

# Linkages Between Sociodemographic Factors, Knowledge About Entrepreneurship, and Labour Force Participation Among Youth in Nigeria

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**Abstract:-** Youth's cognition of entrepreneurship, especially at the practice stage, is essential to owning and building a successful entrepreneurship. An individual's lived entrepreneurship experience can be discerned from sociodemographic background factors like age, sex, region, residence, education, employment status, income level, entrepreneurial ecosystem availability, and personal motivation. The paper assesses youth sociodemographic factors and knowledge about entrepreneurship with a view to increasing labour force participation. The study surveyed youth aged 15-35 across Nigeria using a quantitative research approach to obtain data. A total of 2,396 questionnaires were completed and analysed. The findings suggest that the odds of owning a business venture are significantly higher for youth aged 24-26 (OR=1.46; CI=1.02, 2.10) and above. Owning a business was significantly lower (OR=0.75; CI=0.58, 0.97) for youth who knew of available resources in their environment but higher for youth who knew how to develop (OR=1.69; CI=1.19, 2.41) and organise (OR=1.46; CI=1.00, 2.14) a business. Further, building a successful business venture was significantly higher for youth who know how to develop and organise a business (OR=1.58; CI=1.09, 2.28) and (OR=1.87; CI=1.26, 2.78), respectively. Youth who desired future startups knew about the resources in their environment (OR=1.53; CI=1.22, 1.93). These youths were aged 27-35, earned income, and came from entrepreneurial family backgrounds. This paper has extended the results of previous studies. Policymakers could integrate the evidence provided about the relationship between sociodemographic factors and knowledge about entrepreneurship to develop interventions to achieve better outcomes in labour force participation and demographic dividend.

**Keywords:** Entrepreneurship, labour force participation, knowledge, sociodemographic factors and youth.

## 1. Introduction

Literature affirms the linkages between entrepreneurial knowledge and sociodemographic factors in addressing the unemployment challenges faced by the youth in Nigeria for inclusive labour force participation (LFP). Evidence points to youth skill acquisition and entrepreneurship as a remedy for youth unemployment in Nigeria (Akinfiresoye, Ogidan, Adetimehin, Akinwumiju & Olarewaju, 2023; Akubo, 2021; Aladejebi 2020). Youth unemployment has been a concern and has increased from 8.2% in 2015 to 42.5% in 2020 (National Bureau of Statistics [NBS], 2021; World Bank, 2022) and rose further to 53.4% in 2022 (NBS, 2022), making the realisation of a demographic dividend from the youth through labour force participate difficult for the country. Efforts at reversing the trend and instigating entrepreneurial venture creation and sustainability, achieving greater labour force participation will include, among others, understanding the interception of entrepreneurial knowledge of the demographic group and the sociodemographic factors employed in this paper, including age, sex, region, residence, education, employment status, income level, entrepreneurial ecosystem availability, and personal motivation. These sociodemographic factors can determine or undermine the youths's knowledge of entrepreneurship.

Available opportunities in the labour market require accurate knowledge and some experience, which many youths lack and to such extent leading to exclusion (Adeosun, Bello & Aruleba, 2022; Akinyetun, 2021; Anyanwu & Duru, 2021). Knowledge is transferable into observable practice (Council of Europe, 2023; Indeed Editorial Team, 2021; European Centre for the Development of Vocational Training [CEDEFOP], 2014). So, the natural (background) factors mentioned above may constitute limiters or enhancers. Efforts at understanding the impact of age, personal motivation, and education, among other background factors, are being pushed further to involve the integration of neuroscience to answer some of the fundamental questions on cognitive processes that propel entrepreneurship (Team 10, 2023). In this paper, knowledge about entrepreneurial skills is in four components, which is the key uniqueness of this paper, i.e. knowledge about the availability of resources needed to achieve entrepreneurial goals, knowledge of how to develop a business, knowledge of how to organise a business and knowledge of how to run a business. Knowledge about the availability of resources needed to achieve entrepreneurial goals involves engaging, interacting, and studying the environment to identify available opportunities. Knowledge of how to develop a business means the ability to start up a business or initiate a business from vagueness to concretisation. It means going beyond ideas. Knowledge of how to organise a business is the ability to come up with strategies (short, medium and long term) to achieve the business objectives sustainably and profitably. At the same time, knowledge of how to run a business denotes the ability to deploy resources to run a business effectively, including daily operations and activities.

Labour force participation of youth empowers the youth and relates to economic development, which is society-specific and multi-dimensional (Pekonen, Eloranta, Stolt, Virolainen & Leino-Kilpi, 2020). Empowerment allows people to better themselves in their chosen careers or contribute to society. LFP is the number of people (in this case, youth) readily available and willing to offer their skills or render their services in a labour market. Labour force participation for this paper includes four components: ‘own startup venture(s)’, ‘startup business successful’, ‘desires startup venture’, and ‘secured employment’. Therefore, the paper asks, “To what extent does knowledge about entrepreneurship affect labour force participation among youth in Nigeria?”

## 2. Literature Review

Age significantly influences youth entrepreneurship and new venture creation (Backman & Karlsson, 2017; Zhao, O'Connor, Wu & Lumpkin, 2021; Bohlmann, Rauch & Zacher, 2017). Youth's sex has been argued to play a role in entrepreneurship knowledge and practice (Cardella, Hernández-Sánchez & Sánchez-García, 2020; Nguyen, Frederick & Nguyen, 2014). Some have, however, said there is no significant gender difference in entrepreneurship (Gbadebo, Keshiro, Sule & Taiwo, 2019). Region of residence poses a strong influence on entrepreneurial intent, encouraging ideation (Eckhardt, Harris, Chen, Khoshimov & Goldfarb, 2021). The same applies to the youth's residence, which has been expressed that the level of activities, for example, technology-related entrepreneurial activities, is affected by the entrepreneur's place of residence due to the apparent lack of, or access to, technology, information and infrastructure (Srinuan & Bohlin, 2011). Studies have shown that educational attainment or background triggers entrepreneurship or otherwise (Gujrati, Tyagi & Lawan, 2019; Gbadebo et al., 2019). Being employed can heighten the desirability for entrepreneurship due to the participatory experience of the would-be entrepreneur (Gänser-Stickler, Schulz & Schwens, 2022). The income level of the entrepreneur is essential and substantially determines if the youth will enter into entrepreneurship practice and the mode of entry: direct or hybrid. Similarly, entrepreneurial family background and the business's outcome influence the youth's decision to become an entrepreneur or otherwise (Georgescu & Herman, 2020; Theodor, Lindquist, Sol & Praag, 2021; Mungai & Velamuri, 2011; Scherer, Adams, Carley & Wiebe, 1989).

