

## **I HAVE NOT SEEN ANY: UNDERREPRESENTATION OF QUALITATIVE RESEARCHERS AT THE FACULTIES OF EDUCATION IN NIGERIAN UNIVERSITIES**

*Louis Okon AKPAN*

*Ph.D, Office of the SANRAL Chair in Science and Mathematics Education,  
Faculty of Education, University of the Free State, Nigeria  
Email: [airmailo@yahoo.com](mailto:airmailo@yahoo.com)*

### **Abstract**

The study explored the underrepresentation of qualitative methods in faculties of education in Nigerian universities. Qualitative method was employed. Furthermore and in line with qualitative approach adopted, interpretive paradigm was deployed to understand the phenomenon under investigation. Ten faculties of education from ten universities across Nigeria were purposively selected. Semi structured interview and documentary materials were used for data generation. Thematic analysis was used to analyse the data. Findings revealed that most students (master and doctoral), researchers and scholars in faculties of education used quantitative methods in their dissertations and journal articles. It was also found that the underrepresentation of qualitative methods in education was influenced by a popular belief among pro-quantitative methods that qualitative approach lack objectivity, validity and reliability when adopted in the study.

**Keywords:** Qualitative methods, quantitative methods, underrepresentation, Nigerian universities

## **Introduction**

In this study, first, I intend to share my personal experience in form of story on unfriendly road towards becoming qualitative researcher in Nigeria. It was a war keenly fought between an amalgam of experienced research veterans and myself (a completely new breed researcher) in which the veterans almost won, if not for my solid disposition in qualitative methodologies. Second, effort is geared towards highlighting evolution of qualitative methods from its inception till date. Last, but not the least, I tried to explore reasons for the prioritisation of quantitative methodologies over qualitative methods on the Nigerian education space.

## **Rationale for the study**

As a local migrant fisherman's son who grew up in the riverine area of Niger Delta region of Nigeria, who was blessed not by my parents' affluent which invariably was non-existence, but by the divine intervention of almighty God. At the age of 16, I was compelled to leave the Creek (fishing settlement) of the Niger Delta region of Nigeria where I spent my youthful age fishing, to pursue university education in the city. The academic journey which began in the ancient city of Calabar in Cross River State of Nigeria, took me to the rainbow nation (South Africa) where I bagged a Doctor of Philosophy (Ph.D) from the prestigious University of KwaZulu-Natal. During my Ph.D apprenticeship, I familiarised myself with three different methods of conducting research such as qualitative, quantitative and mixed methods. Interestingly, my mentors (Wassermann and Mngomezulu) gave me freehand to adopt any of the method of my choice, provided it suits the phenomenon under investigation. They (mentors) made me understand that qualitative method is a scientific inquiry which focus on [non-numerical data](#) (Hennink, Hutter & Bailey, 2020), quantitative approach emphasises on statistical, mathematical or computational techniques

(Apuke, 2017), and mixed methods as the name implies involve the mixture of quantitative and qualitative methods within a single investigation (Babbie, 2014). After foregrounding myself with these three research approaches, I decided to adopt qualitative method in my study. My choice was informed by the nature of the social phenomenon I intend to investigate. On graduation, I immediately returned home with unprecedented enthusiasm to showcase and contribute to knowledge in the area of qualitative study.

My day suddenly turned into night immediately I submitted my first empirical paper grounded on qualitative method to one of the local journals for vetting and eventual publication. The paper was not only rejected outrightly, I was tongue lashed by the reviewers on why I should submit a “newspaper article” as an academic paper. As if that was not enough, I attended one of the international academic conferences held in one of the universities in Nigeria where I presented a paper using qualitative method. I was almost stoned by the conference’s participants based on the research method adopted which was a qualitative method. The expression by participants was that, I ought to have followed the path of quantitative method, in which, in their own opinion was generally accepted ‘norm’ for conducting research study. I was surprised by the use of the word norm. The questions which disturbed my mind were: what is the general research ‘norm’ within Nigerian context? Does the said ‘norm’ not applicable to other research approaches such as qualitative or mixed methods? Is it mandatory to always follow the ‘norm’ irrespective of the phenomenon investigated? Answers to these questions are meant for another study.

To convince myself on the methods Nigerian scholars and researchers (particularly in faculties of education) used in their research study, I painstakingly went through over six thousand studies conducted in different disciplines such as educational psychology, history of education, political education, sociology of education, nursing, medicine, business education, anthropology and geography education. To my surprise, I discovered that almost all the scholars and

researchers adopted quantitative methods in their study. Furthermore, my personal observation over the past three years in the faculties of education has shown that over eighty-six percent and ninety percent of the masters and doctoral students respectively in Nigerian universities used quantitative methodologies in their dissertations and theses. The questions begging answers are: what kind of research method(s) do researchers adopt at the faculties of education in Nigerian universities? Why do qualitative methods underrepresented at the faculties of education in Nigerian universities?

