CSCanada
Higher Education of Social Science
Volume 26, Number 1, 2024, pp. 91-99
DOI:10.3968/13310

ISSN 1927-0232 [Print]
ISSN 1927-0240 [Online]
www.cscanada.net
www.cscanada.org

Evaluation of Technical and Vocational Education and Training (TVET) Programmes in Nigeria: The Kirkpatrick Model

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Received 21 January 2024; accepted 15 February 2024
Published online 26 March 2024

Abstract

This study aims to evaluate Technical and Vocational, Education and Training (TVET) programme in the Federal Polytechnic Ilaro using Kirkpatrick model. The model provided a very reliable and valuable framework of evaluating education and technical training or programmes with four levels of Behaviour, Learning, Reaction and Outcome/Impact. The study population is 14290 students registered during the 2021/2022 academic session of the Institution. Krejcie and Morgam (1974) sampling technique was adopted to have 375 sampled sizes for questionnaire administration purpose. The study purposively selected 375 sample size among the graduating classes in three out of five faculty, in which the institution was divided, to represent fifty percent of the stratification. The choice of graduating classes is to have those that is about to complete their academic programme, and have gone through TVET inclined programmes for self-evaluation on the changes in their behaviour, learning, reaction and noticeable outcome-impact of TVET programme on them in their immediate business environment. Descriptive and inferential statistics were adopted for analysis. The result of the findings through regression analysis produced Adjusted R-Square of -0.005, F Statistics of 0.363 and significant value of 0.780, which indicate that Learning, Behaviour and Reaction has not influence the Outcome or Result of TVET programme. It was concluded that learning, reaction and behaviour were adequate in the TVET programme with most respondents agreeing to the variables used to test the three levels, but has no influence on the Outcome/Impact on the improvement in the trainee's life at the completion of the programme in the Federal Polytechnic, Ilaro, Nigeria.

Key words: TVET; Learning, Behaviour; Reaction; Result; Kirkpatrick Model; Development

Makinde, W. A., & Bamiro,T. O. (2024). Evaluation of Technical and Vocational Education and Training (TVET) Programmes in Nigeria: The Kirkpatrick Model. *Higher Education of Social Science*, *26*(1), 91-99. Available from: URL: http://www.cscanada.net/index.php/hess/article/view/13310
DOI: http://dx.doi.org/10.3968/13310

INTRODUCTION

The acquisition of knowledge and competencies plays a crucial role in the advancement of a nation's social, political, and technological development. In the current context, the significance of Technical and Vocational Education and Training (TVET) is evident as it plays a crucial role in equipping individuals with the requisite knowledge and entrepreneurial abilities that are in high demand within the growing global labour market (Ayonmike, Okwelle, and Okeke, 2015). According to Ogbunaya and Ekereobong (2015), the inclusion of Technical and Vocational Education and Training (TVET) courses is of utmost importance as it equips young individuals with tangible job skills. Consequently, this approach addresses the pressing concern of youth unemployment and helps alleviate the adverse socio-political and economic consequences associated with it. Ngugi and Muthima (2017) as well as Oviawe (2018) posit that the Technical and Vocational Education and Training (TVET) programme has a positive impact on the issue of young unemployment, socioeconomic advancement, and social integration.The revised concept of Technical and Vocational Education and Training (TVET) encompasses the integration of education, training, and skills development across

various occupational domains, services, production, and livelihoods, as stated by UNESCO and cited by Ismail et al. (2018). According to Ayonmike (2014), Technical and Vocational Education and Training (TVET) is an extensive curriculum encompassing the examination of technologies and associated sciences, alongside the acquisition of practical attitudes, skills, knowledge, and comprehension pertaining to various professions within diverse social and economic sectors.