Entrepreneurial ecosystem or hub is the entrepreneurs' hometown with enormous advantages that build confidence (Agbanike, Osigwe, Yuni, Onoja & Okwor, 2019; Cao & Shi, 2020; Kansheba & Wald, 2020; Kang, Li, Cheng & Kraus, 2021). Related business ventures aim to have a home for innovations, new business development, and employability skills coaching centres by collaborating better as a physical or virtual hubs community. Unforeseen situations or distressful periods like the COVID-19 pandemic could bring out the best in the entrepreneur regarding innovation. They may also overburden the youth, making them give up trying.

Knowledge about available resources and how the environment changes creates possibilities and sparks entrepreneurial activity (Kimjeon & Davidsson, 2022; Kraus, McDowell, Ribeiro-Soriano & Rodríguez-García, 2021). The United Nations posits that there is a strong correlation between youth labour force participation and countries' real gross domestic product (GDP) per capita (UN, 2020). So, continuously improving the youths' know-how and monitoring the practical LFP outcomes is crucial for development in the country and region (Okolie et al., 2020).

### 3. Methods

The study was conducted between February and April 2023 using quantitative research designs in a cross-sectional survey to collect data across Nigeria's six geopolitical zones, including a state in each zone and two Local Government Areas (LGAs) in each state. It employed a multi-stage sampling technique to select respondents. The first stage involved the pre-selection of six (6) states and 12 LGAs in the six geopolitical zones in Nigeria. A State was selected from each zone, while two LGAs were chosen from each state. The selection criteria included a high youth population using the 2006 census, high business density, and GDP as indicators or proxies for the presence of entrepreneurial activities. A critical consideration for selection was also states and LGAs with considerable ongoing youth entrepreneurship intervention programmes. The second stage of the sample selection involved a stratified random selection of enumeration areas in each LGA. The Stratification was according to urban and semi-urban using the Enumeration Area Demarcation (EAD) list developed by the National Population Commission (NPC). A random selection was made within each stratum to select study EAs. Finally, respondents for the survey were selected in each EA with the support of youth leaders, experienced enumerators in the areas, and the use of landmarks like worship places, business outlets and centres.

The eligible population for the study was comprised of male and female youth aged 15-35 years, as defined by the African Union (2006). According to the 2006 Population and Housing Census of the Federal Republic of Nigeria, the population is 1,832,605 persons. The study group included youth who had participated in skill development and entrepreneurship programmes organised by the government, private organisations/institutions, and non-profit organisations. A control group included a random assignment of youth in the eligible population who have not benefited from any skills and entrepreneurship training programmes.

The enumerators recruited were people with minimum tertiary education qualifications who resided in the areas and had previous experience collecting data on similar projects. A total of 2,397 was calculated as the study sample using the Yamane (1967) sample size determination; however, 2,430 questionnaires were administered to male and female youth aged 15-35 years in the six geopolitical zones. A total of 2,396 questionnaires were completed and retrieved. Each respondent selected was administered a questionnaire until the sample size was achieved. The questionnaire for the study was designed in part by the researchers, while some aspects were adapted from standardised instruments used in previous related studies (National Centre for Technology Management [NACETEM], 2022; Global Entrepreneurship Monitor [GEM], 2021; Staniewski & Awruk, 2019; FATE Foundation, 2021; MindTool, 2022). The survey instrument was tested using Cronbach's alpha coefficient for reliability, which was 0.75. Subject area experts also reviewed the tool, and a pretest (n=20) was conducted in Abuja and Lagos and modified to improve its validity. Data analysis was done using IBM SPSS 25. Three levels of analysis were conducted and are presented in this paper. They include univariate, bivariate and multivariate statistical techniques to describe frequencies and test the extent to which sociodemographic factors and knowledge about entrepreneurship affect labour force participation among youth in Nigeria at specified significance levels.

### 4. Results

This section covers the descriptive presentation of the data generated from background factors, knowledge and labour force participation. The univariate results of the paper's findings showed that 24.0 per cent of the youth who participated in the survey were 20 or less. Age distribution across the other categories include 21-23, 24-26, 27-29, 30-32 and 33-35 with 18.7 per cent, 15.9 per cent, 15.1 per cent, 13.3 per cent and 13.0 per cent, respectively. Fifty-two (52) per cent were males, and 47.2 per cent were females, respectively.

The survey showed that almost an equal number of youths from the north (49.8%) and southern (50.2%) regions of Nigeria participated in the study. Likewise, 46.7 per cent of the youth surveyed were from the semi-urban area, while 53.3 per cent were from urban centres. Furthermore, the survey results showed that a few (1.3%) of the youth surveyed had no formal education. Almost an equal number of youth surveyed had secondary/primary/other equivalents (49.5%), with those that reported having OND or higher (49.2%). About 27.3 per cent of the respondents were unemployed, while those unemployed constituted 72.7 per cent. Those who are self-employed totalled 43.2 per cent. Notably, a larger proportion of the survey participants (35.8%) reported earning less than N30,000.00 per month, Nigeria's minimum wage. Meanwhile, respondents who earned N30,000.00 – N49,999.99, N50,000.00 – N79,999.99 and N80,000.00 and above were 29.4 per cent, 19.7 per cent, and 15.2 per cent, respectively.