## **Literature Review**

### **Underrepresentation of qualitative methods**

Before I look at the underrepresentation of qualitative method within universities in Nigeria, I began by highlighting the differences existing between quantitative and qualitative methods. However, I was compelled to overlook the mixed methods approach, because it is the mixture of the two methods (quantitative and qualitative) (Johnson & Onwuegbuzie, 2004; Daniel, 2016). Over the past decades, Nigerian researchers have deployed quantitative method as against qualitative methods, and have described the quantitative methods as the best approach for research study (Umeokafor & Windapo, 2017). According to Hammersley (2014), the differences which exist between quantitative and qualitative methods are ontological as well as epistemological assumptions. From all indications, quantitative approach invokes positivist paradigm (Rahi, 2017), while qualitative method lies on the realm of philosophical ideas of interpretivism (Dawadi, 2017). In fact, positivists are of the view that various investigators conducting the same factual problem using the same procedure will certainly generate or arrive at the same or similar finding (Creswell, 2014). In other words, positivists maintain that there is a single reality ((Neuman, 2011; Dean, 2018). On the other hand, interpretivists are of the view that social world is considered personal, internal and subjective (Dawadi, 2017). Therefore,

knowledge generated is subjective, context-oriented, holistic, process-oriented and internally dependable (MacCleave, 1989). It is worth pausing at this juncture, since the aim of the study is not the consideration of the differences between quantitative and qualitative methods. Rather, on exploration of the underrepresentation of qualitative methods in faculties of education in Nigerian universities. Before I dabble into some scholarly works on the underrepresentation of qualitative practitioners in research study, I feel it is appropriate to look at the historical development of qualitative methods so as to understand its importance in research.

### **Trend in the development of qualitative methods**

Qualitative methods evolved as a result of the absolute rejection of positivists' orientation by some scholars who felt uncomfortable with their theoretical ideology (Alasuutari, 2010), which involve the systematic gathering of data, adopting standardised measures and statistical analysis to study a phenomenon (Hammarberg, Kirkman & deLacey, 2016). Based on this rejection, scholars such as Margaret Mead, Gregory Bateson, among others in the early 1900s introduced a qualitative approach as an alternative to quantitative methodologies employed over the years. Though, the qualitative methods were sparingly adopted between 1900 and after the second World War, it came into prominence between 1975 and 2000 when scholars such as Eisner, Geertz, Lincoln, Guba, Stake and Wolcott wrote various texts criticising positivists dispositions in research. Tracing the historical development of qualitative method from its inception, Schwandt, Denzin and Lincoln (1994) compartmentalised its development into five phases namely: foundation (1900-1950), modernist or golden age (1950-1970), third moment (1970-1980), profound rupture (mid-1980s-1992) and post-experimental inquiry (mid-1995s to date).

According to Schwandt, Denzin and Lincoln (1994), foundation phase began from 1900 to 1950. Scholars such as Radcliffe-Brown, Margaret Mead, and

Gregory Bateson who mainly were specialists on anthropology and sociology introduced qualitative approach into total dissatisfaction of positivists' orientation. Fielding (2010) argued that qualitative method during this period focused more on interpretive, naturalistic, and critical research methods. Solomon (2000) contended that the newly introduced research method promoted multiplicity, advent of deconstruction and contextualism (Starman, 2013).

In the area of modernist or golden age phase, it began from 1950 and ended during 1970. The proponents of this phase were Howard Becker, Geer, Hughes, Glaser and Strauss. In fact, they endeavoured to formalise qualitative methods through post-positivist discourse in a conscious effort to establish reliability and validity (Sezer & Yilmaz, 2019). Denzin and Lincoln (2008) opined that modernist phase initiated the rigorous nature of qualitative analysis where theories such as ethnomethodology, critical theory, phenomenology and feminism were introduced, amplified and widely deployed in research by many.

The third phase which also refers to as blurring of genres span from 1970 and ended in 1980 (Denzin & Lincoln, 2008). Bailey (2013) said that during this period a variety of qualitative perspectives such as hermeneutics, structuralism, semiotics, phenomenology, cultural studies and feminism were introduced into the qualitative method. Mohajan (2018) stated that the first software programs and packages for computer-supported data analysis were developed during the period. According to Strauss and Corbin (2008), during this period qualitative researchers focused on social constructivism and interpretation of participants' information, instead of the identification of linear models (Mohajan, 2018).

The fourth phase otherwise known as profound rupture occurred from the mid-1980s to 1992. Apparently, profound rupture was an era of experimentalism and new ethnographies (Mohajan, 2018). During this phase, theories were replaced with the participants' narratives. Denzin and Lincoln (2008) argued that the end of outstanding narratives is declared, and Mohajan

(2018, p.6) said that “the accent is shifted towards narratives that fit specific, delimited, local, historical situations and problems.”

The post-experimental inquiry began from mid-1995s till date. During this era, qualitative research was linked to democratic processes and it is very prominent in recent times. Currently, the qualitative researchers focused on the use of poetry, drama, and multimedia techniques in ethnographic writings (Mohajan, 2018). In other words, the period is characterised by the enthronement of ethnographic alternatives, novel forms which express lived experience through representations that were literary, poetic, autobiographical, visual and performative (Le Grange, 2018).

