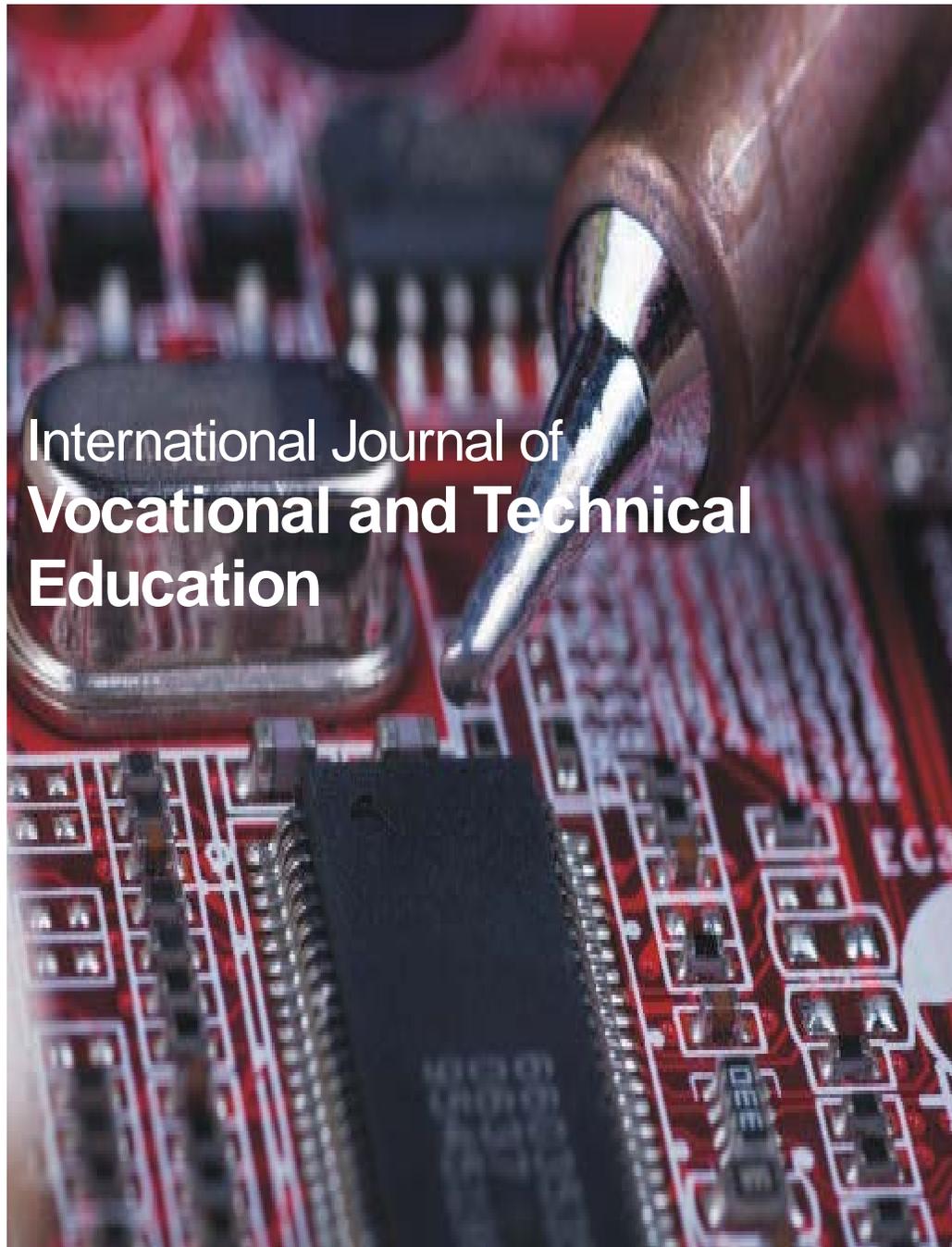


OPEN ACCESS



International Journal of  
**Vocational and Technical  
Education**

January-June 2022  
DOI: 10.5897/IJVTE  
[www.academicjournals.org](http://www.academicjournals.org)



**ACADEMIC  
JOURNALS**  
expand your knowledge

## About IJVTES

The International Journal of Vocational and Technical Education (IJVTE) Provides rapid Publication (monthly) of articles in all areas of the subject such as apprenticeship systems, Procedural knowledge, industrial training, entrepreneurship education, Memory vocabulary Learning strategies etc.

The Journal welcomes the submission of manuscripts that meet the general criteria of significance and scientific excellence. Papers will be published shortly after acceptance. All articles published in IJVTE are peer-reviewed.

### **Open Access Policy**

Open Access is a publication model that enables the dissemination of research articles to the global community without restriction through the internet. All articles published under open access can be accessed by anyone with internet connection.

The International Journal of Vocational and Technical Education is an Open Access journal. Abstracts and full texts of all articles published in this journal are freely accessible to everyone immediately after publication without any form of restriction.

### **Article License**

All articles published by International Journal of Vocational and Technical Education are licensed under the [Creative Commons Attribution 4.0 International License](#). This permits anyone to copy, redistribute, remix, transmit and adapt the work provided the original work and source is appropriately cited. Citation should include the article DOI. The article license is displayed on the abstract page the following statement:

This article is published under the terms of the [Creative Commons Attribution License 4.0](#)  
Please refer to <https://creativecommons.org/licenses/by/4.0/legalcode> for details  
about [Creative Commons Attribution License 4.0](#)

## **Article Copyright**

When an article is published by in the International Journal of Vocational and Technical Education, the author(s) of the article retain the copyright of article. Author(s) may republish the article as part of a book or other materials. When reusing a published article, author(s) should;

Cite the original source of the publication when reusing the article. i.e. cite that the article was originally published in the International Journal of Vocational and Technical Education. Include the article DOI Accept that the article remains published by the International Journal of Vocational and Technical Education (except in occasion of a retraction of the article) The article is licensed under the Creative Commons Attribution 4.0 International License.

A copyright statement is stated in the abstract page of each article. The following statement is an example of a copyright statement on an abstract page.

Copyright ©2016 Author(s) retains the copyright of this article.

## **Self-Archiving Policy**

The International Journal of Vocational and Technical Education is a RoMEO green journal. This permits authors to archive any version of their article they find most suitable, including the published version on their institutional repository and any other suitable website.

Please see <http://www.sherpa.ac.uk/romeo/search.php?issn=1684-5315>

## **Digital Archiving Policy**

The International Journal of Vocational and Technical Education is committed to the long-term preservation of its content. All articles published by the journal are preserved by [Portico](#). In addition, the journal encourages authors to archive the published version of their articles on their institutional repositories and as well as other appropriate websites.

<https://www.portico.org/publishers/ajournals/>

## **Metadata Harvesting**

The International Journal of Vocational and Technical Education encourages metadata harvesting of all its content. The journal fully supports and implement the OAI version 2.0, which comes in a standard XML format. [See Harvesting Parameter](#)

# Memberships and Standards



Academic Journals strongly supports the Open Access initiative. Abstracts and full texts of all articles published by Academic Journals are freely accessible to everyone immediately after publication.



All articles published by Academic Journals are licensed under the [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](#). This permits anyone to copy, redistribute, remix, transmit and adapt the work provided the original work and source is appropriately cited.



[Crossref](#) is an association of scholarly publishers that developed Digital Object Identification (DOI) system for the unique identification published materials. Academic Journals is a member of Crossref and uses the DOI system. All articles published by Academic Journals are issued DOI.

[Similarity Check](#) powered by iThenticate is an initiative started by CrossRef to help its members actively engage in efforts to prevent scholarly and professional plagiarism. Academic Journals is a member of Similarity Check.

[CrossRef Cited-by](#) Linking (formerly Forward Linking) is a service that allows you to discover how your publications are being cited and to incorporate that information into your online publication platform. Academic Journals is a member of [CrossRef Cited-by](#).



Academic Journals is a member of the [International Digital Publishing Forum \(IDPF\)](#). The IDPF is the global trade and standards organization dedicated to the development and promotion of electronic publishing and content consumption.

## Contact

Editorial Office: [ijvte@academicjournals.org](mailto:ijvte@academicjournals.org)

Help Desk: [helpdesk@academicjournals.org](mailto:helpdesk@academicjournals.org)

Website: <http://www.academicjournals.org/journal/IJVTE>

Submit manuscript online <http://ms.academicjournals.org>

Academic Journals  
73023 Victoria Island, Lagos, Nigeria  
ICEA Building, 17th Floor,  
Kenyatta Avenue, Nairobi, Kenya.

## **Editors**

**Prof. Mzobanzi Mboya**

Nepad Secretariat  
Education and Training  
Johannesburg  
South Africa.

**Prof. N.B. Okelo**

Bondo Univeresity College  
Bondo,  
Kenya.

**Dr. Adrian Adascalitei**

Gheorghe Asachi Technical University  
Iași,  
România.

**Dr. Gazi Mahabubul Alam**

Department of Educational Management,  
Planning & Policy  
Faculty of Education  
University of Malaya  
Malaysia.

## **Associate Editors**

**Dr. Tanya Hathaway**

Teaching and Learning Support  
University of New England  
Australia.

## **Editorial Board**

**Dr. Adams Otuoze U. Onuka**

Centre for Peace and Conflict Studies (CEPACS)  
University of Ibadan  
Nigeria.

**Dr. Mudasiru Olalere Yusuf**

Department of Science Education  
University of Ilorin  
Ilorin,  
Nigeria.

**Dr. Tolga Gok**

Torbali Technical Vocational School of Higher  
Education  
Dokuz Eylul University  
Turkey.

## Table of Content

<b>Impact of lecture attendance on academic performance of business education students in tertiary institutions: A case study of Federal Capital Territory College of Education Zuba-Abuja</b> Henry Osimabale Auru and Sulayman Dauda Gidado	1
<b>Challenges and opportunities for the technical and vocational education and training (TVET) in Somalia: A case for Puntland</b> Abdiqani Ahmed Farah and Dahir Abshir Farah	7
<b>Study of the most important factors supporting the success of entrepreneurship in vocational education: Self-efficacy</b> Ariyono Setiawan and Wiwid Suryono	21

*Full Length Research Paper*

# **Impact of lecture attendance on academic performance of business education students in tertiary institutions: A case study of Federal Capital Territory College of Education Zuba-Abuja**

**Henry Osimabale Auru\* and Sulayman Dauda Gidado**

Department of Business Education, FCT College of Education, Zuba, Abuja, Nigeria.

Received 20 January, 2022; Accepted 14 March, 2022

**This study was conducted to determine the impact of lecture attendance on academic performance of business education students in tertiary institutions with Federal Capital Territory College of Education Zuba-Abuja as a case study. The study was guided by two specific research objectives and null hypotheses. The study adopted a descriptive research design. The population of the study comprised of all the 80 students who registered for BED 220 (Entrepreneurship in Business Education I) in 2017/2018 academic session at the Department of Business Education, Federal Capital Territory College of Education, Zuba-Abuja, Nigeria. Census survey was used which led to the consideration of the entire population for the study. The data used in the study was collected from a secondary source (published result) and the two null hypotheses were respectively tested with Chi-square and t-test at 0.05 level of significance. The findings revealed that a significant relationship exists between lecture attendance and academic performance of business education students in tertiary institutions. It also showed that a significant difference exists between the academic performance of business education students with high rate of attendance and those with low rate of attendance. The study concluded that lecture attendance enables students to be more creative, get first-hand and practical information from the teacher and it was found to be crucial to the acquisition of skills required for sustainable development in Nigeria. As a way forward, the study among others recommended that mandatory attendance should be enforced and teachers should adopt a friendly posture and encourage students to be punctual in the class.**

**Key words:** Impact, lecture attendance, academic performance, business education, students, tertiary institutions.

## **INTRODUCTION**

In response to what constitutes the goal of education in modern society, Fleming (2019) posits that the purpose

\*Corresponding author. E-mail: [probhenri@yahoo.com](mailto:probhenri@yahoo.com).

of education is to help people reach their human potential. It could therefore be deduced from this that human capital development is the most important goal of education since it leads to development of talent, skills and competencies that would enable a person to harness their capacity. The authors of this article are also of the conviction that education has the objective of making the recipients to be skilful in order to enhance their personal growth and contribute meaningfully to societal growth and development. Based on this, Kapur (2018) is of the opinion that education is not only necessary for the progress of an individual; it is also required for the development of communities and nations. To buttress this, Gidado and Daramola (2021) point out that education is an instrument for human resource development because it equips learners with skills, knowledge and competencies that would make them to become functional members of the society. The implication of this is that functional education could make the lives of individuals better and position them to contribute to the development of their communities and nations at large. Business education which in Nigeria is studied from Junior secondary school to tertiary level of education is one of the fields of study that are expected to play a lead role in accelerating the pace of sustainable development in Nigeria. To corroborate this view point, a deduction from Umezulike (2015) shows that business education is a discipline which equips the recipients with skills in entrepreneurship, basic education, business environment and vocational practices that are required for developing potentials of an individual, group and the nation. In the formal educational system, the extent to which learners have acquired the desired skills is often evaluated in order to determine their level of educational attainment (academic performance). Academic performance is perceived by researchers as a learning outcome (Lamas, 2015). In the same vein, Okafor and Dalyopjah (2020) see it as the outcome of educational service. It is also an indicator of achievement which clearly manifests in form of understanding, knowledge or idea which is generally represented by grade (Mamman and Oladeji, 2018). Furthermore, Okafor and Dalyopjah (2020) see academic performance as the extent to which educational goals have been attained by a person, teacher and or an institution. This explains why academic performances are often categorized as excellent, good, average or poor. The identified categories which themselves are associated with grades are arrived at through a standardized system of continuous assessment tests and examinations considered as the common instruments for measuring academic performance, whether at random or fixed interval. As to how academic performance should be evaluated, Ekwesianya (2019) points out that there is no consensus in relation to how academic performance should be evaluated. This shows that any suitable method of assessment can be used to determine the extent to which educational goals have

been attained.

In the conventional educational system, skills and competencies are acquired through constant interaction between the teacher and the students in the classroom. The former delivers the instruction, while the latter listen and participate in the teaching-learning process through engaging their senses of sight, sound, feel and emotions. Learners get the opportunity to engage creatively in the class exercises, they are able to establish a connection between concepts and get vague and abstract points clarified. Furthermore, learners would likely also benefit from facts that are based on the teacher's views or experience as opposed to textbook(s) and be able to think critically due to the questioning technique(s) adopted by the teacher and by implication learn something new or acquire new competencies and expertise in a given discipline. The above conjecture explains why many schools and teachers encourage students to be punctual in class or even make class attendance compulsory and a condition for writing examinations. In line with this, Rothmans (2001) stresses that physical presence in the school and active participation in academic activities would make students to benefit from academic programme. In the same vein, Credé et al. (2010) point out that instructors do encourage their students to attend classes because of the belief that high class attendance leads to increased learning and improve students' grades. Furthermore, Chou and Kou (2012) found out that overall class attendance is the strongest predictor of students' performance. In a study conducted by Marburger in Kamal et al. (2013), using a model which compares the absences of students with the questions attempted in a multiple-choice question paper, it was found out that the probability of an incorrect answer increased by absenteeism from 7 to 14%. Adegoke et al. (2013) in reference to Romer (1993) findings disclosed that class attendance significantly reflected on students' Grade Point Average (GPA). In the same vein, a study conducted by Spaho and Goldoja (2014) reveals that lecture attendance of business students has significant impact on their final success in General Mathematics course and that students who attended more than 10 lectures are more likely to get a passing grade. In the light of these reports, lecture attendance should be taken very serious by students. Furthermore, Demir et al. (2017) found out that lecture attendance increases academic success of students in Medical Physiology, regardless of whether they are first time takers or repeat takers. Finally, the findings of a study conducted by Rico et al. (n.d) indicate a strong correlation between class attendance percentages, pass rate and efficiency rate. According to Rico et al. pass rate is a mathematical relationship between the number of students that passed a subject and the total number of registered students. On the other hand, efficiency rate explains the mathematical relationship between the credits earned by students and

the number of credits they had to register so as to earn the particular credits. It should however be noted that the findings of Rico et al. reveals that class attendance correlates more with efficiency rate than pass rate.

