippled) and visually impaired (blind) people in Rivers State. As at the time of the study, there was an estimated population of 231 registered mobility impaired (crippled) and 156 visually impaired (blind) persons making a total of 387 mobility impaired (crippled) and visually impaired (blind) persons in Rivers State [22]. A total number of 284 (170 mobility impaired and 114 visually impaired respondents was used for the study selected through purposive sampling technique. The instrument for the study was a self-
structured questionnaire titled “Physically Challenged Survey Questionnaire” (PCSQ) design after Likert-5 point rating scale. In most cases where the respondents were unable to respond to the questionnaire due impairment, the researcher interprets it to them to ensure that both the visually impaired (blind) and mobility impaired (crippled) persons participate in the study.

The instrument was face and content validated by two experts from the Department of Vocational and Technology Education and one in Measurement and Evaluation in Rivers State University, Port-Harcourt. The reliability of the instrument was determined through test-retest method for measure of stability of the instrument. Copies of the instrument were administered to 20 mobility impaired and 12 visually impaired persons in Bayelsa State using simple random sampling technique. The scores obtained from the responses of the physically challenged persons were used to compute the coefficient reliability using Pearson Product Moment Correlation (PPMC). The coefficient value obtained was 0.86 and was considered adequate for the reliability of the instrument. The researchers distributed 387 copies and retrieved 284 copies of the instrument which is 73% return rate. This number was used for the analysis of the study. Mean and Standard Deviation were used to analyze data in relation to research questions while the z-test was used to test the null hypotheses at 0.05 level of significance. For the research questions, real limits of numbers of 4.50-5.00 (Very High Extent [VHE]), 3.50 – 4.49 (High Extent [HE]), 2.50 – 3.49 (Moderate Extent [ME]), 1.50 – 2.49 (Low Extent [LE]), 0.50-1.49 (Very Low Extent [VLE]) were used. Standard deviation value close or wide apart was used to determine the homogeneity in opinion among the respondents. In testing the hypotheses, the decision was to accept the null hypothesis if the calculated value of z (zcal) is less than the critical value of z (zcrit) but if the calculated value of z (zcal) is greater than the critical value of z (zcrit), the hypothesis is rejected.

3. RESULTS

Results from the study were presented in line with the research questions and hypotheses as follows:

3.1 Research Question 1

What is the extent to which TVET enhances physically challenged person’s employment opportunities in the labour market in Rivers State?

To provide answer to the research question, data were collected in respect to item 1 - 8. The analyses are presented in Table 1.

Table 1. Mean scores of the mobility and the visually impaired on the extent of TVET enhancement to the physically challenged persons in Rivers State

| S/N | TVET can enhance the physically challenged persons employment opportunities in the labour market in the following ways: | Mobility impaired | Visually impaired |
|-----|---------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| 1   | Provision of technical knowledge relevant for employment. | X₁ 3.52 SD₁ 0.68 HE | X₂ 4.60 SD₂ 0.72 VHE |
| 2   | Inculcate in them the relevant experience needed for employment in technical related occupation. | X₁ 3.75 SD₁ 1.30 HE | X₂ 3.42 SD₂ 1.03 ME |
| 3   | Provision of vocational knowledge relevant for employment. | X₁ 4.58 SD₁ 0.92 VHE | X₂ 3.63 SD₂ 1.21 HE |
| 4   | Provision of communicative skill for employment. | X₁ 3.83 SD₁ 1.03 HE | X₂ 3.72 SD₂ 1.01 HE |
| 5   | Bridge the gap between school and work environment for them. | X₁ 3.78 SD₁ 0.81 HE | X₂ 3.66 SD₂ 0.62 HE |
| 6   | Provide managerial skill for employment. | X₁ 3.90 SD₁ 1.02 HE | X₂ 4.60 SD₂ 1.08 ME |
| 7   | Provision of psychological knowledge for employment. | X₁ 4.01 SD₁ 0.96 HE | X₂ 3.39 SD₂ 1.04 HE |
| 8   | Provision of requisite technical skills relevant for employment in technical related occupations. | X₁ 4.58 SD₁ 0.82 VHE | X₂ 4.51 SD₂ 0.78 VHE |
|     | Grand Mean/SD | 4.03 SD₁ 0.92 HE | 3.91 SD₂ 0.95 HE |

Source: Researcher’s Field Result, 2020
The result in the Table 1 shows that the respondents (Mobility and Visually Impaired) agree to all the item questions in Table 1 that TVET can enhance employment opportunities of the physically challenged persons in labour market in Rivers State. This was revealed in the Grand mean (GM) with a mean score of 4.03 and 3.91 for the mobility and the visually impaired respectively which is greater than the cut-off point of 3.50 for decision. Based on the findings, the result shows that TVET can enhance the physically challenged employment opportunity in the labour market. The range of standard deviation from 0.00 – 0.99 show that the respondents were homogenous or close in their responses while standard deviation range 1.00 and above indicate that the respondents were heterogenous or far apart in the responses.

