

**ASSESSMENT OF ENTREPRENEURSHIP OPPORTUNITIES AND PREFERENCES
AMONG LIBRARY AND INFORMATION SCIENCE UNDERGRADUATES**

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Abstract

This study investigates the assessment of entrepreneurship opportunities and preferences among library and information science undergraduates. The objectives were to examine the perception of Library and Information Science undergraduates towards entrepreneurship development and to identify the opportunities available for Library and Information Science undergraduates to pursue entrepreneurship. This study adopted a descriptive survey research design. The study population consists of all level 300 undergraduate students of Library and Information Science Department in Ignatius Ajuru University of Education. The total population of the students is 85. A sample size of 85 level 300 undergraduate students was used for the study. Census study was used as the sampling technique due to the nature of the sample size. The instrument for data collection was a self-structure questionnaire. A total of eighty-five (85) copies of the questionnaire were administered to level 300 students (respondents) of Library and Information Science Department out of which 80 copies were retrieved upon completion by the researcher. To analyze the data collected, the researcher adopted the descriptive statistics of frequency distribution, simple percentage and mean scores. The findings of the study revealed that graduates of library and information science should venture into any of the identified business opportunities for profit maximization in the area of information science. It was recommended that LIS professionals should develop an entrepreneurial culture and mindset and also acquire specific ICT skills to exploit the opportunities in the profession, achieve self-employment and remain relevant.

Keywords: Assessment, Entrepreneurship, Entrepreneurship Opportunities, Preferences and LIS.

Introduction

The pursuit of entrepreneurship and its impact on economic growth has been recognized as a potential solution to the high unemployment rates in developing countries. Entrepreneurship encompasses various aspects and is defined differently by numerous schools of thought, as observed in the literature (Iwu et al., 2021). For example, Chiedu et al. (2021) describe entrepreneurship as the effort to identify business opportunities, launch ventures with innovative ideas, take on associated risks, and bring them to fruition for profit. Additionally, entrepreneurship is seen as the professional use of knowledge and skills by individuals or groups to drive growth related to wealth creation, job generation, and social benefits (Mukharjee, 2021).

Francis and Oghenevwogaga (2015) suggest that entrepreneurship within Library and Information Science (LIS) involves cultivating the attitudes, behaviours, and skills of individuals—whether students, graduates, or professionals—to achieve profit-oriented objectives. Those who bring these elements together are considered entrepreneurs. An entrepreneur is someone who assumes leadership roles, combines and utilizes production factors to create new products and services that benefit society (Chiedu et al., 2021). Entrepreneurs are enterprise builders who recognize and create business opportunities, manage them using personal or borrowed capital, take associated risks, and earn profits as a reward for their efforts (International Labour Organization, 2015; Okoro, 2021). They contribute to the economy by identifying societal needs and strategically taking innovative and resourceful actions to meet those needs, to generate profit (Goetz et al., 2012; Kalabeke, 2018).

In the expanding LIS field, the term ‘infopreneurship’ has been coined and widely adopted. This term is derived from combining ‘information’ and ‘entrepreneurship’ (El-Kalash et al., 2016). Infopreneurship is a growing business model focused on generating profits from information-related activities by creating information products and services that are driven by ICT (El-Kalash et al., 2016). Individuals who engage in entrepreneurial activities within this context are referred to as ‘infopreneurs’ (David & Dube, 2014).

Nweze, (2018) asserted that the increasing importance of entrepreneurship in the global economy has led to a growing interest in understanding the entrepreneurial intentions and preferences of various groups, including students. Library and Information Science (LIS) undergraduates are a unique group, as they possess a blend of technical, organizational, and social skills that can be leveraged to create innovative solutions and businesses. However, there

is a dearth of research on the entrepreneurial aspirations and opportunities among LIS undergraduates.

Westhead and Wright (2013), opined that in recent years, the LIS field has undergone significant transformations, driven by technological advancements, changing user needs, and shifting organizational landscapes. These changes have created new opportunities for LIS professionals to engage in entrepreneurial activities, such as developing digital products and services, creating information-based startups, and offering consulting services. Despite these opportunities, there is a lack of understanding about the entrepreneurial inclinations and preferences of LIS undergraduates.

Assessment is the collection of data aimed at describing or having a more acceptable understanding of an issue (Huitt et al., 2001). Tookoian (2018) argued that the polygonal nature of assessments implies that they can be manipulated in several ways to offer constructive formal or informal configurations to the learning process. Tookoian highlighted that there are four kinds of assessment namely diagnostic, formative, interim and summative. Diagnostic assessment refers to those that are helpful before the process starts, helping to determine what the finest operational approach should be. Formative assessment is advantageous during a defined process to track down steps forward and see if adjustments to the approach should be made during the process. Interim assessment helps to ascertain if the people involved in a process are advancing and picking up the substance. Summative assessment is the type that is done at the end of the process, to reconsider performance, see how the people involved did it, and consider how to get better for the next process. This study adopted the formative assessment approach since entrepreneurship has become entrenched in the fabric of Nigerian universities and LIS professionals - with the strong premise that they possess entrepreneurial skills. According to Mgbonyebi and Olaniyi (2019), acquiring some fundamental professional skills [such as entrepreneurial skills] and using them with knowledge gained after conscious training is the foundation of economic empowerment and development which is urgently needed. Consequently, exploiting and assessing different entrepreneurial skills is not just the way forward for the professional preparation of LIS faculty and academic librarians but also a sure footing for a successful life.