In contrast to the submissions above, Hunter and Tetley (1999) in an earlier study observes that despite fallen attendance rates, pass rates in universities have increased over the years and thus concludes that attendance does not affect examination performance. Similarly, Rodgers (2002) found out that there is no relationship between attendance and academic performance. This owes to the fact that Rodgers implemented an incentive scheme in an undergraduate Introductory Statistics Module in which 1% is deducted from a student's overall mark; whenever they missed tutorial in excess of two. Therefore, when students' attendance and performance were compared with those of the students who took the same module in the previous academic year before the introduction of the incentive scheme, the results indicate an improved attendance without a corresponding academic performance, despite the deduction of the penalty points for non-attendance. On a final note, a study conducted by Doggrell (2020) reveals that there is no association between lecture attendance and academic outcome. A critical examination of the literature reviewed so far shows that both attendance and absenteeism have influence on learning and academic achievement. This owes principally to the fact that while attendance makes the students to have access to first-hand information made available by the teachers, absenteeism denies them such benefits which could lead to poor performance. In the same vein, some studies revealed that class attendance is not a guarantee for good academic performance and absenteeism does not necessarily mean that students would perform poorly in examinations. It is thus, against this background that this study seeks to determine the impact of lecture attendance on academic performance of business education students in tertiary institutions.

### Statement of the problem

As put forward by Kapur (2018), academic performance is influenced by different variables which include attitude of the students, school resources, abilities of the teacher, classroom environment, social, psychological and health factors, counselling and guidance services, time management, home environment and teaching-learning method. A study conducted by Buba and Nwabufo (2020) also revealed that parental level of education has a significant and positive influence on academic achievement of junior secondary schools' students in Business Studies in Adamawa State, Nigeria. Many people view lecture attendance as an important indicator of academic success because it furnishes students with

information made available directly by the teacher. Despite the benefits that are associated with lecture attendance, the researchers observed from preliminary investigation that students do wilfully choose to abscond from lectures. Fayombo et al. (2012) research findings suggest that absenteeism is becoming rampant among students due to reasons such as lack of subject interest, poor teaching strategies adopted by lecturers and unfavourable learning environment. Other reasons advanced for absenteeism among students include too-much socialization, part-time jobs to augment meagre bursaries granted by various sponsors and poor relations with lecturers. These reasons no doubt contributed to the dwindling performance of students in examinations and may impact negatively on their ability to exhibit the desired skills in work environments after graduation. Although, the findings of some studies indicate that absenteeism has no relationship with academic success or failure, a critical examination of the findings of these same studies in the background of inadequate supporting technologies to promote self-study by which academic performance could have been improved or unaffected justifies the need to investigate the impact of lecture attendance on academic performance. Hence, the problem of this study is therefore to empirically determine the impact of lecture attendance on academic performance of business education students in tertiary institutions, so as to bring to the fore and attempt to justify the idea that lecture attendance does lead to academic success.

### Objectives of the study

The objective of the study was to determine the impact of lecture attendance on academic performance of business education students in tertiary institutions. The specific objectives of the study were to determine the relationship between lecture attendance and academic performance of business education students in tertiary institutions and the difference between academic performances of business education students with high and low rates of attendance in tertiary institutions.

### Hypotheses

In line with the research objectives, the following null hypotheses were formulated and tested at 0.05 level of significance:

$H_{01}$ : There is no significant relationship between lecture attendance and students' academic performance in Business education in tertiary institutions.

$H_{02}$ : There is no significant difference between the academic performances of Business education students with high and low rates of attendance in tertiary institutions.

**Table 1.** Relationship between lecture attendance and academic performance of business education students in tertiary institution.

Variable	N	X <sup>2</sup> cal	Alpha ( $\alpha$ )	Df	p-value	Decision
Lecture attendance	80	54.850	0.05	5	0.000	S
Academic performance						

X<sup>2</sup>cal= Chi-square calculated, df= degree of freedom, P-value= probability value, S=significant.

**Table 2.** Summary of t-test on mean difference between academic performances of business education students with high and low rates of attendance in tertiary institutions.

Variable	N	Mean	Standard deviation	Alpha ( $\alpha$ )	df	t-value	p-value	Decision
High attendance rate	58	58.24	7.465	0.05	78	8.770	0.000	Significant
Low attendance rate	22	38.00	12.817					

## METHODOLOGY

The study made use of descriptive survey research design which Enyekit and Enyekit (2015) point out as a design that documents, describes and presents what exists and otherwise in what is being investigated. The study also adopted the census survey which UNESCO (2022) sees as a study that is carried out on all the objects in a given population. This also implies that total population sampling which is seen by Laerd Dissertation (2012) as a purposive sampling technique that could be adopted if the size of the population is relatively small and the population units share similar characteristic(s) was used in the study. Furthermore, another reason for adopting census survey/total population sampling was because, Ademuluyi and Okwuanaso in Umoru and Bala (2018) suggest the use of the entire population if it is less than or equal to two hundred and fifty. Based on these, the entire population of 80 students who registered for BED 220 (Entrepreneurship in Business Education I) in 2017/2018 academic session at the Department of Business Education, Federal Capital Territory College of Education, Zuba-Abuja, Nigeria was used for the study. The students were categorised into two groups based on their percentage rate of attendance. These were; high rate of attendance (50%-100%) and low rate of attendance (0%-49%). Furthermore, A, B and C examination grades with score range; 70-100, 60-69 and 50-59 respectively were considered as good academic performance, while D (45-49), E(40-44) and F (0-39) were taken to be poor academic performance. The data used for the study were obtained from a secondary source (published students' examination result). Hypotheses one and two were respectively tested using Chi-square and t-test with the aid of Statistical Package for Social Sciences (SPSS). The two hypotheses were tested at 0.05 level of significance and the decision rule was that a null hypothesis would be accepted if the p-value was  $\geq 0.05$  and rejected if the p-value was  $< 0.05$ .

## RESULTS

***H<sub>01</sub>: There is no significant relationship between lecture attendance and students' academic performance in Business education in tertiary institutions***

Hypothesis 1 was tested using Chi-square and the

summary is presented in Table 1. Table 1 reveals that there is a significant relationship between lecture attendance and academic performance of Business education students in tertiary institutions. This is because the p-value of 0.000 was less than the alpha ( $\alpha$ ) value of 0.05 leading to the rejection of the null hypothesis.

***H<sub>02</sub>: There is no significant difference between the academic performances of business education students with high and low rates of attendance in tertiary institutions***

Hypothesis two was tested using t-test and the summary is presented in Table 2. From Table 2, it could be seen that there is a significant difference between the academic performance of Business education students with high rate of attendance and those with low rate of attendance. This is because the null hypothesis was rejected as a result of the p-value of 0.000 which was less than the alpha ( $\alpha$ ) value of 0.05.

## DISCUSSION

The major aim of this study was to determine the impact of lecture attendance on academic performance of Business education students in tertiary institutions. The study shows that there was a significant relationship between lecture attendance and academic performance of Business education students in tertiary institutions (p-value = 0.0000 $<$ 0.05). In the same vein, it reveals that there was a significant difference between the academic performance of Business education students with high rate of attendance and those with low rate of attendance (p-value = 0.0000 $<$ 0.05). The study therefore corroborates the works of researchers such as Romer in Adegoke et al. (2013), Kamal et al. (2013),

Spaho and Goldoja (2014), Demir et al. (2017) and Fernandez et al. (n.d) whose findings indicated that class attendance increases academic performance thereby bringing about a positive and significant relationship between the two variables (class attendance and academic performance). Furthermore, the study refutes the findings of Hunter and Tetley (1999), Rodgers (2002) and Doggrell (2020) which all revealed that there is no relationship or connection between class attendance and academic performance.

## Conclusion

The study established that lecture attendance is an important determinant of academic success. This is because it reveals that a significant relationship exists between attendance and academic performance of Business education students in tertiary institutions. It also shows that the students with high rate of attendance performed better than those with low rate of attendance. The pattern of the effect of attendance on performance revealed in this study could only have arisen from the fact that punctuality in class enables students to get first-hand and practical information from the teacher, including the clarification of unclear points and think creatively in line with the questioning technique(s) used by the teacher. The implication of the benefits of punctuality identified in this paragraph is that lecture attendance is an important key needed to facilitate the acquisition of the right knowledge, skills and behaviour in order to achieve sustainable development in Nigeria. The researchers however suggest that further studies should be conducted on influence of other variables such as strike action, attendance policy, personal study, e-books, e-lectures and tutorials among others that were not addressed in this particular study on academic performance of Business education students.

## Recommendations

Based on the findings of the study and the conclusion which was drawn, the following recommendations were suggested. Mandatory attendance should be enforced by teachers and school managements through a college-based attendance policy. Also, teachers should encourage and mentor students regarding the positive benefits of being punctual in class. They could also help by organizing tutorials and revision classes for students so as enable the absentees to learn what they missed when they were absent in the class. The essence of these is to make the students to acquire the right skills, improve credibly and perform well in examination and the world of work. In addition, parents/guardians should inculcate the habit of punctuality in their children/wards right from the elementary level so as to make them to be positively reinforced to always be in class while at the

tertiary level of education.

## CONFLICT OF INTEREST

The authors have not declared any conflict of interest.

## ACKNOWLEDGEMENT

The researchers sincerely appreciate and acknowledge the contribution of Tertiary Education Trust Fund (TETFund) for expanding the frontiers of research and shared knowledge through sponsoring this particular research effort.

## REFERENCES

- Adegoke BO, Salako RJ, Ayinde LA (2013). Impact of attendance on students' academic performance in ICT related courses: Faculty of Engineering, Osun State Polytechnic, Iree. *Journal of Education and Practice* 4(16):95-98.
- Buba MM, Nwabufu BN (2020). Influence of parental levels of education on students' academic achievement in Business studies in public junior secondary schools in Adamawa State, Nigeria. *Journal of the Business of Education* 3(1):53-64.
- Chou PT, Kuo Y (2012). Examining factors relating to classroom attendance and performance. *Journal of Studies in Education* 2(2):193-204.
- Credé M, Roch SG, Kieszczyńska UM (2010). Class attendance in college: a meta-analytic review of the relationship of class attendance with grades and student characteristics. *Review of Educational Research* 80(2):272-295.
- Demir EA, Tukuk O, Dogan H, Egeli D, Tumer C (2017). Lecture attendance improves success in medical physiology. *Advances in Physiology Education* 41:599-603.
- Doggrell SA (2020). No apparent association connection between lecture attendance or accessing lecture recordings and academic outcomes in a medical laboratory course. *BMC Medical Education* 20(207):1-12.
- Ekwesiana AA (2019). Contribution of Facebook to academic performance of university business education undergraduates in AbiaState. *Conference proceedings of Association of Business Educators of Nigeria* 6(1):232-241.
- Enyekit EO, Enyekit KEO (2015). Extent of Availability of School Plants and Facilities for Effective Teaching Administration of Business Education Programmes in Tertiary Institutions in Rives State. *Nigerian Journal of Business Education* 2(2):118-128.
- Fayombo GA, Ogunkola BJ, Olaleye YL (2012). Cross institutional study of the cuses of absenteeism among university students in Barbados and Nigeria. *Journal of Educational and Developmental Psychology* 2(1):122-136.
- Fleming E (2019). What are the most important goals of education? Retrieved from <https://www.sidmartibio.org> on 17/02/2022.
- Gidado SD, Daramola R (2021). School supervision and inspection: Strategies for quality assurance in business education in post COVID-19era. A paper presented at the maiden National conference of the Faculty of Education Kwara State University, Maleté.
- Hunter S, Tetley J (1999). Lectures: Why don't students attend? Why do students attend? Proceedings of HERDSA annual international conference held in Melbourne 12-15 July 1999, Higher Education Research and Development Society of Australia, Milperra, NSW.
- Kamal MF, Waseem MA, Mujtaba BG (2013). Comparative analysis of the effect of attendance on academic performance of management and finance course students. *World Applied Sciences Journal* 24(12):1651-1655.
- Kapur R (2018). Factors influencing student's academic performance in

- secondary schools in India. Retrieved from <https://www.researchgate.net/publication/324819919>.
- Lamas H (2015). School performance. *Propositos y Representaciones* 3(1):313-386.
- Laerd Dissertation (2012). Total Population Sampling. Retrieved from <http://dissertation.laerd.com/total-population-sampling.php> on 30/6/2018.
- Mamman JS, Oladeji AD (2018). Influence of social media on communication skills and academic performance of business education students in colleges of education in south-west, Nigeria. *Conference proceedings of Association of Business Educators of Nigeria* 5(1):296-305.
- Okafor EC, Dalyopjah RK (2020). Teachers' educational factors as determinants of students' academic performance in office technology and management (OTM) courses. *Conference proceedings of Association of Business Educators of Nigeria* 7(1):597-606.
- Rico JEF, Fernandez SF, Suarez AA, Camblor PM (n.d.). Importance of university lecture attendance. *Vice-chancellorship for Quality, Planning and Innovation*, pp. 1-10.
- Rodgers JR (2002). Encouraging tutorial attendance at university did not improve performance. *Australian Economic Papers* 41(3):255-266.
- Rothman S (2001). School absence and student background factors: A multilevel analysis. *International Education Journal* 2(1):59-68.
- Spaho A, Goldoja M (2014). Lecture attendance and success on General Mathematics. Case study of first-year business students, University of Tirana, Albania. *International Journal of Research in Business Management* 2(5):73-78.
- Umezulike A (2015). Achieving a reliable and desirable sustainable national development through adequate funding of Business Education Programme. *Nigerian Journal of Business Education* 2(2):83-89.
- Umoru TA, Bala Y (2018). Office Technology and Accounting Skills Possessed by Business Education Students in Colleges of Education for Management of small Scale Businesses in Adamawa State. *Nigerian Journal of Business Education* 5(1):370-383.
- UNESCO Institute of Statistics (2022). Census survey, retrieved from <http://uis.unesco.org/en/glossary-term/census-survey> on 11/01/2022

*Full Length Research Paper*

# **Challenges and opportunities for the technical and vocational education and training (TVET) in Somalia: A case for Puntland**

**Abdiqani Ahmed Farah\* and Dahir Abshir Farah**

Hayaan Institute for Research and Policy, Garowe, Puntland, Somalia.