3.2 Research Question 2

What are the barriers to TVET implementation to physically challenged persons for productive participation in Rivers State?

To provide answer to the research question, data were collected in respect to item 9 - 19. The analyses are presented in Table 2.

From Table 2, result shows that the respondents accepted most of the item listed as challenges to the implementation of TVET to the physically challenged persons in Rivers State. On the other hand, the respondents disagree item 9 and 10 on the challenges confronting the implementation of TVET programmes to the physically persons in Rivers State. Item 11 – 19 were agreed by the respondents.

### Table 2. Mean scores of the mobility and the visually impaired on the barriers to TVET implementation to the physically challenged persons for productive participation in Rivers State

| S/N | The following are the barriers to TVET implementation to the physically challenged persons in Rivers State | Mobility impaired | Visually impaired |
|-----|---------------------------------------------------------------------------------------------------|-------------------|-------------------|
|     |                                                                                                    | \(X_1\) | SD.1 | Remark | \(X_2\) | SD.2 | Remark |
| 9   | Negative attitude of physically challenged persons due to health issues.                           | 2.49   | 1.08 | Disagree | 2.03   | 1.12 | Disagree |
| 10  | Difficulty in practical activities due to health issues of the challenged persons.                  | 4.38   | 1.51 | Disagree | 3.22   | 1.09 | Undecided |
| 11  | Inadequate number of special technical teachers.                                                   | 3.49   | 1.24 | Undecided | 3.82   | 1.04 | Agree |
| 12  | Inadequate number of special technical colleges for physically challenged persons.                | 3.76   | 1.02 | Agree   | 3.91   | 1.11 | Agree |
| 13  | Negative employers' attitude towards the recruitment of physically challenged persons in technical related occupation | 4.10   | 1.21 | Agree   | 3.71   | 1.55 | Agree |
| 14  | Inadequate funding of TVET programmes by the government.                                          | 4.14   | 1.08 | Agree   | 4.04   | 0.52 | Agree |
| 15  | Inadequate support from family members                                                           | 4.18   | 0.63 | Agree   | 3.88   | 0.76 | Agree |
| 16  | Very high TVET training fees                                                                     | 3.53   | 0.81 | Agree   | 4.47   | 1.03 | Agree |
| 17  | Poor dissemination of information by government                                                  | 4.04   | 1.19 | Agree   | 4.10   | 1.27 | Agree |
| 18  | Lack of support in accessing assistive devices.                                                   | 4.52   | 0.93 | Agree   | 4.42   | 1.06 | Agree |
| 19  | Lack of employment after training.                                                               | 3.73   | 1.09 | Agree   | 4.02   | 0.63 | Agree |
|     | Grand Mean/SD                                                                                     | **3.85** | **1.07** | **Agree** | **3.78** | **1.02** | **Agree** |

Source: Researcher’s Field Result, 2020
respondents (mobility and visually impaired) as a challenge. The range of standard deviation from 0.00 – 0.99 show that the respondents were homogenous or close in their responses while standard deviation range 1.00 and above indicate that the respondents were heterogenous or far apart in the responses.

3.3 Research Question 3

What are the strategies for productive participation of the physically challenged persons through TVET in Rivers State?

To provide answer to the research question, data were collected in respect to item 20 - 30. The analyses are presented in Table 3.

The result in Table 3 shows that the mobility and the visually impaired physically challenged persons agree to all the item questions in the table as strategies for productive participation of the physically challenged persons through TVET in Rivers State with a grand mean score of 4.23 and 4.19 for the mobility impaired and visually impaired respectively. The range of standard deviation from 0.00 – 0.99 show that the respondents were homogenous or close in their responses while standard deviation range 1.00 and above indicate that the respondents were heterogenous or far apart in the responses.

3.3.1 Hypothesis 1

There is no significant difference between the mean response of the mobility and visually impaired persons on the extent of TVET enhancement of their employment opportunities in the labour market in Rivers State.

