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Entrepreneurship Skills Preference among Undergraduates' Technology Education Students for National Development during COVID-19 Pandemic

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Abstrak

Selama covid-19 jarak sosial membuat pengajaran di kelas menjadi terbatas. Untuk menanggapi perubahan ini telah terjadi penyerapan yang cepat dalam metode pendidikan kewirausahaan pembelajaran jarak jauh dan digital. Studi ini menganalisis preferensi keterampilan Kewirausahaan di kalangan mahasiswa S1 Pendidikan Teknologi untuk Pembangunan Nasional di Masa Pandemi Covid-19. Penelitian yang diadopsi untuk penelitian ini adalah penelitian survei. Area yang dicakup dalam penelitian ini adalah mahasiswa sarjana pendidikan teknologi yang menawarkan kursus pendidikan teknologi. Populasi untuk penelitian ini terdiri dari 200 mahasiswa S1 pendidikan teknologi. Semua 200 mahasiswa sarjana teknologi adalah peserta. Statistik deskriptif dan statistik inferensial digunakan untuk menjawab pertanyaan penelitian dengan bantuan Statistical Product and Service Solution (SPSS) versi 20.0 pada taraf signifikansi 0,05. Hasil penelitian menunjukkan bahwa tidak terdapat perbedaan yang signifikan rerata rating laki-laki dan perempuan terhadap preferensi keterampilan kewirausahaan di antara mahasiswa S1 Pendidikan Teknologi untuk pembangunan nasional di masa pandemi Covid-19. Studi ini menyimpulkan bahwa berbagai Masalah mempengaruhi keterampilan kewirausahaan yang disukai oleh siswa selama Pandemi COVID-19. Studi ini merekomendasikan bahwa siswa harus merangkul keterampilan kewirausahaan yang tidak dapat dibatasi oleh krisis apapun.

***Kata kunci*:** *Keterampilan Kewirausahaan, Covid-19, Pendidikan Teknologi dan Pandemi*

Abstract

During covid-19 social distancing requirements makes limited in class teaching. To respond to these changes there has been a rapid uptake in remote and digital learning entrepreneurship education methods. This study analyzes the Entrepreneurship skills preference among undergraduates' technology education students for National Development during covid-19 Pandemic. The study adopted for the study is survey research. The area covered in this research work is undergraduate technology education students offering technology education courses. The population for the study consists of 200 undergraduate students' technology education students. All the 200 undergraduate technology students were participants. Descriptive statistics and Inferential statistics were used to answer the research questions with the aid of stastistical product and service solution (SPSS) version 20.0 at 0.05 level of significant. The result indicated that there was no significant difference in the mean rating of male and female on entrepreneurship skills preference among undergraduate technology education students for national development during covid-19 pandemic. The study concluded that various Problem influencing the preferred entrepreneurial skills by students during COVID-19 Pandemic. The study recommended that students should embrace entrepreneurial skill that cannot be restricted by any crisis.

Keywords: entrepreneurial-skills, COVID-19, Technology Education and Pandemic

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1. INTRODUCTION

It is apparent that labor market has become more competitive than before to the extent that only youth with saleable and entrepreneurial skills can be relevant in labor market. Previous study remarked that training and re-training of the skills, attitudes and experiences that will make one productive, and self-reliant become crucial for National Development (A. Adigun et al., 2013). Previous study remarked that the current mismatch between what Nigerian Economic needs and what Nigerian Youth (undergraduate) are made to study in the University is becoming very disgusting (Oviawe et al., 2017). Basic knowledge of entrepreneurial skills is rarely taught from Secondary School to tertiary level (F. O. Adigun

& Akande, 2013; Epçaçan, 2019). Obviously, this will not allow early discovery of Student's entrepreneurial skills and objectives will not be achieved. Hence, for the Enterprise to be sustained, people with entrepreneurial skills are needed for the development of Country.