Personal motivation captured using ten items is one of the background variables in this study. Results showed that nearly half (48 %) of the youth reported that they sometimes/always keep themselves in check to remain motivated in their entrepreneurial practice. Forty-nine and a half per cent said they set goals and achieve them. Similarly, 48.6 per cent noted that they are motivated by creating a vivid vision of their future success. Those who reported that they study their environment often, as well as others who make maximum efforts and work harder if they suffer a setback, were 49.1 per cent apiece. Think positively about making sure my needs are met (49.6%), use rewards to keep myself focused (48.9%), sustain my belief (46.2%), move in a new direction (47.3%), do the minimum amount of work necessary (44.6%). All had less than 50% affirmation.

About 73.1 per cent of the survey respondents had entrepreneurial family backgrounds. Conversely, as few as 28.5 per cent of respondents said entrepreneurial hubs/ecosystems exist in their locations. Following a similar trend with family background, 28.8 per cent said they were affected by unforeseen situations like the COVID-19 pandemic.

Sixty-one per cent of the youth surveyed said they know of the resources in their environment that can support their entrepreneurial practice. About 61.6 per cent of the respondents reported that they have knowledge of how to develop a business. Similarly, 61.4 per cent said that they have knowledge of how to organise a business, while 60.5 per cent said they have the knowledge of how to run a business. Only 37 per cent of the respondents surveyed reported owning a business venture, while 38.1 per cent said that their business is successful (profitable). However, more than half (57.1 per cent) of the youth surveyed desire to have a startup in the future. A few respondents (25.3%) have secured employment from their skill/entrepreneurship training.

**Table 1: Percentage frequency distribution of background factors, knowledge and labour force participation**

Variables	Freq.	Per cent	Variables	Freq.	Per cent	Variables	Freq.	Per cent
Age group			Unforeseen situations (e.g. COVID-19)			Move in a new direction		
20 or Less	575	24.0	No	1706	71.2	Never	1289	53.8
21-23	448	18.7	Yes	690	28.8	Sometimes	511	21.3
24-26	381	15.9	<b>Personal Motivation (PM)</b>			Always	596	24.9
27-29	361	15.1	Keep myself in check			Do the minimum amount of work necessary		
30-32	319	13.3	Never	1246	52.0	Never	1327	55.4
33-35	312	13.0	Sometimes	493	20.6	Sometimes	432	18.0
<b>Sex</b>			Always	657	27.4	Always	637	26.6
Male	1265	52.8	Set goals, and achieve them			<b>Knowledge about entrepreneurship development</b>		
Female	1131	47.2	Never	1211	50.5	Resource available		
Region			Sometimes	438	18.3	No	927	38.7

Northern Nigeria	1193	49.8	Always	747	31.2	Yes	1469	61.3
Southern Nigeria	1203	50.2	Create a vivid vision of my future success			Develop a business		
Residence			Never	1231	51.4	No	919	38.4
Semi-Urban	1120	46.7	Sometimes	391	16.3	Yes	1477	61.6
Urban	1276	53.3	Always	774	32.3	Organise a business		
Education			Study my environment often			No	924	38.6
None	31	1.3	Never	1220	50.9	Yes	1472	61.4
Secondary/Primary/Other equiv.	1185	49.5	Sometimes	479	20.0	Run a business venture		
OND or higher	1180	49.2	Always	697	29.1	No	947	39.5
Employment Status			Maximum effort and work harder if I suffer a setback			Yes	1449	60.5
Unemployed	653	27.3	Never	1220	50.9			
Self-Employed	1035	43.2	Sometimes	415	17.3	Own a business venture		
Employed (Priv Sector)	462	19.3	Always	761	31.8	No	1510	63.0
Employed (Pub Sector)	246	10.3	Think positively about making sure my needs are met			Yes	886	37.0
Income level			Never	1207	50.4	Business successful (profitability)		
Less than N30,000.00	858	35.8	Sometimes	398	16.6	No	1482	61.9
N30,000-N49,999	704	29.4	Always	791	33.0	Yes	914	38.1
N50,000 to N79,999	471	19.7	Use rewards to keep myself focused			Desire startup in the future		
N80,000.00 and above	363	15.2	Never	1264	52.8	No	1027	42.9
Entrep. fam. background			Sometimes	531	22.2	Yes	1369	57.1
No	645	26.9	Always	601	25.1	Secured Employment		
Yes	1751	73.1	Sustain my belief			No	1789	74.7
Entrepreneurial hub/ecosystem			Never	1224	51.1	Yes	607	25.3
No	1714	71.5	Sometimes	309	12.9			
Yes	682	28.5	Always	863	36.0	<b>Total</b>	<b>2396</b>	<b>100.0</b>

### Bivariate results

Table 2 shows the bivariate association between background factors and four variables on knowledge about entrepreneurial development: (1) resource availability, (2) develop a business, (3) organise a business, and (4) run a business venture. The results show that knowledge about resource availability by the respondents was highest (70.5%) among youth between the ages 30-32 years old compared to their counterparts aged 20 or less (53.0%), 21-23 (58.3%), 24-26 (62.2%), and aged 27-29 (63.4%) (p-value=0.000).