### **Qualitative methods: Underrepresented**

On the issue of the underrepresentation of qualitative methods in research study, Carter and Fortune (2004), Laryea and Leiringer (2012) asserted that researchers in building industry have negative culture for qualitative methods. The reason advanced for the adoption of quantitative methods is that qualitative research is very unpopular among research practitioners in Africa (Umeokafor & Windapo, 2017). Hagggar and Chatzisarantis (2011) said the underrepresentation of qualitative methods is evident in sub-Saharan countries, because of the widely held assertion that it is not theoretical and rigorous (Park, Konge & Artino, 2020). Moreso, Hagggar and Chatzisarantis (2011) held that there is complete lack of objectivity in qualitative methods, also the generalisation of findings is totally impossible. Conversely, Hughes (2010) had made a case for overrepresentation of quantitative methods in some African countries. He maintained that most of the master and doctoral students in developing countries are influenced by their mentors to adopt quantitative approach, because of mentors' strong quantitative methods orientation (Queirós, Faria & Almeida, 2017). Aside from Hughes' assertion, Holton and Burnett (2005) had earlier submitted that most researchers in some African countries employed quantitative methods due to their conviction that it is the best method when using large group

of people. Furthermore, generalisation is very possible outside the context in which the research findings were reached. Still on the gains of deployment of quantitative methods in research, Queirós, Faria and Almeida (2017) argued that quantitative method is very effective and appropriate when a researcher answer research questions which borders on the 'what' or 'how' (Abdullahi, Senekal, Van Zyl-Schalekamp, Amzat&Saliman, 2012). For instance, how many geography teachers participated in last year promotion examination? Here, quantitative method is required to answer this kind of question. This is because it provides the audience with numerical answer (Abdullahi, Senekal, Van Zyl-Schalekamp, Amzat&Saliman, 2012). From all indications, the position was sharply refuted by Swaminathan and Mulvihill (2017) who contained that qualitative researchers also answer the 'what' or 'how' questions especially when they interrogate social phenomenon and (Cleland, 2017) also seek deeper understanding of the thoughts, experiences, beliefs and emotions of a participant (Thomas, 2017). For instance, how do geography teachers perform in last year promotion examination?

Going back to the focus of the study, Dainty (2007) has demonstrated the underrepresentation of qualitative methods in West African countries. He analysed articles published in Journal of Construction Management and Economics in 2006. The findings showed that out of one hundred and seven papers received and published, nine adopted qualitative methods, seventy six employed a quantitative approach, twelve used mixed methods and ten deployed position papers. The situation was not completely different from Hyari, El-Mashaleh and Rababeh's (2015) notion who acknowledged that the under-adoption of qualitative methods by most scholars in building industry is of great concern to the Association of Builders (AB), therefore called for a review of the trend.

Surprisingly, the position held by Fejes and Nylander (2015) on overrepresentation of qualitative methods in developed countries was quite



interesting. In fact, these authors researched on bibliometric analysis on the highest quoted papers between 2005 and 2012 in three journals namely; Adult Education Quarterly, International Journal of Lifelong Education and Studies in Continuing Education. These journals are all based in United Kingdom (UK). From the findings, it was shown that qualitative methods actually dominated these three journals. Additionally, Boeren (2018) brought her live experience into context, as an Editor-in-Chief in some renowned journals at UK, She said that over the years she has observed that there are dominance of qualitative practitioners in UK. She argued that it is not surprising that this dominance positively reflected on the research productivity published in some journals such as Adult Education Journal. From the literature, obviously, developing countries are dominated by quantitative methods practitioners, while scholars in qualitative methods are domiciled and carry out their trade in developed countries.

### **Research methodology**

Here, I located the study within qualitative methods (Wisdom, Cavaleri & Onwuegbuzie, 2011). In fact, as one of the proponents of qualitative approach, I would have been seen as a 'joker of the century' by my audience if I have done otherwise. Moreover, my choice of qualitative method was based on the phenomenon under investigation and also the information that my participants would volunteer (Yanow & Schwartz-Shea, 2014). Similarly, based on the fact I adopted qualitative approach in the study, it is also appropriate that I deployed interpretive paradigm in order to have an in-depth interpretation and understanding (Denzin & Lincoln, 2011) of the underrepresentation of qualitative methods in Nigerian universities. Ten faculties of education in ten different universities located across Nigeria were purposively selected. It is pertinent to inform the audience that most of these faculties of education were established before 2010, therefore, any faculty founded after 2010 was not selected. I strictly adhered to all ethical issues in conducting the study. For

instance, letters of authorisation to access the selected universities' libraries were submitted to the authorities of these various universities and were subsequently granted. Approvals were also sought from various gatekeepers of these libraries. To ensure the confidentiality of the universities and participants, names were replaced with pseudonyms such as University A-J, and participant A-T.

I decided to employ both documentary materials and semi structured interview to generate my data. In the area of documentary materials, I went for Doctor of Philosophy (Ph.D) dissertations submitted by the students between 2010 and 2018. Also, I accessed six key faculties of education journals with highest impact index. The journals selected were Ibadan Journal of Educational Studies, NET Journal, Nigerian Journal of Business Education, NOUN Journal of Education, Lagos State Journal of Education and Journal Articles of Education and Extension Services. Crouch & McKenzie (2006) argued that to select few sample size in qualitative research assist the researcher to build and maintain a close rapport with interviewees and improve open, in-depth and frank information generation. Drawing from Crouch & McKenzie's (2006) position, therefore, I purposely selected twenty academic staff in ten faculties of education for the data generation. My choice of these academic staff was informed by the frequency these staff published on the journals yearly. I developed fifteen interview questions for the participants. On the field, I used audiotape during my interaction with the participants. However, the use of audiotape aside from ensuring the exactness of the information (Rutakumwa, de Vries, Parker, Tindana, Mweemba & Seeley, 2019), it was meant to discountenance criticism among anti-qualitative researchers (Tuckett, 2005) that qualitative study is prone to systematic bias (May, 1991) during information generation. Here, I selected one hundred and twenty academic journals and one thousand, three hundred and twenty Ph.D dissertations between 2010 and 2018. In fact, on each of the journal and Ph.D work reviewed, I looked out for concepts like percentage, multivariate analysis of variance, questionnaire, chi-

