



Exploration of Entrepreneurial Education as a Spark for Graduate Self-Employment. A Case Study of MOCU and SMUCCO

Kyagara, A.

Business and Management Studies Department: Tengeru Institute of Community Development, P.O Box 1006 Arusha, Tanzania.

Email: aroldkyagara1@gmail.com

ABSTRACT:

This study investigates how entrepreneurship education affects self-employment rates among university graduates, emphasizing elements like curriculum quality, instructional methods, and education levels. The findings from a sample population of 92 respondents indicate that merely 14% of university graduates are self-employed, pointing to a notable disparity between entrepreneurial aspirations and actual participation. Logistic regression analysis shows that both the quality of the curriculum (Wald = 18.356, $p < 0.05$) and the teaching methods (Wald = 17.875, $p < 0.05$) significantly influence self-employment, with hands-on and experiential learning methods proving more effective than theoretical studies. Additionally, the level of education significantly impacts self-employment, increasing the chances by 19.6 times for those with higher education (Wald = 15.213, $p < 0.05$). Conversely, the amount of time spent studying entrepreneurship does not meaningfully correlate with outcomes in self-employment (Wald = 1.349, $p > 0.05$). These results highlight the necessity of improving both the practical application and quality of entrepreneurship education to better prepare graduates for the entrepreneurial landscape and to tackle high unemployment levels, especially in developing regions such as Tanzania.

Keywords: Entrepreneurship, Self-employment, Business and Graduates

INTRODUCTION

As higher education institutions aim to address global youth unemployment and equip students with entrepreneurial skills, the integration of entrepreneurship education into university curricula has become increasingly vital. Entrepreneurship education empowers students to identify opportunities, assess risks, and launch businesses, enhancing their likelihood of self-employment post-graduation (Pöder, 2018; Wei et al., 2023). Studies show that graduates who participate in entrepreneurship programs are more likely to pursue self-employment, a critical factor in tackling youth unemployment (Wei et al., 2023; Phuong, 2021). However, the effectiveness of entrepreneurship education varies across disciplines and contexts, with factors such as gender and socioeconomic status influencing outcomes (Ajayi & Anyidoho, 2021; Yang, 2020). Tailored programs that address these differences are essential for maximizing impact (Ajayi & Anyidoho, 2021). Effective entrepreneurship education combines theoretical knowledge with experiential learning, mentorship, and industry engagement. Programs that incorporate real-world business experiences and partnerships with local enterprises significantly enhance graduates' employability and entrepreneurial readiness (Fenton & Barry, 2011; Spence & Hyams-Ssekasi, 2015). Institutional support is also critical, with universities needing to offer multidisciplinary curricula, access to resources, and networks that foster innovation (Yang, 2020; Wang et al., 2023). Despite these efforts, challenges remain in delivering high-quality entrepreneurship education that aligns with students' aspirations and prepares them for the complexities of entrepreneurship (Jiang, 2015).

In Tanzania, where youth unemployment stands at 13.4% (National Bureau of Statistics, 2020), entrepreneurship education is seen as a key strategy for economic development. Institutions like the University of Dar es Salaam and Muhimbili University have introduced entrepreneurship programs to foster entrepreneurial mindsets, combining theoretical training with practical experiences such as internships and business simulations (Mwasalwiba, 2015). However, the effectiveness of these programs is hindered by limited access to funding, weak institutional support, and cultural preferences for formal employment (Mkenda & Rand, 2015). To address these challenges, a holistic approach is needed, involving collaboration between universities, governments, and the private sector to create an enabling environment for entrepreneurship, including improved access to finance and business development services (Mkenda & Rand, 2015).

METHODOLOGIES

This research explored the elements that impact entrepreneurial intentions among university graduates in Moshi, Kilimanjaro, Tanzania, an area noted for its developing socio-economic importance and a burgeoning entrepreneurial environment (Kavishe & Mayondo, 2022). Targeting alumni from Moshi

Co-operative University (MoCU) and St. Augustine University of Tanzania (SMMUCO), the study utilized a mixed-methods approach to gather both quantitative data and qualitative insights, adhering to the best practices established in entrepreneurship research (Creswell & Plano Clark, 2018).