Nevertheless, the outcomes of the implementation of the Technical and Vocational Education and Training (TVET) curriculum in Nigeria have not met the anticipated objectives. The subject under discussion pertains to the ongoing discourse surrounding the employability of Nigerian graduates, as evidenced by the works of Ayonmike (2014), Ogbunaya and Ekereobong (2015), and Abdullahi, Muhammad, and Muhammad (2021). The complexity of this matter is exacerbated by the current high rate of youth unemployment in Nigeria, estimated at over 40% (Adesina, 2022). Moreover, it is imperative to underscore that the poverty rate in the United States has a significant impact on around 90 million individuals, which accounts for 40% of the population. The assessment of Technical and Vocational Education and Training (TVET) programmes in Nigeria holds significant importance in comprehending the challenges they face and their potential to replicate the achievements observed in industrialised nations and certain developing countries globally. Ngure (2015) posits that the assessment of training and educational programmes serves three primary objectives: raising the quality of the programme, validating the necessity of the programme, and determining the profitability of the course for providers. Moreover, various models have been utilised in the scholarly literature to assess training and education initiatives. Nonetheless, the existing body of research in Nigeria lacks sufficient utilisation of the Kirkpatrick model for the evaluation of Technical, Vocational Education and Training (TVET) programmes. Ngure (2015) and Abdelaty and Ibrahim (2017) conducted studies on the topic. The Kirkpatrick model is well recognised as a prominent goal-oriented methodology for the analysis and assessment of training and educational programmes. The evaluation encompasses a range of instructional approaches, encompassing both structured and unstructured methods, with the aim of gauging proficiency across four distinct dimensions: reaction, learning, behaviour, and outcomes. The primary objective of the present study is to evaluate the Technical, Vocational, Education, and Training (TVET) curriculum implemented at the Federal Polytechnic in Ilaro, Nigeria. This evaluation will be conducted using the Kirkpatrick model, which serves as the assessment framework for the study. The selection of the Federal Polytechnic, Ilaro, Nigeria was based on its established reputation as one of the leading polytechnics in Nigeria. The objective of this assessment is to offer significant perspectives to the Nigerian government and Technical and Vocational Education and Training (TVET) institutions regarding strategies for enhancing the growth of TVET in the country, with a particular focus on socioeconomic progress and sustainable development.

LITERATURE REVIEW

The global recognition of Technical and Vocational Education and Training (TVET) stems from its ability to provide individuals with the essential practical skills required for success in the professional sphere (Oviawe, 2018). Technical and Vocational Education and Training (TVET) encompasses the educational components that encompass not only general education, but also the exploration of technologies and associated sciences. Additionally, it involves the development of practical skills, attitudes, understandings, and knowledge pertaining to occupations across diverse sectors of economic and social domains (Federal Republic of Nigeria, 2013). The definition of TVET, as endorsed by UNESCO (2015), encompasses the integration of education, training, and skills enhancement pertaining to a diverse array of occupational domains, encompassing production, services, and sustainable livelihoods. Technical and Vocational Education and Training (TVET) is an ongoing educational system that can be implemented across several levels of education. Typically, vocational education is regarded as being situated within the postsecondary level of education, as its primary objective is to cultivate the practical skills and occupational knowledge of its participants.

Nwosu and Micah (2017) posit that Technical and Vocational Education and Training (TVET) encompasses both technical and vocational education, offering individuals the chance to gain and enhance their skills, competence, and overall productivity within the labour field. Technical education offers a comprehensive understanding of technical concepts, enabling individuals to pursue careers at levels below a bachelor's degree (Okoye & Arimonu, 2016; Opoko et al., 2018). Makinde and Rafiu (2020); Makinde and Bamiro (2023)viewed TVET as a comprehensive tern describing aspect of educational processes involving the study of technologies and sciences related knowledge and occupational training tailored towards various sector of social and economic life.

Some of the goals of TVET are to meet the needs for skilled manpower in a country as well as to support the state of economy of individual and nation (Ayonmike et al, 2015). Therefore, TVET does not only equip participants with vocational and technical skills only but also with broad range of knowledge, attitudes and skills that are meaningful and important in ones work life (Ayomike et al, 2015). TVET is therefore an important option for

young people to acquire skills that will enable them to get employed and contribute to the economic development of Nigeria (Makinde & Bamiro, 2022). These definitions of TVET above shows the importance of the program in ensuring production oriented economy especially in Nigeria.