square, regression, cronbach alpha analysis, correlation, analysis of variance, and (quasi-) experimental design which are often used by quantitative methods researchers (Creswell, 2014). Data from the interview was transcribed verbatim. It is worthy to mention that about 73 scripts were generated from the transcription. Afterward, all the 73 scripts were subjected to an open coding. I decided to subject the data to an open coding in order to organise and group them into categories (Saldana, 2016) for the emergence of the themes. Thereafter, thematic analysis (TA) was used to analyse the data. The choice of TA is based on its flexibility (Terry, Hayfield, Clarke & Braun, 2017). According to Neville, Adams, Bellamy, Boyd and George (2015), the flexibility of TA means its suitability for analysing a wide range of data such as interviews (Niland, Lyons, Goodwin & Hutton, 2014), textual materials (Hayfield, 2013) and dissertations (Clarke, Braun & Wooles, 2015).

### **Findings and discussion**

The only emerging theme resulting from the first research question was adoption of quantitative methods and it is explained below.

### **Employment of quantitative methods**

From the first research question, the result of the analysis indicated that quantitative method was heavily adopted by researchers and scholars to conduct research in the faculties of education. For instance, I carefully analysed two hundred and forty Ph.D dissertations submitted by the doctoral candidates to University C. I discovered that about two hundred and twenty-one dissertation employed multiple regressions, chi-square, analysis of variance and other statistical, while nineteen dissertations adopted mixed methods. Interestingly, there was no doctoral candidate in the faculty who deploy qualitative methods for his/her dissertation. In University F, sixty Ph.D dissertations used quantitative methods, seventy-eight adopted mixed methods and only one student adopted qualitative method (narrative analysis). Out of curiosity, I was compelled to interrogate the student's mentor on the reason for

the deployment of narrative analysis. In response, he said; “*we (mentee and mentor) adopted qualitative method, that is, narrative analysis in conducting the research because of the phenomenon under which my candidate investigated.*” I, therefore, asked him the nature of the study investigated, he responded as follows:

*My candidate worked on the historical development of university education in Nigeria and Ghana. As you can see from the topic, we were looking at the trends in the development of university education between the two countries. Therefore, there was no basis for the deployment of any other method aside from narrative inquiry.*

At the University A, F and H, I discovered that all the Ph.D dissertations submitted within eight years (2010-2018) adopted quantitative research methodologies such as descriptive statistics, inferential statistics, among others. It was very disappointing to realise that for a whole eight years, no doctoral student in faculties of education wrote and submitted Ph.D dissertation using qualitative methods.

In fact, still in line with establishing the underrepresentation of qualitative methods in faculties of education, I was opportune to be provided with a great number of journals domicile at various faculties of education in Nigerian Universities. It is pertinent to say that Ibadan Journal of Educational Studies, NET Journal, Nigerian Journal of Business Education, NOUN Journal of Education, Lagos State Journal of Education and Journal Articles of Education and Extension Services were critically analysed to establish the frequency in which researchers and scholars applied qualitative methods. Obviously, it was amazing to discover that the majority of the articles published by Nigeria’s scholars and researchers in the journals used quantitative and mixed methods. Disappointingly, the majority of articles submitted did not contain analytical tools such as textual analysis, narrative analysis, discourse analysis, hermeneutic analysis, thematic analysis, phenomenological analysis, among others indicating non-application of qualitative methods. Notwithstanding the overrepresentation of quantitative methods, I equally found that few articles

published were non-empirical in nature. Within Nigerian context, these types of articles are popularly known as opinion papers. Obviously, it was argued that opinion papers were not based on any empirical evidence, rather, on conventional facts. On the other hand, analysis further indicated that only eleven academic papers used qualitative methods. Closer examination of the eleven papers revealed that their authors were all foreigners. For instance, Peter Nelson (2015) used qualitative method to explore the massification of higher education in Africa. From my in-depth observation of the authors' addresses, I was able to establish that there were written thus; Faculty of Education, University of Pretoria in South Africa, Faculty of Education, University of Accra in Ghana, School of Education and University of Botswana in Botswana which implies that the authors are foreign researchers.

