Barriers to female entrepreneurship performance in Nigeria: A qualitative research approach

Mercy Uche Olugu, Beulah Chikere Obiekwe, Kayode O. Balogun

Abstract—This paper is purposed to examine the barriers and other challenges posed to the female entrepreneurs in the course of commencing entrepreneurial activities. In doing so, it addresses a gap in the body of knowledge as related to the female entrepreneurs in the context of developing country, Nigeria. The paper draws on data a qualitative approach. Twelve entrepreneurs within Lagos State, Nigeria were investigated. Results show that two major challenges affect the performance of female entrepreneurs. The barriers are lack of funding and weak network affiliations. Other minor challenges also include problem of skill and training, social status, lack of infrastructure, marketing problem and socio personal problem.

Index Terms—Entrepreneurship, Female entrepreneur, Barriers, Nigeria.

I. INTRODUCTION

Entrepreneurship is today regarded as an important vehicle for economic development and the significant contribution of womenfolk to it globally cannot be overemphasized [1]. Despite the fact that female entrepreneurs in Nigeria are playing key roles in the society, their business endeavors are nevertheless explored. Moreover, scholarly works related to female entrepreneurs is scarce, regardless of womenfolk' impact on global economy [2] [3, 4]. [5] posit that research on female entrepreneurs constitutes less than ten percent of all entrepreneurship research.

A rising number of scholarly works that address the under-representation of female researchers both in academia [6] and in female entrepreneurship in general exist [7] [8]. Regardless of the proliferation of female entrepreneurship studies, few studies have been carried out on female entrepreneurship related to research institute.

One type of helpful milieu that may perhaps be a key to encourage the involvement of women in academic entrepreneurship is the university incubator [8]. Furthermore, University business incubators (UBIs) are establishments intended to speed up national economic development through supporting start-up firms, particularly new technology-based

Manuscript received October 22, 2014.

Mercy Uche Olugu, Department of Statistics, Federal School of Statistics, Ibadan, Nigeria

Buelah Chikere Obiekwe, Department of Statistics, Federal School of Statistics, Ibadan, Nigeria

Kayode O. Balogun, Department of Statistics, Federal School of Statistics, Ibadan, Nigeria

firms [9] as well as early-stage businesses through an array of business support resources and services [8].

II. LITERATURE REVIEW

Hundreds of definitions related to entrepreneurship concept exists [10]. This study adopts the definition proposition by Shane and Venkaraman. Entrepreneurship is defined as "a process that involves the discovery, evaluation and exploitation of opportunities to introduce new products, services, processes, ways of organizing or markets" [11]. [12] underscore the significance of entrepreneurship development in numerous countries of the world.

Several people have different reasons for joining or desiring to be involved in entrepreneurial activity. Some of the motivations that drive people may be explained using the Pull-Push factors. According to [13], several businesspersons are dragged into commencing a business, while others are compelled into starting up a business. They noted that pull related factors are affirmative for the reason that the businessperson wants to actualize his aspiration of becoming his/her own boss as well as gaining financial autonomy. Conversely, the push factors are perceived in the negative perspective since such entrepreneurs may possibly have been forced into entrepreneurism due to adverse life involvements such as joblessness, being without a job, existing low-paying jobs or as a result of some other negative life happenings.

Women entrepreneurs play a major role in economic growth and development worldwide [14]. [15] posit that even though the involvement of women in the SME has been increasing rapidly over the years, there is a scarcity of studies on this subject that lay more emphasis on developing nations [16]. Moreover, [17] stated that regardless of the enormous volume of scholarly works exploring entrepreneurs success stories, very little is known of the role of females in the discovery of business opportunities

Studies that have been conducted on the concerns of women entrepreneurs [18] have focused more on developed countries than developing countries. What is needed is an in-depth insight of women entrepreneurs, especially in emerging countries like Nigeria. [19] reported that various nations have different norms relating to gender and its effect is noteworthy on specific viewpoint of women entrepreneurship. They also noted that entrepreneurship is generally depicted as a naturally male phenomenon in entrepreneurship discourse. In addition, this assertion is reinforced by [20] who stated that the discriminating practices against women and other norms and practices buttress male-controlled tenets that are predominantly influential in Africa. Numerous scientific studies have established that female enterprisers experience increased obstacles in the

course of growing their own companies in comparison with men and therefore male-owned companies are actually, documented to outperform female-owned entrepreneurial businesses [21] [22].