Received 10 March, 2022; Accepted 31 May, 2022

The purpose of this paper is to examine the context and circumstances surrounding technical and vocational education training (TVET) in Somalia in general, and Puntland State in particular, in order to have a positive impact on reducing chronic youth unemployment, which currently stands at 67% across the country. The existing condition, difficulties, and prospects of the TVET education industry in Puntland were surveyed in the first section using secondary sources. Second, a quantitative survey was undertaken using the questionnaire approach to explain Puntland's TVET difficulties and potential to diverse stakeholders. The study's findings suggest that insufficient competent teachers, gender imbalance ratios among teachers in some districts, lack of necessary instructional materials, an imbalance in the distribution of TVET facilities, and a lack of public awareness of its value plague TVET facilities across Puntland. The participating governmental ministries have a lot of administrative overlap because they all want to get their hands on the sector's international donor fund. Another important finding of the poll is that university graduates are frequently unemployed due to a lack of automation for available occupations. Puntland's TVET education also lacks clarity on the roles of the private and governmental sectors, as well as a uniform and unified curriculum. To fulfill enterprise and industry standards, fair access to TVET, increasing its quality and relevance, the government's involvement in controlling the sector's delivery, and financing mechanisms are all vital.

**Key words:** Technical and Vocational Education and Training (TVET), Puntland State, Federal Government of Somali (FGS), skilled worker, standardized curriculum, gender disparity.

## **INTRODUCTION**

Education is the process of transforming and enhancing a person with the goal of passing down knowledge, skills, and cultural heritage from one generation to the next (Ahmad, 2015). It endeavors to draw out the best in a young person's mind. Thus, learning is an indicator of the perfection that has already existed in mankind (Jawara

and White, 2019).

The trend of schooling, formal or otherwise, predates the colonial era, and even the adoption of Islam by the lands that became Somalia (Lewis, 1999). Formal education programmes of learning, though of limited scope, were slowly but steadily established with the

\*Corresponding author. E-mail: [abdiqani.farah@hayaaninstitute.org](mailto:abdiqani.farah@hayaaninstitute.org). Tel: +252906794164.

arrival of colonialism. The schooling scheme in the colonial period was unambitious and chiefly limited to primary schools (Dadfeared, 2018). With independence in 1960, the education sector advanced very rapidly, including the post-primary and post-secondary sectors (Abdi, 1998). The Technical and Vocational Education and Training (TVET) division was established in order to reduce inequalities, through increased training opportunities for the handicapped and learners from disadvantaged communities, as well as women, and above all, to be relevant to the commercial and economic needs of the country (Technical/Vocational Education and Training, 2009). Prior to the collapse of the central government, the state owned and funded all the education systems in the country, and was the sole employer of the graduates, including those from TVET ranks, from all disciplines (Farah, 2020). The 1969 regime subsequently was able to boast that the number of technical and vocational schools had increased from 8 to 17 between 1969 and 1976 (Cassanelli and Abdikadir, 2008). The self-declared government of Somaliland also developed a policy that puts in place procedures intended for the creation of technical and professional institutions as a way of catering for the gaps that exist in the TVET sector (Ahmed, 2009). Since the turn of the century, technical training has been passed down from generation to generation among Somalis in a clan-based context, with the respective craftsmanship limited to a specific clan. Finally, the work presented in here highlights for vocational education is to be equated upon more attention by the various Somali educational authorities, with the aim of making it more comprehensively inclusive, promote social justice, equity and diversity.

## LITERATURE REVIEW

African countries' appraisal of TVET systems finds that the existing status of TVET systems in Africa varies and is delivered according to country at different scales, such as technical and vocational schools, technical colleges, businesses, and internship learning centers (Abdul-Wahab and George, 2009). Moreover, as TVET is a means that could help progress the quality of workforce, the mounting mindfulness of the need to adapt the sector to match the speedy global economic obligation is categorically important (Onwusa, 2021). Thus, most African countries have managed to place the growth of technical and occupational skills at the heart of their development strategy (Kingombe, 2011). According to the Provisional Constitution adopted 1st August 2012 Somalia became federal democratic republic in which Puntland is a member state (Provisional Constitution, 2012). By reviewing the state of TVET in Somalia in general and Puntland in particular, this paper attempts to contribute to filling that critical information gap for decision-makers and policymakers so they are able to

make evidence-based decisions on TVET planning and to impart the best remedies to further advance TVET in Puntland State of Somalia. The political assumptions of the TVET policy should have been analysed and compared to the sub-Saharan, particularly the neighboring countries, then subsequently initiated and enhanced cooperation with them in the sector.

Somalia is considered one of the most heavily indebted and poorest countries in the world (The World Bank, 2021). A situation exacerbated by a long civil war and the absence of a functioning central government for more than a quarter-century (Pape and Karamba, 2019). Somalia established fiefdoms out of the ashes of the civil war, which eventually evolved into the aforementioned different member states of the federal government, with Puntland being the earliest and oldest more peaceful and stable Federal Member State. As a result, a notable improvement has been registered in public sector development and service provision, but the TVET sub-sector of the education sphere has been consistently neglected, as it does not obtain proper technical direction for its accomplishment. It has not been cultivated enough to reduce barriers to skills development, and fails to provide lifelong learning opportunities for youth and adults.

The people of Puntland have been playing an important and visibly unique role in that metamorphosis of craftsmanship history, which finally fledged into TVET, particularly the inception of its administration, although this is somewhat neglected and not given its deserved prominence. Those artisans, craftsmen, and women who produced some valuable native products are today marginalized throughout Somalia. Puntland is no different in that regard. It is obvious that they are called Somali "skilled-men", who at least could manage their daily lives and improve their living standards, disparaging remarks like "Tumaal" (Craftsman) (Lewis, 1994; Cassanelli, 1995). Consequently, the social exclusion of skilled craftsmanship consigned the TVET sub-sector to the fringes of the education sector. As a result, over the years, all over Somalia, technical education, which is a significant factor of human resource development with great potential for adding value to products and services, contributing both to the national economy and the quality of life of the Somali people, has been either lacking or neglected altogether in post conflict Somalia (UNDP, 1981). Against all odds, the skills market in Puntland has huge potential to enhance private sector progress. The skills in high demand include: electrical skills, tailoring/dressmaking, plumbing and sanitation, masonry, metal work, shoe making, fabric design, secretarial skills, management and information communication technology (ICT) (Rieckmann, 2018).

As for the current education settings, Somalia has one of the world's lowest enrollment rates, with only 30% of children registered in lower and upper primary education and even fewer (26%) enrolled in secondary education

**Table 1.** Puntland civil servants' educational background.

The certificate/levels	Number of employees	Percent
PhD	3	0.05
Master's degree	217	4
Graduate	1503	27
Diploma and other certificates	1,040	18
High school	1,619	29
Primary or below (either completed basic school or never had any formal education)	1,206	21.95
Total	5,588	100
(Mean $\pm$ SD)	931.33 $\pm$ 672.2	-

Source: Ministry of Labour, Youth and Sports (MoLYS, 2017).

(MOE&HE, 2020). Access to education, including improvement of adult literacy and access to life skills as well as continuing education for adults and the youth, in Puntland State is still limited, with only 38% receiving schooling, leaving the majority without access to even basic education (MOE&HE, 2020). Girls are at risk of gender-based (sexual?) violence and the limitations of arranged and early marriage (Hujale, 2020). Boys are often enrolled willy-nilly in child labour. There is still a gender disparity in enrollment and completion rates between boys and girls, with only 57% gross enrollment rates (GER) for girls as compared to 70% for boys in Puntland (MOE&HE, 2020).

In most African countries, large numbers of graduates coming out of the formal school system are unemployed (PEC, 2017). In Tanzania the graduates lack the skills required by the labor market and this trend results in mass graduate unemployment (Ndyali, 2016). The same goes to Somalia, as young graduates from higher education institutions virtually lack preparation and switching to work automation skills required by the Puntland labor market (Farah, 2020). This situation has brought into sharp focus the incongruity between training and the "transferrable skills" demanded by the labour market. Critics argue that the absence of input from prospective employers into curriculum design and training delivery is partly responsible for the disparity (PEC, 2017). Another reason that is often cited for the incidence of high unemployment among graduates is the absence of entrepreneurial training in the primary and secondary school curriculum. TVET graduates remain unemployed because they have not acquired the practical, hands-on competencies. There is a disconnection between teaching and the world of work. It is noticeable that Technical and Vocational Education graduates are absent in the statistics of the government civil servants, as per Table 1, over 78% of the government employees have leaving secondary school certificates, whereas 22% have attained primary education and below. While 27% have bachelor's degrees, 4% have master's degrees, and 0.05% PhD degrees (PEC, 2017).

### The current status of TVET education sector in Puntland

The technical and vocational education and training enrollment in 2014 was 3637 of which had been 66% female students and 34% male students. Since then, the subsequent enrollment of the TVET programs had been falling year on year, until in the 2018/2019 session, the total was only mere 1995. This situational analysis reveals the fact that the TVET program has recently been less attractive to potential students. According to the Ministry of Education of Puntland, the original cause of the falling numbers in the program was not explained. Based on the data by the MOE&HE (2016), there are 31 vocational training centers in Puntland. There are a total of 209 instructors teaching these vocational training courses (VTCs), with 65% being male and 35% being female. Another issue worth noting is that 68% of the VTCs in Puntland are privately owned institutions, whereas 32% are government-owned ones. It is quite clear that privately retained institutions dominated the government-maintained VTCs centers by a factor of two.

As stated in the data of MOE&HE (2016), in Appendix Tables 1 to 2, abridged ten VTC are registered in the Nugal region. These ten governmental and privately owned TVET institutions have 52 instructors, of which the majorities are male. In contrast, in the Mudug region only five VTCs were documented, with a total of 25 mentors among these five vocational training centers, where female staff were in the majority. Based on data from the Ministry of Education and Higher Education, the public and private TVET institutions in the Bari region number is five: one public vocational training center and four private ones. These five institutions have a total of 40 instructors with roughly equal numbers of male and female trainers. In the Haylan and Sanaag regions of Puntland, there are four privately owned vocational training centers (VTCs). There are a total of 32 instructors across those four VTCs, with males making up the majority with a 5% margin. The government and privately maintained TVET institutions in the Karkaar

region of Puntland have a total of five VTCs with 33 instructors, of which 67% of the teachers characterized as male instructors, and the rest (33%) are female teachers. In the Sool region, only two VTCs have been registered. Altogether, 23 instructors teach in these centers, of whom 69.5% are male, while 30.5% are female.

### Objectives

The main objective of this survey is to provide essential information regarding opportunities and challenges facing the TVET education system in Puntland, currently the Cinderella of the educational system in the province. The study modernizes and harmonizes TVET in order to transform it into a mainstream endeavor for Puntland's youth development, leading to employment and thus enhancing economic development. An additional aim must be to provide guidance to young people so that they can become fully effective in their careers. Also, it highlights the need for the Puntland government to give TVET a higher priority. In order to make the sector attractive to students, and so create a pool of skilled technicians of both sexes, essential to running a society in the 21st century.

The scope of the study covers three main areas: (1) to summarize the existing contexts of matters on TVET in Puntland in order to indicate the indispensable evidence for the donors and the researchers; (2) to notify the government and policymakers of Puntland on the greatest performance related to the impact assessment of the TVET in terms of the final labour market outcomes of its participants as well as on finest practices regarding efficient design of school-choice matching mechanisms; (3) to discuss choices in formulating and designing TVET impact evaluation specifically in Puntland and Somalia at large.

### Challenges of the TVET

The current TVET curriculum is not producing graduates who have the essential knowledge, skills and attitudes for entry into the workplace. In order to make the curriculum more responsive to the labour market and target resources according to skill priorities, it is important to understand which services are in high demand and which ones are not. Moreover, it is not just significant to identify immediate skill needs, but to be more strategic and think about future skill needs and how to identify them. This will help ensure that policies and strategies for TVET anticipate and support change (MoEHE, 2016-2020). By and large, educational achievement and cognizance level are restricted or limited in Somalia. The 2014 labour force survey (LFS) indicated that 1% of the labour force had attained vocational training. 36% of males and 30% of

females have successfully accomplished secondary education, whereas 21% of males and 9% of females have a first degree at university (NEP, 2017). The UNFPA survey demonstrated the fact that higher education is associated with higher unemployment. Unemployment rates by level of education ranged from 12% for those who have no formal education, 16% for those with primary education, 18% for those with secondary education, and 19% for those with tertiary education. These numbers are clearly suggestive of the need for a wide-ranging effort to boost educational attainment, including vocational education and training (NEP, 2019).

Vocational and technical education in Puntland is currently a minor, neglected educational sub-sector. The term "technical education" refers to post-secondary courses of study and practical training aimed at the preparation of technicians to work as supervisory staff. Although these types of post-secondary TVET courses are not available in Puntland, they refer to lower-level tutoring and training for the preparation of a skilled or semi-skilled workforce in various trades.

In TVET today, there is very little research that has been done on the relationship between skills development and culture. Thus, the question that arises is, 'how do we go about developing systems that fit into the country's culture, values, traditions, and social interaction as well as its particular level of development?' As industry responds to what people value, such as products, TVET needs to appeal to those who cannot make it to the regular education system. Thus, there is not much research done by academics into the country's unique culture and traditions, including values, work habits, relationships among the various sectors of society, and other forms of social traditions and interactions that are still very much adhered to by the majority of the population.

The government of Puntland's budget offers little support for TVET education. To get some perspective, the international community's contribution is indicated only for the year 2014 (Table 2).

The Puntland government spends 48% of its budget on primary education (Grade 1-8 and ABE), 21% is allocated to secondary schooling; while 20% is assigned to educational management and administration. The rest of the budget did not encompass substantial percentages of activity on TVET (ESSP, 2016). The allocation of 1% of the actual government education budget to the TVET subsector confirms suspicions that career and technical education is not a governmental priority. This distorts or damages the students' opportunities and orientation into the world of work. To get some perspective on Puntland administrations' expenditure on the education sector, the 2015 budget breakdown is demonstrated in Appendix Table 3.