Owo and Isaac (2022) applied the Kirkpatrick model to evaluating training programs in Nigeria polytechnics. The findings revealed that the model helps to ensure that students acquire the right skills in order to boost efficient and effective skilled and semi- skilled technical manpower that are needed in the various industries. In the study carried out by Ngure (2015) TVET processes was evaluated among key stakeholders in education and business industries. The findings which was guided by Kirkpatrick evaluation model revealed that majority of the stakeholders were happy with the objectives of TVET as well as its provision of skills needed in the industries. However some challenges were also and enumerated.

Wijaya (2017) also evaluated learning programs in vocational education based on the four levels of the Kirkpatrick evaluation model. The results showed that the learning activities was effectively and properly conducted using this model. Ayonmike *et al* (2015) pointed out various factors such as inadequate TVET facilities, poor teaching methods, poor students' assessments and inadequate funding of TVET programs by the government on the side of the students, school and government are responsible for ineffective TVET programmes in Nigeria tertiary institutions. On the other hand, Haruna and Kamin (2019) investigate the challenges for effective TVET using the factor analysis approach. The study through questionnaire administered sought the opinions of the lecturers and supervisors made the findings that ineffective policy and inadequate funding are the main challenges of TVET.

Idjawe (2020) also examined some critical issues that affect the quality of learning outcomes in Nigeria TVET to be inadequate facilities, inadequate funding and ineffective utilization. Other challenges identified by Okwelle and Deebom (2017) are inadequate qualified staff, inadequate funding by the government and poor remuneration of staff are some factors affecting the effective implementation of TV ET in Nigeria. It is based on these that the study evaluates the TVET in the Federal Polytechnic of Ilaro with the application of Kirkpatrick model using the four levels of evaluation.

Kirkpatrick model was proposed by Donald Kirkpatrick in 1959. This model is one of the most widely used model to evaluate training and education because of its high validity and reliability. The model evaluates based on four levels namely; behaviour, reactions, learning and result or impact (Kirkpatrick & Kirkpatrick, 2006).

The behaviour level helps to know the changes that occur in the behaviours of the participants (students) as a result of the training program in the environment. It measures how the students apply what they have learnt during the TVET to their job. This is the degree to which students apply the TVET with effect in their behavior which can be observed after several months of training depending on the situation.

The reaction level is the level of feelings and satisfaction of the participants about the training program. It assesses how the participants engaged, contributed and responded to the facilitators in order to know how well the training program is being perceived. It is the degree to which the student participating find the training as favorable, suitable, relevant and engaging to their jobs. This evaluates how the students feels and react to the TVET experiences (Kirkpatrick & Kirkpatrick, 2006). To measure this behaviour level, inputs that the students have received over the months from TVET in the Federal Polytechnic of Ilaro is examined.

The learning level evaluates the level of skills, knowledge and values that are acquired by the participants from training program. The learning level measures what the participant feels he/she will be able to do, how certain they are and how motivated they are to perform it. This evaluates the extent to which students acquire the knowledge, skills, ability, confidence, attitudes and commitment. This is used to measure the increase in the intellectual capabilities or the knowledge acquired from the TVET programmes (Kirkpatrick & Kirkpatrick, 2006).

The outcome or result level is the achievement of the target outcome due to the training accountability and support giving. This is the effect of the improved performance of the training on the business environment (Kirkpatrick & Kirkpatrick, 2006).

Kirkpatrick has several advantages, as it has been applied by many scholars who identified that the main strength of the model lies in its simple language in dealing with many outcomes and how those outcomes can be obtained. The model also focuses on the outcomes of the behaviours of the participants in the training (Bates, 2004; Paull, Whitsed and Girardi, 2016). The model has been applied by different authors in various aspects (Saks & Haccoun, 2010) such as on leadership development training programs (Miller, 2018); on training courses (Farjad, 2012); on online group work approach (Baskin, 2001); on writing course (Aryadoust, 2017); on curriculum intervention (Paull et al, 2016); on institutional approach (Quintas et al, 2017); on training programme (Masood & Usmani, 2015); on research (Abdulghani et al, 2014); on online information management training courses (Chang & Chen, 2014); on health information management courses (Rouse, 2011); and on teacher training program (Sahin, 2006).