Youth in southern Nigeria who participated in the survey had higher (66.5%) knowledge of the availability of resources for entrepreneurship in their environment than youth in the northern (56.1%) part of the country (p-

value = 0.000). Knowledge of resource availability in the environment increased with the level of education with the percentages: None (51.6%), Secondary/Primary/Other equivalents (58.2%), and OND or higher (64.7%) (p-value = 0.000). As may be expected, self-employed respondents had the highest (65.5%) number of persons with knowledge about resources available in their environment for entrepreneurship practices compared to the unemployed, 52.1 per cent; employed (private sector), 63.9 per cent and employed (public sector), 63.4 per cent, respectively (p-value = 0.000). About 71.6 per cent of the respondents who earned an income of N80,000.00 and above (self-employed substantially (43.0%) constitutes the number that earns this much) have knowledge about resource availability for entrepreneurship while other proportions are as follows: less than N30,000.00 (54.3%), N30,000.00-N49,999.99 (62.6%), N50,000.00-N79,999.99 (64.1%) (p-value = 0.000). About 65.8 per cent of respondents from entrepreneurial family backgrounds know about resource availability (p-value = 0.000). Also, 75.5 per cent of respondents who reported having an entrepreneurial hub/ecosystem in their location know about the resources in their location for entrepreneurship practice (p-value = 0.000), while 68.7 per cent of respondents who had experienced unforeseen situations like the COVID-19 pandemic or cash scarcity as was witnessed in Nigeria know about resource availability (p-value = 0.000).

Results in Table 2 show that knowledge about how to develop a business by the respondents was highest (73.2%) among youth between the ages 30-32 years old, followed by those aged 33-35 (71.8%) and 27-29 (70.4%). Others include those aged 27-29 (70.4%), 24-26 (63.0%), 21-23 (55.6%), and 20 or less (47.0 per cent) (p-value = 0.000). Similarly, respondents in the two regions with knowledge of how to develop a business were north (57.1%) and south (66.2%) (p-value = 0.000). Knowledge of how to develop a business was flat for non-education (54.8%) and Secondary/Primary/Other equivalents (54.8%), while OND or higher was 68.7 per cent (p-value = 0.000). About 72.4 per cent of respondents employed in the public sector said they know how to develop a business. In comparison, the least (44.4%) of respondents who said they were unemployed knew how to develop a business (p-value = 0.000). About 74.1 per cent of the respondents who earned an income of N80,000.00 and above have knowledge about how to develop a business, while other proportions are less than N30,000.00 (48.3), N30,000.00-N49,999.99 (64.1%), N50,000.00-N79,999.99 (72.8%) (p-value = 0.000). About 68.4 per cent of respondents with entrepreneurial family backgrounds know how to develop a business (p-value = 0.000). The majority (82.3%) of respondents who said there is an entrepreneurial hub/ecosystem in their area know how to develop a business (p-value = 0.000), while 78.1 per cent of respondents who had experienced unforeseen situations like COVID-19 knew how to develop a business (p-value = 0.000). The association between background factors and knowledge on how to organise a business was also significant for age, region, education, employment status, income, entrepreneurial family background, entrepreneurial hub/ecosystem and unforeseen situations. The result followed the same trend and the same background factors for knowledge of how to run a business venture (p-value = 0.000).

**Tables 2: Bivariate association between youth background factors and knowledge about entrepreneurial development**

Variables	Knowledge about entrepreneurial development							
	Resource availability		Develop a business		Organise a business		Run a business venture	
	Yes (%)	P-Value	Yes (%)	P-Value	Yes (%)	P-Value	Yes (%)	P-Value
Age								
20 or less	53.0		47.0		45.6		42.6	
21-23	58.3		55.6		53.8		54.0	
24-26	62.2		63.0		64.3		63.3	
27-29	63.4		70.4		71.5		70.1	
30-32	70.5		73.2		75.2		77.1	
33-35	67.9	0.000	71.8	0.000	72.4	0.000	71.2	0.000
Sex								
Male	61.8		61.7		62.1		60.7	

Variables	Knowledge about entrepreneurial development							
	Resource availability		Develop a business		Organise a business		Run a business venture	
	Yes (%)	P-Value	Yes (%)	P-Value	Yes (%)	P-Value	Yes (%)	P-Value
Female	60.7	0.589	61.6	0.987	60.7	0.51	60.2	0.803
Region								
Northern Nigeria	56.1		57.1		57.2		57.0	
Southern Nigeria	66.5	0.000	66.2	0.000	65.7	0.000	63.9	0.001
Residence								
Semi-Urban	62.9		62.2		61.3		61.3	
Urban	59.9	0.123	61.1	0.579	61.6	0.861	59.7	0.418
Education								
None	51.6		54.8		54.8		41.9	
Secondary/ Primary/ Other equivalents	58.2		54.8		54.3		53.3	
OND or higher	64.7	0.003	68.7	0.000	68.7	0.000	68.1	0.000
Employment								
Unemployed	52.1		44.4		45.9		44.3	
Self-Employed	65.5		70.2		69.8		68.8	
Employed (Priv. Sector)	63.9		61.0		60.8		61.9	
Employed (Pub Sector)	63.4	0.000	72.4	0.000	68.7	0.000	65.9	0.000
Income								
Less than N30,000.00	54.3		48.3		48.8		48.4	
N30,000.00 to N49,999.99	62.6		64.1		64.3		62.5	
N50,000.00 to N79,999.99	64.1		72.8		70.5		71.1	
N80,000.00 and above	71.6	0.000	74.1	0.000	73.8	0.000	71.3	0.000
Entrepreneurial family background								
No	49.0		43.4		45.4		40.8	
Yes	65.8	0.000	68.4	0.000	67.3	0.000	67.7	0.000
Entrepreneurial hub/ecosystem								
No	55.7		53.4		53.7		53.7	
Yes	75.5	0.000	82.3	0.000	80.8	0.000	77.6	0.000
Unforeseen situations (e.g. COVID-19)								
No	58.3		55.0		55.7		54.5	
Yes	68.7	0.000	78.1	0.000	75.7	0.000	75.4	0.000
<b>Personal Motivation</b>								
Keep myself in check								
Never	49.1		46.0		46.5		45.5	
Sometimes	75.7		77.5		77.1		77.7	
Always	73.7	0.000	79.5	0.000	77.9	0.000	76.0	0.000
Set goals and achieve them								
Never	49.1		45.3		46.4		45.1	