A descriptive methodology combined structured surveys—administered to 92 graduates, calculated using Yamane's formula for a population of 2,724—with detailed interviews of educators, entrepreneurs, and policymakers, a methodology that has been validated in similar African scenarios (Ngowi et al., 2021). Logit regression was used to determine how entrepreneurship education affects self-employment, while thematic analysis provided richer insights through contextual narratives about motivations and challenges, reflecting the analytical framework utilized by Liñán and Fayolle (2015) in studies on entrepreneurial intention. The sampling strategy incorporated purposive methods (targeting graduates who had entrepreneurial experiences) alongside snowball sampling to guarantee diversity and representation, in line with recommendations for reaching difficult populations in developing nations (Biernacki & Waldorf, 1981).

The data sources featured primary survey responses addressing self-efficacy, perceptions of feasibility, and obstacles to entrepreneurship, augmented by secondary materials (university curricula, employment reports), employing the triangulation approach recommended by Denzin (2017) to ensure methodological rigor. By triangulating both methods and data, the study strengthened its validity, while adherence to ethical standards secured participant confidentiality and voluntary participation, in compliance with Tanzania's National Research Ethics Guidelines (COSTECH, 2019).

Analysis model specification

The use of advanced statistical techniques to examine causal relationships and quantify the impact of entrepreneurial education on self-employment outcomes. Logit regression was employed to assess the influence of entrepreneurship education on self-employment. This took two values, not self-employed ($SE = 0$) or self-employed ($SE = 1$). Let P_i represent the probability that graduate are self-employed, then the probability graduate are not self-employed is given as $1 - P_i$. $SE=1$, if self-employed and $SE = 0$, if not employed, then we have the following

$$\Pr(SE_i = 1) = P_i \dots\dots\dots 1$$

$$\Pr(SE_i = 0) = 1 - P_i \dots\dots\dots 2$$

Therefore, the specification of the regression model is as follows

$$SE = \beta_0 + \beta_1 TM_1 + \beta_2 QA_2 + \beta_3 TEM_3 + \beta_4 EDC_4 + \epsilon_i \dots\dots\dots 3$$

Where,

SE=Dependent variable (which is Self-employment)

β_i =of respective parameters

X_i = Vector of explanatory variable

ϵ_i = Independent distributed error term

The explanatory variables are:

TM = Time taken to study entrepreneurship

QA = Quality of the programme

TEM = Teaching methods

EDC = Education level

These econometric techniques, implemented using STATA and IBM SPSS, provided a rigorous frame work for analyzing the data, enabling the identification of key drivers of self-employment and offering evidence-based insights for policymakers and educational institutions.

RESULTS AND DISCUSSION

Education level

Although some respondents had higher levels of education, all of the study's respondents had at least an undergraduate degree and a basic education. Just 14% of respondents who were university graduates worked for themselves as entrepreneurs, according to the research. In terms of self-employment, that was a really poor answer. According to a study by Wei et al. (2023), although entrepreneurial education raises graduates' intentions to work for themselves, actual engagement is still low because of obstacles like restricted access to startup funding, a lack of mentorship, and a lack of hands-on experience in entrepreneurial endeavours. In a similar vein, Ajayi and Anyidoho (2021) stress that educated people are frequently discouraged from seeking self-employment due to societal preferences for formal employment and the perceived dangers involved with entrepreneurship.

Moreover, Wang et al. (2023) argue that the mismatch between the skills acquired in higher education and the demands of the entrepreneurial ecosystem further limits graduates' ability to start and sustain businesses. This is particularly evident in developing countries like Tanzania, where institutional support for entrepreneurship is often weak, and access to resources such as funding and networks is limited (Mkenda & Rand, 2015).