Access to finance is a key obstacle to small business start-ups [23] [24]. Therefore, numerous innovative concepts are left idle or are never formulated due to a lack of funding throughout the nascent era of the business. However for a businessperson to inaugurate a business endeavour successfully, sufficient funding is essential to assist the businessperson to procure fixed assets and to afford working capital pending when the business will be able to break even. Furthermore, [25] noted that entrepreneurs, especially women, face hitches in gaining access to funding and for this reason, they commonly end up financing their business through personal investment as a source of start-up capital for the business. The difficulty encountered by female entrepreneurs in accessing loans from financial institutions can be traced to lack of track record in order to demonstrate credibility as well as absence of collateral and inimical institutional arrangement [26]. This is coming on the heels that several female entrepreneurs with sustainable projects battle to show their trustworthiness to financial establishments [27]. In view of this, financial establishments have classified female entrepreneur as high-risk debtors [28]. According to [29], personal financing includes money from family, and loan from friends, personal loan from bank. This kind of sourcing for money at little or no cost is referred to as financial bootstrapping. Furthermore, female businesspersons may well find it pretty challenging to gain access to support in the course of financing their businesses as compared to their male equivalents for the reason that the phenomenon of 'doing gender' [30].

[26] discussed the barriers faced by women entrepreneurs in Nigeria. They categorised the barriers into three factors as follows:

- 1. Personal factors (which include lack of educationa/training and lack of confidence).
- 2. Gender and family-based factors (such as family responsibilities and gender discrimination).
- 3. Market-based factors (such as lack of access to finance, government regulation and economic conditions.

In the market-based factors, lack of access to funding was the most glaring aspect of the barrier [26]. A case in point is a study by [31] and [32] who reported that there exist a degree of discrimination towards female entrepreneurs in Western context regarding bank lending. Likewise, [26] also highlighted that in Nigeria, banks are usually reluctant to lend to women.

[33] stated that absence of funding may tend to limit business advancement as well as causing cash crunch in the business [34]. This may ultimately cause enterprise collapse. In line with this, the role of finance in the success of business cannot be overemphasized.

In a recent study GEM [35] reported that in the East Asia and Pacific where different culture, values and history exist; different level of female entrepreneur also exist, A case in point is China where the level is considered high while in Korea, the level is low. In Malaysia, the percentage is high as a result of government support for technology based firm

using venture capital financing [36]. [1] noted that the different levels of female entrepreneur in different countries mentioned are not unconnected with religious influence on entrepreneurial activity.

The state of affairs of women entrepreneurs in the Middle East has some uncommon features in comparison with other emerging nations, generally arising from the social structure of this region. GEM and the World Bank cross-country research indicate that, in Middle East regions female labor force involvement levels, are the lowermost globally; hence, entrepreneurship can provide new opportunities for women to make their own earnings as well as to nurture their individual and social situations. Conversely, as the workforce in this region is a man's domain, womenfolk have to encounter numerous social obstacles which hinder their opportunities to start their own businesses. In the first place they have to encounter great problems in getting financial assistance from banks. The process of applying for the bank loan usually entail male family members' (husbands' or fathers') as co-signatory, and therefore often dampen prospective female borrowers

[37] reported that in certain respects Brazilian women have attained equality. They went further to illustrate how women spend more time in education than men. However, in comparison with men, women still have less opportunity to gain employment, receive much lower remuneration for doing the same work and tend to occupy inferior posts.. Moreover, the participation of women in decision making positions is still low. In view of this and regardless of the womenfolk's attainment in the society, they are still relegated to the background [38].

In sub-Saharan African economies female entrepreneurs are downgraded to the boundary of the national economy (such as crafts, hawking, personal services) and often to the informal sector [35].

Numerous factors affecting women entrepreneurs' development emerge in the sub-saharan African region. One of the main problems is closely associated with family responsibilities. [39] noted that high fertility rates of five or six births per woman have significant personal effects for females who attempt to start up or grow an enterprise [40].