According to the oral interview conducted, almost all Nigeria's researchers agreed to the use of quantitative method for conducting their research. For instance, Researcher G explained that though he read few research works in which qualitative methods was adopted, he never deploy the method in any of forty-five research works. Corroborating Researcher G's view, Researcher B said "*I have been university teacher for over 31 years. During this period, I have not used qualitative methods to carry out any study in my field of specialisation.*" Furthermore, Researcher H narrated how she read research works which bordered on qualitative methods such as ethnography, autoethnography, ground theory, photovoice, phenomenology and historical case study, however, she was yet to adopt any of the method in her numerous articles. Similarly, according to Researcher C, she never uses qualitative methods in any of her articles, rather, she usually applied Statistical Package for the Social Sciences (SPSS) to conduct various research studies. At this juncture, I asked Researcher C the reason for the application of SPSS instead of Content Analysis (CA). She responded:

*Well, I often used SPSS to conduct my works because it can handle a large set of variable data formats. Moreover, I used the techniques to analyse, transform, and produce a*

*characteristic pattern between diverse data variables. It is impossible to achieve this feat if one adopts qualitative method.*

From the above narrative, it is evident that quantitative methodologies were applied by Ph.D candidates and renowned researchers to conduct research studies in education. From all indications, oral and documentary evidence had clearly indicated the overrepresentation of quantitative methodologies irrespective of the disciplines or nature of investigation. It is disturbing to see quantitative methods being applied in some disciplines such as sociology of education, history of education, philosophy of education, among others. I want to argue that it is not completely wrong to deployment of quantitative research methodologies on the disciplines mentioned above. In fact, if at all quantitative method should be adopted, it must be informed by the nature of the phenomenon under investigation and the research questions formulated. It is not appropriate to employ quantitative methods, for instance, to explore ways in which John Dewey's philosophies influence the present-day education policies in Nigeria. It is obvious, this type of investigation does not require chi-square, regression, cronbach alpha analysis, correlation, analysis of variance or (quasi-) experimental design which are the elements of quantification. Rather, discourse, content or narrative analysis which is located within the qualitative methods should be adopted. The reason for the adoption of qualitative analysis is to bring out thick and in-depth description of the education policies in Nigeria.

Lacks of objectivity, validity and reliability were themes emerging from the second research question and it is analysed below.

### **Lack of objectivity in qualitative method**

The participants interviewed informed that they prefer to employ quantitative methods on their study because of its objectivity and rigourness. For instance, Researchers B and T categorically said that as science education researchers, it will be unscientific to conduct research using qualitative methods. Based on this statement, I, therefore, drew their attention to some of

the natural science researchers such as Mori and Nakayama (2013) who as medical practitioners adopted qualitative methods to carry out their study. Researcher B was quick to respond thus:

*Well, you may be right to say that qualitative methods are used in medical field and other related disciplines. However, I cannot apply the method in my research work because it would not really speak to my work. I see the application of qualitative approach in sciences as less objective, less rigorous and less robust.*

In the same breathe, Researchers J, D and F gave reasons for the application of quantitative methodologies. In fact, they specifically stated that quantitative methodologies allow them to make statistical generalisations. According to Researcher D, under quantitative methodologies it is possible to generalise research findings and make inference from the representative statistical sample to the population from which the said sample was drawn. He (Researcher D) went further to say that this kind of representativeness is not feasible or achievable in qualitative methods. Rather, what is obtainable in qualitative methods is analytical generalisation which involves case-to-case transfer. At this juncture, I hastily informed the Researcher J that his assertion is an imaginary dichotomy which usually prevailed during research sampling. In an angry tone, he thundered:

*No, this is not an imaginary dichotomy. I am aware that random sampling tends to be an ally of quantitative research, while non-random sampling tends to associate itself with qualitative research. Therefore, it is impossible to break the dichotomy hence my adherence to random sampling which often resulted in universal generalisation.*

Researcher T narrated her discomfort on the use of qualitative methods. She reported that she cannot imagine herself employing qualitative methods on her works. Her reason was based on the fact that the method (qualitative) does not focus on numerical representativity, instead, on the reality that cannot be quantified. She concluded by saying that qualitative methods is entrenched in micro sociological traditions with strong emphasis on subjectivity. Corroborating

her view, Researcher G was very personal in his submission as he declared; “*I want inform you that the very essence of deploying quantitative methods in conducting research is to discover natural law that govern human society and behaviours, not to build abstract theory which is very common in qualitative study.*”

### **Validity and reliability of instrument in quantitative method**

The issue of validity and reliability were equally mentioned by the participants as a valid ground for the adoption of quantitative methodologies in the research. Pretending as if I have not heard of the two concepts (validity and reliability) before, I interrogated further the meanings of the two words. One of the participants replied; “*validity involve meaningfulness, appropriateness, correctness and usefulness of the inferences an investigator arrived at.*” Another participant simplified the meaning of validity as a way in which a researcher determines whether the research truly measures that which it was intended to measure. In the area of reliability, Researcher M said; “*reliability is seen as the consistency or repeatability of results when test-retest method is done at two or more different times.*” Therefore, it was argued by Researcher A that “*the application of these concepts (validity and reliability) in quantitative research makes the study solidly robust and rigorous.*” This position was further affirmed by Researchers K and L who declared that in quantitative research work, robustness and rigorousness are often achieved through validity and reliability, however, it is unachievable in qualitative research work. At this point, I reminded these participants of trustworthiness and triangulation in which qualitative researchers adopted in place of validity and reliability at ensuring robustness and rigorousness in qualitative study. Critiquing this assertion, Researcher K responded:

*I cannot understand what the proponents of qualitative methods such as Lincoln, Guba, Creswell, Padgett and Sandelowski are saying. Let me tell you, it is not possible to achieve a good degree of validity and reliability in qualitative study without exhibiting bias and reactivity.*



In an angry tone Researcher K said; *“I do not want to sound immodest, employing validity and reliability in qualitative research is irrelevant and misleading due to its different ontological and epistemological assumptions.”* In affirming Researcher K’s position, Researcher F clearly narrated the experience most novice qualitative researchers encountered which includes the use of incorrect criteria to evaluate the study. She went on to cite one of her doctoral students who erroneously applied internal validity, external validity and content reliability traditionally domicile and applied in quantitative research on the qualitative study. In sharp contrast, Researcher O agreed with the notion of trustworthiness in qualitative research. He argued that unlike quantitative research, qualitative study is guided by the credibility, dependability, confirmability, transferability and reflexivity to achieve rigour in research findings. The participant also mentioned triangulation as a concept that could also be adopted to achieve credibility or trustworthiness in qualitative research.