So long the administrative challenges of TVET in Puntland are concerned, Governmental Technical and Vocational Training Programs in Puntland are

**Table 2.** Ten-year MOE&HE budget (Government and donor contribution).

Year	Total government budget	MOE&HE actual budget	MOE&HE percentage of total budget	INGO contribution
2010	\$28,020,000	\$5690,71.9	2.0	
2011	\$30,158,200	\$1,055,537	3.5	
2012	\$38,622,800	\$1,351,798	3.5	
2013	\$39,277,340	\$1,351,798	3.5	
2014	\$60,182,150	\$4,212,750.5	7	\$1,666,650
2015	\$60,182,159	\$4,212,751.13	7	
2016	\$70,118,316	\$4,908,282.12	7	
2017	\$67,200,000	\$4,704,000	7	
2018	\$73,920,000	\$5,174,400	7	
2019	\$81,312,000	\$5,691,840	8	
2020	\$346,416,158.99	\$27,713,292.7	8	

Source: MOE&HE and ESSP (2016, 2017).

administered by two different ministries: the Ministry of Education and the Ministry of Labor, Youth and Sports. This overlap is obviously an administrative challenge which has had a detrimental effect on the development of the TVET sector as far as Puntland administration is concerned. The Ministry of Education, the Ministry of Justice, Religious Affairs, and Rehabilitation (MoJRAR), the Ministry of Labor, Youth, and Sports (MoLYS), the Ministry of Commerce and Industry (MOC & I), and the Ministry of Public Works, Construction, and Housing (MoPW & T) are all directly involved in all TVET activities. Therefore, this creates confusion for the donors as well as the recipients (TVET beneficiaries) of programs. There is a great deal of overlap in the terms of reference for the respective ministries that are involved in TVET matters of the Puntland administration. The presidential decree (Number 59327, September 2015), in which the president tries to demarcate the individual mandates of the concerned ministries, states that the Education Ministry is responsible for the management of TVET for education mainstream and polytechnic schools in Puntland, whereas the Ministry of Labour, Youth and Sports is responsible for the management of vocational training for the development of employable skills programs and short term job creation training in Puntland (Gaas, 2015). The presidential decree has unfortunately created a confusion of responsibilities between the two ministries, which, in turn, has undoubtedly hindered the advancement of TVET in Puntland.

Though rehabilitation of technical and vocational education and training in Somalia has been gradually reconstituted for the last four to five years (Rieckmann, 2018), Somali federal government and federal member states put less value on TVET than upon formal schooling (primary and secondary), university, or tertiary education. A secondary problem is that, often, TVET itself does not respond to the demands of the market, as the Puntland government neglected the TVET system in

terms of curriculum development. As a consequence, the TVET sector lacks qualified, competent, and motivated teachers who see the sector as an educational backwater. This has resulted in commercial companies being unable to recruit sufficiently well-trained technical staff.

#### **Poor perception of TVET in Puntland and gender stereotyping and lack of linkage between vocational and general education**

Currently, in Puntland, there is no accepted vision for the future of skills development in TVET around which the government, employers, and workers could unite. In the near future, an increasing number of young people will enter the labor force, necessitating a review of the scope and efficiency of technical education and training. This includes consideration of which ministry should be in charge of developing new and expanded provisions as well as the rate of improvement of publicly-funded TVET. Therefore, it is necessary to urgently adopt the National Skills Strategy for technical education and career development in Puntland. Finally, there are persistent concerns about the quality of technical education and training, which, to underline this, is strictly demand-led in meeting the needs of our economy. The general public believes that vocational education is only appropriate for those who are academically underprivileged. In many other states, including Puntland, graduates of the vocational education stream find it difficult, if not impossible, to proceed to higher education. There is a need to make TVET more attractive and less of an inferior sector. Certain vocational training programs, such as carpentry, masonry, and welding are stereotypically mostly male dominated, whereas dressmaking and tie-dyeing textiles are associated with women and girls who are less gifted academically and have inadequate

technical expertise to drive the TVET system in Puntland.

In many countries, the Ministry of Education principally controls the public TVET institutions, schools, and centers, leaving little room for innovation on the part of the institutions (African Union, 2007). There is a need to increase the operational autonomy of public training providers through decentralization and the devolution of management powers to the institutions. Operational autonomy can be balanced by output-based funding mechanisms that link government funding to institutional performance in the areas of success rates, innovation, and employability of trainees; otherwise, TVET will never get trained and skilled teachers (African Union, 2007).

Because of its negative image, vocational education and training have become isolated from the rest of the country's educational systems. The TVET programs have separate institutions and teachers. This situation tends to reinforce the perception of inferiority of the vocational pathway as a route to a successful career. Therefore, it is important to create a modality that links vocational education to the other sectors of education such as secondary and tertiary education.

### **Lack of harmonized TVET curriculum**

TVET system does not have a unified, harmonized, and standardized curriculum. It is a project-based program. Five ministries of Puntland's government, as aforesaid, are directly involved in TVET activities, without proper unification of course content. According to the MOE & HE, the TVET subsector encompasses seven programs with different levels, such as animal production, auto mechanic, carpentry, construction joinery, electronics, metal fabrication, and plumbing. Some TVET courses omit important areas of skill development and fail to follow technical developments. The TVET subsector faces several other challenges within the system, such as a lack of TVET monitoring and performance evaluation, and inadequate instructional materials and equipment. Those constraints, and many others, undermine the effectiveness of the sector. Moreover, the VTCs have inadequate management systems. This has weakened their effectiveness and relevance to the reality of the workplace or demand of the market. Another substantial challenge is the lack of transfer across streams in the education system.

### **Opportunities of the TVET**

TVET can be designed to contribute to occupational competence through the proper teaching of appropriate skills and training in the development and application of indigenous or local technology. It also must reflect the basic occupational needs of its beneficiaries. Possibilities for individual, community, and national development

include: developing learner confidence and potential through appropriate programs; developing self-sufficiency and independence through real-world expressions and skills; ensuring appropriate learning enhancements for students to identify their vital roles and responsibilities within Puntland; and ensuring vocational training centers are well equipped with the basic skills and knowledge in preparation for the workforce. Developing inclusive programs in which learners will attain the proper skills that lead to the social and economic development of the nation; ensuring practical programs for students to respond constructively to community expectations, cultural imperatives, economic conditions, and national goals.

### **Problem statement**

Puntland has a severe shortage of TVET-trained workers equipped with basic craft and industrial skills to serve society. The impact of the 1991 Somali civil war resulted in a substantial loss of vocationally skilled and trained manpower. That specifically hindered the Puntland government's ability to reach its vision 2024 targets. Furthermore, the Puntland Education Policy Paper, the Puntland Education Act, Revised (2012), Puntland Higher Education Bill (2016), and the Puntland Five-Year Development Plan<sup>3</sup> by MoPDEPIC (2019) as well as the Puntland Second Youth Policy Development (MoLYS, 2017) do not clearly indicate the government's commitment to enhance and improve the TVET sector. For that reason, Puntland is still in dire need of a TVET-trained workforce and, as aforesaid, skilled technicians to meet the demands of the market and reality of the workplaces. Even in those occupational fields that indicate a great demand for a trained labor force, TVET graduates remain unemployed due to a lack of incorporating employability skills into the curriculum of TVET institutions (Oresanya et al., 2014). The insufficiency of the government's commitment and well-articulated policy that could guide the development and management of TVET education exacerbated the issues in Puntland. In addition, there is an acute shortage of qualified instructors while there is no harmonized and standard curriculum. It is clear that demand far outstrips current supply, and that TVET does not reach the majority of young people. Many thousands of young people each year leave schools and universities without having acquired employability skills (Idris and Rajuddin, 2012).

### **METHODOLOGY**

The goal of this study is to learn more about the state of TVET in Puntland, Somalia, as well as the issues that surround it. In addition, to put to the test the TVET issues, opportunities, and decline that the program has been experiencing in Somalia's

**Table 3.** Government submitted breakdown of MOE&HE subsector specific on education.

Subsector	MOE&H Budget	Percentage out of government annual budget 2015
Primary (Grade 1-8) and ABE	\$1,912,247	48
Secondary Education	\$842,540	21
ECE Education	-	0
NFE Education	\$92,171	2
<b>TVET</b>	<b>\$40,074</b>	<b>1</b>
Higher Education	\$150,000	4
Educational Management and Administration	\$801,486	20
Educational Development	\$169,915	4

Source: MOE&HE and ESSP (2016).

Puntland state for some time. Furthermore, the design takes into account the viewpoints of individuals who are most directly involved in the field of education, particularly how the TVET program runs. Purposive sampling, in which components, elements, items, or respondents' qualities are contingent on the researcher's judgment and intuition, was used to select respondents for the study (Kanyonga et al., 2019; Adam and Kamuzora, 2008). A comprehensive planned interview schedule in which all candidates/key informants (30) answered 10 predefined questions in the same order and assessed using a standardized scoring system in a face-to-face setting. Candidates/Key informants with a variety of demographic characteristics were gathered to be interviewed, including age, gender disparity, education level, distinctive institutions, and competence in the TVET subsector. Among them were representatives from higher education institutions/universities, TVET societies, and a number of government agencies, including the Puntland Ministry of Education, Ministry of Labor, Youth, and Sports, and Ministry of Justice. The interviewees' response factors, such as frequencies (n) and proportions (percent), were analyzed and cataloged in a descriptive manner, and the results were reported (Tables 3 to 5) (Dolores and Tongco, 2007). Previous studies on TVET education in Somalia in general and Puntland in particular have also been given priority. Finally, the frequency (n) and proportion (%) of the key informants' demographic data (Table 4) were supplied in scoring method (1, 2, and 3) of the interviewee's response (Table 5).

## RESULTS

As far as demographic data and the respective qualifications of the respondents are concerned (Appendix Table 5), of the total number of 30 key informants who participated in the survey, 90% were male. As for their respective qualifications, 70% held master's degrees, 13.3% had bachelor's degrees, 10% were PhDs, and 3.3% had varying post-secondary certificates. The age of the respondents ranged between 21 and 70 years old.

### Interviewee's responses

As aforementioned, after 30 key informants were retained in the survey, the majority of respondents in the study population were predominantly university-educated males.

Appendix Table 6 shows how interviewees responded to the questions. The scoring is in a predetermined manner in which the three choices given to the respondents are sequentially categorized into 1, 2, and 3, respectively.

1) 70% of the key informants responded that there is a lack of funding, a chronic shortage of qualified instructors and also a wrong perception, mainly based on gender balance, that TVET programs are seen as being largely male-oriented and, at the same time, inferior to the other available secondary and higher education programs. Whereas, 20% replied that there is a severe lack of educational facilities and equipment for the sector and 10% said government policy and commitment toward the sub-sector is missing.

2) When asked about their expertise on the funding of TVET by the Puntland government, 83% of the participants underscored that the sub-sector has not been allocated, since its inception, any funding by the government. 13% of them responded that the Puntland government assigned only 1% of the yearly actual budget of the Ministry of Education, whereas 3% demonstrated that 15% of that annual actual budget of the Ministry of Education is allotted for the sector.

3) 77% of key informants stated that a lack of government prioritization and commitment is the reason TVET education has not received funding. Whereas 23% of the respondents reasoned that "public-private partnership" is absolutely absent.

4) 93% of the key informants underlined and demonstrated the presence of the administrative challenges that sector faces, while 7% of the interviewees opposed the existence of the challenges.

5) When asked about the overlap of five ministries involved in TVET education terms of references hindered the sectors' ability to get properly established and thrive in Puntland state, 73% of the respondents agreed, 17% strongly disagreed, and 10% of the participants were neutral.

6) A majority of the participants considered that there is a cultural challenge that TVET education faces, and 90% of

**Table 4.** Key informants' demographic characteristics.

<b>Demographic characteristics of the key informants</b>	<b>Frequency n = 30</b>	<b>Proportion of informants (%)</b>
<b>Age: n (%)</b>		
21-30	11	37
31-40	12	40
41-50	3	10
51-60	3	10
61-70	1	3
<b>Gender: n (%)</b>		
Male	27	90
Female	3	10
<b>Education level: n (%)</b>		
Certificate	1	4
Bachelor Degrees	4	13
Master Degrees	22	73
PhD Degrees	3	10
<b>Experiences (%)</b>		
1-5 years	11	37
6-10 years	9	30
11-15 years	6	20
16 years and above	4	13

Source: Author

the interviewees said cultural taboos such as disparaging remarks about TVET education (Tumaal) or craftsmen equated with the technical and vocational education and training sector are a main hindrance to the sector. 10% rejected the existence of cultural limitations.

7) 57% of the participants argued that cultural taboos that hinder the development of TVET education could be reduced by massive public awareness. 43% responded that the government's commitment and priority to the TVET sector is the greatest factor that can bring sustainable solutions to the sector.

8) 57% of the participants strongly agreed that TVET education depends on the international agencies' contributed expenditures, while 17% strongly disagreed. Another 27% of the respondents neither disagreed nor agreed and remained neutral on the matter.

9) 67% of the key informants agreed that the TVET curriculum is not harmonized and standardized. 30% of the respondents indicated the curriculum is synchronized. 3% underlined 'none' of these.

10) After exposing the TVET curriculum to the participants of the survey for them to highlight the relevance of the sub-sector's curriculum based on the sought skills for the market demand, 82% of the respondents agreed that the curriculum was not relevant, 11% of them disagreed, and 7% of the participants neither agreed nor disagreed.

## DISCUSSION

Somalia faces the difficulty of having a large number of secondary school leavers and more than 10,000 university graduates every year with little skills and no real possibility of future employment after more than 30 years of civil conflict and chronic rural and urban poverty. The German Corporation for International Cooperation (GIZ) has been collaborating with the Federal Ministry of Planning, Investment, and Economic Development in Somalia on the restoration of TVET since 2018, and it is hoped that TVET rehabilitation will help to reduce chronic youth unemployment, which currently stands at 67% across the country. The Ministry and GIZ have emphasized two significant reasons as a result of the sluggish and gradual recognition of the younger generation's chronic unemployment: the lack of labor market-oriented TVET systems and the chronic shortage of trained teachers. Thus, by reengaging GIZ, the National Federal Government (NFG) established TVET institutes in Hargeisa (Somaliland), Garowe (Puntland), Kismayo (Jubbaland), and Mogadishu, with various programs aimed at easing chronic youth unemployment and the market shortage of trained labor (Rieckmann, 2018). Ironically, with Puntland's ministry of education failing to make the most of the GIZ initiative and the FGS's difficult working relationship with Puntland's

Table 5. Interviewee's response.

Variable	Scoring	Respondents (n) = 30 (%)
<b>The major challenges of TVET: n (%)</b>		
Lack of fund, poor perception of TVET education and lack of qualified Instructors	1	21 (70)
Deficiency of educational facilities	2	6 (20)
Lack of Government policy	3	3 (10)
<b>Based on your understanding on the matter, roughly what is the overall budget of Puntland's TVET programs? n (%)</b>		
No budget (0%)	1	25 (83)
One percent (1%)	2	4 (13)
Fifteen (15%)	3	1 (4)
<b>Why there is no proper funding for the TVET education sector: n (%)</b>		
Lack of Government prioritization and commitment	1	23 (77)
No public-Private Partnership	2	7 (23)
<b>Administrative challenges exist on TVET education: n (%)</b>		
Yes, there is administration challenge	1	28 (93)
No there is no administration challenge	2	2 (7)
<b>Do you agree the overlap of five ministries involved in TVET education terms of references hindered for the sector to get properly established and thrived in Puntland state of Somalia: n (%)</b>		
Strongly agree	1	22 (73)
Strongly disagree	2	5 (17)
Neither disagrees nor agrees	3	3 (10)
<b>Cultural challenge that hinders the development of TVET education: n (%)</b>		
There is cultural challenge	1	27 (90)
There is no cultural challenge	2	3 (10)
<b>How can we reduce cultural taboo in TVET education: n (%)</b>		
Public awareness	1	17 (57)
Government prioritization	2	13 (43)
<b>TVET is an international donations project-based program: n (%)</b>		
Strongly agree	1	17 (57)
Strongly disagree	2	5 (17)
Neither disagrees nor agrees	3	8 (26)
<b>The TVET curriculum is not harmonized and standardized: n (%)</b>		
Agree	1	20 (67)
Disagree	2	9 (30)
Neither agree nor disagree	3	1 (3)
<b>Is the TVET curriculum relevant based on skill that is on demand in the market or if it enhances the employability rate of the graduates (%)?</b>		
Agree	1	82%
Disagree	2	11%
Neither agree nor disagree	3	7%

Source: Author

administrative institutions (United Nations, 2017; Reliefweb, 2020; Farah, 2020), businesses are frantically seeking assistance. They urgently need electricians, carpenters, and masons to mention a few. Right now, companies are seeking those services from far and away. These "skill gaps," the difference between the skills needed for a job and the capabilities of the workforce represent a major constraint on societal and commercial growth.