Variables	Knowledge about entrepreneurial development							
	Resource availability		Develop a business		Organise a business		Run a business venture	
	Yes (%)	P-Value	Yes (%)	P-Value	Yes (%)	P-Value	Yes (%)	P-Value
Sometimes	70.8		67.8		69.2		68.7	
Always	75.6	0.000	84.6	0.000	81.3	0.000	80.6	0.000
Create a vivid vision of my future success								
Never	49.2		45.7		46.4		45.3	
Sometimes	76.7		78.3		77.7		77.2	
Always	72.7	0.000	78.7	0.000	77.1	0.000	76.1	0.000
Study my environment often								
Never	49.2		45.8		46.7		45.5	
Sometimes	70.8		74.9		74.5		76.4	
Always	76.0	0.000	80.2	0.000	78.2	0.000	75.8	0.000
Maximum effort and work harder if I suffer a setback								
Never	48.8		45.2		46.3		45.1	
Sometimes	74.2		76.6		77.8		76.4	
Always	74.4	0.000	79.8	0.000	76.7	0.000	76.5	0.000
Think positively about making sure my needs are met								
Never	49.0		45.5		46.1		45.1	
Sometimes	77.1		78.1		77.9		78.6	
Always	72.2	0.000	78.0	0.000	76.6	0.000	74.8	0.000
Use rewards to keep myself focused								
Never	49.8		46.9		47.6		46.4	
Sometimes	73.4		75.5		74.6		75.1	
Always	74.7	0.000	80.4	0.000	78.9	0.000	77.2	0.000
Sustain my belief								
Never	49.3		45.5		46.5		45.2	
Sometimes	75.7		75.1		73.8		71.2	
Always	73.1	0.000	79.7	0.000	78.2	0.000	78.3	0.000
Move in a new direction								
Never	50.1		46.8		47.9		46.4	
Sometimes	71.8		75.5		75.7		74.8	
Always	76.5	0.000	81.9	0.000	78.4	0.000	78.7	0.000
Do the minimum amount of work								
Never	51.5		47.8		48.6		47.5	
Sometimes	75.2		78.9		78.2		77.1	
Always	72.2	0.000	78.8	0.000	76.8	0.000	76.3	0.000
<b>Total</b>							<b>2396</b>	

**Multivariate Results**

Table 3 shows the binary logistic regression of the effect of background factors and knowledge by four youth labour force participation variables: own a business venture, business successful, desire startup in the future, and secured employment.

In model 1, results showed that the odds of owning a business venture are significantly higher for youth aged 24-26 compared to the reference category (OR=1.46; CI=1.02, 2.10). Also, youth aged 27-29, 30-32, and 33-35 had significantly higher odds of owning a business venture compared to their counterpart in the reference category (OR=2.09; CI=1.45, 3.01), (OR=2.11; CI=1.44, 3.08), and (OR=2.17; CI=1.48, 3.20), respectively. The results showed that the odds of owning a business were higher for female youth compared to their male counterparts (OR=1.26; CI=1.03, 1.55).

Results in Table 3 showed that the odds of owning a business venture were significantly lower for youth in the southern part of Nigeria compared to the reference category (OR=0.56; CI=0.44, 0.70). Also, the results showed that the odds of owning a business venture were significantly higher for youth who are self-employed compared to their counterparts in the reference category (OR=2.98; CI=2.19, 4.05). Further, the results on income showed that the odds of owning a business venture are significantly higher for youth who earn N30,000.00 to N49,999.99 and N80,000.00 and above per month compared to their counterpart in the reference category (OR=1.34; CI=1.01, 1.77) and (OR=1.71; CI=1.20, 2.43), respectively. In the same vein, the results show that the odds of owning a business venture were significantly higher for youth with entrepreneurial family backgrounds compared to their counterparts in the reference category (OR=1.47; CI=1.14, 1.89).

Also, Table 3 showed that the odds of owning a business venture were four times higher for youth who have experienced unforeseen situations like the COVID-19 pandemic compared to their pairs in the reference category (OR=5.79; CI=4.61, 7.28). On knowledge, the results showed that the odds of owning a business were lower for youth who have knowledge about available resources in their environment compared to their pairs in the reference category (OR=0.75; CI=0.58, 0.97). Contrary to that result, the odds of owning a business were higher for youth who have knowledge of how to develop a business and organise a business compared to their pairs in the reference category (OR=1.69; CI=1.19, 2.41) and (OR=1.46; CI=1.00, 2.14), respectively.

In model 2, Table 3 results showed that the odds of building a successful business venture (profitability) are significantly higher for youth aged 27-29 compared to the reference category (OR=1.62; CI=1.11, 2.38). Also, youth aged 30-32 and 33-35 had significantly higher odds of having a successful business venture compared to their counterpart in the reference category (OR=2.00; CI=1.35, 2.98), and (OR=2.01; CI=1.34, 3.02), respectively.

Results in Table 3 showed that the odds of building successful business ventures were significantly lower for youth in the southern part of Nigeria compared to the reference category (OR=0.55; CI=0.44, 0.70). Also, the results showed that the odds of having a successful business venture were significantly higher for youth who are self-employed compared to their counterparts in the reference category (OR=3.13; CI=2.26, 4.34). Further, the results on income showed that the odds of building successful business ventures are significantly higher for youth who earn N30,000.00-N49,999.99 income per month compared to their counterpart in the reference category (OR=1.48; CI=1.10, 1.99). Furthermore, the results show that the odds of building successful business ventures are significantly higher for youth who earn N50,000.00-N79,999.99 and N80,000.00 and above income per month compared to their counterpart in the reference category (OR=1.45; CI=1.04, 2.03) and (OR=1.50; CI=1.04, 2.17), respectively. In the same vein, the results show that the odds of having a successful business venture were significantly higher for youth with entrepreneurial family backgrounds compared to their counterparts in the reference category (OR=1.81; CI=1.39, 2.37).