With all these above identified, it can be inferred that Kirkpatrick model has offered a great contribution to the theory of evaluation and practice. Nevertheless, it also has

its limitations as it has been criticized by some scholars over the years. According to Alliger and Janak (1989), the model is not suitable for business world and can only be limited to the higher education and training because the model is tiered and the levels are structured in an increasing order of importance which professionals tends to disregard the lower levels of the model and address the higher-level ones. This was supported by the submission of Lambert (2011) that learning in the multifarious environments of higher education can be without any limitations. It is based on this fact that this model was applied to this study as it is seen as the most applicable model in evaluating TVET in the Federal Polytechnic of Ilaro, Nigeria.

Although Lambert (2011) made submission that that the application of the model in higher education has not been paid much attention but Steele et al (2016) pointed out that even in higher education that this theory is applied, there are tendencies to restrict evaluation from getting to the lower levels of the model. According to Rouse (2011) the model was oversimplified as it did not put into consideration the contextual factors within the program. Yardley and Dorman (2012) observed that the model does not explore multi-dimensional outcomes that can be ascertained but rather focus on the intended outcomes only and disregard the unintended outcomes. Despite criticisms, the Kirkpatrick model has been largely accepted as one of the best Goal-based models for evaluating training and educational programmes.

METHODOLOGY

The study used a descriptive research design, with a questionnaire distributed to a representative sample of respondents. The study population includes 14,290 students from the Federal Polytechnic in Ilaro, Ogun State, Nigeria. A multistage sampling approach was used in the study. The first stage is the adoption of Krejcie and Morgan's (1970) to have 375 sample size for questionnaire administration purpose. The second stage entails applying to fifty percent of the faculty/schools at the institution in order to select three faculty for the study. The faculty considered for this study are Management, Engineering, and Pure & Applied Sciences. The third stage involves selecting respondents from the finalist classes (ND 2 and HND 2) at the selected faculty in the Federal Polytechnic Ilaro in Ogun State, Nigeria. The study made use of both primary and secondary data sources. Primary data comes from the administration of questionnaires, whereas secondary sources include magazines, Internet-based resources, historical papers, and official publications. Descriptive statistics, such as frequency distribution tables and percentages, as well as inferential statistics, such as linear regression, will be used to evaluate the collected data.

DATA PRESENTATION, ANALYSIS AND DISCUSSSION OF FINDINGS

Table 1
Responses on the Trainee's Reaction toward TVET Programme

S/N	Questions	Agreed		Disagreed		Total		Mean Value
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
1	The TVET programme objectives were clear and specific	220	60.4	144	39.6	364	100	2.81 (4th)
2	The instructors were well qualified and prepared	219	60.2	145	39.8	364	100	2.80 (5th)
3	The amount of time scheduled was sufficient	183	50.2	181	49.8	364	100	2.60 (6th)
4	The method of training used were suitable	328	90.1	36	9.9	364	100	3.40 (1st)
5	The schedule of the programme was suitable	291	79.9	73	20.1	364	100	3.20 (2nd)
6	There is adequate practical know-how in TVET programme	219	60.2	145	39.8	364	100	2.90 (3rd)
	Average mean value on reaction							2.95

Source: Fieldwork, 2022

Table 1 summarises the data gathered about trainees' perceptions and attitudes towards technical vocational education and training at the Federal Polytechnic, Ilaro in Ogun State, Nigeria. According to the findings, 220 participants, or 60.4% of the total respondents, agreed with the clarity and precision of the TVET program's objectives. In contrast, 144 participants, or 39.6% of all responders, voiced dissatisfaction. The previously indicated variable is ranked fourth, with a mean value of 2.81. Furthermore, it was shown that 219 people, or

60.2% of the total sampled respondents, agreed on the teachers' high level of qualification and preparedness. In contrast, 145 respondents, or 39.8% of the total sampled respondents, disagreed with this assertion. The variable under consideration is ranked sixth, with a mean value of 2.80.