The null hypothesis is accepted since the zcal (1.06) is less than the zcrit (1.96). This implies that there is no significant difference in the mean opinion of the respondents on TVET enhancement of employment opportunities in the labour market in Rivers State.

Table 3. Mean scores of the mobility and the visually impaired on the strategies for productive participation of the physically challenged persons through TVET in Rivers State

| S/N | Strategies for productive participation of the physically challenged through TVET in Rivers State | Mobility impaired | Visually impaired |
|-----|------------------------------------------------------------------------------------------|------------------|------------------|
|     | X₁ | SD₁ | Remark | X₂ | SD₂ | Remark |
| 20  | 3.99 | 0.89 | Agree | 4.61 | 0.95 | S. Agree |
| 21  | 4.27 | 1.25 | Agree | 3.28 | 1.33 | Undecided |
| 22  | 4.42 | 1.01 | Agree | 4.29 | 1.02 | Agree |
| 23  | 4.46 | 1.00 | S. Agree | 4.35 | 1.10 | Agree |
| 24  | 4.14 | 1.13 | Agree | 4.53 | 0.82 | Agree |
| 25  | 4.35 | 1.20 | Agree | 4.22 | 1.32 | S. Agree |
| 26  | 4.38 | 0.91 | Agree | 4.27 | 1.09 | Agree |
| 27  | 4.42 | 0.62 | Agree | 4.04 | 0.83 | Agree |
| 28  | 4.29 | 1.08 | Agree | 3.92 | 0.64 | Agree |
| 29  | 4.49 | 1.14 | Agree | 4.52 | 0.59 | S. Agree |
| 30  | 3.28 | 1.06 | Undecided | 4.14 | 1.12 | Agree |

Grand Mean/SD 4.23  1.03  Agree  4.19  0.98  Agree

Source: Researcher’s Field Result, 2020
Table 4. z-test analysis of the mobility and the visually impaired on the extent to which TVET enhances the physically challenged persons in Rivers State

| Group              | X  | SD  | N   | df | Zcal | Zcrit | α    | Decision |
|--------------------|----|-----|-----|----|------|-------|------|----------|
| Mobility impaired  | 4.03 | 0.92 | 170 |    | 282  | 1.06  | 1.960 | 0.05     | Accepted |
| Visually impaired  | 3.91 | 0.95 | 114 |    |      |       |      |          |          |

Source: Researcher’s Field Result, 2020; Accept Ho if zcal ≤ zcrit; Else reject

Table 5. z-test analysis of the mobility and the visually impaired on the barriers to TVET implementation to the physically challenged persons in Rivers State

| Group              | X  | SD  | N   | df | Zcal | Zcrit | α    | Decision |
|--------------------|----|-----|-----|----|------|-------|------|----------|
| Mobility impaired  | 3.85 | 1.07 | 170 |    | 282  | 0.56  | 1.960 | 0.05     | Accepted |
| Visually impaired  | 3.78 | 1.02 | 114 |    |      |       |      |          |          |

Source: Researcher’s Field Result, 2020; Accept Ho if zcal ≤ zcrit; Else reject

Table 6. z-test analysis of the mobility and the visually impaired on the strategies for productive participation of the physically challenged persons through TVET in Rivers State

| Group              | X  | SD  | N   | df | Zcal | Zcrit | α    | Decision |
|--------------------|----|-----|-----|----|------|-------|------|----------|
| Mobility impaired  | 4.23 | 1.03 | 170 |    | 282  | 1.33  | 1.960 | 0.05     | Accepted |
| Visually impaired  | 4.19 | 0.98 | 114 |    |      |       |      |          |          |

Source: Researcher’s Field Result, 2020; Accept Ho if zcal ≤ zcrit; Else reject

3.3.2 Hypothesis 2

There is no significant difference between the mean response of the mobility and visually impaired persons on the barriers to TVET implementation to them in Rivers State.

The null hypothesis is accepted since the zcal (0.56) is less than the zcrit (1.96). This implies that there is no significant difference in the mean opinion of the respondents on the barriers to TVET implementation to the physically challenged persons in Rivers State.

3.3.3 Hypothesis 3

There is no significant difference between the mean response of the mobility and visually impaired persons on the strategies that can enhance TVET practices among them in Rivers State.

The null hypothesis is accepted since the zcal (1.33) is less than the zcrit (1.96). This implies that there is no significant difference in the mean opinion of the respondents on the strategies that can enhance TVET practices among the physically challenged persons in Rivers State.