Also, results showed that the odds of building successful business ventures were significantly higher for youth who have experienced unforeseen situations like the COVID-19 pandemic compared to their pairs in the reference category (OR=8.43; CI=6.61, 10.74). On the personal motivation of the youth, results showed that the odds of building a successful business venture are significantly higher for youth who keep themselves in check sometimes compared to their counterparts in the reference category (OR=2.17; CI=1.14, 4.13). Results further showed that the odds of building a successful business venture are significantly lower for youth who think positively about ensuring that their needs are met and those who always do the minimum amount of work necessary compared to

their counterparts. In the reference categories (OR=0.40; CI=0.18, 0.92) and (OR=0.54; CI=0.33, 0.89), respectively. In contrast, results showed that the odds of building a successful business venture were significantly higher for youth who have knowledge about how to develop a business and organise a business compared to their counterparts in the reference category (OR=1.58; CI=1.09, 2.28) and (OR=1.87; CI=1.26, 2.78)

In model 3, Table 3, results show that the odds of desiring a startup in the future were significantly lower for youth aged 24-26 years compared to their counterparts in the reference category (OR=0.64; CI=0.47, 0.89). For other age categories, the results show that the odds of desiring a startup in the future were significantly lower for 27-29, 30-32 and 33-35 years compared to their counterparts in the reference category (OR=0.47; CI=0.34, 0.66), (OR=0.47; CI=0.33, 0.66), and (OR=0.44; CI=0.31, 0.63), respectively. Also, the result showed that the odds of desiring a startup in the future were significantly higher for youth in the southern part of the country compared to the youth in the reference category (OR=2.81; CI=2.29, 3.44). The result showed that the odds of desiring a startup in the future were significantly higher for youth secondary education compared to the youth in the reference category (OR=2.46; CI=1.03, 5.86). The results showed that the odds of desiring a startup in the future were significantly lower for youth who are self-employed compared to those in the reference category (OR=0.37; CI=0.28, 0.48), just as it is lower for youth who are employed in the public sector compared to their counterparts in the reference category (OR=0.53; 0.36, 0.78). Further, the research results show that the odds of desiring a startup in the future were significantly lower for youth who experienced unforeseen situations compared to their counterparts in the reference category (OR=0.33; CI=0.27, 0.41). On the contrary, the odds are higher for youth who have knowledge about available resources in their environment compared to their counterparts in the reference categories (OR=1.53; CI=1.22, 1.93); however, the odds are lower for youth who have knowledge of how to develop a business (OR=1.63; CI=0.45, 0.86).

Model 4 in Table 3 showed that the odds of securing employment were significantly higher for youth aged 27-29 years compared to their counterparts in the reference category (OR=1.54; CI=1.05, 2.25). Also, the result showed that the odds of securing employment were significantly higher for youth with secondary/primary/other equivalent educational levels compared to the youth in the reference category (OR=6.07; CI=1.31, 28.05). Similarly, the results showed that the odds of securing employment were significantly higher for youth who are self-employed, employed in the private and public sectors compared to those in the reference categories (OR=1.45; CI=1.02, 2.04), (OR=2.26; CI=1.54, 3.33) and (OR=2.53; CI=1.63, 3.94), respectively. Likewise, the results on income showed that the odds of securing employment are significantly higher for youth who earn N50,000.00-N79,999.99 income per month compared to their counterpart in the reference category (OR=2.40; CI=1.72, 3.34). Furthermore, the results show that the odds of securing employment are significantly higher for youth earning N80,000.00 and above monthly income compared to their counterpart in the reference category (OR=1.70; CI=1.18, 2.45). In the same vein, the results show that the odds of securing employment were significantly higher for youth with entrepreneurial family backgrounds compared to their counterparts in the reference category (OR=1.74; CI=1.31, 2.30). The results show that the odds of securing employment were significantly higher for youth with an entrepreneurial ecosystem compared to their counterparts in the reference category (OR=1.23; CI=0.96, 1.58). The results show that the odds of securing employment were significantly higher for youth with unforeseen situations compared to their counterparts in the reference category (OR=2.57; CI=2.05, 3.33). Furthermore, the results showed that the odds of securing employment are significantly higher for youth who often study the environment than their counterparts in the reference category (OR=2.01; CI=0.97, 4.13). The results showed that the odds of securing employment are significantly lower for youth who always use rewards to keep themselves focused compared to their counterparts in the reference category (OR=0.58; CI=0.34, 0.98). The results showed that the odds of securing employment are significantly higher for youth who always sustain their belief compared to their counterparts in the reference category (OR=2.21; CI=1.08, 4.53). Similarly, results showed that the odds of securing employment were significantly higher for youth who have knowledge about how to develop a business compared to their counterparts in the reference category (OR=1.73; CI=1.17, 2.57).

**Table 3 Binary Logistics Regression analysis showing the effects of background factors and knowledge by labour force participation**