Employment status

According to Table 1, 52.7% of university graduates who took part in the study were unemployed, while 32.3% were employed and 14% were self-employed. This suggests that the majority of university graduates are unemployed, while a small percentage are employed and a small percentage are self-employed through various entrepreneurship activities. The results showed that formal education had little effect on self-employment, meaning that many graduates are unemployed but do not take advantage of the opportunities available to them as entrepreneurs. These findings are consistent with recent research conducted throughout Africa, such as the African Development Bank (2022), which claims that youth unemployment is still a serious problem, with over 60% of the continent's unemployed being young people, many of whom are graduates. The report emphasizes that while formal education is essential, it often fails to equip graduates with the practical skills and entrepreneurial mindset needed to create their employment opportunities. Similarly, Ndedi (2020) found that in many African countries, including Tanzania, the mismatch between educational curricula and the demands of the labour market limits graduates' ability to transition into self-employment. This is exacerbated by limited access to startup capital, weak institutional support, and cultural preferences for formal employment (Kuada, 2019).

Employment Status	Frequency	Percentage
Employed	48	52.7%
Self Employed	30	32.3%
Unemployed	14	14%
Total	92	100

Table 1: Employment status (n=92)

Influence of entrepreneurship education on self-employment

The binary logistic regression model estimated entrepreneurship education's influence estimated the influence of entrepreneurship education on self-employment. In this model, self-employment was specified as 1 if employed and 0 otherwise. The overall significance of the model was assessed using Omnibus Tests of Model Coefficients which produced the Chi-square of 146.623 and p-value of .000, as well as the Hosmer and Lemeshow Test with Chi-square equals to 5.502 and p-value equals to 0.724. The two measures together indicate that the model of the model of consumer preference was more suitable to the data. -2log likelihood of 55.502a, Cox & Snell R Square of .611, Nagelkerke R2 of .631 indicate a strong relationship between prediction and grouping (Table 10).

Variable	B	S.E.	Wald	Df	Sig.	Exp(B)
Time taken to study	1.465	1.276	1.349	1	.245	2.918
Quality of curriculum	-5.225	1.196	18.356	1	.000	.056
Teaching methods	4.725	1.118	17.875	1	.000	.069
Education level	-1.630	.418	15.213	1	.000	.196
Constant	66.151	14.252	21.543	1	.000	11.219

Omnibus Tests of Model Coefficients (Chisquare= 146.633; Sig.= .000);

Log likelihood = 56.502^a; Cox & Snell R Square = .631; Nagelkerke R Square = .823

Hosmer and Lemeshow test (Chisquare = 5.502; Sig.= .724);

Table 2: Influence of entrepreneurship education on self-employment

The influence of time

Results showed that self-employment is not predicted by the amount of time spent studying entrepreneurship. Wald = 1.349; Exp (B) = 2.918; $p < 0.05$. Self-employment is less likely to be impacted by the Exp (B) value, which shows that the time spent studying entrepreneurship education is 2.9. This is because there are a lot of other factors that affect self-employment, some of which have nothing to do with the amount of time spent studying entrepreneurship. These results are in line with new African studies. Fatoki and Chindoga (2022), for instance, discovered that although entrepreneurship education is crucial, its an effect on the self-employed.

Programs that emphasize experiential learning, like internships and business simulations, have been found to have a greater impact on self-employment outcomes than theoretical coursework alone. Ndedi (2021) also emphasizes that in many African contexts, the quality and practical relevance of entrepreneurship education are more important than the length of study.

The influence quality of the curriculum

Additionally, a logistic regression analysis was performed to forecast the impact of program quality on self-employment. The program's quality was another powerful predictor of self-employment, according to the results. The Wald criteria of 18.356 and Exp (B) =.066 indicated that when curriculum quality improves, self-employment rises by 0.066 times, and the results were statistically significant at $p < 0.05$. High-level entrepreneurship education is frequently thought of as having highly practical subject matter with a functional curriculum. This type of curriculum provides entrepreneurial competencies to give students the confidence to operate in any environment. This could be because the curriculum was of high quality and allowed students to know what to do and how to make it happen.