According to Ogbonna and Dare (2020), entrepreneurship opportunities refer to situations or conditions that allow individuals to develop and implement innovative business ideas, products, or services. These opportunities can arise from various sources, including changes in

market trends, advancements in technology, shifts in consumer behaviour, or gaps in existing products or services. Entrepreneurial opportunities can be categorized into different types, including small business entrepreneurship, scalable startup entrepreneurship, and large company entrepreneurship. Small business entrepreneurship involves starting a business without the intention of turning it into a large conglomerate, whereas scalable startup entrepreneurship involves creating a business with the potential to grow rapidly and become a large company. Large company entrepreneurship, on the other hand, involves creating a new business division within an existing company.

Adetayo and Hamzat (2021), opined that in terms of preferences, entrepreneurs often have different personality traits, skills, and motivations that influence their entrepreneurial pursuits. For example, some entrepreneurs may be driven by a desire to innovate and create new products or services, while others may be motivated by a desire to solve social or environmental problems. Entrepreneurs may also have different leadership styles, communication skills, and organizational behaviours that influence their ability to succeed in their entrepreneurial ventures.

Statement of the Problem

The unemployment situation in Nigeria has resulted in graduates getting involved in some social vices like armed robbery, banditry, kidnapping etc. This sorry situation gave rise to an increased yearning for skills and competency-based education through which graduates can acquire skills necessary for entrepreneurship. If library and information science students do not acquire skills, they cannot become entrepreneurs in their field. Failure to equip students with entrepreneurship education, skills and motivation undermines their ability to embrace entrepreneurship and achieve self-reliance. The acquisition of these skills enables students to live a responsible life in society. There is a need to investigate the factors that influence LIS undergraduates' entrepreneurial intentions, the types of entrepreneurial opportunities that appeal to them, and the skills and resources required to support their entrepreneurial endeavours. This knowledge gap hinders the development of targeted interventions and support systems that can foster entrepreneurship among LIS undergraduates. In lieu of the above, the researchers seek to investigate the assessment of entrepreneurship opportunities and preferences among library and information science undergraduates.

Aim and Objectives of the Study

The aim of the study is to investigate the assessment of entrepreneurship opportunities and preferences among library and information science undergraduates. Specifically, the objectives of this study are:

1. To investigate the perception of Library and Information Science undergraduates towards entrepreneurship development.
2. To identify the opportunities available for Library and Information Science undergraduates in pursuing entrepreneurship.

Research Questions

1. What are the perceptions of Library and Information Science undergraduates towards entrepreneurship development?
2. What are the opportunities available for Library and Information Science undergraduates in pursuing entrepreneurship?

Scope of the Study

The scope of entrepreneurship opportunities and preferences among library and information science undergraduates is a vital area of exploration. Research has shown that there is a growing need to inculcate intrapreneurial initiatives among library and information science professionals, and to design curricula that foster entrepreneurial skills. Study revealed that most respondents acquired entrepreneurship skills through formal education during their LIS education. The study also identified key skills that were potential to make librarians and information professionals entrepreneurs, including information literacy training skills, information search, reference services, and research methods. Furthermore, the study highlighted challenges that would limit librarians and information professionals in exercising their entrepreneurship skills, such as lack of innovative skills, insufficient financial resources to start up a business, inadequate ICT facilities and training, as well as lack of confidence and encouragement. The study found that most of the courses in the LIS curriculum did not provide adequate training in entrepreneurship and marketing opportunities. These studies underscore the need for LIS educators to prioritize entrepreneurship education and training in their curricula, and to provide students with opportunities to develop entrepreneurial skills and competencies.

Conceptual Clarification

Entrepreneurship

Entrepreneur is a French word which means to undertake, to pursue opportunities, to fulfil the needs and wants of the people through innovation and starting a business. An entrepreneur does the following;

(i) undertakes a venture, (ii) organizes it, (iii) raises capital to finance it, (iv) and assumes the whole or major part of the risk of business. An entrepreneur is one of the most important inputs and segments of economic growth. He/she is one of the responsible persons who can set up a business or an enterprise. The Longman Dictionary of English Language and Culture defines an entrepreneur as a person who starts a company or arranges for a piece of work to be done and takes business risks in the hope of making a profit. He or she is the person who perceives the market opportunity and then has the motivation, drive and ability to mobilize resources to meet it. An entrepreneur is skilled in the use of available resources to create something new which can sustain the individual or provide him with a means of livelihood. According to the Bureau of Public Reforms (BRP) (2009), an entrepreneur is simply a person who can come up with a specific business idea and the skills, ability and finance to transform it into a viable business concern.

Entrepreneurship is a word derived from the French word “entreprendre” which means to “undertake”. An entrepreneur can be defined as an innovating individual who has developed an ongoing business activity where none existed before Iorfa et al., (2019) Meredith cited in Arogundade, defined an entrepreneur as a person who possesses the ability to recognize and evaluate business opportunities, assemble the necessary resources to take advantage of them and take appropriate action to ensure success. Entrepreneurs are people who constantly discover new markets and try to figure out how to supply those markets efficiently and make a profit. He is a person who searches for change, responds to change, and exploits change by converting change into business opportunities Jegbefume et al., (2017).

Entrepreneurship refers to an individual's ability to manipulate ideas and turn them into reality. These include creativity, innovation, initiative, and bearing of risk. It is also the ability to manage projects to achieve objectives. Morrison (2016) defined entrepreneurship as the willingness and ability of a person or persons to acquire Educational skills to explore and exploit investment opportunities, establish and manage a successful business enterprise. Nwaka (2019) opined that entrepreneurship education prepares an individual for occupational fields

and for effective participation in the world of work as well as preparation for responsible citizenship and a tool for promoting environmentally sound sustainable development and a way of alleviating poverty for individuals who take a risk and start something new.