It was surprising to be informed that courses such as Educational Research Methods (EDU 823) and Advanced Educational Research Methods (EDU921) are taught at Masters and Doctoral class respectively in all faculties of education. However, topics on qualitative methods are not taught despite its inclusion in the curriculum. Based on the conversation, I interrogated participants on reason behind the alienation of qualitative methods in Nigeria, Researcher G responded:

*From what I have seen in Nigeria, early senior researchers were not exposed to qualitative methods when they were postgraduate students. It is, therefore, difficult if not impossible to impart the methods to their students. Bear in mind, you cannot give what you do not have.*

Furthermore, in justifying why qualitative methods were not taught at the postgraduate level, Researcher H said:

*Few of us who want to introduce qualitative methods to our doctoral students were politely reprimanded by the Dean of faculty on the ground that it is unscientific. Moreover, most*

*external examiners do not like doctoral candidates to employ qualitative method on Ph.D dissertations. Rather, they prefer experimental, quasi-experimental research and expo-facto research.*

From the extracts, it is evident that the underrepresentation of qualitative methods was influenced by erroneous belief held by Nigerian quantitative researchers that in qualitative study objectivity could not be achieved. Efforts at convincing the participants to believe that objectivity and subjectivity in quantitative and qualitative methods respectively are mere false dichotomy proved futile. Finding also showed that overrepresentation of quantitative methods by doctoral candidates was influenced by their mentors' disposition in quantification.

### **Discussion**

From the analysis, it was discovered that eighty-six percent of the doctoral dissertations in faculties of education in Nigerian universities used quantitative methodologies. However, approximately twelve percent of the candidates adopted mixed methods, and only two percent used qualitative methods. In the same manner, the six key journals with highest impact index analysed showed underrepresentation of qualitative methods. In fact, the concepts such as analysis of covariance, multivariate analysis of variance and chi-Square, multiple regression analysis among others statistical tools were freely and intensively used to tease the data. Looking at the methods frequently adopted in technology education, Zuga (1994) explained the over reliance of quantitative methods and analysis by researchers in United Kingdom (UK). He went on to say that approximately two hundred and twenty dissertations analysed, sixteen representing seven percent employed qualitative approach, about eighty-five percent used quantitative methods, with sixty-five percent involving descriptive statistics. Still in UK, but this time around, its focus was on conference proceedings which were held between 2000 and 2001, where Carter and Fortune

(2004) affirmed the overrepresentation of quantitative methodologies by the conference attendees. Corroborating Carter and Fortune's (2004) position, Ejohwomu and Oshodi (2014) analysed Ph.D dissertations supervised in the faculties of building and construction at seven Nigerian universities between 1984 and 2012. Findings indicated that no doctoral researcher applied action research, archival research, ethnography or grounded theory in his/her study.

From the analysis, however, reasons were also advanced for the adoption of quantitative methodologies. These include; lack of objectivity, validity and reliability in qualitative research methods. It was argued that subjectivity, trustworthiness and triangulation amplified by proponents of qualitative methods were mere 'window dressing' which could not be applied in quantitative study. In fact, this formed the basis under which quantitative methods were overrepresented in the faculties of education in Nigerian universities. In agreement to the findings, Bubaker, Balakrishnan and Bernadine (2005) in their study of qualitative case study research in Africa held that qualitative methods is grossly underadopted, while statistical tools are highly deployed for scientific exploration. Specifically, in the construction sector in Nigeria, Ejohwomu and Oshodi (2014) argued that quantitative methods were often adopted by Nigerian researchers to generate new knowledge in their various fields of study.

Also, underrepresentation of qualitative methods in the faculties of education in was informed by an excellent quantitative methodological background held by many Ph.Ds' supervisors/mentors. Apparently, in education, educator can only impact knowledge based on what he/she knows. Therefore, the culture of quantitative methods dominant and internalised on doctoral supervisors/mentors was transferred to the mentees by the mentors, thereby reinforcing the adoption of quantitative methods in the faculties of education. In one of the studies conducted by Hughes (2010), he argued that doctoral and young researchers were influenced by the strong culture of the discipline where the supervisors/mentors are dominant. In furtherance to the above, Hughes

contended that if the supervisors/mentors have a strong quantitative research culture, there is likelihood that they will not only impact on the adoption of other research approaches, but also on how mentees are taught.

### **Conclusions and recommendations**

It was shown that there are three methods in which any empirical study should be carried out. In Nigeria, overrepresentation of quantitative methods in faculties of education has grown exponentially over the years. This, invariably, promotes lack of interest in accessing Nigerian scholarship. From the study, it was discovered that qualitative methods is underrepresented in the faculties of education. Education researchers and scholars researched and published in reputable journals using quantitative methods. From all indications, objectivity, validity, reliability and supervisors/mentors' knowledge on quantitative methods were reasons advanced for the passive application of qualitative methods in Nigeria.