Entrepreneurial skills training will not only improve unemployment for the youth, but also sustain competitiveness in the economy. Entrepreneurial skills is important in resent time because, new businesses will create more jobs, new ideas that will solve problems in better way will emerge (Boldureanu et al., 2020; Nnajiofor, 2019). An entrepreneur has no definite definition, but people describe it as it is perceived. Entrepreneur is a person who is action oriented, highly motivated, task risks to achieve goals. Entrepreneur establishes businesses with the intension of making profits (Napathorn, 2021; Truong & Laura, 2015). Entrepreneur as one who organizes manages and assume the risks of business or enterprise. Entrepreneur innovates, raises money, assembles input, chooses managers and sets the organization growing (Isenberg, 2011; Webster, 2019). There are four elements that entrepreneurs must have which include: Vision-identifying emerging opportunities, Innovation-creating new business or new ways of doing something, Risk bearing-taking risk and facing uncertainty and Organizing – collection and coordination of the necessary resources (Epçaçan, 2019; Mason & Brown, 2014). In other words, entrepreneur is a person doing something new and something different for the purpose of creating wealth for individual and adding value to society.

For someone to be successfully self—employed, vital skills such as: employability, practical, problem-solving, communication, organizational entrepreneurial skills just to mention few, must be acquired by entrepreneur. Entrepreneurial skills is described as an individual's ability to turn ideas into action which include, creativity, innovation, and risk-taking, ability to plan and manage projects in order to achieve objectives (Kadek et al., 2022; Lampropoulos et al., 2019; Salhieh & Al-Abdallat, 2021). Besides, time management, strategic thinking, efficiency, resilience curiosity and networking are among skill needed by entrepreneur. Moreover, entrepreneurial skill can be a major asset, if one is in a workforce to deliver new business or build new products. Entrepreneurship education helps students to develop communication, accountability, managerial, attitudinal, investment, cognitive and affective skills (Asmahasanah et al., 2018; Koe et al., 2021; Suleiman, 2021). Entrepreneurship education as the education that identifies the general characteristics of entrepreneur and how potential entrepreneur can be trained in management technique needed for effective performance for long-time survival in an organization (Chun-Mei et al., 2011; Saeed et al., 2015).

Differences persist in the levels of new firm creation across genders, with international studies indicating that the number of women involved in starting a business is significantly and systematically lower than that of men (Bosma & Levie, 2009; Langowitz & Minniti, 2007). Research supports the supposition that men and women follow different business start-up processes. Women are more likely than men to balance work and family roles, to handle conflict and to consider time and space constraints as they create new firms (Brush, 1992; Carter & Brush, 2004; Havenga, 2009). In general, men are more likely to start a business than are women. In no country are women more active in starting and owning a business than are men. Women comprise up to 52% of the adult population, of which 41% are considered to be part of the active working population. South Africa's early-stage total entrepreneurial activity index, the primary measure, which is used to compare the rate of new business start-ups amongst countries, was found to be relatively low (5.90%) for 2009 (Bosma & Levie, 2009; Oberholzer et al., 2010).

The profile of those who are categorised as entrepreneurs in terms of the specified index indicates that approximately 7.5% are men and 5.0% are women. Even though the ratio between male and female entrepreneurs in South Africa is not highly disproportionate, the

majority of South African women entrepreneurs operate within the crafts, hawking, personal services and retail sectors, in which sectors little technology is utilised in the undifferentiated businesses concerned (Bosma & Levie, 2009; Maas & Herrington, 2006). Such a finding clearly suggests that some form of gender division of labour still persists in South Africa, with women still being locked into traditional female functions, tending to concentrate on those activities which are compatible with their domestic and reproductive roles (Botha et al., 2007; Mahadea, 2001). Experts believe that entrepreneurial activity is affected by the attitudes of those groups which are discriminated against and by cultural practices which hinder the development of entrepreneurship in South Africa (Driver et al., 2001; Maas & Herrington, 2006). More than 50% of South African women entrepreneurs were found to think that they were not entrepreneurial in nature, whereas a relatively low (9%) percentage of them expressed the belief that they were entrepreneurial in nature.