Similarly, out of the total number of respondents questioned, 183 people (50.2%) agreed that the allotted time for the TVET curriculum was adequate. In contrast, 181 respondents, or 49.8% of the total sample, voiced disagreement. With an average value of 2.60, the variable came in sixth position. A total of 328 respondents, or 90.1% of the sampled respondents, agreed that the training approach used for the TVET curriculum was appropriate. In contrast, 36 respondents, or 9.9% of those polled, voiced dissatisfaction. With a mean value of 3.40, the variable in question has obtained the highest rank.

A total of 291 respondents, or 79.9% of the sampled respondents, agreed that the TVET programme schedule was appropriate. In contrast, 73 respondents, or 20.1% of those polled, voiced dissatisfaction. The variable in question is ranked second, with a mean value of 3.20. Furthermore, it was shown that 219 persons, or 60.2% of the total selected respondents, agreed with the presence of appropriate practical knowledge in the Technical and Vocational Education and Training (TVET) curriculum. In contrast, 145 respondents, or 39.8% of the total sample, disagreed with this statement. The variable under consideration is ranked third, with a mean value of 2.90.

Table 2
Result on the TVET Learning of Programme Objective

S/N	Questions	Agreed		Disagreed		Total		Mean value
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
1	There are new skills, knowledge and attitude from TVET programme	255	70.0	109	30.0	364	100	3.00 (4th)
2	The programme increased the effectiveness in accomplishing works or jobs	220	60.4	144	39.6	364	100	2.81 (5th)
3	TVET programme aims at understanding the learner's group of ideologies, instruction, knowledge and skill	292	80.2	72	19.8	364	100	3.41 (1st)
4	TVET programme produce graduate with special professionalism and innovation	256	70.3	108	29.7	364	100	3.11 (2nd)
5	TVET programme equipped intending graduate with technology necessary for self-employment	256	70.3	108	29.7	364	100	3.11 (2nd)
	Average mean value on learning							3.09

Source: Fieldwork, 2022

Table 2 presents the responses of students enrolled at Federal Polytechnic, Ilaro, located in Ogun State, Nigeria, regarding their experiences with technical vocational education and training. The findings of the study indicate that a majority of the sampled respondents, namely 255 individuals or 70.0% of the total, expressed agreement with the notion that the TVET curriculum effectively imparts new skills, information, and attitudes. Conversely, a smaller proportion of respondents, specifically 109 individuals or 30.0%, expressed disagreement with this statement. With an average value of 3.00, this variable is ranked fourth. Moreover, a total of 220 participants, constituting 60.4% of the entire sample, expressed agreement on the program's ability to enhance work or task efficiency. Conversely, 144 respondents, accounting for 39.6% of the overall sample, expressed disagreement. The variable in question possesses a mean value of 2.81, placing it in the fifth position.

In a similar vein, it was found that 292 participants, constituting 80.2% of the entire sample, concurred with the notion that the objective of a Technical and Vocational Education and Training (TVET) course is to facilitate the understanding of the learner's collective set of values, pedagogy, knowledge, and skills. Conversely, 72 respondents, accounting for 19.8% of the total sample, expressed disagreement with this proposition. At the time point of 3.41, this particular variable has the greatest average value. According to the findings of the survey, a significant majority of the respondents, specifically 70.3%, expressed their belief that the TVET programme effectively cultivates graduates who possess exceptional levels of professionalism and originality. Conversely, a smaller proportion of the participants, accounting for 29.7%, held a differing viewpoint on this matter. The variable in question is ranked second based on its mean value of 3.11. In the study, a total of 256 respondents, accounting for 70.3% of the sampled respondents, expressed agreement on the TVET programme's provision of essential technologies for self-employment. Conversely, 108 respondents, constituting 29.7% of the sample, expressed disagreement with this notion. The variable in question is listed as the second highest, with an average value of 3.11.