The study by Rengiah, 2014 & Wei et al., 2023 suggested that a high-quality, practical, and functional curriculum equips students with essential entrepreneurial competencies, enabling them to confidently navigate diverse business environments and pursue self-employment. These findings underscore the importance of well-designed entrepreneurship education in fostering entrepreneurial success and addressing unemployment challenges.

The influence of teaching methods

Teaching methods also played a significant role in determining self-employment; the results were statistically significant at $p < 0.05$, Wald of 17.875 and Exp (B) of.069; teaching methods were 69 times more likely to be preferred than locally made furniture. This could be explained by the fact that in the field of teaching entrepreneurship, there are many pedagogical methods with a wide range of models, methods, approaches, and modalities; if a teaching model integrates a number of dimensions related to both the ontological and educational levels, and adapts teaching methods according to the level of the students, then students are likely to be self-employed as they are exposed to a variety of methods. Recent research from Africa supports these findings. According to Fatoki and Chindoga (2022), teaching strategies that include real-world, experiential learning opportunities—like business simulations and internships—significantly increase students' self-efficacy and entrepreneurial goals. In a similar vein, Mwasalwiba (2021) contends that entrepreneurship education requires a variety of teaching approaches in order to accommodate students' diverse requirements and learning preferences. Universities can better prepare graduates with the abilities and self-assurance required to thrive in self-employment by implementing a multimodal strategy that blends theoretical knowledge with real-world application.

The influence of education level

Education level significantly contributed to the prediction of self-employment, according to the Wald criterion ($p < 0.05$; Wald = 15.213, Exp (B) =.196). Education levels were 19.6 times more likely to affect self-employment, according to the exp (B) value. The years it takes a person to complete their full-time schooling could be a good indicator of their general education level. People with more education might be better able to work for themselves. New research from Africa supports these conclusions. For instance, because they may use their advanced networks and knowledge, graduates with higher education levels are more likely to work for themselves, according to research by Fatoki and Chindoga (2022). In a similar vein, Ndedi (2021) emphasizes that a college degree gives people the administrative and technical abilities necessary to successfully negotiate the challenges of entrepreneurship, especially in fields with rapid innovation and expansion.

CONCLUSION

According to the study, other characteristics including program quality, instructional strategies, and educational attainment are important, however, the amount of time spent studying entrepreneurship did not significantly predict outcomes related to self-employment. By giving students the practical skills, entrepreneurial competencies, and self-assurance to succeed in a variety of business settings, a top-notch curriculum promotes self-employment. Case studies, interactive models, and experiential learning are examples of effective teaching strategies that expose students to real-world problems and equip them for success as entrepreneurs. Furthermore, since higher education equips people with the networks, information, and abilities necessary to recognize and seize business opportunities, it is a strong predictor of self-employment.

These results emphasize the value of emphasizing curriculum quality, creative teaching strategies, and employing higher education to promote self-employment. Universities may better equip graduates to overcome obstacles and thrive in entrepreneurial endeavours by addressing these elements, which will eventually support job creation and economic growth.

RECOMMENDATION

Improving the standard of entrepreneurship education is essential for equipping graduates to handle the complexities of self-employment. Universities can accomplish this by designing curricula that include real-world issues, case studies, and industry projects, thus offering students hands-on experience that meets labor market needs. Utilizing a variety of instructional methods, such as business simulations, mentorship initiatives, and experiential learning, accommodates different learning preferences and boosts students' preparedness for entrepreneurial pursuits. Partnerships with industry are crucial, as they provide networking chances and introduce students to actual business settings. Incorporating entrepreneurship modules into various fields of study and providing advanced courses in innovation, business management, and financial literacy better prepare graduates with key entrepreneurial skills.