The theoretical framework of social feminism helps to explain gender differences in human capital, positing, as it does, that there are differences in male and female experiences from the earliest moments of life, which result in men and women having fundamentally different ways of viewing the world (DeTienne & Chandler, 2007; Fischer et al., 1993). Basically, social feminism views the genders as different but equal and proposes that differences between women and men are due to unique socialization processes. These distinctive experiences allow men and women to develop unique human capital, which, in turn, impacts on the identification of entrepreneurial opportunities (Eddleston & Powell, 2007; Venkataraman, 1997).

However, due to the large global impact covid-19 has had on society, new entrepreneurial education practices are required to deal with the change. Covid-19 is posing a significant challenge to management education especially for undergraduates' courses that have an experiment. Restrictions on mass gatherings and social distancing requirements have limited in class teaching, which has resulted in a massive quick shift to online teaching methods as a result of the covid-19 pandemic. This has meant an increase in courses taught through digital communication methods. Border closures have further restricted student mobility and business activities. To respond to these changes there has been a rapid uptake in remote and digital learning entrepreneurship education methods. Hence, this study assesses the preference of undergraduates' technology education students in entrepreneur skills for national development during covid-19 pandemic. The major purpose of this study is to assess the preference of undergraduates' technology education students in entrepreneur skills for national development during covid-19 pandemic. Specifically, the study sought to identify entrepreneur skills preference of undergraduates' technology education student in entrepreneurial skills for National development during covid-19 pandemic and examine the influence of entrepreneurship preference on students' skills during COVID-19 Pandemic.

2. METHODS

The research design adopted for the study is survey research. This design is considered suitable because, it involves the assessment of public opinion, using questionnaire and sampling technique methods to collect detailed descriptions of existing phenomena with the intent of using the data to report the event as it occurs in reality (Braun et al., 2021; Fox & Bayat, 2007). The area covered in this research work is undergraduate technology education students in kwara state, offering technology education courses. These are University of Ilorin and Ekiti State University (affiliated with kwara state college of education, Ilorin).

The population for the study consisted of 200 undergraduate students studying technology education courses in the universities. This group of student was used because they

are in better position to provide relevant information about entrepreneurial skills preferred. Since the sample is relatively small, no sampling technique was carried out. All the 200 undergraduate students were used. The instrument used for data collection was questionnaire which was designed by the researcher. The questionnaire contains two sections. Section A sought for bio data information of the respondents such as name of the university, gender and faculty. Section B contains 28 structured items designed to elicit information on entrepreneurship skill preference among undergraduate technology education students in kwara state. The questionnaire was on four-point rating scale type weighted as Most preferred (MP =4), Moderately preferred (MP =3), preferred (P=2) and Not preferred (NP=1). The instrument was critically examined and analyzed for its face and content validity by research supervisor and a research expert in Educational Technology of University of Ilorin, Ilorin.

The instrument was tested for reliability using Cronbach Alpha and found to be 0.95. The correlation coefficient of 0.95 was found satisfactory. A total of two hundred questionnaires were given out by researcher, in which one hundred and fifty were responded to and returned. The rate of returns was 75%. The mean and standard deviation were used for the research questions with 2.5 as the cut-off point, this implies that any variable with a mean of 2.5 and above were regarded as agree while all others with less than 2.5 were regarded as disagree. The hypothesis was tested, using independent t-test statistics to indicate the existence of significant difference. All statistics tests were tested at significance level of 0.05 with t-critical of 1.98, the decision rule is to accept null hypothesis if calculated table value is less than critical table value and reject, if calculated table value is greater than critical table value.

3. RESULTS AND DISCUSSION

Results

The preference of undergraduate technology education students in entrepreneurial skills for national development during COVID-19 Pandemic is show in Table 1.