According to Babalola (2018), entrepreneurship in library and information science is all about attitudinal change and development, the behaviour of library and information science practitioners at the individual level to pursue opportunities through innovative leveraging of resources that for the most part are not controlled internally. Entrepreneurship makes an individual to be self-reliant, focused, functional, realistic, productive, reliable and creative where he/she can manage and utilize available resources for income generation and survival. According to the Bureau of Public Reforms (BRP) (2019), an entrepreneur is simply a person who can come up with a specific business idea and the skills, ability and finance to transform it into a viable business concern.

Entrepreneurship Opportunities

Opportunity refers to a chance for advancement, progress or profit. Such changes can be obtained by an individual to accomplish a set of goals and objectives if well-articulated. The Oxford Advanced Learners Dictionary (2015) defines opportunity as a time when a particular situation makes it possible to do or achieve something. It can also be seen as a favourable circumstance or occasion. According to Hansen (2009), for an opportunity to be meaningful, it must be recognized, discovered and identified. This is known as entrepreneurial opportunity. Entrepreneurial opportunities provide economic value to the entrepreneur after he has attended to the identified need. That is why Shane and Venkaturam (2000) opined that it is those situations in which goods and services, raw materials and organized methods are introduced and sold at greater than their cost of production. Entrepreneurial opportunities enable the entrepreneur to discover new methods and techniques of harnessing goods, services, raw materials, personnel etc. to earn economic value.

According to Omekwu and Echezona (2019), Entrepreneurship opportunities refer to situations or conditions that allow individuals to develop and implement innovative business ideas, products, or services. These opportunities can arise from various sources, including changes in market trends, advancements in technology, shifts in consumer behaviour, or gaps in existing products or services. Entrepreneurial opportunities can be categorized into different types, including small business entrepreneurship, scalable startup entrepreneurship, and large company entrepreneurship. Small business entrepreneurship involves starting a business

without the intention of turning it into a large conglomerate, whereas scalable startup entrepreneurship involves creating a business with the potential to grow rapidly and become a large company. Large company entrepreneurship, on the other hand, involves creating a new business division within an existing company.

Entrepreneurial opportunities can also be driven by various factors, including economic factors, technological advancements, globalization, and industry-specific economics. For instance, a strong economy can fuel growth in various industries, creating opportunities for entrepreneurs to start new businesses or expand existing ones. Technological advancements, such as the development of artificial intelligence, can also create new opportunities for entrepreneurs to develop innovative products or services (Ezeani et al., 2015).

Preferences

Erhirheme and Ekpeyen (2012), Preferences refer to the individual choices, priorities, and inclinations that entrepreneurs have regarding various aspects of their business ventures. These preferences can shape the direction and success of a business by influencing decisions such as the type of industry to enter, the business model to adopt, the level of risk to take, and the approach to innovation. Entrepreneurs may have preferences for working in certain markets, targeting specific customer segments, or prioritizing growth over profitability. Understanding and aligning these preferences with the market environment and opportunities is crucial for effective decision-making and long-term success in entrepreneurship.

In terms of preferences, entrepreneurs often have different personality traits, skills, and motivations that influence their entrepreneurial pursuits. For example, some entrepreneurs may be driven by a desire to innovate and create new products or services, while others may be motivated by a desire to solve social or environmental problems. Entrepreneurs may also have different leadership styles, communication skills, and organizational behaviours that influence their ability to succeed in their entrepreneurial ventures.

According to Okolo and Ivwighrehweta (2021), preferences refer to the choices and decisions made by entrepreneurs to maximize their satisfaction and achieve their goals. These preferences can influence the type of goods and services they offer, the target market they cater to, and the business strategies they employ. For instance, an entrepreneur may have a preference for sustainability, leading them to develop eco-friendly products or adopt environmentally responsible practices. Similarly, an entrepreneur may have a preference for innovation, driving them to invest in research and development to stay ahead of the competition. Understanding an

entrepreneur's preferences is essential to grasping their motivations, values, and decision-making processes.

Library and Information Science

Library and information science is the academic and professional study of how information and information carriers are produced, selected, acquired, organized, evaluated, managed and disseminated. Library and information profession serves the information needs of a democratic, progressive technologically sophisticated and culturally diverse society. A key focus of the profession is enabling people to connect with the world of information, interacting with and utilizing information in all aspects of their lives. The profession fosters lifelong learning, personal fulfilment, improved decision-making, knowledge development, innovation, imagination, creativity and cultural continuity Omehia, (2019). People who work in the profession have specialized knowledge and skills in producing, selecting, acquiring, organizing, evaluating, managing and disseminating information resources and services.

Entrepreneurial Opportunities for Graduates of Library and Information Science

There are so many entrepreneurial opportunities for LIS professionals not known to them. Ekuoye and Igbeka in Ugwu and Ezeani (2012) identified some business opportunities open to LIS professionals including information brokerage, book publishing, and trading, Email Publishing, Web Publishing, and Desktop Publishing, establishing and maintaining libraries for organizations, organization of private libraries, a compilation of directories, information services to visually impaired, indexing and abstracting services, freelancing and others. Publishing Web Publishing, and Desktop Publishing, establishing and maintaining libraries for organizations, organization private libraries, compilation directories, information services to the visually impaired, indexing and abstracting services, freelancing and others

Information Brokerage: Information brokers provide information for their clients for a fee. The ability to deliver documents, copies of unpublished articles, and similar materials to the academic, business and professional communities on demand presents an opportunity for those with enough foresight and entrepreneurial spirit to turn these varied needs into business. As a result, information brokers provide their clients with information for a fee. Information brokers use various resources including the internet, online services that specialize in databases, public libraries, books, and CD-ROMs. From convenience, and confidentiality of the services they offer, packaged answers which save time and effort, cheaper hiring of a professional or expert, speed in information provision, and flexibility in information service rendering among others

(Ikenwe, 2021) it will therefore not be possible for the information brokers to do the same thing or perform the same type of jobs. Consequently, no two information brokers' jobs are exactly alike.