The second difficulty encountered by female entrepreneurs is closely related to lack of legitimacy as well as low social recognition bestowed on female entrepreneurs. In this area a large number of men believe that if women are independent and successful, they do not deserve to be considered as chaste and respectable, and therefore are not suitable to play their role as good mothers and wives [39]. Thus, for women, customary patriarchal norms and rules are still in force. Not by chance, in fact, the results of researches show that women seem to be struggling to find acceptance in the market and respect from their customers [39]. Additionally, [41] remarked that from an institutional related viewpoint, the role of government in supporting women's entrepreneurship cannot be ruled out thereby bringing about social change that will assist and nurture female's entrepreneurship. Conversely, [30] [42] observed that gendered factors are constantly being strengthened by both men and women through unconscious anticipations of what is required from a person of a specific gender. In view of this, [43] remarked that gender impacts that are formed and maintained by the social order may perhaps pose a serious obstacle to women's tendency to involve in business activities as well as develop their businesses.

Furthermore [44] stated that inadequate education as well as training of business women is related to lack of success of female entrepreneurs. The impact of education on performance is more pronounced in female-owned businesses than in male-owned ones. [45] stated that the entrepreneurs' management skills deficiency explains about ninety percent of the collapse rates in the first five years of new businesses.

III. METHODOLOGY

This study utilized the interpretive constructionist (naturalistic) qualitative paradigm. In line with this, researchers place meanings and understandings to be plural; individuals and groups see and interpret reality through their own perspectives, where understanding is subjective. The aim of choosing this paradigm is to describe particular events, processes, or culture from the perspective of the participants, usually using qualitative techniques (Rubin and Rubin 2012). The qualitative method was considered to be the most suitable for the topic of the research in order to get a more in-depth understanding and knowledge of the participants' experiences of female entrepreneurs [46].

This study aims to explore the socio-economic and cultural difficulties encountered by female entrepreneurs. The current research is unique as it focuses specifically on exploring the barriers affecting the performance of female entrepreneurship in Lagos, Nigeria. Thus, a critical interpretative perception method is utilised in exploring these factors.

The target group of study is female entrepreneurs in Lagos, Nigeria. A case study qualitative research technique was used. The study employed a case study design approach. In-depth semi-structure interviews with selected entrepreneurs were conducted on twelve female entrepreneurs who were selected for the interview on a purposive basis. Purposive sampling is a type of non-probability sampling in which the units to be investigated are chosen based on the researcher's judgment about which one will be the most useful or representative [47]. The rationale for these interviews was to get more insight towards the better understanding of the concept of female entrepreneurship generally and the barriers they face in attaining entrepreneurial performance in particular, in Nigeria.

Lagos State was chosen because of its commercial activity as well as its sobriquet as the Nigeria's commercial capital. The target segments for the choice of participants were industrial, merchandising and services. The female entrepreneurs were selected from all the industrial areas of Lagos State. The respondents were guaranteed that their responses would be treated confidentially before they were interviewed.

IV. RESULTS

This study was able to explore in-depth, the barriers the women entrepreneurs encounter in the course of developing their businesses. The result is based on the outcome of the in-depth semi structured interview. In the process of the

interview, two major themes emanated from the interview sessions. All the ten respondents (100%) identified them as barriers to female entrepreneurship.

Barriers to female entrepreneurship performance in Nigeria Theme 1 Lack of Funding

The reason for starting a business is to increase the wealth of the individual. There is a need to make financial provision from sources that comprise both internal and external. In the case of external funding especially through loan from banks, all the participants complained about the frustration they all went through. One respondent reported that:

"It has been difficult in accessing bank loans as their collateral requirements are very stringent. Also banks are usually reluctant to extend their facility to female entrepreneurs with reasons best known to them".

The same response goes for all the participants in this study.

Theme 2 lack of network affiliations

The entrepreneurial process involves not only the activities of the entrepreneur but several stakeholders and practitioners equally. Consequently, for entrepreneurship to be successful, particularly the female entrepreneurship, there is the need for close collaboration among these participants, more especially financial institutions, venture capital, angel investors, industrial contacts marketing experts among others. Through networking several kinds of know-hows as well as financial assistance usually comes the way of female entrepreneurs. [48] reported that several scientific works show the importance of social capital and how it helps individuals or firms to improve performance. However, the perception of female entrepreneurs' networking is usually viewed as social club and not really business association. This perception has equally made it difficult for them to come together in networking. One of the respondents recounted:

All the entrepreneurs stressed the negative perception of their involvement in entrepreneurial social networking. "People always feel we gather to discuss our family issues especially how we marry our husbands as well as a meeting point for some of us for onward dating with men. This has really demoralized us in forming a formidable entrepreneurial social network".