Table 1. Preferences of Undergraduate Technology Education in Entrepreneurial Skills

S/N	Questionnaire Item	N	Mean	S.D
1	Fashion design	150	3.00	0.72
2	Electrical Electronic work	150	3.05	0.71
3	Plumbing Work	150	3.28	0.60
4	Building and Construction Work	150	3.32	0.49
5	Printing and Publishing work	150	3.26	0.54
6	Metal Work	150	3.32	0.48
7	Photography and Videography	150	3.00	0.58
8	Automobile Repair	150	3.29	0.64
9	Wood work	150	3.19	0.57
10	Tile and POP	150	3.15	0.55
11	ICT Skills	150	3.00	0.72
12	Grand mean		3.20	0.71

Table 1 reveals clearly that item 6 has the highest mean value of 3.32, meaning that the undergraduates have preference for metal work. This was noted to be followed by mean

score of 3.29 against the item that Automobile was prefer by undergraduates. The respondents also prefer building construction having a mean score of 3.32.

Furthermore, the respondents prefer publishing and printing work with a mean score of 3.26. This was closely followed by a mean score of 3.19 against the statement that they prefer woodwork. However, item 11 which revealed that the respondent place more premium on Tiles and POP had a mean score of 3.15. On the general note, the grand mean score for the preferences of undergraduate technology education students in entrepreneurial skills for national development during COVID-19 Pandemic State was 3.20. Using 2.5 as the bench mark, it could be deduced that undergraduate technology education students' preferences were in the order of the mean score from the highest mean to the lowest mean in entrepreneurial skills for national development during COVID-19 Pandemic. The problem influencing the preferred entrepreneurial skills by students during COVID-19 Pandemic is show in Table 2.

Table 2. Problem Influencing The Preferred Entrepreneurial Skills

S/N	ITEMS	Sum	Mean	Std. Deviation
1	Lack of adequate funding from the university	150	3.97	0.72
2	I inadequate Facilities for teaching skills acquisition in the university.	150	3.70	0.71
3	Insufficient skillful lecturers to teach some of the entrepreneurial skills in the university	150	3.44	0.60
4	Incessant power outage/ failure.	150	3.35	0.49
5	Large class do not give room for effective practical work	150	2.99	0.54
6	Acquisition of entrepreneurial skills is tedious and time consuming in the school	150	2.65	0.48
7	Schools time table not adequate to accommodate some of the entrepreneurial skills	150	3.50	0.58
8	Excursion trip to industries should be encouraged to improve entrepreneurship training and re-tanning	150	3.74	0.64
9	Incessant strike, influence entrepreneurship skills acquisition	150	3.61	0.57
10	Frequent Covid-19 lockdown has impact on entrepreneurship skills acquisition	150	3.39	0.55
	Grand Mean		**3.44**	

Base on Table 2 reveals that Lack of adequate funding from the university was ranked highest having the mean score of 3.97 out of 4. This was followed by Excursion trip to industries should be encouraged to improve entrepreneurship training and re-tanning, that inadequate Facilities for teaching skills acquisition in the university, and that Insufficient skillful lecturers to teach some of the entrepreneurial skills in the university having the means of 3.74, 3.70 and 3.61 respectively. The lowest mean score was 3.35 with the statement incessant power outage/ failure.

However, the grand mean score for problem influencing the preferred entrepreneurial skills by students during covid-19 Pandemic was found to be 3.44. Using 2.5 as the average benchmark, it can then be inferred that the problems listed influenced the preferred entrepreneurial skills by students during covid-19 Pandemic. Ho There will be no significant difference in the mean rating of male and female on entrepreneurship skills preference among undergraduate technology education students for national development during covid-19 pandemic. Significant difference in the mean rating f male and female on entrepreneurship skills preference is show in Table 3.