Selected Variables	Own a business		Business successful		Desire future startup		Secured employment	
	Model 1:		Model 2:		Model 3:		Model 4:	
	OR (95% CI)	Sig.	OR (95% CI)	Sig.	OR (95% CI)	Sig.	OR (95% CI)	Sig.
Age group								
20 or less	1.00		1.00		1.00		1.00	
21-23	1.05(0.73, 1.49)	.803	0.97(0.67, 1.40)	.883	0.98(0.72, 1.34)	.913	0.97(0.59, 1.26)	.454
24-26	1.46(1.02, 2.10)	.038	1.34(0.92, 1.95)	.123	0.64(0.47, 0.89)	.007	1.13(0.77, 1.65)	.534
27-29	2.09(1.45, 3.01)	.000	1.62(1.11, 2.38)	.013	0.47(0.34, 0.66)	.000	1.54(1.05, 2.25)	.027
30-32	2.11(1.44, 3.08)	.000	2.00(1.35, 2.98)	.001	0.47(0.33, 0.66)	.000	1.27(0.86, 1.89)	.234
33-35	2.17(1.48, 3.20)	.000	2.01(1.34, 3.02)	.001	0.44(0.31, 0.63)	.000	1.13(0.76, 1.70)	.538
Sex								
Male	1.00		1.00		1.00		1.00	
Female	1.26(1.03, 1.55)	.028	1.19(0.96, 1.48)	.118	0.93(0.77, 1.12)	.427	0.94(0.76, 1.17)	.600
Region								
Northern Nigeria	1.00		1.00		1.00		1.00	
Southern Nigeria	0.56(0.44, 0.70)	.000	0.55(0.44, 0.70)	.000	2.81(2.29, 3.44)	.000	0.95(0.75, 1.20)	.660
Residence								
Semi-Urban	1.00		1.00		1.00		1.00	
Urban	1.07(0.87, 1.33)	.519	0.89(0.71, 1.11)	.309	0.94(0.77, 1.14)	.525	0.86(0.69, 1.07)	.185
Education								
None	1.00		1.00		1.00		1.00	
Secondary/ Primary/ Other equivalents	0.66(0.27, 1.61)	.366	1.24(0.48, 3.19)	.657	2.46(1.03, 5.86)	.042	6.07(1.31, 28.05)	.021
OND or higher	0.74(0.31, 1.81)	.513	1.27(0.49, 3.28)	.624	2.27(0.95, 5.43)	.065	3.86(0.84, 17.84)	.084
Employment								
Unemployed	1.00		1.00		1.00		1.00	
Self-Employed	2.98(2.19, 4.06)	.000	3.13(2.26, 4.34)	.000	0.37(0.28, 0.48)	.000	1.45(1.02, 2.04)	.036
Employed (Priv. Sector)	1.17(0.81, 1.69)	.390	1.41(0.96, 2.07)	.078	0.85(0.61, 1.17)	.308	2.26(1.54, 3.33)	.000
Employed (Pub Sector)	1.11(0.72, 1.70)	.648	1.33(0.85, 2.07)	.217	0.53(0.36, 0.78)	.001	2.53(1.63, 3.94)	.000
Income								
Less than N30,000.00	1.00		1.00		1.00		1.00	
N30,000.00 to N49,999.99	1.34(1.01, 1.77)	.046	1.48(1.10, 1.99)	.010	0.97(0.75, 1.25)	.807	1.34(0.98, 1.82)	.065
N50,000.00 to N79,999.99	1.16(0.84, 1.60)	.359	1.45(1.04, 2.03)	.028	1.27(0.94, 1.71)	.121	2.40(1.72, 3.34)	.000
N80,000.00 and above	1.71(1.20, 2.43)	.003	1.50(1.04, 2.17)	.031	0.97(0.70, 1.35)	.843	1.70(1.18, 2.45)	.004
Entrep family background								
No	1.00		1.00		1.00		1.00	
Yes	1.47(1.14, 1.89)	.003	1.81(1.39, 2.37)	.000	0.83(0.67, 1.04)	.112	1.74(1.31, 2.30)	.000
Entrepreneurial hub/ecosystem								
No	1.00		1.00		1.00		1.00	
Yes	0.91(0.70, 1.18)	.480	0.80(0.61, 1.05)	.110	1.26(0.98, 1.61)	.068	1.23(0.96, 1.58)	.101

Selected Variables	Own a business		Business successful		Desire future startup		Secured employment	
	Model 1:		Model 2:		Model 3:		Model 4:	
	OR (95% CI)	Sig.	OR (95% CI)	Sig.	OR (95% CI)	Sig.	OR (95% CI)	Sig.
Unforeseen situations (e.g. COVID-19)								
No	1.00		1.00		1.00		1.00	
Yes	5.79(4.61, 7.28)	.000	8.43(6.61, 10.74)	.000	0.33(0.27, 0.41)	.000	2.57(2.05, 3.22)	.000
<b>Personal Motivation</b>								
Keep myself in check								
Never	1.00		1.00		1.00		1.00	
Sometimes	1.55(0.84, 2.87)	.163	2.17(1.14, 4.13)	.018	0.94(0.53, 1.70)	.849	1.17(0.63, 2.17)	.617
Always	1.83(0.98, 3.42)	.058	1.94(1.01, 3.73)	.048	0.90(0.50, 1.62)	.720	0.89(0.48, 1.66)	.717
Set goals and achieve them								
Never	1.00		1.00		1.00		1.00	
Sometimes	1.06(0.46, 2.43)	.896	0.98(0.41, 2.33)	.960	0.75(0.33, 1.69)	.492	1.33(0.59, 3.02)	.495
Always	0.98(0.42, 2.29)	.960	1.02(0.42, 2.48)	.960	0.82(0.36, 1.88)	.647	1.33(0.58, 3.05)	.495
Create a vivid vision of my future success								
Never	1.00		1.00		1.00		1.00	
Sometimes	1.23(0.61, 2.49)	.562	1.36(0.66, 2.83)	.409	0.77(0.39, 1.52)	.458	0.57(0.29, 1.13)	.110
Always	1.08(0.53, 2.20)	.831	1.41(0.68, 2.96)	.357	0.85(0.43, 1.69)	.650	0.65(0.33, 1.28)	.212
Study my environment often								
Never	1.00		1.00		1.00		1.00	
Sometimes	0.71(0.35, 1.42)	.329	1.04(0.50, 2.16)	.907	1.51(0.76, 3.02)	.240	1.64(0.64, 2.61)	.477
Always	0.54(0.27, 1.11)	.096	0.74(0.35, 1.56)	.429	1.76(0.87, 3.58)	.117	2.01(0.97, 4.13)	.059
Maximum effort and work harder if I suffer a setback								
Never	1.00		1.00		1.00		1.00	
Sometimes	1.40(0.70, 2.80)	.340	1.94(0.93, 4.02)	.076	0.78(0.40, 1.52)	.460	1.15(0.57, 2.34)	.699
Always	1.001(0.50, 2.02)	.997	1.89(0.90, 3.95)	.092	0.85(0.43, 1.67)	.638	1.02(0.50, 2.09)	.963
Think positively about making sure my needs are met								
Never	1.00		1.00		1.00		1.00	
Sometimes	0.73(0.33, 1.60)	.429	0.71(0.31, 1.60)	.404	1.11(0.52, 2.34)	.794	1.26(0.59, 2.67)	.548
Always	0.53(0.24, 1.18)	.119	0.40(0.18, 0.92)	.030	1.69(0.79, 3.63)	.176	0.82(0.38, 1.76)	.612
Use rewards to keep myself focused								
Never	1.00		1.00		1.00		1.00	
Sometimes	0.76(0.44, 1.33)	.337	0.96(0.54, 1.71)	.902	1.06(0.63, 1.76)	.856	0.75(0.45, 1.27)	.290
Always	0.70(0.41, 1.22)	.214	0.71(0.40, 1.27)	.249	1.22(0.73, 2.04)	.455	0.58(0.34, 0.98)	.041
Sustain my belief								
Never	1.00		1.00		1.00		1.00	
Sometimes	2.07(1.00, 4.30)	.051	1.44(0.67, 3.08)	.354	0.55(0.28, 1.11)	.096	2.16(1.04, 4.47)	.038
Always	1.68(0.82, 3.42)	.155	1.24(0.59, 2.62)	.570	0.76(0.39, 1.48)	.415	2.21(1.08, 4.53)	.030