Book Publishing and Trading: Librarians and information professionals can venture into the publishing industry business where there are a lot of opportunities and prospects. One can become a publisher, an editor, a reference book critic, a children's books reviewer, promote books in libraries or own a bookshop. One can decide to carry out all the activities or you can take one or two categories and specialize in them. For example, one can decide to own a bookshop as well as review references and children's books. One can also own a bookshop and seize the opportunity to promote one's type of stock. Some booksellers also specialize in acquiring a lot of CD-ROM databases like ERIC, AGRIS, etc. which they sell to libraries. Ekuoye (2007) opines that to be in the publishing business, you will have to source for authors and manuscripts. But with diskettes, you do not go about again with manuscripts and typescripts. You can receive manuscripts by electronic mail. More so, one can venture into journal publishing. Journal publishing is interesting but more demanding.

Organization of a Private Library: This is another job an information scientist can do to earn some money. Many scholars have a lot of books, documents, and journals, especially after their retirement which they can organize into a library.

Compilation of Directories: Compilation of directories is another entrepreneurial opportunity that library and information professionals can delve into as entrepreneurs. There is so much that needs to be compiled. There can be "Who is who" in virtually anything, profession, village, organization, etc. A telephone directory is a wonderful tool.

Compilation of Bibliographies: This involves the compilation of bibliographic details of a given discipline, subject, or topic for a given target audience. LIS professionals, as entrepreneurs, can earn a sustainable income through the publishing of subject and trade bibliographies.

Reprography services: According to Musa and Tsafe (2019) reprographic services consist of repairs of minor/major damaged books to restore them to their original shape and prevent further deterioration. The binding of books, documents, research materials/projects, and other vital documents, is a very brick business especially, in educational institutions. This business can go a long way in supporting LIS graduates to be self-employed, employ others and also attend to their basic/domestic needs.

Selective dissemination of information/Current Awareness Services: These services are designed to keep the user abreast of information in their area of work or interest that has recently been published and received or identified by the libraries or information units. Libraries can provide content pages for subscribed journals and can publish a new monthly newsletter, which could contain links to resources and information on developments in subject areas.

Perception of Library and Information Science Undergraduates towards Entrepreneurship Development

Dutse, Mamaki and Djib (2013), perception of Library and Information Science (LIS) undergraduates towards entrepreneurship development is a crucial aspect of their academic and professional journey. Research suggests that LIS students and graduates have a positive perception of entrepreneurship education, recognizing its potential to contribute to economic growth, innovation, and job creation. However, there are challenges hindering entrepreneurship skills development for LIS graduates, including lack of capital, bad business decisions, economic crises, poor market demand, technology/ICT skills requirements, lack of managerial functions and knowledge/entrepreneurial mindset, and poor education and training. Entrepreneurship education is essential for LIS students as it empowers them to create job opportunities for themselves and others, promotes innovation and enhances their employability. The benefits of entrepreneurship education for LIS professionals include self-employment, diversified knowledge and creative abilities, innovation, and the ability to transform ideas into visible ventures. Moreover, entrepreneurship education prepares LIS graduates for self-employment and occupational fields, enabling them to create wealth.

LIS undergraduates can explore various entrepreneurship opportunities, such as producing and selling equipment used in libraries and information centers, bookselling business, indexing and abstracting, and compilation of bibliographies. To succeed in these ventures, they require skills such as business management, personal entrepreneurship, information technology, information literacy, and knowledge management. Overall, the perception of LIS undergraduates towards entrepreneurship development is positive, and with the right education, training, and skills, they can become successful entrepreneurs, contributing to the growth of the economy and the development of the library and information science profession (Lawan et al., 2015).

Problems Associated with Entrepreneurial Opportunities for LIS Professionals

The entrepreneurial opportunities available to Library and Information Science professionals discussed in this paper are in no doubt without their challenges, hence, the paper will be incomplete without referring to some of them. This paper therefore highlights some of the challenges that LIS professionals encounter while trying to venture into entrepreneurship.

Poor attitude of Librarians toward Entrepreneurship: Librarians' mentality in Nigeria is such that they only see job opportunities in libraries and ministries. They never imagine using some of the information skills acquired during their training to identify needs in society to meet people's needs for a fee. This has prevented librarians from cashing in on such opportunities.

Lack of appreciation by benefactors: The other external challenge that new entrepreneurs face in starting a business is finding good customers. Good customers can help to build a business where they will always try to do the right thing that can benefit both the company and themselves (Lohitkumar and Reddy 2016). Besides that, they will always appear loyal to the company besides being very forgiving if there is a mistake or apology made by a certain business. Furthermore, they will also provide constructive comments on the service of a certain new business so that improvements can be made to it by the entrepreneurs. However, good customers like this are not many. Bad customers are commonly categorized as those people who are very picky and bossy about minor issues that happen. They will always try to ruin the business where they will exploit the company by looking for loopholes in the company's policy and trying to tear the company apart Kanchana and Beegom (2013).