The study reveals that there are numerous problems in the TVET education industry, with cultural limits and a lack of government commitments being the most significant impediments to the sector's growth. In the Puntland State of Somalia, the general TVET system is currently on the decrease, owing to lower productivity and rising unemployment rates, which are mostly due to a skills deficit. According to data from the MoE&HE (2017), Puntland has 31 vocational training centers, with 67.7% being privately held and 32.3% being government-operated, and a total of 209 instructors (64.6% are male while 35.4% are female). In this regard, the lack of qualified teachers and limited teaching materials are major issues.

As stated in the data of MoE&HE (2017), abridged in (Appendix Table 1 and 5), VTC is registered in the Nugal region. These ten VTC institutions have 52 mentors, of whom 77% are male, whereas 23% are female. The findings show a deficiency of teachers as some centers are struggling with only one teacher, while others have unsustainably settled for two or three instructors. Another aspect worth noting is that the data depicts gender disparity ratios of the teachers at the VTC in the Nugal region and the TVET education sub sector in general.

Furthermore, in the Mudug region, only five (5) VTCs were documented. As in Appendix Table 2, a total of 25 mentors among these 5 vocational training centers shows a chronic shortage of instructors, although, unlike in the Nugal region, the gender disparity ratio of the teachers is not that wide in Mudug VTC centers: 60% of the instructors are female, whilst 40% of them are male. However, in the Bari region, which is the largest province in Puntland that hosts a population of over one million in the commercial hub of Bosaso city, it is quite unreasonable to have only five VTCs Appendix Table 3. In Karkaar province of Puntland, there are five VTCs that recapitulate the government and privately maintained VTC institutions Appendix Table 4. On this site, 33 instructors teach in these VTCs, 66.7% of the instructors are characterized as male instructors. On the other hand, 33.3% are female teachers. In the Haylan and Sanaag regions of Puntland, only four (4) privately owned VTCs have been registered Appendix Table 5. There are a total of 32 instructors in those 4 VTCs, of which 68.75% are male, whereas 31.25% are female. As a matter of fact, two huge and important provinces, such as Haylan and Sanaag, agreed to settle for only four privately-owned VTCs and no absolutely public ones. This triggers a

concern.

Despite the fact that Sool has experienced political tensions between Puntland and Somaliland, it is nonsensical and inappropriate for the region to have only two privately run VTCs Appendix Table 6. Another noticeable issue is the fact that Sool is a single region with only two VTCs. In total, 23 instructors work in the centers, with 69.5% of them being male teachers and 30.5% being female mentors. Only 23 teachers are clearly insufficient for the TVET centers in the Sool region, and the severe scenario of a persistent instructor shortage is critical to the sector's overall development. As a result, there is a lack of prioritization on the part of the Puntland administration in this area.

Out of the 30 key informants retained in the survey. A majority of respondents had attained a university level of education and were predominantly male. The research has designated the different stakeholders, including members from higher educational institutions, civil society organizations, and the public and private sector, to get primary information about the TVET challenges. Most of the respondents underlined that the TVET is lacking funding, exacerbated by a notable deficiency of qualified instructors, while the public's awareness is largely poor. About 83.3% of the key informants highlighted that TVET was not allocated any budget and that this non-sustainable financing mechanisms in TVET demonstrates that the sector is not in the government's priority. That, at the very least, hinders investments by the private sector and foreign donors. One of the main factors for TVET to reach the critical threshold in Puntland, according to the respondents, is cultural challenge. Around 93% of the key informants accentuated that there is severe administration overlap among various directly involved, in one way or the other, in TVET education due to the overlap in their respective mandates. The relevant ministries believe that in order for the TVET education docket to be included in their terms of reference, they must gain access to international donor financing for the sector. The TVET soup is being spoiled by too many cooks. Another major finding of the survey participants is that most university graduates remain unemployed due to a lack of automation (not sure what automation means) for available occupations. In general, higher education institutions generated unskilled graduates, which harmed both the graduates' future prospects and the country's output level. According to the study, TVET education lacks a consistent and harmonized curriculum, as well as ambiguous responsibilities for the private and public sectors due to the lack of a uniform curriculum.

## CONCLUSION AND RECOMMENDATIONS

Most key informants highlighted in major colours that there is a lack of funding; the government has not allocated funding to the sub-sector; tuition fees on TVET

funding should be taken seriously; the overlap of ministries involved in TVET education terms of reference hampered the sector's ability to get properly established and thrive in Puntland State; and dissatisfaction with the sector's dependency on the international community. Thus, if the value of TVET is to be felt in the public and commercial sectors, political stability, transparency, sound economic policies, and reasonable wealth transfer should all be attained (Wahba, 2011). One of the most distinguishing characteristics of TVET is that the curriculum's concentration on the acquisition of applicable skills agrees with the African Union's (AU) goal for the development of the continent's human resources. It recognizes the value of TVET as a means of empowering individuals and believes that it should be customized to meet the demands of the community (African Union, 2007; Tom and Norton, 2021).

The document strongly advocates for equitable access to TVET in order to educate young people from all walks of life with the skills they need to help the country's economy recover and grow, and subsequently assist their families and communities. The report strongly recommends that a state-level TVET conference be convened in order to better engage all stakeholders and improve the quality and relevance of TVET. For the conference to be a success, several political, economic, and social changes found throughout the research study must be carefully examined. Partnership with the private sector by giving them a meaningful role in the sector's development, management, and evaluation; policy changes such as integrating TVET into the government's fiscal policy; development of effective and upgraded uniform TVET curricula; bringing in modern technologies in the institutions; adequately experienced TVET trainers; and close ties with already established international donor communities (Chamadia and Shahid, 2018; Wahba, 2011).

## CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

## REFERENCES

- Abdul-Wahab H, George A (2009). Workshop on Revitalizing TVET Provision in ECOWAS Countries. Abuja: 17th – 20th August 2009. Final workshop report. [http://www.unescobreda.org/sitebreda/pdf/UNESCO\\_ECOWAS\\_Fina\\_Workshop\\_Report\\_Comments\\_on\\_board.pdf](http://www.unescobreda.org/sitebreda/pdf/UNESCO_ECOWAS_Fina_Workshop_Report_Comments_on_board.pdf)
- Adam J, Kamuzora F (2008). Research methods for business and social studies. mzumbe mzumbe book project. P 138.
- Ahmad M (2015). Ilimi Principles of education. Graduate Studies I. Lahore: Ilimi Kitab Khana. Kabeer St, Urdu Bazar Lahore. <https://ilmitabkhana.com/product/ilmi-principle-of-education-b-a-part-i/>
- African Union (2007). Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa. [https://au.int/sites/default/files/documents/39018-doc-15\\_au\\_2007\\_tvete\\_strategy.pdf](https://au.int/sites/default/files/documents/39018-doc-15_au_2007_tvete_strategy.pdf)
- Abdi AA (1998). Education in Somalia: History, distraction, and calls for reconstruction, *Comparative Education* 34(3):327-340.
- Ahmed HS (2009). An Analytical Understanding of How External Sources Inform and Impact Upon Somaliland's National Education and Teacher Education Policy Making Processes. School of Sport and Education Brunel University. <https://core.ac.uk/download/pdf/40045914.pdf>.
- Cassanelli L, Abdikadir FS (2008). "Somalia: Education in Transition," *Bildhaan: An International Journal of Somali Studies* 7:7. Available at: <https://digitalcommons.maclester.edu/bildhaan/vol7/iss1/7>
- Cassanelli L (1995). "Victims and Vulnerable Groups in Southern Somalia." Ottawa: Documentation, Information and Research Branch (DIRB), Immigration and Refugee Board.
- Chamadia S, Shahid M (2018). Skilling for the future: Evaluating post-reform status of "skilling Pakistan" and identifying success factors for TVET improvement in the region. *Journal of Technical Education and Training (JTET)*10:1.
- Dadfeatured (2018). Italian Mogadishu. <https://dadfeatured.blogspot.com/2018/05/italian-mogadishu.html>.
- Dolores M, Tongco C (2007). Purposive Sampling as a Tool for Informant Selection. *Ethnobotany Research and Applications* 5:147-158.
- Kingombe C (2011). Lessons for Developing Countries from Experience with Technical and Vocational Education and Training. *Paper for the International Growth Centre – Sierra Leone country programme*. International growth centre, IGC, <https://www.theigc.org/project/lessons-for-developing-countries-from-experience-with-tvet/>.
- ESSP (2016). Education Sector Strategic Plan 2012 to 2016. Puntland Ministry of education & Higher Education.
- Farah AA (2020). Governance of Somali Tertiary Education Systems: A Case Study in Complexity. *Cultural and Pedagogical Inquiry* 12(1):353-359.
- Farah AA (2020). Puntland That came Into a Cross road Oblivion by Its Sovereign, and a federal Government that had a day trip to Damascus and came back. *Wardheernews*. <https://wardheernews.com/puntland-that-came-into-a-cross-road-oblivion-by-its-sovereigns-and-federal-government-that-had-a-day-trip-to-damascus-and-came-back/>.
- Gaas A (2015). The presidential decree number 593 dated on 27 September 2015. <https://molgov.so/>
- Hujale A (2020). A race against time: the new law putting Somalia's children at risk of marriage. *The Guardian*. <https://www.theguardian.com/global-development/2020/sep/03/a-race-against-time-the-new-law-putting-somalias-children-at-risk-of-marriage> <https://www.giz.de/en/worldwide/70532.html>.
- Idris A, Rajuddin MR (2012). The Influence of Teaching Approaches among Technical and Vocational Education Teachers towards Acquisition of Entrepreneurship Skills in Kano State-Nigeria. *OSR Journal of Humanities and Social Science* 5(3):19-22.
- Jawara A, White W (2019). Challenges Affecting Technical Vocational educational and Training in Trinidad and Tobago. *Journal of technical education and training* 11(3):136-143.
- Kanyonga L, Mtana N, Wendt H (2019). Implementation of competence-based Curriculum in technical colleges: The case of Arusha City, Tanzania. *International Journal of Vocational and Technical Education* 11(1):1-20. <https://doi.org/10.5897/IJVTE2018.0262>.
- Lewis IM (1999). A pastoral democracy: A study of pastoralism and politics among the Northern Somali of the Horn of Africa. London: James Currey.
- Lewis IM (1994). *Blood and Bone: The Call of Kinship in Somali Society*. Lawrence, NJ: The Red Sea Press
- MoE, HE (2016). Chapter 8. Technical/Vocational Education and Training. Education Sector Strategic Plan. Garowe, Puntland, Somalia.
- MOE,HE (2017). Project TEU and TVE Department. Ref ww&TS/50228/2017. <http://education.puntlandgovt.com/tvet.php>
- MoE, HE (2020). Chapter 15. Technical and Vocational Education and Training. Educational Management Information System year book. Garowe, Puntland, State of Somalia.

- MoE,HE (2020). Out of school children advocacy paper. [www.moepuntland.com](http://www.moepuntland.com).
- MoE,HE (2020). Global Partnership for Education Program Document 2017-2020. [www.moepuntland.com](http://www.moepuntland.com)
- MoE,HE (2020 ). Puntland School Feeding Program Advocacy Paper [www.moepuntland.com](http://www.moepuntland.com).
- MoPDEPIC (2019). Five-Year Puntland Development Plan 3 (FYDP-3) 2020-2024. [https://www.researchgate.net/profile/Mohamed-Samantar/publication/352936687\\_Puntland\\_5\\_YEAR\\_Dev\\_Plan\\_-\\_Jan\\_28\\_2021/links/60e06fb6a6fdccb745034da7/Puntland-5-YEAR-Dev-Plan-Jan-28-2021.pdf](https://www.researchgate.net/profile/Mohamed-Samantar/publication/352936687_Puntland_5_YEAR_Dev_Plan_-_Jan_28_2021/links/60e06fb6a6fdccb745034da7/Puntland-5-YEAR-Dev-Plan-Jan-28-2021.pdf)
- MoLYS (2017). Puntland Second Youth Policy Development Plan 2017-2021. [www.moepuntland.com](http://www.moepuntland.com)
- Ndyali L (2016). Higher Education System and Jobless Graduates in Tanzania. *Journal of Education and Practice* 7(4):116-121. <https://files.eric.ed.gov/fulltext/EJ1092388.pdf>
- Onwusa SC (2021). The Issues, Challenges and Strategies to Strengthen Technical, Vocational Education and Training in Nigeria. *International Journal of Research and Innovation in Social Science* 5:5.
- Oresanya TO, Omodewu OS, Kolade TT, Fashedemi AO (2014). Vocational Education and Employability: The Nigerian Situation. *Journal of Poverty, Investment and Development-An Open Access International Journal* 3:158-160. <https://www.iiste.org/Journals/index.php/JPID/article/view/12051>
- NEP (2017). National Employment Policy. Federal Government of Somalia. Version 4. [www.moepuntland.com](http://www.moepuntland.com)
- NEP (2019). National Employment Policy. Federal Government of Somalia. Version 4. [https://www.ilo.org/africa/media-centre/pr/WCMS\\_673622/lang-en/index.htm](https://www.ilo.org/africa/media-centre/pr/WCMS_673622/lang-en/index.htm)
- PEC (2017). Headcount Report for the Puntland of Somalia civil Service. Human Resource Audit, Capacity Injection Project. Puntland of Somalia civil Service.
- Pape U, Karamba W (2019). From data to development: Poverty and policy in Somalia. [blogs.worldbank.org](https://blogs.worldbank.org/africacan/data-development-poverty-and-policy-somalia) <https://en.unesco.org/news/equipping-youth-skills-meet-future-demands-labour-market>.
- Provisional Constitution (2012). The Federal Republic of Somalia. Article 1. <http://hrlibrary.umn.edu/research/Somalia-Constitution2012.pdf>
- Puntland Higher Education Bill (2016). not available online. Contact: [info@parliament.pl.so](mailto:info@parliament.pl.so). <http://en.puntlandparliament.net/act/>.
- Reliefweb (2020). Situation in Somalia - Report of the Secretary-General. (S/2020/398). <https://reliefweb.int/report/somalia/situation-somalia-report-secretary-general-s2020398>.
- Rieckmann U (2018). Rehabilitation of technical and vocational education and training in Somalia. Ministry of Planning, Investment and Economic Development (Federal Government); Ministry of National Planning and Development (Somaliland). Federal Ministry for Economic Cooperation and Development (BMZ). <https://www.giz.de/en/worldwide/75212.html>
- Technical/Vocational Education And Training (2009). Puntland State of Somalia-Ministry of Education -Archived from the original. <https://web.archive.org/web/20091027053731>.
- The World Bank (2021). The World Bank supports government institutions in Somalia to promote good governance, accelerate economic recovery and create jobs. The World Bank in Somalia on Africa can. <https://www.worldbank.org/en/country/Somalia/overview>
- Tom, Norton M (2021). The Need for New Pathways in TVET Delivery. <https://tvetjournal.com/tvet-systems/tvet-pathways/>
- United Nations (2017). Report of the Secretary-General on Somalia. Security Council. S/2017/1109. <https://reliefweb.int/sites/reliefweb.int/files/resources/N1745189.pdf>
- UNDP (1981). Technical Education and Vocational Training, Project Findings and Recommendations, Somalia. United Nations Educational, Scientific and Cultural Development. United Nations Development Program. Serial No. FMR/ED/OPS/81/402 (UNDP. file:///C:/Users/user/Downloads/047787engo.pdf.
- Wahba, MMM (2011). Technical and Vocational Education and Training (TVET) Challenges and Priorities in Developing Countries. *Economy. SEMANTIC SCHOLAR*. [https://unevoc.unesco.org/e-forum/TVET\\_Challenges\\_and\\_Priorities\\_in\\_Developing\\_Countries.pdf](https://unevoc.unesco.org/e-forum/TVET_Challenges_and_Priorities_in_Developing_Countries.pdf)