Findings also indicated that majority of masters and doctoral candidates used quantitative methods in their final dissertations, even when the phenomenon under investigation did not demand application of the methods. In light of the above, it is strongly recommended that supervisors/mentors should encourage their candidates to adopt qualitative methods in writing their dissertation when it is appropriate to use the methods. After all, qualitative methods particularly allow the user(s) to familiarise and immerse his/herself with the data for valid and reliable research findings.

Additionally, the position held by the proponents of quantitative methods that in qualitative methods, validity and reliability could not be achieved should be dismissed. Instead, the qualitative methods practitioners should double their effort towards educating (through seminars, workshops and conferences) pro-quantitative researchers that validity and reliability can also be attained in qualitative methods through trustworthiness and triangulation. In qualitative

methods, Dainty, Bagilhole and Neale (2000) had earlier said that the issue of bias is completely eliminated and methodological transparency upholds.

## References

Abdullahi, A.A., Senekal, A., Van Zyl-Schalekamp, C., Amzat, J. & Saliman, T., (2012).

Contemporary Discourses in Qualitative Research: Lessons for Health Research in Nigeria. *African Sociological Review*, 16(1), 19-40.

Alasuutari, P. (2010). "The rise and relevance of qualitative research". *International Journal of Social Research Methodology*, 13 (2), 139-55.

Apuke, O. (2017). "Quantitative Research Methods A synopsis review". *Arabian Journal of Business and Management Review*, 6 (10), 40-47.

Babbie, E. (2014). *The Basics of Social Research* (6th Ed.). [California](#): Wadsworth Cengage.

Bailey, L. F. (2014). The origin and success of qualitative research. *International Journal of Market Research*, 56(2), 167-184.

Boeren, E. (2018). The Methodological Underdog: A Review of Quantitative Research in the *Key Adult Education Journals*, *Adult Education Quarterly*, 68(1), 63-79.

Bubaker, S., Balakrishnan, P. & Bernadine, C., (2005). Qualitative case study research in Africa and Asia: Challenges and prospects. *Proceedings. 3rd International Qualitative Research Convention, Malaysia*, 1-13.

Carter, K. & Fortune, C. (2004). Issues with data collection methods in construction management research. In: Khosrowshahi, F. (Ed.), *Proceedings 20th Annual ARCOM Conference, 1-3 September 2004, Edinburgh, UK*, (2), 939-46.

Clarke, V., Braun, V., & Wooles, K. (2015). Thou shalt not covet another man? Exploring constructions of same-sex and different-sex infidelity using story completion. *Journal of Community & Applied Social Psychology*, 25(2), 153-166.

[Cleland](#), J. A. (2017). The qualitative orientation in medical education research. *Korean Journal Medical Education*, 29(2), 61-71.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*, (4th Ed.), London: Sage publications.

Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social Science Information*, 45(4), 18-31.

Dainty, A. R. J., Bagilhole, B. M., & Neale, R. H. (2000). Computer aided analysis of qualitative data in construction management research. *Building Research and Information*, 28(4), 226–233.

Daniel, E. (2016). The Usefulness of Qualitative and Quantitative Approaches and Methods in Researching Problem-Solving Ability in Science Education Curriculum. *Journal of Education and Practice*, 7, (15), 91-100.

Dawadi, S. (2017). Are quantitative and qualitative approaches to educational research compatible? Retrieved from <https://thewarwickeltezine.wordpress.com> on 12<sup>th</sup> April, 2020.

Dean, B.A. (2018). The interpretivist and the Learner. *International Journal of Doctoral Studies*, 13, 1-8.

Denzin, N. K., & Lincoln, Y. S., (2008). *The landscape of qualitative research* (Vol. 1). London: Sage.

Denzin N. K. and Lincoln Y., (2011). *The SAGE Handbook of Qualitative Research*. London: Sage Publications.

Fejes, A., & Nylander, E. (2015). How pluralistic is the research field on adult education? Dominating bibliometrical trends, 2005-2012. *European Journal for Research on the Education and Learning of Adults*, 6, 103-123.

Ejohwomu, O. A., & Oshodi, O. S. (2014). A review of construction management and economics research outputs in Nigeria: towards a sustainable future. *Journal of Construction Project Management and Innovation*, 4(Supplement 1), 900-905.

Goertzen, M. J. (2017). . Introduction to Quantitative Research and Data. *Library Technology Reports*, 53(4), 12-18.

Hammersley, M. (2014). On the ethics of interviewing for discourse analysis. *Qualitative research*, 14(5), 529-541.

Fielding, N. (2010). Elephants, gold standards and applied qualitative research. *Qualitative Research*, 10 (1), 123-127.

Haggar, M.S.&Chatzisarantis, N. S. L., (2011). Never the twain shall meet? Quantitative psychological researchers' perspectives on qualitative research, *Journal of Research in Sport, Recreation and Exercise*, 3, 266-277.

Hammarberg, K. Kirkman, M. & deLacey, S., (2016). Qualitative research methods: when to use them and how to judge them. *Human Reproduction*, 31, (3) 498-501.

Hayfield, N. (2013). 'Never judge a book by its cover?': Students' understandings of lesbian, gay and bisexual appearance. *Psychology & Sexuality*, 4(1), 16-24.

Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. London: SAGE Publications Limited.

Holton, E. F., & Burnett, M. F., (2005). The basics of quantitative research. *Research in organizations: Foundations and methods of inquiry*, 29-44.

Hughes, W. (2010). Built Environment education, research and practice: Integrating diverse interests to make an impact. In: Laryea, S., Leiringer, R. and Hughes, W. (Eds.) *Proceedings West Africa Built Environment Research (WABER) Conference, 27–28 July, Accra, Ghana, 1–8*.

Hyari, H.K., El-Mashaleh, M.S., & Rababeh, S.M. (2015). Framework For Managing The Traffic Impacts of Building Construction Project. *Journal of Construction in Developing Countries*, 20 (2) 97–113

Johnson, R. & Onwuegbuzie, A.J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33, (7), 14-26.

Laryea, S. & Leiringer, R. (2012). Built Environment research in West Africa: current trend and future direction. In: Laryea, S., Agyepong, S. A., Leiringer, R. and Hughes, W. (Eds.) *Proceedings 4th West Africa Built Environment Research (WABER) Conference*, 24–26 July, Abuja, Nigeria, 797–804.

Le Grange, L. (2018). What is (post) qualitative research?. *South African Journal of Higher Education*, 32(5), 1-14.

MacCleave, A. (1989). Qualitative and quantitative research: Problems and possibilities. *Home Economics*, 4(1), 3-5.

May, K.A., (1991). Interview techniques in qualitative research: concerns and challenges. In: Morse J.M. (Ed.) *Qualitative Nursing Research: A Contemporary Dialogue* (pp. 188-201) London: Sage.

Mohajan, H. K. (2018). Research Methodology in Social Sciences and Related Subjects. *Journal of Economic Development, Environment and People*, 7, (1), 23-48.

Mori, H. & Nakayama, T. (2013). Academic impact of qualitative studies in healthcare: bibliometric analysis, *Plos One*, 8(3), 1-7.

Nelson, P. (2015). Used qualitative method to explore the massification of higher education in Africa. *International Journal of Education*, 2 (1), 25-38.

Neuman, W.L. (2011), *Social Research Methods: Qualitative and Quantitative Approaches*, (7<sup>th</sup> Ed.). Boston: Pearson/Allyn and Bacon,

Neville, S., Adams, J., Bellamy, G., Boyd, M., & George, N. (2015). Perceptions towards lesbian, gay and bisexual people in residential care facilities: A qualitative study. *International Journal of Older People Nursing*, 10(1), 73-81.

Niland, P., Lyons, A., Goodwin, I., & Hutton, F. (2014). ‘See it doesn’t look pretty does it?’: Young adults’ airbrushed drinking practices on Facebook. *Psychology & Health*, 29(8), 877-895.

Park, Y. S., Konge, L., & Artino, A. R. (2020). The positivism paradigm of research. *Academic Medicine*, 95(5), 690-694.



Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*, 2, 12-25.

Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.

Rutakumwa, R., de Vries, J., Parker, M., Tindana, P., Mweemba, O., & Seeley, J. (2019). What constitutes good ethical practice in genomic research in Africa? Perspectives of participants in a genomic research study in Uganda. *Global Bioethics*, 1-15.

Saldana, J., (2016). *The coding manual for Qualitative researchers* (3<sup>rd</sup> Ed.). London: Sage.

Schwandt, T. A., Denzin, N. K., & Lincoln, Y. S. (1994). Handbook of qualitative research. *Londres, Ed: Denzin & Lincoln*.

Sezer, B., & Yilmaz, R. (2019). Learning management system acceptance scale (LMSAS): A validity and reliability study. *Australasian Journal of Educational Technology*, 35(3).

Solomon, D. (2000). Toward a post-modern agenda in instructional technology. *Educational Technology Research and Development*, 48 (4), 5–20.

Starman, A. B. (2013). The Case Study as a Type of Qualitative Research. *Journal of Contemporary Educational Studies*, 1, 28–43.

Strauss, A., & Corbin, J. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3rd Ed.). Thousand Oaks, London, New Delhi: SAGE Publications.

Swaminathan, R., & Mulvihill, T. M. (2017). *Critical approaches to questions in qualitative research*. London: Taylor & Francis.

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The Sage handbook of qualitative research in psychology*, 17-37.

Thomas, G. (2017). *How to Do Your Research Project: A Guide for Students* (3rd Ed.). Thousand Oaks, CA: Sage.

Tuckett AG (2005) Part II: Rigour in qualitative research: complexities and solutions. *Nurse Researcher*, 13(1), 29-42.

Umeokafor, N., &Windapo, A. (2018). Challenges to and opportunities for establishing a qualitative approach to build environment research in higher education institutions. *Journal of Engineering, Design and Technology*.

Wisdom, J.P., Cavaleri, M.C., Onwuegbuzie, A.T., (2011). Methodological reporting in qualitative, quantitative, and mixed methods health services research articles. *Health Services Research*, 47(2),721–45.

Yanow, D., & Schwartz-Shea, P., (2014). *Interpretation and method: Empirical research methods and the interpretive turn*, (2nd Ed.). London & New York: Sharpe &Routledge.

Zuga, K. F. (2004). Improving technology education research on cognition. *International Journal of Technology and Design Education*, 14(1), 79-87.