Personal Motivation									
Move in a new direction									
Never	1.00		1.00		1.00		1.00		
Sometimes	1.11(0.65, 1.91)	.696	0.82(0.46, 1.45)	.488	1.02(0.61, 1.71)	.927	0.99(0.59, 1.68)	.973	
Always	1.66(0.96, 2.87)	.067	1.19(0.67, 2.12)	.545	0.70(0.42, 1.18)	.182	1.31(0.77, 2.22)	.323	
Do the minimum amount of work									
Never	1.00		1.00		1.00		1.00		
Sometimes	1.08(0.58, 1.74)	.737	0.73(0.45, 1.20)	.212	0.89(0.57, 1.40)	.624	0.69(0.43, 1.10)	.115	
Always	0.88(0.55, 1.42)	.601	0.54(0.33, 0.89)	.015	1.20(0.77, 1.87)	.430	0.90(0.57, 1.42)	.644	
Knowledge about entrepreneurship development									
Resource available									
No	1.00		1.00		1.00		1.00		
Yes	0.75(0.58, 0.97)	.029	0.87(0.67, 1.14)	.313	1.53(1.22, 1.93)	.000	1.15(0.89, 1.50)	.324	
Develop a business									
No	1.00		1.00		1.00		1.00		
Yes	1.69(1.19, 2.41)	.004	1.58(1.09, 2.28)	.015	0.63(0.45, 0.86)	.004	1.73(1.17, 2.57)	.006	
Organise a business									
No	1.00		1.00		1.00		1.00		
Yes	1.46(1.00, 2.14)	.050	1.87(1.26, 2.78)	.002	1.08(0.76, 1.52)	.675	1.43(0.93, 2.18)	.100	
Run a business venture									
No	1.00		1.00		1.00		1.00		
Yes	1.14(0.79, 1.64)	.487	1.23(0.84, 1.80)	.279	1.00(0.72, 1.40)	.980	0.95(0.64, 1.41)	.795	

Note: Level of Significance;  $p \leq .1$ ,  $p \leq .05$ ,  $p \leq .01$ ,  $p \leq .001$ .

Model 1: dependent variable: own a business venture: Chi-square = 852.925, -2 Log likelihood = 2304.236, Nagelkerke R Square = .409

Model 2: dependent variable: business successful: Chi-square = 1044.922, -2 Log likelihood = 2140.698, Nagelkerke R Square = .481

Model 3: dependent variable: desire startup in the future: Chi-square = 613.227, -2 Log likelihood = 2659.350, Nagelkerke R Square = .303

Model 4: dependent variable: secured Employment: Chi-square = 544.031, -2 Log likelihood = 2168.138, Nagelkerke R Square = .300

## 5. Discussion

The paper aimed to assess how sociodemographic factors and knowledge about entrepreneurship affect labour force participation among youth in Nigeria. The impact of sociodemographic factors, specifically age, sex, region of residence, income, family background and unforeseen situations, were significant in this study, thus confirming the results of previous studies by O'Connor et al., 2021; Bohlmann et al., 2017; Cardella et al., 2020. While controlling for knowledge in the full model, the study found that owning a business was significantly lower for youth who knew of available resources in their environment but higher for youth who knew how to develop and organise a business. Further, building a successful business venture, the second LFP component, was significantly higher for youth who know how to develop and organise a business. These youth were aged 27-35, had earned income, and came from entrepreneurial family backgrounds. Youth who knew about the resources available in their environment desired future startup businesses. The desire was significant from age 24 to 35, and they had faced unforeseen situations. Securing employment was significantly higher for youth who know how to develop a business, and this was only for youth aged 27-29. It was also significant for youth with entrepreneurial family backgrounds.

## 6. Recommendation

The study, thus, provides policymakers, programme implementers, and other stakeholders with evidence that will enable them to purposefully target the youth based on specific sociodemographic factors and knowledge about entrepreneurship that can stimulate entrepreneurial practice among them in the country.

## 7. Conclusion

The study examined the association between sociodemographic factors, knowledge about entrepreneurship and youth labour force participation in Nigeria. Findings showed that socioeconomic factors and knowledge about entrepreneurship affect youth labour force participation and demonstrated the linkages. Therefore, understanding the factors that increase the knowledge of the youth in entrepreneurship will lead to more involvement in and targeted entrepreneurship development programmes for labour force participation. Increased youth labour force participation will result in a much-expected demographic dividend for the country in the long run.

## Conflict of Interest

The authors state no conflict of interest exists.

## Institutional Review Board Statement

The Ethical Committee of Covenant University, Ota, Nigeria, has approved this study.

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