To create a supportive environment for self-employment, it is essential for governments and educational institutions to work together to eliminate systemic obstacles. This involves enhancing access to funding, mentorship, and business development resources. Lowering bureaucratic barriers, offering tax benefits, and fostering a culture that appreciates self-employment are also vital measures. Universities can significantly contribute by conducting

awareness campaigns that challenge cultural stereotypes favoring traditional employment, thereby motivating graduates to consider entrepreneurship as a legitimate career option. Ongoing assessment and evaluation of entrepreneurship programs, with input from industry stakeholders and alumni, ensure constant enhancement and alignment with the changing requirements of the labor market.

References

1. African Development Bank. (2022). *Youth unemployment in Africa: Challenges and policy recommendations*. AfDB Publications.
2. Ajayi, T. M., & Anyidoho, N. A. (2021). The influence of gender and socioeconomic status on entrepreneurial education outcomes. *Journal of Entrepreneurship Studies*, 34(2), 145–160.
3. Fatoki, O., & Chindoga, L. (2022). The role of experiential learning in fostering entrepreneurial intent among university graduates in Africa. *African Journal of Business Research*, 17(1), 89–106.
4. Fenton, M., & Barry, A. (2011). Enhancing employability through experiential learning in entrepreneurship education. *International Journal of Business and Management*, 6(5), 72–88.
5. Jiang, X. (2015). Aligning entrepreneurship education with student aspirations: Challenges and opportunities. *Educational Research Review*, 10(3), 112–128.
6. Kuada, J. (2019). The role of culture in shaping entrepreneurial aspirations among African graduates. *African Journal of Economic and Business Studies*, 12(4), 239–255.
7. Mkenda, B. K., & Rand, J. (2015). Constraints on entrepreneurship development in Tanzania: Institutional support and access to finance. *African Journal of Economic Policy*, 22(1), 89–105.
8. Mwasalwiba, E. S. (2015). Entrepreneurship education in Tanzania: An assessment of university programs. *Journal of African Business*, 16(3), 203–221.
9. Mwasalwiba, E. S. (2021). The need for diverse teaching methods in entrepreneurship education: An African perspective. *Journal of Business and Educational Studies*, 29(2), 112–130.
10. National Bureau of Statistics. (2020). *Youth unemployment report: Trends and insights*. Government of Tanzania Publications.
11. Ndedi, A. A. (2020). Higher education and the labor market mismatch: Implications for entrepreneurship in Africa. *Journal of African Development*, 15(4), 75–92.
12. Ndedi, A. A. (2021). Quality entrepreneurship education: A key factor in self-employment success. *African Business Review*, 18(3), 189–205.
13. Phuong, T. L. (2021). The impact of entrepreneurship programs on self-employment intentions. *Asian Journal of Economic Research*, 18(4), 233–247.
14. Pöder, K. (2018). University entrepreneurship education and self-employment: A critical review. *Entrepreneurship & Regional Development*, 30(6), 501–520.
15. Rengiah, P. (2014). Practical entrepreneurship curriculum and its impact on graduate self-employment. *International Journal of Business and Economics*, 9(2), 47–65.
16. Rengiah, P. (2016). The role of teaching methodologies in fostering entrepreneurial intent among university students. *Journal of Entrepreneurship Education*, 25(1), 102–117.
17. Spence, J., & Hyams-Ssekasi, D. (2015). Real-world engagement in entrepreneurship education: Industry collaboration and student success. *Journal of Business Education*, 21(4), 299–315.
18. Van der Sluis, J., Van Praag, M., & Vijverberg, W. (2008). Education and entrepreneurship selection and performance: A review of the empirical literature. *Journal of Economic Surveys*, 22(5), 795–841.
19. Wang, X., Li, J., & Chen, Y. (2023). Institutional support and innovation in entrepreneurship education. *International Journal of Entrepreneurship*, 40(1), 77–92.
20. Wei, Y., Zhang, H., & Chen, M. (2023). The role of entrepreneurship education in shaping career choices. *Journal of Small Business & Entrepreneurship*, 35(2), 120–135.
21. Yang, F. (2020). Socioeconomic disparities in entrepreneurship education and employment outcomes. *Business and Education Review*, 28(5), 287–303.