Lack of entrepreneurial spirit: an entrepreneur should be able to possess the ability to see what others cannot see simply known as "envisioning the idea". When others see problems, an entrepreneur must be able to see opportunities instead. Only then, these opportunities will eventually turn out and forge into a business idea. In other words, an entrepreneur has to be able to bring innovative products into existence by "creating value out of nothing" that can satisfy the public. Hence, the process of searching for a business idea is undeniably challenging and entrepreneurs have to possess the ability to transform problems into business opportunities which is very difficult. Besides that, developing a vision is another crucial aspect of starting up a business.

Poor source of funds- According to Nyanga, T. (2013) challenge that new entrepreneurs usually face when starting a business after developing an idea is the challenge of raising capital for their business start-up. Knowing only the core of a business idea is not enough for a business to get started especially without business capital. Hence, an entrepreneur himself is responsible for searching for investors to raise the capital for his own business. It is one crucial step to be

done and indeed a challenging task for new entrepreneurs. According to Kanchana and Beegom (2013), when building the first business, an entrepreneur not only has to convince the investors about something that does not exist but also gain their trust in the task proposed so that they are willing to invest in it.

Empirical Review

Ahmed et al. (2024), assessed the entrepreneurial skills of LIS students in Federal Polytechnic, Offa, Kwara State, Nigeria. The descriptive research survey design was used for this study. The population for the study consisted of 250 HND I and HND II students of Department Of Library and Information Science for 2021/2022 academic session. Purposive sampling technique was used since it is believed that they have completed their mandatory Industrial Training Programme and offered entrepreneurship education course for at least 5 semesters. 250 questionnaires were distributed and 236 questionnaires (representing 94.4%) were returned and found usable. Data from the study were analyzed using mean. Mean was used to answer all the research questions and decision rule for positive (agreed) response was set at mean score of 2.50 and above, while a mean score of below 2.50 was set as negative and rejected. The major findings of the study included low level of entrepreneurial skills acquisition by the LIS students; out of the sixteen skills examined, they only agreed to have 4; the major challenges identified were lack of financial support to start a business, high student population among others. It was recommended that the curriculum should be reviewed and practical skills required to function effectively as an entrepreneur after graduation should be included.

Musa and Tsafe (2019), examine the entrepreneurship opportunities for graduates of Library and Information Science (LIS) in the 21st century. Entrepreneurship has been identified as a solution to the problems of unemployment being experienced in most economies of the world. This is because; it provides a lot of opportunities for employment, self-reliance, skills and knowledge development and success in life. Graduates of LIS sometimes find it difficult to secure jobs after graduation. This paper identified and discussed several opportunities that graduates of library and information science (LIS) can explore to get employment and become self-reliant.

Bumkeng and Adadu (2023), examine entrepreneurial opportunities available to library and information science graduates. It examined the concept of entrepreneurship, job opportunities, librarianship, contemporary era as well as highlighting the skills required by library and information science professionals, the paper further identified challenges such as poor attitude of library and information science graduates towards entrepreneurship, lack of entrepreneurial spirit, poor sources of funds among other factors hindering professionals from engaging fully

in entrepreneurship and suggested use of skills acquired during training and development of entrepreneurial spirit by LIS graduates as some of the way forward. The paper concludes that LIS Professionals should embrace the entrepreneurial opportunities available to them having acquired all the skills required to embark on the business of entrepreneurship in the course of training to become professionals.

Methodology

This study adopted descriptive survey research design. The population of the study consists of all level 300 undergraduate students of Library and Information Science Department in Ignatius Ajuru University of Education. The total population of the students is 85. A sample size of 85 level 300 undergraduate students was used for the study. Census study was used as the sampling technique due to the nature of the sample size. The instrument for data collection was a self-structure questionnaire. A total of eighty-five (85) copies of the questionnaire were administered to level 300 students (respondents) of Library and Information Science Department out of which 80 copies were retrieved upon completion by the researcher. To analyze the data collected, the researcher adopted the descriptive statistics of frequency distribution, simple percentage and mean scores.

Result and Discussion

Demographic Information of Respondents

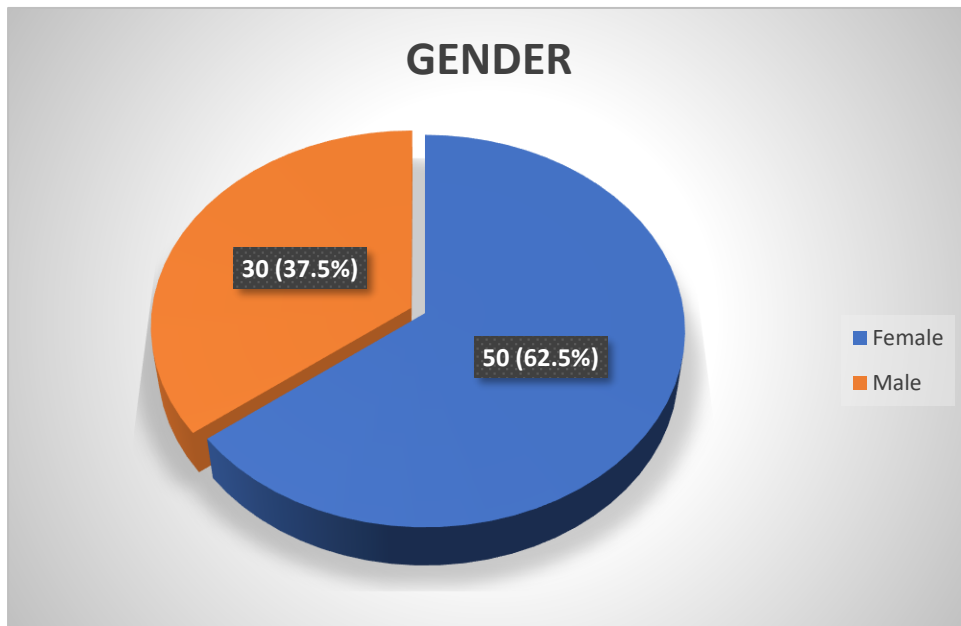


Figure 1: Distribution of Respondents by Gender

Table 4.1 shows that out of 80 respondents used in this study, 30(37.5%) were males while the remaining 50(62.5%) were females. The result from this table implies that the females are more than the males.