However, [20] in underscoring the significance of social networks in resource acquisition found that female entrepreneurs have the tendency to have more difficulty than menfolk in accessing finance but recompense by fostering social relationships as well as utilsing the social capital resulting from them as a resource leveraging mechanism. Furthermore, he observed that female entrepreneurs have a tendency to be influenced by their social contacts for moral and emotional support through the early stages of enterprise growth, while men would want to "de-link" themselves from the extended family during initial stages and then "re-link" with family when the businesses can accommodate the demands of family financially.

V. DISCUSSION AND CONCLUSION

This scholarly work has indicated that the perceptions which are most appreciated in clarifying barriers to female

entrepreneurship in Nigeria are lack of funding, lack of infrastructure, marketing problem, problem of skill and training, lack of network affiliations, social status, human capital (related professional education and previous experience). However, the most important factors are financial and networking related. Majority of women businesspersons in Nigeria encounter some kind of problems for the reason that, as compared to men, they have a lesser role in the social order. Lack of training and segregation from business networks, inadequate capital and financial amenities; impeding regulations and policies, were identified and talked about. Financial bootstrapping was also highlighted as one of the informal source of financing for women entrepreneurs. Other themes that emerged from the different participants individually include the following: Problem of skill and training, social status, Lack of Infrastructure, Marketing Problem, Socio personal problem.

In the case of networking, lack of networking is regular occurrence in the female entrepreneurship studies as a result of socio-cultural perspective which most of the participants highlighted during the interview. This assertion is consistent with [49]. Woman businesspersons usually lack a helpful linkage, thus starting groups with local organizations assist in opening interaction networks among businesspersons as well as creditors. The financial barrier raised by the respondents also corroborated with the findings of [26]. This suggests that finance generally is the livewire of any business.

This study has traversed different terrain such as the barriers, the motivation and goal as well as the importance of female entrepreneurship to the economic development of any country. Finally, the objective of this study which is to examine the barriers to female entrepreneurship in Nigeria has been accomplished. However, it is noteworthy that the main limitation of this study is that findings from this study may lack generalization, as it may well be restricted to the geographical areas covered and the number of respondents interviewed.

ACKNOWLEDGMENT

The authors thank Nkem Okpa Obaji for his valuable comments and suggestions. All errors are ours.

REFERENCES

- [1] De Vita, L., Mari, M., and Poggesi, S., Women entrepreneurs in and from developing countries: Evidences from the literature. European Management Journal, 2014. **32**(3): p. 451-460.
- [2] Ahl, H., Why research on women entrepreneurs needs new directions. Entrepreneurship Theory and Practice, 2006. 30(5): p. 595-621.
- [3] De Bruin, A., Brush, C. G., and Welter, F., Introduction to the special issue: towards building cumulative knowledge on women's entrepreneurship. Entrepreneurship Theory and practice, 2006. 30(5): p. 585-593.
- [4] De Bruin, A., Brush, C. G., and Welter, F., Advancing a framework for coherent research on women's entrepreneurship. Entrepreneurship theory and practice, 2007. 31(3): p. 323-339.
- [5] Brush, C. G. and Cooper, S. Y., Female entrepreneurship and economic development: An international perspective. Entrepreneurship & Regional Development, 2012. **24**(1-2): p. 1-6.