Table 3
Responses on the Trainee's Behaviour after TVET Programme

S/N	Questions	Agreed		Disagreed		Total		Mean Value
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
1	TVET programme created a positive influence in relationship with colleague	255	70.0	109	30.0	364	100	3.00 (5th)
2	TVET programme will contribute to graduate development in future	256	70.3	108	29.7	364	100	3.01 (3rd)
3	TVET programme has change the behaviour of student from job seekrs to job creators	255	70.0	109	30.0	364	100	3.01 (3rd)
4	TVET programme change the orientation of trainee on business concept creation and proposal writing	291	79.9	73	20.1	364	100	3.30 (1st)
5	TVET programme will enhance intending graduate performance on their job/work	291	79.9	73	20.1	364	100	3.10 (2nd)
	Average mean value on behaviour							3.08

Source: Fieldwork, 2022

Table 3 shows trainee replies to questions on their behaviour after completing technical vocational education and training at the Federal Polytechnic, Ilaro, Ogun State, Nigeria. According to the findings, 255 respondents, or 70.0% of the total sampled respondents, agreed that the TVET programme had a beneficial impact on relationships with coworkers, whereas 109 respondents, or 30.0% of the total selected respondents, disagreed. This variable ranks fifth in terms of mean value (3.00). Furthermore, 256 respondents, or 70.3% of the total sampled respondents, believed that TVET will contribute to graduate growth in the future, whereas 108 respondents, or 29.7%, disagreed. This variable ranks third in terms of mean value (3.01).

Similarly, 255 respondents, or 70.0% of those polled, agreed that the TVET programme had turned students from job searchers to job creators, while 109 respondents, or 30.0% of those polled, disagreed. With an average value of 3.01, these variable ranks third. 291 respondents, or 79.9% of the total sampled respondents, agreed that the TVET programme changes trainees' perspectives on business concept development and proposal writing, while 73 respondents, or 20.1% of the total sampled respondents, disagreed. At 3.30, this variable has the highest mean value. Finally, 291 respondents, or 79.9% of the total sampled respondents, agreed that the TVET programme will increase the job/work performance of intending graduates, whereas 73 respondents, or 20.1%, disagreed. This variable is ranked second with a mean value of 3.10.

Table 4
Responses on the Result of TVET programme on Trainee

S/N	Questions	Agreed		Disagreed		Total		Mean Value
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
1	TVET programme has resulted to potentital graduate setting up personal business while in school	132	36.2	232	63.8	364	100	2.09 (4th)
2	TVET programme has helped graduating student in quality business proposal writing	99	27.2	265	72.8	364	100	2.00 (5th)
3	TVET programme has changed graduating student from potential job seekers to job creators	198	54.4	166	45.6	364	100	2.73 (1st)
4	TVET programme has changed graduating set orientation of life after graduation	165	45.3	199	54.7	364	100	2.64 (2nd)
5	TVET programme has resulted to reduction in youth unemployment	132	36.2	232	63.8	364	100	2.27 (3rd)
	Average mean value on result							2.35

Source: Fieldwork, 2022

The results of technical vocational education and training (TVET) on trainees at the Federal Polytechnic, Ilaro in Ogun State, Nigeria, are presented in Table 4. According to the data, 132 participants, or 36.2% of the total sampled, agreed with the premise that the TVET curriculum has resulted in prospective graduates creating their own firms while still in school. In contrast, 232 individuals, or 63.8% of the total sample, disagreed with this viewpoint. The variable under consideration is ranked fourth, with a mean value of 2.09. Furthermore, it was discovered that 99 persons, representing for 27.2% of the total sampled respondents, agreed with the notion that the TVET course has been effective in developing the skills of graduating students in the area of business proposal writing. In contrast, 265 respondents, or 72.8% of the total number of respondents, disagreed with this assertion. With an average value of 2.00, the variable in question is ranked fifth in the world.