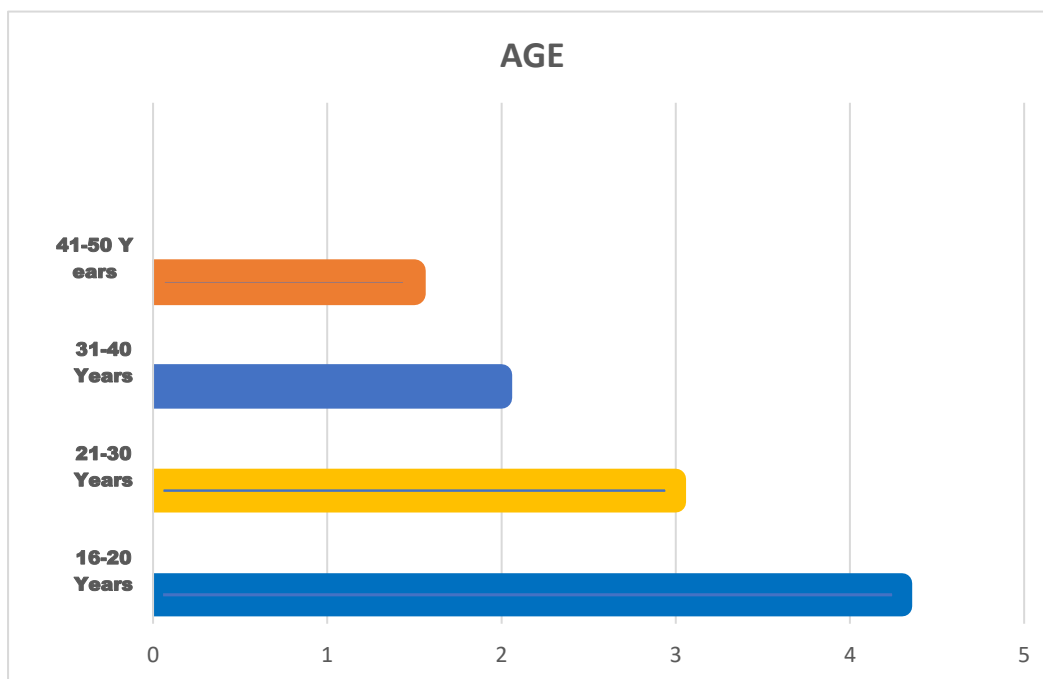


Figure 2: Age of Distribution of Respondents

The result shows that 40 (50%) of the respondents fall between the ages bracket of 16-20 while 20 (25%) fall between the ages of 21-30. On the other hand, the result revealed that 18 (22.5%) fall between the ages of 31-40, also the results shows that 2(2.5%) of the respondents fall

between the ages bracket of 41-50. In summary, it can be deduced that majority of the respondents fall between the ages of 16-20.

Answers to Research Questions

Research Question 1: What are the perceptions of Library and Information Science undergraduates towards entrepreneurship development?

Table 1: shows the perceptions of Library and Information Science undergraduates towards entrepreneurship development.

Perceptions of Library and Information Science undergraduates towards entrepreneurship development.	SA	A	D	SD	Mean	Decision Rule
Entrepreneurship can be considered as a career option in today's globalized world.	30	24	16	10	2.9	Positive
Entrepreneurship is for the less educated people	19	28	15	18	2.6	Positive
Entrepreneurship is a rewarding career	15	25	19	21	2.4	Negative
Venturing into entrepreneurship is a risky business.	9	31	25	15	2.4	Negative
Money is what motivates individuals towards entrepreneurship.	7	30	22	21	2.3	Positive
Grand mean	80				2.71	

Table 1: Perceptions of Library and Information Science undergraduates towards entrepreneurship development are: Entrepreneurship can be considered as a career option in today's globalized world with an average mean of (2.9), Entrepreneurship is for the less educated people with an average mean of (2.6), Entrepreneurship is a rewarding career with an average mean of (2.4), Venturing into entrepreneurship is a risky business with an average mean of (2.4), and Money is what motivates individuals towards entrepreneurship with an average mean of (2.3).

This finding is in agreement with Lawan et al. (2015) who opined that despite the ongoing awareness of entrepreneurship development in Nigeria, there still exists a poor perception and negative attitude towards venturing into it, especially among LIS practitioners. However, this finding disagrees with Renjini (2016) who found that library staff in India had a positive perception towards entrepreneurship as a career.

Research Question 2: What are the opportunities available for Library and Information Science undergraduates in pursuing entrepreneurship?