- [6] Rosa, P. and Dawson, A., Gender and the commercialization of university science: academic founders of spinout companies. Entrepreneurship and Regional Development, 2006. 18(4): p. 341-366
- [7] Minniti, M., Arenius, P., and Langowitz, N., 2004 Global entrepreneurship monitor special topic report: women and entrepreneurship. Center for Women's Leadership at Babson College, Babson Park, MA, 2005. 28(2-3): p. 223-239.
- [8] Dahlstrand, Å. L. and Politis, D., Women business ventures in Swedish university incubators. International Journal of Gender and Entrepreneurship, 2013. 5(1): p. 78-96.
- [9] Somsuk, N. and Laosirihongthong, T., A fuzzy AHP to prioritize enabling factors for strategic management of university business incubators: resource-based view. Technological Forecasting and Social Change, 2014. 85: p. 198-210.
- [10] Toma, S.-G., Grigore, A.-M., and Marinescu, P., *Economic Development and Entrepreneurship*. Procedia Economics and Finance, 2014. **8**: p. 436-443.
- [11] Shane, S. and Venkataraman, S., *The promise of entrepreneurship as a field of research.* Academy of management review, 2000. **25**(1): p. 217-226.
- [12] Obaji, N. O. and Olugu, M. U., The role of government policy in entrepreneurship development. Science Journal of Business and Management, 2014. 2(4): p. 109-115.
- [13] Edewor, P. A., Imhonopi, D., and Amusan, T., Socio-Cultural and Demographic Dynamics in Sustainable Entrepreneurial Development in Nigeria. Developing Country Studies, 2014. 4(4): p. 58-64.
- [14] Still, L. V. and Timms, W., Women's business: the flexible alternative workstyle for women. Women in Management Review, 2000. 15(5/6): p. 272-283.
- [15] Mcgregor, J. and Tweed, D., Profiling a new generation of female small business owners in New Zealand: networking, mentoring and growth. Gender, Work & Organization, 2002. 9(4): p. 420-438.
- [16] Roomi, M. A. and Parrott, G., Barriers to development and progression of women entrepreneurs in Pakistan. Journal of Entrepreneurship, 2008. 17(1): p. 59-72.
- [17] Gonzalez-Alvarez, N. and Solis-Rodriguez, V., Discovery of entrepreneurial opportunities: a gender perspective. Industrial Management & Data Systems, 2011. 111(5): p. 755-775.
- [18] Cetindamar, D., et al., What the numbers tell: The impact of human, family and financial capital on women and men's entry into entrepreneurship in Turkey. Entrepreneurship & Regional Development, 2012. 24(1-2): p. 29-51.
- [19] Baughn, C. C., Chua, B. L., and Neupert, K. E., The normative context for women's participation in entrepreneruship: a multicountry study. Entrepreneurship Theory and Practice, 2006. 30(5): p. 687-708.
- [20] Kuada, J., Gender, social networks, and entrepreneurship in Ghana. Journal of African Business, 2009. 10(1): p. 85-103.
- [21] M. Carter, N. and R. Allen, K., Size determinants of women-owned businesses: choice or barriers to resources? Entrepreneurship & Regional Development, 1997. 9(3): p. 211-220.
- [22] Coleman, S. and Kariv, D., Gender, Performance And Financial Strategy: A Dynamic Capabilities Perspective. Journal of Developmental Entrepreneurship, 2013. 18(03).
- [23] Macht, S. A. and Robinson, J., Do business angels benefit their investee companies? International Journal of Entrepreneurial Behaviour & Research, 2009. 15(2): p. 187-208.
- [24] Underwood, P., Supporting the information needs of entrepreneurs in South Africa. Library review, 2009. 58(8): p. 569-580.
- [25] Nieman, G., Hough, J., and Nieuwenhuizen, C., Entrepreneurship: A South African perspective. 8th ed. 2007, Pretoria, South Africa: Van Schaik Publishers.
- [26] Mordi, C., et al., The role of cultural values in understanding the challenges faced by female entrepreneurs in Nigeria. Gender in Management: An International Journal, 2010. 25(1): p. 5-21.
- [27] Rouse, J. and Jayawarna, D., The financing of disadvantaged entrepreneurs: are enterprise programmes overcoming the finance gap? International Journal of Entrepreneurial Behaviour & Research, 2006. 12(6): p. 388-400.
- [28] Derera, E., Chitakunye, P., and O'neill, C., The Impact of Gender on Start-up Capital: A Case of Women Entrepreneurs in South Africa. Journal of Entrepreneurship, 2014. 23(1): p. 95-114.

International Journal of Engineering Research And Management (IJERM) ISSN: 2349-2058, Volume-01, Issue-07, October 2014

- [29] Musibau, A. A. and Kamariah, I., The Financing of Early Staged Technology Based Firms in Malaysia. Middle-East Journal of Scientific Research, 2013. 18(5): p. 697-707.
- [30] Brush, C. G., et al., *Growth-oriented women entrepreneurs and their businesses: A global research perspective.* 2006: Edward Elgar Publishing.
- [31] Roper, S. and Scott, J. M., Perceived Financial Barriers and the Start-up Decision An Econometric Analysis of Gender Differences Using GEM Data. International Small Business Journal, 2009. 27(2): p. 149-171.
- [32] Marlow, S., A safety net or ties that bind? Women, welfare and self-employment. International journal of sociology and social policy, 2006. **26**(9-10): p. 397-410.
- [33] Obamuyi, T., Firms' Performance and Lending Constraints in Nigeria. Journal of Entrepreneurship, 2010. 19(2): p. 179-190.
- [34] Hughes, K. D., Pushed or Pulled? Women's Entry into Self-Employment and Small Business Ownership. Gender, Work & Organization, 2003. 10(4): p. 433-454.
- [35] 2010 Global Entrepreneurship Monitor Report Pakistan
- [36] Ajagbe, M. A. and Ismail, K., Factors influencing venture capital assessment of high growth companies in Malaysia. International Journal of Entrepreneurship and Small Business, 2014. 21(4): p. 457-494.
- [37] Agostinho, L. L., et al., Gender in the Management of Brazilian Incubators. International Journal of Gender, Science and Technology, 2014. 6(1): p. 101-124.
- [38] UNDP 2010 United Nations Development Programme Human development
- [39] Singh, S., et al., Challenges In Female Entrepreneurial Development—A Case Analysis Of Nigerian Entrepreneurs.