## APPENDIX

**Table 1.** Government and privately owned TVET institutions in Nugaal region.

No.	Region	Institutions		Instructors				Total of instructors
		Public	Private	Male	%	Female	%	
1	Nugaal	Garowe VTC	-	17	77.2	5	-	22
2	Nugaal	-	Hanad VTC	1	100	0%	-	1
3	Nugaal	-	SWA	6	-	-	-	6
4	Nugaal	Burtinle VTC	-	2	50	2	50	5
5	Nugaal	-	Ugbaad VTC	2	-	-	-	2
6	Nugaal	Horseed VTC	-	3	-	5	-	8
7	Nugaal	-	Nasteh VTC	1	100	-	0	1
8	Nugaal	-	Barwaqo VTC	1	100	-	0	1
9	Nugaal	-	X/Tako VTC	6	100	-	0	6
10	Nugaal	-	S/wado VTC	1	100	-	-	1
			Sub-Total	40	77	12	23	-
			Total					52

Source: Ministry of Education and Higher Education MOE&amp;HE (2017).

**Table 2.** Government and privately owned TVET institutions in Mudug region.

No.	Region	Institutions		Instructors				Total of instructors
		Public	Private	Male	%	Female	%	
1	Mudug	Galkaio VYC		5	45	6	55	11
2	Mudug	B/busle VTC		1	25	3	75	4
3	Mudug	Bursaleh VTC		3	75	1	25	4
4	Mudug	Jareban VTC		2	40	3	60	5
5	Mudug	-	G/dogob VTC	2	40	3	60	5
			-	-	44.8	-	55.2	-
			Sub-Total	13	-	16	-	-
			Total					29

Source: Ministry of Education and Higher Education MOE&amp;HE (2017).

**Table 3.** Government and privately owned TVET institutions in Bari region.

No.	Region	Institutions		Instructors				Total of instructors
		Public	Private	Male	%	Female	%	
1	Bari	Bosaso VTC		14	73.7	5	26.3	19
2	Bari		Dondor VTC	2	33.3	4	66.7	6
3	Bari		Ilsan VTC	4	57.1	3	42.9	7
4	Bari		PDO VTC	2	40	3	60	5
5	Bari		Reebi VTC	0	0	3	100	3
			Sub-Total	22	55	18	45	-
			Total					40

Source: Ministry of Education and Higher Education MOE&amp;HE (2017).

**Table 4.** Government and privately owned TVET Institutions in Karkaar region.

No.	Region	Institution		Instructors				Total of instructors
		Government	Privates	Male	%	Female	%	
1	Karkar	Qardo VTC	-	7	77.8	2	22.2	9
2	Karkar	-	Qarwnet VTC	3	50	3	50	6
3	Karkar	Hodman VTC	-	3	37.5	5	62.5	8
4	Karkar	-	PDO VTC	5	-	0	-	5
5	Karkar	-	OTT VTC	4	-	1	-	5
			Sub-Total	22	66.7	11	33.3	-
			Grand Total					33

Source: Ministry of Education and Higher Education MOE&amp;HE (2017).

**Table 5.** Government and privately owned TVET institutions in Sanaag and Haylan regions.

No.	Region	Institutions		Instructors				Total of instructors
		Public	Private	Male	%	Female	%	
1	Sanaag		Ilsan VTC	14	82.3	3	17.7	17
2	Sanaag		Himilo VTC	2	33.3	4	66.7	6
3	Sanaag		Daryel VTC	4	66.7	2	33.3	6
4	Hiland		Dondor VTC	2	66.7	1	33.3	3
			SUB-Total	22	68.75	10	31.25	-
			Total					32

Source: Ministry of Education and Higher Education MOE&amp;HE (2017).

**Table 6.** Government and privately owned TVET institutions in Sool region.

No.	Region	Institutions		Instructors				Total of instructors
		Public	Private	Male	%	Female	%	
1	Sool		Ugbad VTC	14	82.4	3	17.6	17
2	Sool		Talex VTC	2	33.3	4	66.7	6
			Sub-Total	16	69.5	7	30.5	-
			Total					23

Source: Ministry of Education and Higher Education MOE&amp;HE (2017).

*Full Length Research Paper*

# **Study of the most important factors supporting the success of entrepreneurship in vocational education: Self-efficacy**

**Ariyono Setiawan<sup>1\*</sup> and Wiwid Suryono<sup>2</sup>**

Politeknik Penerbangan Surabaya, Surabaya, Indonesia

Received 6 January, 2021; Accepted 13 September, 2021

**When the desire that grows in a person is balanced with will and ability, self-confidence grows, especially when someone gets motivation and support from seeing that he can develop more than he thinks. In entrepreneurship, it is necessary to have self-confidence; self-confidence will provide the motivation needed for the business to thrive. Without a sense of self-confidence, every effort made will be in vain. This study reveals one determining factor for entrepreneurial success is the presence of self-confidence, and self-confidence can be categorized into several variables, including feelings, beliefs, perceptions, and expectations. Many successful efforts are due to a sense of optimism, where every failure is an opportunity to get up and move forward. Without a definition of confidence success in entrepreneurship is impossible. The results show that there is a positive and significant effect of entrepreneurship self-efficacy on entrepreneurial intentions.**

**Key words:** Vocational education, entrepreneurship, self-efficacy.

## **INTRODUCTION**

Vocational education aims to prepare students to become productive humans, able to work independently, to fill existing job vacancies according to the competencies in the expertise program they choose in order to be independent and productive (Rintala and Nokelainen, 2020; Yoto, 2016). Vocational high school students need to change their way of thinking by not just hoping to become employees, but becoming someone who opens new jobs for others, because currently, competition in the business world is very tight along with the number of jobs that are not proportional to the number of workers (Rainie

and Anderson, 2017). This is evidenced in the online site written by the Selasar Editor, which revealed that according to the Central Statistics Agency (BPS) as of February 2014, there was open unemployment of 5.7% or 7.15 million people. The figure of 7.15 million people is mostly filled with young unemployed, between 19-24 years. The National Development Planning Agency (Bappenas) also noted that the number of unemployed youths between 15-29 years in Indonesia is about 19.9%. Educational institutions play an essential role in fostering student interest in entrepreneurship. According to

\*Corresponding author. E-mail: [ariyono.19010@mhs.unesa.ac.id](mailto:ariyono.19010@mhs.unesa.ac.id).

Harackiewicz et al. (2016), interests are feelings, hopes, convictions, prejudices, fears, or other tendencies that lead individuals to confident choices. Meanwhile to Djaali (2013), interest is a sense of preference or concern in something or activity without being asked. Someone who has an interest in an object tends to pay great attention to that object.

Entrepreneurship according to Elfving (2008) is the process of creating something new at the value of using the time and effort required, bearing financial, physical, and social risks that accompany, receiving the resulting monetary rewards, as well as personal satisfaction and freedom. According to Nasution et al. (2021), entrepreneurs are not just traders but there are much deeper meaning on human mentality, self-confidence, time efficiency, creativity, grit, tenacity, seriousness, and morality in running an independent business. The ultimate goal is to prepare individuals and societies to live correctly as humans. Interests play a significant role in the lives of students and have a substantial impact on attitudes and behaviors. Students who have an interest in something tend to have an interest in knowing and learning things related to such interest without coercion. A person is said to have a high interest in entrepreneurship due to various aspects of his personality such as character, attitude, and behavior. According to Apriyani et al. (2019), the characteristics of entrepreneurship have six critical components, namely self-confidence, results-oriented, risk-taking, leadership, originality (innovative, creative, and flexible), and future-oriented. According to Suhartini (2011), several factors influence interest, namely: internal driving factors, which are stimuli from the environment or scope according to one's wishes or needs; social motive factors, what is a person's interest in objects that are influenced by elements from within humans and motives, social, emotional and feeling aspects which influence the object.

The existing entrepreneurship will not run if it is not balanced with the self-efficacy of students in entrepreneurship to give birth to new entrepreneurs. Entrepreneurship self-efficacy that students have will give them maximum results if students believe in themselves that they are capable. Not all students have high entrepreneurship self-efficacy, because most students feel unsure. Entrepreneurship belief in oneself will foster one's entrepreneurial intention. If someone is not sure about the abilities they have, it is unlikely that the person will have entrepreneurial intentions. Entrepreneurship intention begins before students decide to be entrepreneurs, then students will be committed to the decisions that have been made. The purposes can also bridge the gap students in their subsequent actions. Self-efficacy is a person's belief or confidence in his ability to do something. This self-efficacy is very important for self-development.

Self-efficacy seems to be very much needed for everyone in entrepreneurship. This confidence will make

someone believe they can carry out and organize all the required actions in situations that have good prospects and profitable opportunities. Everyone seems to need self-efficacy, especially when they enter the world of work. Self-efficacy is a person's belief in his or her ability to perform tasks or activities needed to achieve specific results. Bandura explained that self-efficacy is the result of a cognitive process in the form of decisions, beliefs, or awards about the extent to which a person estimates his or her ability to complete or carry out tasks or achieve the expected results. Self-efficacy rests on a person's belief. A person with self-efficacy believes that they are capable of doing something to change the events around them. In contrast, a person with low self-efficacy considers himself to be unable to do anything around him. In difficult situations, people with low efficacy tend to give up easily. Meanwhile, people with high self-efficacy will strive to overcome obstacles that get in the way. Several previous studies have discussed self-efficacy in terms of developing entrepreneurship, especially in vocational education. Yulianingsih et al. (2013) in their research showed that there was a positive and significant relationship with a moderate level of correlation between entrepreneurial knowledge and interest as well as self-efficacy in entrepreneurship for class XII accounting students of SMK Negeri 1 Sukoharjo in the 2012/2013 academic year. This means that students' interest in entrepreneurship will increase if students' entrepreneurial knowledge increases. Marini and Hamidah (2014) shows that self-efficacy has a positive and significant effect on interest in entrepreneurship, with a correlation coefficient ( $r_{xy}$ ) of 0.440 and  $p < 0.05$ . In line with this research, Bernstein and Carayannis (2012) concluded that "it is proposed that a positive relationship exists between self-efficacy for having an entrepreneurial career with interest in majoring in entrepreneurship" (Figure 1).

This means there is a positive relationship between self-confidence and interest in a career as an entrepreneur in the entrepreneurship department. Therefore, based on the explanation that has been put forward, the author is interested in examining the self-efficacy of the most crucial factor in entrepreneurship, especially in vocational research. This paper hopes to contribute in terms of scientific development and become the basis for research development. The purpose of this study is to provide information sources, especially in terms of the role of self-efficacy in supporting student success in entrepreneurship, especially in vocational education. Also, this study is an initial study on the development of doctoral dissertation research conducted by researchers.

## PROBLEMS OF STUDY

The problems that will be studied in this research are: how significant is the influence of self-efficacy as a

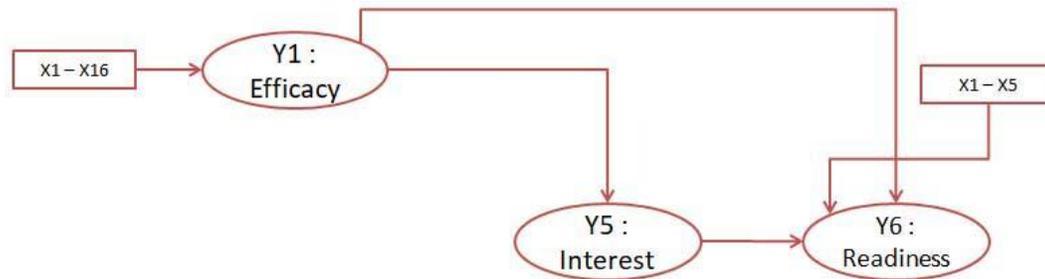


Figure 1. Self-Efficacy diagram.

supporting factor for student success in entrepreneurship and how is the impact of self-efficacy on entrepreneurship development in vocational education? Self-efficacy is related to one's beliefs for exert personal control on motivation, cognition, affection for the social environment (Bandura, 1997). Self-efficacy is the belief that a person is capable of carrying out tasks, achieving goals, or overcoming obstacles. Individuals tend to avoid or even run away from situations that they believe the individual is unable to deal with. Self-efficacy is self-perception of how well one can function in certain situations; self-efficacy is related to the belief that oneself can take the expected actions (Alwisol, 2009).

Self-efficacy is a complete belief in yourself, optimism and hope to solve problems without feeling hopeless. When an individual is faced with the stress that will arise, his self-efficacy ensures a reaction to a situation between emotional reactions and his efforts in facing adversity. The self-efficacy possessed by the individual can make the individual deal with a variety of situations (Patton, 1998). Self-efficacy is a person's belief about his chances of accomplishing a particular task (Kreitner and Kinick, 2003). Self-efficacy is a person's belief that he will be able to carry out the required behavior in a task. Referring to some of the opinions above, it can be concluded that self-efficacy is a person's belief in one's ability to carry out tasks, achieve goals, or overcome obstacles (Prakoso, 1996).