4. DISCUSSION OF FINDINGS

On the extent to which TVET enhances physically challenged person’s employment opportunities in the labour market in Rivers State, the result in Table 1 shows that provision of technical and vocational knowledge is relevant for the employment of the physically challenged persons in Rivers State. This finding is consistent with the report of [23] as avers that case studies have shown that possessing vocational skills significantly increases the physically challenged person’s chance of earning fair income, whether it is in salary or self-employment in the formal or informal sector. The report also indicated that disabled people could acquire vocational skills which will increases their chances of employment through three avenues which include informal sector employment, formal sector apprenticeships and formal vocational training in TVET institutions. Result of this study also revealed that TVET provides the physically challenged persons the requisite technical skills relevant for employment in any technical and vocational related occupations. This finding is in line with [24] who posited that at first glance, China have made significant improvements for youth with disabilities and expanding their opportunities for TVET training and employment. The finding of the study further shows that physically challenged persons trained under qualified special instructors gains employment. This is in agreement with [25] who reported that professional training under qualified instructors and leading if possible, to some form of recognized certification is an essential passport.
to gaining employment for the people with disability.

Results in Table 2 shows that inadequate number of special technical instructors, inadequate support from families, high TVET training fees, negative attitude of employers towards the recruitment of physically challenged persons in technical vocational related occupation are the barriers to TVET implementation to physically challenged persons in Rivers State. This result is in collaboration with [26] who affirmed that negative employer attitudes can is one of the most serious threats to the success of a TVET special employment programme for the physically challenged youths as employers of labour perceives physical challenged persons as taboo. Employing persons with physical challenges may be expected to affect the prosperity of businesses. Negative stereotypical views on the concept of intellectual disability are deep-seated and prevailing most countries. This result was also supported by [27] who opined that in employment markets, youth are often the “last in and the first out,” but for youth with physical challenges, even the possibility of being ‘last in’ is often not a reality. This was as a result of non-possession of qualified certificate or TVET skills. It was further stressed by [28] that lack of inclusion in TVET and skills development initiatives for young people with disabilities foreshadows a lifetime of unemployment and marginal employment among a population eager to work. The result of the study revealed that high TVET training fees, lack of special training courses in training centres were some of the barriers to the implementation of TVET programmes to the physically challenged persons in Rivers State. These findings are in agreement with the findings of [29] who observed that in Malawi and Zambia, training available to people with physical challenges did not correspond to the current or emerging opportunities in the labour market or in enterprise, and in some cases involved skills which were both low-level and out dated.

On the strategies for productive participation of the physically challenged persons through TVET in Rivers State, it was revealed in Table 3 that provision of suitable environment for TVET programme, provision of incentives for the physically challenged persons, inclusion of skills needed by employer were some of the strategies that enhances the productive participation of the physically challenged persons in Rivers State. This result was buttressed by [30] who reported in their comparative analysis of employment services for people with intellectual disabilities in Australia, Finland, Sweden and emphasized the necessity for education and training as a key factor in improving the participation of people with intellectual disabilities in the general labour force. [31] in a study of the special employment project in Zambia, emphasized the central importance of vocational training in appropriate marketable skills and recommended that a market analysis should be undertaken to identify the precise skills potential physically challenged job-seeker needs when vocational training programmes are being designed. Independent living and social skills were also found to be important to successful employment outcomes of people living with disability.

5. CONCLUSION

Conclusively, acquired Technical Vocation Education and Training Programmes skills by physically challenged persons in Rivers State had positive impact on the productive participation of those of them who already have the skills. Hence, lack of employment after training inadequate number of special technical colleges for physically challenged persons, difficulty in practical activities due to health issues of the physically challenged persons are some of the challenges hindering the implementation of TVET programmes among the physically challenged persons in Rivers State. Therefore, the physically challenged persons cannot be productive participants as demand and cannot contribute meaningfully to the society.

6. RECOMMENDATIONS

Based on the findings, the following recommendations were made.

1. At least two (2) TVET special schools and two (2) TVET training centre should be built (set up) in each senatorial zone in Rivers State to help train the physically challenged.

2. All the physically challenged in Rivers State should be subjected to a compulsory TVET programme in order to reduce the rate of unemployment and begging in the state. This will engage the physically challenged persons thereby making them to be self-reliant.

3. There should be employment opportunities for the physically challenged persons by the government and NGOs.
4. Policy on inclusive education and equal opportunity and treatment should be pursued more rigorously without delay. This will give everyone including the physically challenged equal opportunity to education and employment.

CONSENT

Informed and written participant consent was obtained and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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