Table 2: Shows the opportunities available for Library and Information Science undergraduates in pursuing entrepreneurship

Opportunities available for Library and Information Science undergraduates in pursuing entrepreneurship.	SA	A	D	SD	Mean	Decision Rule
Reprography services	29	23	18	10	2.9	Positive
Indexing and Abstracting Services	20	25	19	16	2.6	Positive
Compilation of Bibliographies	15	30	17	18	2.5	Positive
Organization of a Private Library	10	35	22	13	2.5	Positive
Establishing and Maintaining Libraries for Organizations	6	40	16	18	2.4	negative
Grand Mean	80				2.81	

Table 2: Reveal the opportunities available for Library and Information Science undergraduates in pursuing entrepreneurship: Reprography services with an average mean of (2.9), Indexing and Abstracting Services with an average mean of (2.6), Compilation of Bibliographies with an average mean of (2.5), Organization of a Private Library with an average mean of (2.5), and Establishing and Maintaining Libraries for Organizations with an average mean of (2.4).

Findings aligned with that of Igbeka (2018) who remarks that there are many entrepreneurship opportunities for the library school graduates in Nigeria. The findings is also an agreement with that of Ugwu and Ezeani (2011) who affirmed that there is a corresponding market of library and information professionals in Nigeria.

Conclusion

It is very clear to that the changing nature of the world where unemployment, economic recession, poverty and youth restiveness tend to be consuming our society. An entrepreneurial opportunity therefore, plays a vital role in alleviating these societal and economic problems. Society today, needs entrepreneurs of different categories to invest and achieve meaningful progress. Library and Information Science trainers should do anything possible to inculcate entrepreneurship education in our students before they graduates from Library Schools so that they do not have to depend on white color jobs which are very scarce. Therefore, graduates of library and information science should venture into any of the identified business opportunities for profit maximization in the area of information science. There has been the need to expand career opportunities given to small growth of libraries and information centers' in developing countries like Nigeria. With the present economic realities, population expulsion and the challenges in the labor market in Nigeria as well as the need to equip students of LIS with the basic entrepreneurial skills that would enable them to be self-employed after graduation.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. LIS students should be required to acquire the necessary skills that will enable them to meet up with the needs of the society.
2. The professional and regulatory bodies like Nigerian Library Association (NLA), Librarians Registration Council (LRCN), library schools and departments of library and information science should as a matter of urgency continually organize seminars, conferences and workshops on the best methods to inculcate entrepreneurship education in the LIS curriculum. This will definitely reposition the library and information science graduates to be self-reliant.
3. Governments at all levels and other relevant agencies should provide enabling environment for our LIS graduates to acquire soft loans for a startup of their entrepreneurial business.
4. Training and re-training of the lecturers of library and information science in respect to entrepreneurial education should be intensified in order to reposition them to impart positively, the knowledge of entrepreneurship to students of LIS.
5. Excursion visits and industrial training should be encouraged in order for the LIS graduates to acquire practical work and entrepreneurial skills.

References

- Adetayo, A. J., & Hamzat, S. A. (2021). Infopreneurship and financial satisfaction among library professionals in tertiary institutions in Ede, Osun, Nigeria. *Library Philosophy and Practice (e-journal)*, 4749. <https://digitalcommons.unl.edu/libphilprac/4749>.
- Ahmed, Y. O., Yusuf, T. I., Mahammud, S. O. & Jimoh, J. O. (2024). An assessment of entrepreneurial skills of LIS students in Federal Polytechnic, Offa, Kwara-State, Nigeria. *Journal of Library Services and Technologies*, 6(1), 40 – 48.
- Babalola, J.B. (2018). Eyeing sustainable development: entrepreneurship climate must change in Nigerian universities. In Arubayi, E. A; Akpotu, N. E. & Oghuvbu, E (Eds) *Education and training for entrepreneurship*. University Printing Press, Delta State University. Pp. 2-19.
- Bureau of Public Service Reforms. (2019). *Establishment and management of small-scale business*. Government Printer.
- Chiedu, O. V., Zekeri, A., & Oladeji, O. S. (2021). Innovative thinking as a tool for leadership and entrepreneurial development in Nigeria. *African Scholar Journal of Humanities and Social Sciences (JHSS-6)*, 23(6), 205-230.
- David, R. & Dube, A. (2014). Infopreneurial behaviour among university graduates in the information science faculty of a university in Zimbabwe. *Infopreneurial Journal*, 1(2), 18-30.
- Dutse U.Y., Mamaki, U. P., & Djib I. (2013). Perception and attitude of students of tertiary institutions towards entrepreneurship education in Nigeria. *Journal of Humanities and Social Science*, 15(3), 5 – 8.
- Ekuoye, O. (2007). *Choosing areas of interest in library and information science*. Justice Jeco Press.
- El-Kalash, K. I., Mohammed, S. B., & Aniki, M. Y. (2016). Exploring infopreneurship for economic growth and sustainability in a developing economy: The Nigeria perspective. *Journal of Educational Policy and Entrepreneurial Research*, 3(7), 240-249.