Self-efficacy is formed by four sources of information, one of which is successful experience. In human life, the success of solving a problem will increase self-efficacy, on the other hand, failure will decrease self-efficacy (especially in self-efficacy time has not been established in a person). For self-efficacy to be established, one must experience tough challenges, so he could finish them with persistence and hard work (Bandura, 1997). The development of self-efficacy in addition to being determined by the success and failure that has been done is also determined by errors in self-assessment. If in everyday life what is always remembered is poor appearance, then the conclusion about self-efficacy will be low. Conversely, even though failure is often experienced but continuously trying to improve

performance, self-efficacy will increase. Collection of past experiences will determine self-efficacy through cognitive representations, which include a memory of the frequency of success and failure, temporary patterns, and the situations in which success and failure occur (Bandura, 1997).

The role of thinking ability in the development of self-efficacy is quite large because high intelligence people will be better able to remember and analyze events that have been experienced so that the conclusions made will be more accurate. Self-efficacy in each individual will differ from one individual to another based on three aspects. This is expressed by a self-efficacy scale based on the aspects of self-efficacy put forward by Bandura, namely task difficulty level, area of duty and level of stability, confidence, strength (Bandura, 1997):

#### Task difficulty level (Magnitude)

This aspect relates to the degree of difficulty of the task. If the tasks assigned to individuals are arranged according to their level of difficulty, then differences in individual self-efficacy may be limited to easy, medium, and difficult tasks, according to the limits of the perceived ability to meet the behavioral demands required at each level. To know the reflection of a person's level of self-efficacy in carrying out a task, it is necessary to measure it against every demand for a task that must be done by someone. In this study, to measure the level of self-efficacy, a person can choose from five gradient degrees of self-efficacy. These gradients include: completely unsure of being able to do; not sure of being able to do; sometimes being sure of being able to do; confident of being able to do; and very confident of being able to do.

#### Area of duty (Generality)

This aspect relates to the broad field of behavioral tasks in which individuals feel confident in their abilities. In measuring a person's self-efficacy in performing a task, it is not only limited to one aspect, but the measurement of

self-efficacy is measured from several aspects. The aspects in this research are used as a reference in measuring one's self-efficacy, including social resources, academic competence, self-regulation in learning, utilizing free time and extracurricular activities, self-efficacy in self-regulation, and the expectations of others.

### **Level of stability, confidence, strength (Strength)**

This aspect relates to the strength level of an individual's belief or expectation regarding his ability. To determine the strength level of a person's self-efficacy, it is necessary to measure using a self-efficacy scale. This self-efficacy is useful for describing the difference in the strength of one's self-efficacy with others in performing a task.

Luthans states that self-efficacy can directly impact the following (Luthans, 2005): selection of behavior-decisions will be made based on how efficacy a person feels against choices, for example, work assignments or career fields; effort motivation- people will try harder and try more at a task where their self-efficacy is higher than those who have low self-efficacy; endurance- people with high self-efficacy will be able to get up and survive when faced with problems or failures, while people with low self-efficacy tend to give up when facing obstacles; facilitative thinking patterns- efficacy ratings influence self-talk as a person with high self-efficacy might say to himself, "I know I can find a way to solve this problem". Some people with low self-efficacy may say to themselves, "I know I cannot do this, I don not have the ability"; stress resistance- people with low self-efficacy tend to experience stress and laziness because they think of failure, while people with high self-efficacy enter stressful situations with confidence and certainty and are thus able to withstand stress reactions. Researchers have documented a strong tie between high self-efficacy and success in a wide variety of physical and mental tasks. Conversely, people with low self-efficacy are associated with a condition called learned helplessness (distrust of one's ability to control a situation), a drastically weakened belief so that a person has no control over their environment (Kreitner and Kinicki, 2003).

Based on the description above, it can be concluded that self-efficacy has an impact on a person's life. The impact of self-efficacy, among others, is that individuals can choose the right behavior, have high motivation in trying, can survive when facing problems, have facilitative thinking patterns, and are more resistant to stress. Individuals who have high self-efficacy will tend to choose to be directly involved in doing a task, while individuals who have low self-efficacy tend to avoid the task. Individuals who have high self-efficacy tend to do a particular task, or even though the tasks are difficult. They do not view assignments as a threat they must avoid. Those who fail to do something, usually quickly

regain self-efficacy after experiencing that failure.

Individuals who have knowledge and fail, fail because of lack of of hard effort, knowledge, and skills. Individuals who have low self-efficacy will stay away from difficult tasks because they are seen as a threat to them. Such individuals have low aspirations and low commitment to achieving the goals they choose or set. Individuals who have low self-efficacy think about how to deal with difficult tasks. They are also slow to fix or regain self-efficacy when faced with failure. Based on the above opinion, it can be concluded that individuals who have high and low self-efficacy have the following characteristics (Permana et al., 2016): High self-efficacy- tend to be directly involved in doing a task. Tend to do certain tasks, as well as difficult tasks. Regard failure as a result of a lack of effort, knowledge, and skills and is persistent in trying. Believe in one's abilities with little doubt and likes to find new situations; Low self-efficacy- tend to avoid assignments. Doubt his abilities. A difficult task is seen as a threat. Sluggish in fixing yourself when you fail, weak aspirations and commitment to duty, do not think about how to deal with problems and does not like looking for new situations.

From business activities carried out by the community, either small or large scale, can be categorized according to their characteristics and character, including into entrepreneurial activities or not. The following are the characteristics and characteristics of entrepreneurship (Suryana, 2001):

1. Confidence means that in managing business activities, an entrepreneur must have confidence that the business carried out is sure to be successful. It does not depend on other people in carrying out its activities and is managed individually, and always has a high optimistic spirit.
2. Oriented to tasks and results, meaning that business activities goals carried out to achieve with profit orientation. For this reason, business activities must be carried out diligently, full of courage, and determination to work hard and have strong drive, energetic and initiative in running its business.
3. Taking risks, entrepreneurial activities are indeed required to take reasonable risks from their business activities, the higher the risk, the greater the possibility of benefits and the smaller the risk, the less likely the benefits will be obtained.
4. Leadership, in leading business activities, must be clever, socialize/communicate with all levels of society or stakeholders and can receive suggestions and criticism for the progress of their business activities.
5. Originality, meaning that business activities are always carried out developed with creations that are new and easy to adjust to market developments/market segments.
6. Oriented to the future, to develop business activities should always take advantage of scientific developments knowledge, and technology so as not to be left behind

with competitors.

In carrying out entrepreneurial activities, an entrepreneur is required to know the type and level of entrepreneurship to know his position in entrepreneurship. The types and levels of entrepreneurship are as follows (Winarto, 2011):

1. Innovating Entrepreneurship- experimented aggressively, skillfully practiced attractive transformations. Experiments should always be carried out to find the updates that will be later transformed into the real activities of business activities to keep up with the demands of consumer demand.
2. Imitative Entrepreneurship- copying successful innovations from innovative entrepreneurs. In addition to efforts to find new things to develop its business, it can also adopt successful innovations from its predecessors, although it must also be considered the possibility of saturation points from the output of previous renewal products.
3. Fabian Entrepreneurship- an utterly cautious attitude and an attitude of skepticism but an immediate one carry out the imitations it becomes very clear, if they are not doing so, they will lose their relative position in the industry concerned. This attitude determination is to avoid falling behind with the existing industrial position there is.
4. Drone Entrepreneurship- drone means laziness. Refuse to take advantage of opportunities to carry out changes in the production formula even if it will result in them losing money compared to other producers. Slowness and lack of communication with other parties about changes and updates that occur will cause significant losses.
5. Parasitic Entrepreneurship- in many developing countries there is still another type of entrepreneurship known as Parasitic Entrepreneurship, in the context of economics it is referred to as rent-seekers.

To be able to carry out entrepreneurial activities, it is necessary to know the stages in entrepreneurship. In general, the stages of doing entrepreneurship (Winarto, 2011):

1. The initiating stage- this is the stage where a person intends to make efforts to prepare everything that is needed, begins by looking at what new business opportunities might be open to new business, make acquisitions, or do franchising. Also choose the type of business to be carried out whether in agriculture, industry/manufacturing/production, or services.
2. The stage of carrying out the business or summarized by the "road" stage- here an entrepreneur manages various aspects related to his business, including aspects which include financing, human resources, ownership, organization, leadership includes how to take risks and make decisions, marketing, and doing evaluations.

3. Maintain effort- at this stage the entrepreneur has based the results that have been achieved perform an analysis of the progress achieved to be followed up following the conditions at hand.

4. Develop a business- here if results are obtained classified as positive or experiencing development or can survive, and then business expansion is one possible option taken.

Entrepreneurs are divided into three levels, namely early entrepreneurship, tough entrepreneurship, and entrepreneurship superior. It is divided into three groups: Administrative Entrepreneurs, Innovative Entrepreneurs, and Catalyst Entrepreneur. Entrepreneurship triggers are influenced by internal factors and external factors. Becoming a successful entrepreneur requires certain steps. The entrepreneurial process model consists of an initial (piloting) phase and a phased growth. Other factors that cannot be ignored are the factors that cause entrepreneurial failure and the advantages and disadvantages of entrepreneurship.

Based on literature analysis related to entrepreneurship, it is known that aspects that need to be considered in doing entrepreneurship are (Winarto, 2011):

1. Looking for new business opportunities- the length of time the business was carried out, and the type of business ever done.
2. Financing- funding, the amount and sources of funds
3. Human Resources- labor used.
4. Ownership- roles in conducting business
5. Organization- division of labor among the workforce that is owned
6. Leadership- honesty, religion, long-term goals, process managerial (POAC)
7. Marketing- location and place of business.

Entrepreneurship provides several benefits including (Waspada, 2004): increase productivity; increase economic growth and create jobs; creating new technologies and creating new products and services. Many entrepreneurs take advantage of opportunities by creating new products or services. Even if they still defend the old product, the product is an existing product repaired. Many entrepreneurs also develop technology new to producing goods; drive innovation. Though it usually does not create anything new, they can develop methods or products innovative; helping large business organizations. Big businesses often acquire components from small producing companies these components. Big companies do not produce goods and this is because it is not very efficient to produce small components with a small market.

Entering the present decade, the development of the economic environment in the world has undergone rapid change and is leading to stabilizing a more open form of the market economy. During such a situation, the problem that faces the Indonesian nation is how the

activities of our economic actors can keep up with these changes and create high competitiveness in facing the global market. One of the most important factors in preparing the toughness of national economic competitiveness is improving the quality of human resources, especially those active as economic actors. One of the efforts to achieve independence and resilience national economy is through the development, stabilization of attitudes, behavior, and skills as well as entrepreneurship. This is because the development of national entrepreneurs will be driving the wheels of the national economy and spurring growth national economy. This effort needs to be supported by all good groups from elements of government, society, and the business world in a directed and sustainable manner.

An entrepreneur is said to be successful if he meets the following criteria (Kasmir, 2007):

1. Have clear vision and goals. This function is to guess where the steps and directions are going so that the entrepreneur can know what steps the entrepreneur should take.
2. Initiative and always proactive. This is a fundamental trait where entrepreneurs are not just waiting for something to happen, but first to start and look for opportunities as a pioneer in various activities.
3. Achievement-oriented-Always successful entrepreneur pursuit of achievement that is better than previous achievements. Product quality, services provided, and customer satisfaction are the main concerns. Every time all business activities are run is always evaluated and must be better than previous.
4. Dare to take risks. This is a must-have trait for an entrepreneur anytime and anywhere, both in terms of money and time.
5. Hard work. Employer working hours are not limited to time; where there is an opportunity there he comes. Sometimes a businessman it is difficult to manage his working time. His mind was always thinking progress of his business. New ideas always pushed him to work hard to make it happen. There are no words difficult and there are no problems that cannot be resolved.
6. Responsible for all activities carried out, good now and in the future. The responsibility of an entrepreneur is not only material but also moral to various parties.
7. Commitment to various parties is a characteristic that must be adhered to and must be adhered to. Commitment to do something is indeed an obligation to immediately pay for the realization.
8. Develop and maintain good relationships with various parties, whether directly related to that business whether it is run or not. Relationships are necessary to execute, among customers, government, suppliers, and the wider community.

From the analysis of experience in the field, the main characteristics of entrepreneurship to be successful can

be summarized in three attitudes, namely (Winarto, 2011):

1. Honest, in the sense of being brave enough to state the real conditions of the business being run, and willing to carry out its business activities according to its capabilities. This is necessary because this attitude tends to make buyers have high trust in entrepreneurs so that they are willing to become customers in the long term.
2. Have long-term goals, in the sense of having a picture of clear information regarding the final development of the business being carried out. This is to be able to provide great motivation for entrepreneurs to be able to do work even though at the same time the expected results have not been obtained.
3. Always be obedient to pray, which is submission to God to ask for what you want and accept whatever results you get. In another language, it can be stated that "man tries, but God is the one who determines!" therefore praying is one of the therapies for business maintenance to achieve goals.

Dan Steinhoff and F. Burgess suggested several characteristics needed to achieve the building-up of entrepreneurial success, as follows (Suryana, 2003): have the vision to achieve goals; can anticipate the risk of time and money; plan, organize and follow up; work hard; build trust in customers, employees, suppliers, and others; responsibility for success.

Based on the above opinion, it appears that there are several things an entrepreneur must have to be successful in running a business. First, he must have a vision and goals of the business which he is pioneering. Second, after his business is running, he must be able to anticipate risks that may arise, both from a time perspective and from a financial perspective. Third, being able to plan everything that will be done, organize employees and follow up on any problems or opportunities that exist. Fourth, must be willing to work hard.

A business can be successful or a failure depending on the previous business plan. Business planning describes analysis and feasibility studies that include studies of raw materials, processing to marketing. In business planning, it is also necessary to conduct a cash flow study (cash flow) which describes the profits that can be obtained each year so that expenses and income (Break-Even Point) can be estimated with certainty. For those of us who want to start a small business on a home industry scale, business planning is also very important. There are two planning activities, the first which includes tasks, such as making contact with bankers as a source of funds (if funds are from banks), accountants, and lawyers if our business will be established in a certain legal entity. Second, planning related to routine business activities, such as preparing monthly financial reports, monitoring and revising budgets, allocating production time, and marketing products.

In general terms, before starting as an entrepreneur, we must prepare and plan capital, equipment used for production, standard manufacturing procedures for production goods, product raw materials, raw material suppliers (if just starting a business means the location for taking raw materials), executors, financial holders, marketing actors. , determine the number of goods to be produced, sales targets, target consumers, product prices, expected profits, solutions if experiencing obstacles, to small things such as packaging, product names, and label forms. After everything has been prepared, then we can start a business which of course begins with high intentions and motivation, as well as a prayer that our efforts will be successful.

After the home industry that we run lasts one week, we need to check how smooth the marketing of our products is. If it turns out well, and the benefits we expect are met, then we can continue the business; likewise the following week. So, when we start a new business, check the marketing/sales of our products on the market as often as possible. But after running for months and it turns out that the results are always following our expectations (getting a profit), then checking can be done per month because that means our business prospects are bright.