Table 3. Significant Difference in the Mean Rating f Male and Female on Entrepreneurship Skills Preference

Gender	No	$\overline{X}$	SD	Df	T	Sig. (2-tailed)
Male	85	3.62	0.424	148	0.65	0.73
Female	65	2.42	0.42			
Total	**150**	**3.10**				

Table 3, shows that t (148) = .65, p = .73. This means that the stated null hypothesis was accepted. This was as a result of the t-value of .65 resulting in .73 significance value which was greater than 0.05 alpha value. By implication, the stated null hypothesis was established thus: there was no significant in the mean rating of male and female on entrepreneurship skills preference among undergraduate technology education students for national development during covid-19 pandemic.

Discussion

This study analyzes entrepreneurship skills preference among undergraduates' technology education students for National Development during covid-19 Pandemic**.** Research question one seeks to examine preferences of undergraduate technology education students in entrepreneurial skills for national development during covid-19 pandemic. Different items were tested and from the data gathered, it was revealed that undergraduate technology education students' preferences were in the order of the mean score from the highest mean to the lowest mean in entrepreneurial skills for national development during covid-19 Pandemic. The study agreed with the previous findings that entrepreneurial skills training will not only improve unemployment for the youth, but also sustain competitiveness in the economy (Nnajiofor, 2019). An entrepreneurial skill is important in recent time because, new businesses will create more jobs, new ideas that will solve problems in better way that will emerge (Liu et al., 2019; Olugbola A, 2017). An entrepreneur has no definite definition, but people describe it as it is perceived.

The findings of this study also contradict the study of other study stated that the current mismatch between what Nigerian Economic needs and what Nigerian Youth (undergraduate) are made to study in the University is becoming very disgusting (Oviawe et al., 2017). The problem is influencing the preferred entrepreneurial skills by students during covid-19 Pandemic. From the data analyzed, it was revealed that problems listed influenced the preferred entrepreneurial skills by students during covid-19 pandemic. This study asserted

that restrictions on mass gatherings and social distancing requirements have limited in class teaching, which has resulted in a massive quick shift to online teaching methods as a result of the covid-19 pandemic (Davis et al., 2018). This has meant an increase in courses taught through digital communication methods. Border closures have further restricted student mobility and business activities.

There is no significant difference existed in the mean rating of male and female on entrepreneurship skills preference among undergraduate technology education students for national development during covid-19 pandemic. These findings agreed with the previous findings that clearly suggests that some form of gender division of labour still persists, with women still being locked into traditional female functions, tending to concentrate on those activities which are compatible with their domestic and reproductive roles (Mahadea, 2001). Moreover, women entrepreneurs tend to have a Grade 12 or lower educational qualification, which might explain the lack of exploitation of higher order entrepreneurial opportunities. The findings of this study contradict the previous study of women entrepreneurs were found to think that they were not entrepreneurial in nature, whereas a relatively low (9%) percentage of them expressed the belief that they were entrepreneurial in nature (Maas & Herrington, 2006).

The implications of this research are increasing awareness about the importance of entrepreneurial skills. Technology education students prioritize entrepreneurial skills during the covid-19 pandemic, this can increase awareness of the importance of these skills in a crisis situation. In addition, the research results can provide guidance for educational institutions to update or adjust the technology education curriculum to better cover aspects of entrepreneurship that are relevant to the current situation. However, the limitations of this research were only carried out on a certain group of technology education students at a certain location and time. Therefore, the results may not be widely generalizable to the worldwide population of technology education students.

4. CONCLUSION

This study analyzes entrepreneurship skills preference among undergraduates' technology education students for National Development during covid-19 pandemic. The findings revealed no significant difference in the mean rating of male and female on entrepreneurship skills preference among undergraduate technology education students for national development during covid-19 pandemic. Hence, entrepreneurship skills can be acquired by both male and female undergraduates. The study also established that various Problem influencing the preferred entrepreneurial skills by students during covid-19 pandemic.

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