Similarly, 198 respondents, or 54.4% of the studied participants, agreed that the TVET programme has turned graduating students from being job seekers to employment producers. In contrast, 166 respondents, or 45.6% of the total selected participants, disagreed with this viewpoint. With an average value of 2.73, the aforementioned variable ranks first. A total of 165 respondents, accounting for 45.3% of the total sampled respondents, agreed that the TVET programme had altered the graduating cohort's post-graduation outlook. In contrast, 199 respondents, or 54.7% of the total sampled respondents, disagreed with this viewpoint. With an average value of 2.64, the variable in question is ranked as the second highest. Finally, 132 respondents, or 36.2% of the studied population, agreed that the TVET programme has contributed to a drop in youth unemployment. In contrast, 232 respondents, representing 63.8% of the sampled population, disagreed with this viewpoint. The previously indicated variable is ranked third, with a mean value of 2.27.

REGRESSION ANALYSIS ON THE EVALUATION OF TVET PROGRAMMES IN THE FEDERAL POLYTEHCNIC, ILARO, NIGERIA

This section examines the relationship between the Four levels of Behaviour, Reactions, Learning and Outcome/ Result identified by Kirkpatrick model to evaluate education and training programme, which is adopted to evaluate TVET programme in the Federal Polytechnic, Ilaro, Ogun State, using multiple linear regression analysis. In this analysis, Behaviour, Learning and Reaction are separate independent variable to check their effect on the dependent variable (Outcome/Result). The test was conducted at 0.05 level of significance.

The result of the analysis shows that Reaction has coefficient of 0.042 and P-value of 0.658, which indicate that the variable has insignificant effect on outcome or result of the TVET programme. Also, the analysis revealed that Learning has coefficient of 0.022 and P-value of 0.792, which indicate that Learning has no significant effect on Outcome or Result of TVET programme. In the same vein, the analysis on Behaviour shows coefficient of 0.000 and P-value of 0.996, which indicate that Behaviour has no significant influence on the Outcome of the TVET programme. Overall, the regression analysis produced Adjusted R-Square of -0.005, F Statistics of 0.363 and significant value of 0.780, which indicate that Learning, Behaviour and Reaction has not influence the Outcome or Result of TVET programme. Based on the assumption of Kirkpatrick model, outcome or result is the improved performance of the trainee in the business environment due to changes in their behaviour, reaction to the relevance of the training and skills or knowledge learned. However, the result of the analysis revealed that despite changes in behaviour, skill learned and reaction of trainee to its relevance, the expected outcome in the business environment from those trained cannot be ascertained. The findings predict that there are other variables, not consider by this model and this study, affecting the expected outcome of TVET programme in the Federal Polytechnic, Ilaro, Nigeria.

CONCLUSION AND RECOMMENDATIONS

The research findings suggested that the reaction, learning, and behaviour of TVET programme participants were judged satisfactory, as most respondents agreed with the variables used to assess these three dimensions. However, the results showed no obvious improvement in the trainees' quality of life following completion of the TVET programme. This observation indicates that, in addition to the policy objectives or curriculum, there are additional elements that impede the efficacy of the TVET programme (response), the acquisition of skills, information, and attitudes from the TVET programme (learning), and the impact of the TVET programme on trainees' behaviour (behaviour). Extraneous variables that are not considered or included in the Kirkpatrick model's development, specifically those of an environmental nature (such as political, economic, social, technological, and legal factors), must be investigated in relation to their impact on the outcomes of the TVET programme at the Federal Polytechnic Ilaro, Ogun State, Nigeria.

The research recommends that;

i. Management strengthen their areas of strength in their Technical and Vocational Education and Training (TVET) programmes in order to improve the institution's performance and global ranking in Africa and globally.

ii. The government's supply of infrastructure is critical in assisting the creation and development of young firms that arise from Technical and Vocational Education and Training (TVET) programmes in Nigeria.

iii. It is proposed that the government increase its financial allocation to education, with a special emphasis on Technical and Vocational Education and Training (TVET), in order to reduce the nation's present unemployment rate.

v. The government should consider providing subsidies, grants, and tax breaks to graduates of TVET programmes who demonstrate a willingness to start small businesses.

iv. To ensure a continuous and high level of performance in Technical and Vocational Education and Training (TVET) in Nigeria, there is a need for ongoing training of both academic and non-academic employees.

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