- Erhirheme, P. E & Ekpeyen. P. E (2012). *Assessment of opinions of students on the implementation of entrepreneurship in selected Nigerian tertiary institutions in Edo, Delta, Lagos and Ogun States*. A [Paper presented] at an International Conference on African Indigenous Research and Development Initiatives held at the Goodness Convention Centre, Johannesburg, South Africa, 14th-16th March.
- Ezeani, C.N., Eke, H.N., & Ugwu, F. (2015). Professionalism in library and information science: An examination of current trends, needs, and opportunities in academic libraries in Southeast Nigeria. *The Electronic Library*, 33(1), 2-18.
- Francis, E. E., & Oghenevwogaga, T. D. (2015). Promoting entrepreneurship in library and information science for self-reliance: Paradigm shift for LIS graduates in Nigeria. *International Journal of Library and Information Science*, 4(1), 70-77.
- Goetz, S. J., Fleming, D. A., & Rupasingha, A. (2012). The economic impacts of self-employment. *Journal of Agricultural & Applied Economics*, 44(3), 315–321.
- Hansen, D. J., Shrader, R., & Monllor, J. (2009). Composite definitions of entrepreneurial opportunity and their operationalizations: Toward a typology. *Frontiers of Entrepreneurship Research*, 29(17), 1-38.
- Huitt, W., Hummel, J., & Kaeck, D. (2001). Assessment, measurement, evaluation, and research. <http://www.edpsycinteractive.org/topics/intro/sciknow.html>.
- Igbeka, J.U. (2018). *Entrepreneurship in library and information services*. Stirling Horden Publishers Ltd. Pp. 27-32.
- Ikenwe, I.J (2021). *Marketing and entrepreneurship in library and information science*.in Ifidon, E.I & Krubu, D.E (Eds) Trends in modern librarianship. Department of library and information science Ambrose Alli University Edo State 221-238.
- International Labour Organization (2015). *Jobs, gender and small enterprises in Bangladesh*. http://www.cartierwomensinitiative.com/docs/ILO_Bangladesh.pdf.
- Iorfa, T., Tondo, R., I., & Kabir, I. (2019). *Library and information science graduate employability*. A [paper presented] at the national conference of faculty of education, Federal University Dutsin-ma, Katsina State, Nigeria, 29-30.

- Iwu, C. G., Opute, P. A., Nchu, R., Eresia-Eke, C., Tengeh, R. K., Jaiyeoba, O., & Aliyu, O. A. (2021). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. *The International Journal of Management Education*, 19(2), 10-45. <https://doi.org/10.1016/j.ijme.2019.03.007>.
- Jegbefume, C, M., & Ikhimeakhu, D, S. (2017). *Library and information science for entrepreneurship and wealth creation*. Compendium of papers presented at the 1st international conference and homecoming of the Department of Library and Information, University of Nigeria, Nsukka, 14-24.
- Kalabeke, W. (2018). Factors affecting new graduate entrepreneurial intention: An empirical study of the unemployed graduates in Nigeria. *International Journal of Multicultural and Multireligious Understanding*, 5(2), 221-230.
- Lawan, U. M., Envuladu, E. A., Mohammad, M. A., Wali, N. Y., & Mahmoud, H. M. (2015). Perceptions and attitude towards entrepreneurship education programme, and employment Ambitions of final year undergraduate students in Kano, Northern Nigeria. *International Journal of Education and Research*, 3(11), 229 – 242.
- LIS students in universities in South East Nigeria. *Library philosophy and practice*. <http://digitalcommons.unl.edu/ibphilprac/83b>.
- Mgbonyebi, D. C., & Olaniyi, V. (2019). Entrepreneurship education. A catalyst for effective economic empowerment in South-South of Nigeria. *Delta Business Education Journal*, 9(2), 94-102.
- Morrison, J. (2016). Ties STM Education Monograph Series: *Attributes of science, technology and mathematics education*. Wadsworth Publishing Company.
- Mukharjee, S. (2021). Problems and prospects of entrepreneurship development. *International Journal of Advanced Research in Commerce, Management & Social Science (IJARCMSS)*, 4(I), 181-188.
- Musa, J. & Tsafe, A. G. (2019). Entrepreneurship opportunities for graduates of library and information science. *Journal of Library Services and Technologies*, 1(2), 76 – 82.
- Nwaka, N. G. (2019). *Managing entrepreneurship education for sustainable development challenges*. [A paper presented] at the National Conference of the Nigeria Association for Educational Administration and Planning (NAEAP) held at the Women Development Centre, Awka. 22nd-23rd, September.

- Nweze, C. A. (2018). Utilization of ICT facilities for quality teaching and learning in the 21st century: An overview of public secondary schools in Rivers State. *African Journal of Educational Research and Development (AJERD)*, 11(2), 215-229.
- Ogbonna, U. A., & Dare, L. A. (2020). Adopting the social media and infopreneurship skills for overcoming the unemployment problems of university graduates in Nigeria. *Library Philosophy and Practice (e-journal)*, 4563. <https://digitalcommons.unl.edu/libphilprac/4563>.
- Okolo, E. S., & Ivwighrehweta, O. (2021). Entrepreneurship skills and opportunities for librarians in the field of library and information science: A perspective in view. *International Journal of Sustainability Management and Information Technologies*, 7(2), 27-35.
- Okoro, P. E. (2021). Entrepreneurship skills needed by Nigerian tertiary institution students and graduates for global relevance. *International Journal of Higher Education*, 10(4), 247-257.
- Omehia, A. E. (2019). Library and information science education and learning in a world of difference. *International Journal of Library and Information Science Studies*, 5(4), 24-35.
- Omekwu, C. O., & Echezona, I. R. (2019). Emerging challenges and opportunities for Nigerian libraries in a global information environment. *Library review* 58(7), 482-492.
- Tookoian, J. (2018). Different types of assessment and what you need to know about them. <https://edulastic.com/blog/types-of-assessment/>.
- Ugwu, F. N. and Ezeani, C. N. (2011). *Evaluation of entrepreneurship awareness and skills among LIS students in universities in South East Nigeria*. [A paper presented] at the national conference of Nigeria association of library and information science educators (NALISE) held on 18-12th November Pp 7-10.
- Venkataraman, S. (2000). The Distinctive Domain of Entrepreneurship Research: An Editor's Perspective. In *Advances in Entrepreneurship, Firm Emergence, and Growth*, (3, eds.) J. Katz & R. Brockhaus. Greenwich, JAI Press: 119-138.
- Westhead, P., & Wright, M. (2013). *Entrepreneurship: A very short introduction*. Oxford University Press.