 Journal of Enterprising Culture, 2010. 18(04): p. 435-460.
- [40] Belwal, R., Tamiru, M., and Singh, G., Microfinance and sustained economic improvement: Women small-scale entrepreneurs in Ethiopia. Journal of International Development, 2012. 24(S1): p. S84-S99.
- [41] Bruton, G. D., Ahlstrom, D., and Li, H. L., *Institutional theory and entrepreneurship: where are we now and where do we need to move in the future?* Entrepreneurship theory and practice, 2010. **34**(3): p. 421-440.
- [42] Myers, B. and Pringle, J. K., Self-initiated foreign experience as accelerated development: Influences of gender. Journal of World Business, 2005. 40(4): p. 421-431.
- [43] Marlow, S. and Swail, J., Gender, risk and finance: why can't a woman be more like a man? Entrepreneurship & Regional Development, 2014. 26(1-2): p. 80-96.
- [44] Chirwa, E. W., Effects of gender on the performance of micro and small enterprises in Malawi. Development Southern Africa, 2008. 25(3): p. 347-362.
- [45] Peters, L., Rice, M., and Sundararajan, M., The role of incubators in the entrepreneurial process. The Journal of Technology Transfer, 2004. 29(1): p. 83-91.
- [46] Dana, L. P. and Dana, T. E., Expanding the scope of methodologies used in entrepreneurship research. International Journal of Entrepreneurship and Small Business, 2005. **2**(1): p. 79-88
- [47] Babbie, E., The basics of social research. 6th ed. 2014, Belmont, CA: Cengage Learning.
- [48] Aarstad, J., Haugland, S. A., and Greve, A., Performance spillover effects in entrepreneurial networks: Assessing a dyadic theory of social capital. Entrepreneurship Theory and Practice, 2010. 34(5): p. 1003-1019.
- [49] Lerner, M., Brush, C., and Hisrich, R., *Israeli women entrepreneurs: an examination of factors affecting performance*. Journal of Business Venturing, 1997. **12**(4): p. 315-339.

Mercy Uche Olugu is a senior lecturer in the Department of Statistics at the Federal School of Statistics, Ibadan, Nigeria. She has an M.Sc (Statistics) from University of Lagos, Nigeria in 1998. Other academic and professional qualifications include: B.Sc (Statistics) from University of Ibadan, 1992; Professional Diploma in Statistics (PDS) from University of Ibadan 1988; Certificate Course in Statistics, 1986; Diploma in Statistics/Data Processing from Indian Statistical Institute 1993. She co-authored an article in the "Science Journal of Business and

Management". She is a member of Nigerian Statistical Association. She is currently the Head of Department of Statistics.

Beulah Chikere Obiekwe is currently the Deputy Rector at the Federal School of Statistics, Ibadan, Nigeria. She has an M.Sc (Statistics) from University of Ibadan, Nigeria in the year 2010. Other academic credentials include: B.Sc (Statistics) from Ahmadu Bello University Zaria, Nigeria 1990; National Certificate in Education (NCE) from Federal College of Education, Katsina, Nigeria, 1985.

Kayode O. Balogun is currently the Rector of Federal School of Statistics, Ibadan, Nigeria. He has an M.Sc (Statistics) from University of Ibadan (UI), Nigeria in 2004. Other academic and professional qualifications include: B.Sc (Statistics) from UI, 1994; Professional Diploma in Statistics (PDS) from UI 1988; Certificate Course in Statistics, 1986. Currently, he is a Ph.D. scholar in the Department of Statistics, University of Ibadan, Nigeria. He won the Best Presenter "Teachers' Conference" in 2014 in the UK. He is a member of Nigerian Statistical Association.