Meanwhile, to be able to reach the peak of an entrepreneurial career, one must go through eight steps, consisting of (Alma, 2011): work hard (capacity for hard work); collaborating with other people (getting things done with and through people); good appearance; self-confidence; good at making decisions; want to increase knowledge; ambition to move forward. Successful entrepreneurs have a standard of achievement high. The entrepreneurial potential can be seen as follows (Masykur, 1994; Winardi, 2003): innovative capabilities; tolerance of ambiguity; the desire to excel; realistic planning capabilities; goal-oriented leadership; objectivity; personal responsibility; adaptability (flexibility); ability as organizer and administrator; high level of commitment (survival).

One of the ways to evaluate the success of a business can be assessed by the amount of income. In the economic sense, there are various kinds of concepts of income, it depends on which point of view we see it. As for what is meant by the income of each individual, namely the income received by an entrepreneur, which is often called the entrepreneur's profit. Gardner Ackley suggests the following definition of individual/someone's income: "An individual's income can be defined as the amount of income obtained from production services that he delivers at a certain time or from his assets; national income is not more than the sum of all individual income" (Ackley, 1961). J. Schumpeter's Dynamic Theory, Profits are found in life dynamic economy and obtained by dynamic entrepreneurs as well (Waspada, 2004). Dynamic entrepreneurs who are also known as the captain of entrepreneurs, namely pioneering entrepreneurs, who dare to take new paths, use new techniques and try new

production methods, will receive benefits ahead of other entrepreneurs. They will receive supernormal profit, while other entrepreneurs will only profit normally. It is only in the long term that other entrepreneurs will emulate it to use new production techniques and methods. Thus, the supernormal profit will be lost. Meanwhile, Profit as a risk premium from F. Knight in his book "Risk Uncertainty and Profit" suggests that profit is linked with uncertainty. Therefore, entrepreneurs should have "perfect for sight" (Waspada, 2004). For the courage to take the risk and their keen view of the future, then they should receive some compensation for their skills. With this in mind, the success of profit is largely determined by entrepreneurial ability, courage to take risks is a view of the future, so that small business can develop themselves in global competition and develop themselves in creating a good competitive climate. Of course, this success is expected to be able to minimize the level of risk by properly analyzing future uncertainty patterns.

Extrinsic success is a measured success with lots of materials, achievements, and other extrinsic factors. Neither achievement nor material wealth is an indication of success. To regard life to produce worldly possessions is a short-term goal. Human capital is a basic trait that supports success in entrepreneurship (Austhi, 2017). This trait is formed and emerges from within itself that other people do not always have, namely the right combination and composition of a tough and unyielding attitude, and the ability to cope with difficult times in various situations. Social capital is where having a positive social environment and supporting the development and journey of a person in pursuing an entrepreneurial career, namely friends and relatives, mothers who can support, develop, inspire, and love that person wholeheartedly (Austhi, 2017). Reputational capital is where an entrepreneur has a positive reputation to give a strong character in every work he has (Austhi, 2017).

## METHODS

In this study, researchers used a quantitative research method approach. By using a sample population of 300 students as the sample of the course, as shown in Table 1. The sample population in this study was obtained from the air transportation school consisting of 7 populations with a sample value of 585 respondents. Among them are 198 women and 387 men, resulting in the following calculation

### Respondents' status, sex and class proportions

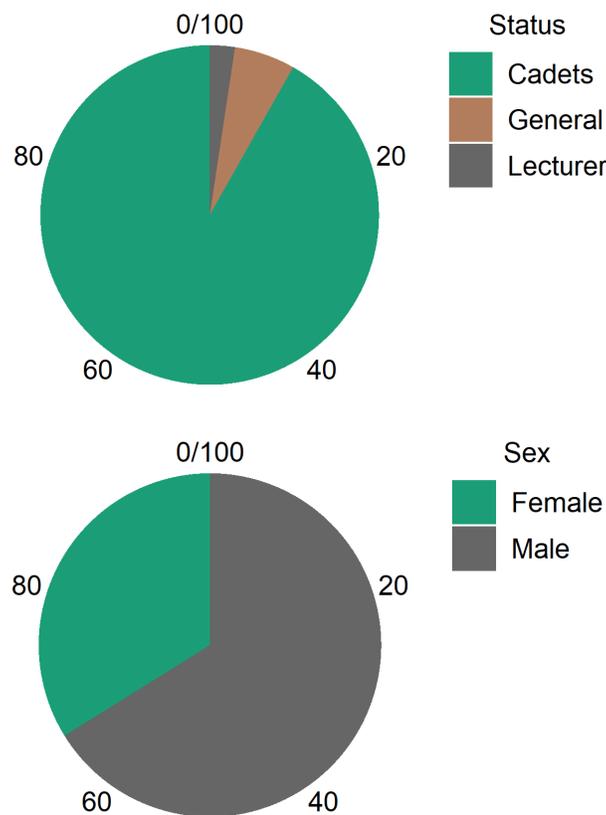
Respondents were drawn from the productive age range between 17 and 25 years, consisting of students at the polytechnic aviation Surabaya, from 7 study programs with a random sample of men and women as shown in Table 2, with their respective status and sex are presented in Figure 2. In this measurement (Table 3), it can be seen that the test data for women are 0.338 and for men 0.662,

**Table 1.** Statistical description.

Statistical parameter	Sex	
	Female	Male
Valid	198	387
Missing	0	0
Mean	7.727	7.850
Std. Deviation	2.534	2.560
Minimum	3.000	1.000
Maximum	10.000	10.000

**Table 2.** Frequencies for Sex.

Sex	Frequency	Percent	Valid percent	Cumulative percent
Female	198	33.846	33.846	33.846
Male	387	66.154	66.154	100.000
Missing	0	0.000		
Total	585	100.000		



**Figure 2.** Respondents' status and sex.

resulting in a training set of 0.345 for women and 0.655 for men, until it is known that the test set produces 0.333 for women and 0.667 for men. The research variables consisted of self-efficacy

which consisted of independent variables (X1): Feelings (X2): Beliefs (X3): Perceptions (X4): Trust and the dependent variable (Y): Expectations.

**Table 3.** Measurement of class proportions.

Sex	Data set	Training set	Validation set	Test set
Female	0.338	0.345	0.319	0.333
Male	0.662	0.655	0.681	0.667

**Table 4.** Data from self-efficacy analysis.

No.	Self efficacy indicators	N	Mean	Standard deviation	Percentage
1	Feeling	585	0.9967	0.05774	99.7
2	Confidence	585	0.4700	0.49993	57.0
3	Perception	585	0.9667	0.17981	96.7
4	Trust	585	0.9467	0.22507	94.7
5	Hope	585	1.000	0.0000	100

### Data collection and analysis

Data collection techniques are a method used to obtain the data needed in a study. To get the required data, namely documentation, and questionnaire techniques, the analysis technique uses descriptive analysis in the form of a percentage which is analyzed by Microsoft Excel and SPSS 12. The data analysis technique begins by determining the percentage score as in equation (1).

$$A\% = \frac{n}{N} \times 100\% \quad (1)$$

Where,  $A\%$  = percentage scores;  $n$  = value obtained;  $N$  = total value

Meanwhile, for the analysis confidence variable, several questions were used, each of which had a score of 1 to 4.

## RESULTS AND DISCUSSION

In this study, researchers used a quantitative research method approach. With the subject of self-efficacy, including feelings, beliefs, perceptions, beliefs, and expectations as the results of the analysis are presented in Table 4. Based on the results of the analysis in Table 4, it can be seen that only 3% have the feeling of wanting to pursue or enter into the world of entrepreneurship. In comparison, 99.7% do not want to join or enter the world of entrepreneurship. From the confidence table, it can be seen that only 53.0% lack confidence to do entrepreneurship while 47.0% can do entrepreneurship. Furthermore, it is found that only 3.3% have a good perception of the willingness to implement Entrepreneurship Moderate 96.7% lack a good perception of Entrepreneurship, meaning they want to but only think or still have a sense of concern to start entering the world of entrepreneurship, that maybe fear of failure. Furthermore, it can be seen that 5.3% of students have

the confidence to succeed in entrepreneurship and 94.7% do not believe it. From the results of the analysis in, it can be seen that the indicators of trust play an important role in supporting success in entrepreneurship. Austhi (2017), in his writing, reports that success can be translated into a feeling of satisfaction at their work, which has the freedom to create their atmosphere and work environment. Success is measured by the value of each individual, not just their market share, income stream, or profit margin. Meanwhile, Wulandari and Muafi (2021) reports that with self-efficacy, the power for more significant business can be obtained. The stronger the feeling of self-efficacy and the greater the persistence, the higher the likelihood that the activity is selected and carried out successful. Aside from the feeling aspect, confidence has a smaller percentage compared to other indicators, with a percentage of 57.0%. This is most likely influenced by the psychological state of students who are not ready and still hesitant in running a business. This doubt can become a part that makes a prospective entrepreneur must think carefully about the concept of the company being built. This is in line with what was stated by Wulandari and Muafi (2021) in his study, that the lack of confidence in students' abilities causes these students to feel doubtful and afraid of failure when facing obstacles and do not dare to take risks. Also, with self-efficacy, the power for more tremendous effort can be obtained. The stronger is the feeling of self-efficacy and the greater the persistence, the higher the likelihood that the activity is selected and carried out successfully. In the aspect of perception, trust, and hope also hold a high percentage with a value of 96.7% (perception), 94.7% (faith), and 100% (expectation). Therefore, from the results of the analysis, it is obtained that the sample population has a hope of being able to enter the world of entrepreneurship. Still, it all depends on the factors of the variables that the researchers have proposed, including feelings, beliefs, perceptions, and expectations.

## CONCLUSION, LIMITATION AND FURTHER RESEARCH

This research has several limitations such as the study cannot be implemented directly into business ventures. For this reason, further research needs to consider related aspects of several variables that are suitable to be developed into the world of entrepreneurship, including age, education level, and ability, as control variables, further research so that students can consider being able to enter the world's entrepreneurship, self-efficacy, attitudes towards entrepreneurship, and perceived behavioral control. In other words, entrepreneurial self-efficacy, attitudes towards entrepreneurship, and perceived behavior control have mediated the relationship between subjective norms and entrepreneurial intentions, also, our results show that the relationship between entrepreneurial self-efficacy and entrepreneurial intentions are mediated by attitudes towards entrepreneurship and perceived behavioral control. Thus, two research questions have been answered clearly. Useful to examine further research should expand the research model by adding new variables such as gender, a field of study, entrepreneurship education, an entrepreneurial ecosystem to enrich and contribute to the literature review and entrepreneurial practice.

## CONFLICT OF INTERESTS

The authors have not declared any conflict of interest.

## ACKNOWLEDGEMENTS

The authors appreciate the respondents for offering their time to carry out the survey.

## REFERENCES

- Ackley G (1961). *Macroeconomic Theory*, Jakarta: UI press: University of Indonesia Publisher.
- Alwisol (2009). *Personality psychology revised edition*. Malang: PT. UMM, Press. P 287.
- Apriyani Y, Haryono SEQ ZM (2019). The Effect of Self-Learning, Entrepreneurship Competence and Entrepreneurship Orientation on Micro Business Performance in the Special Province of Yogyakarta.
- Austhi D (2017). Entrepreneurial Motivation and Entrepreneurial Success in Female Entrepreneurs Anne Avani. *AGORA* 5(1).
- Bandura A (1997). *Social learning theory*. In: Prentice Hall, Englewood Cliffs.
- Bernstein AT, Carayannis EG (2012). Exploring the value proposition of the undergraduate entrepreneurship major and elective based on student self-efficacy and outcome expectations. *Journal of the Knowledge Economy* 3(3):265-279.
- Djaali (2013). *Educational Psychology*. Jakarta: Earth Literacy.
- Elfving J (2008). Contextualizing entrepreneurial intentions: a multiple case study on. Entrepreneurial cognition and perception. Abo Forlag Academy.
- Harackiewicz JM, Canning E A, Tibbetts Y, Priniski SJ, Hyde JS (2016). Closing achievement gaps with a utility-value intervention: Disentangling race and social class. *Journal of personality and social psychology* 111(5):745.
- Kasmir (2007). *Kewirausahaan*, PT Raja Grafindo Perkasa, Jakarta.
- Kreitner Rd, Kinicki A (2003). *Organizational Behavior*, Fifth Edition, McGraw- Hill Higher Education.
- Luthan (2005). *Organizational Behavior*, New Rok, Mc. Graw-hill companies, hlm. P 186.
- Marini CK, Hamidah S (2014). The influence of self-efficacy, family environment, and school environment on entrepreneurial interest in Jasa Catering Vocational High School students. *Journal of Vocational Education* 4(2):195-207. <https://doi.org/10.21831/jpv.v4i2.2545>
- Masykur W (1994). *Entrepreneurship: A series of lectures*, Gunadarma. Jakarta.
- Nasution MDTP, Rafiki A, Lubis A, Rossanty Y (2021). Entrepreneurial orientation, knowledge management, dynamic capabilities towards e-commerce adoption of SMEs in Indonesia. *Journal of Science and Technology Policy Management*.
- Patton P (1998). *IQ Emotional Intelligence is the road to happiness and well-being*. Jakarta: Media Partners. P 168.
- Permana H, Harahap F, Astuti B (2016). The Relationship Between Self-Efficacy and Anxiety in Facing Exams in Class IX Students at MTS Al Hikmah Brebes. *Journal of Islamic Counseling and Da'wah Guidance* 13(2):51-68.
- Prakoso (1996). How to deliver learning outcomes to improve student cell efficacy. *Journal of Psychology* 2:11-22.
- Rainie L, Anderson J (2017). *The Future of Jobs and Jobs Training*. Pew Research Center.
- Rintala H, Nokelainen P (2020). Vocational education and learners' experienced workplace curriculum. *Vocations and Learning* 13(1):113-130.
- Suhartini (2011). *Analysis of Factors Affecting Motives for Online Shopping in Kaskus Community Semarang*. Thesis. Management Studies Program. University Diponegoro. Semarang
- Suryana (2001). *Kewirausahaan*, Penerbit Salemba Empat, Jakarta.
- Suryana (2003) *Kewirausahaan*, Salemba Empat, Jakarta
- Waspada I (2004). *Sukses Wirausaha Sukses Profit*. Media Komunikasi dan Informasi Pengabdian Masyarakat Universitas Pendidikan Indonesia P 4.
- Winardi J (2003). *Entrepreneur and Entrepreneurship*, Kencana, Jakarta.
- Winarto H (2011). Towards Success Together. *Economics Scientific Magazine* 14(1):1-38.
- Wulandari G, Muafi M (2021). The effect of self-efficacy and organizational citizenship behavior toward knowledge sharing: The mediation role of abusive supervision. *International Journal of Research in Business and Social Science* 10(4):128-138.
- Yoto (2016). Vocational education development strategy to improve quality of human resources in dealing with Asean Economic Community. In *AIP Conference Proceedings* 1778(1):030047. AIP Publishing LLC.
- Yulianingsih IPS, Jaryanto (2013). Relationship of Entrepreneurship Knowledge and Perception of Job Opportunities in Accounting with Entrepreneurial Interest. *Journal of Economic Education* 2(1):131-145.

**Related Journals:**

