

ARTS-BASED QUANTITATIVE RESEARCH AND THE SCIENTIFIC CROSSROADS: A CORRECTIVE TRAJECTORY FOR SOVEREIGNTY IN THE ARTS

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Abstract

Arts-based research engages rigorous artistic undertakings to solve problems. When research is cross-disciplinary it combines measurement and evaluation approaches obtainable in both disciplines. The current study projected in the main, reasons quantitative arts-based research should not look overtly scientific. The specific objectives of the quasi-experimental study were to; (i) simplify amalgamated learning in humanities with multifaceted approaches, (ii) find out the best ways to present quantitative research findings under cross-disciplinary topics, and (iii) domesticate quantitative visual arts research with comparative design elements. Participants in the 4-week vacation study were 60 randomly selected arts-based students from the University of Nigeria, Nsukka and Alex Ekwueme Federal University, Ndufu Alike: Visual arts (n=20), Literary arts (n=20), and Performing arts (n=20). The instruments for data and information collection were the Sovereignty in Arts-based Research Syllabus (SA-bRS) and a Yes-and-No structured questionnaire. Data were presented in an exemplified quantitative form using 5-point rating contemplations per research question, to address the stipulated weekly courses. Discussions were made based on the cumulative mean (x) of Yes or No scores per row. The results show that it is possible to undertake quantitative research in the arts faculty without extreme calculations, and that both qualitative and quantitative research types could be combined in studies with ethnographic backgrounds. It was also discovered that researches in the arts always yield results that improve humanity in the long run.

Keywords: Cross-disciplinary, multi-faceted, overtly scientific, ethnographic.

Introduction

The term sovereignty is often misunderstood to represent arrogance or some sort of imperial autocracy, especially in public administration and governmental parlances. But more succinctly put, sovereignty connotes autonomy or independence. The independence of research methods in the arts, as prescribed in this study, does not however, preclude cross-disciplinary tendencies in some researches. However, cross-disciplinary educational overtures have made it possible that quantitative researches could be conducted in the arts too. Arts-based research in the context of this study has been made to encompass research activities in the departments considered directly streaming from the Visual, Literary and Performing arts in the Faculty of Arts, University of Nigeria, Nsukka, and the Faculty of Humanities, Alex Ekwueme Federal University, Ndufu Alike. The selected departments therefore represent all others in the faculty. They are;

1. Fine & Applied Arts
2. Music
3. Theatre and Film Studies
4. Foreign Languages and Literature
5. English & Literary Studies
6. Igbo Linguistics and Nigerian Languages

With narrower emphasis on the tripod of the Visual, Literary and Performing arts, this study exemplifies a proof that scientific incursions so far made into the arts-based researches have to be checked, with the domiciliary sovereignty of the arts and humanities. Suffice it to say that professionals and academics in the arts have made very insignificant effort at upholding the very tenets that convivially define cross-disciplinary research in the humanities. Given the fact that research is about problem solving, and that the 'quantitativeness' of a research work does not consist in the abundance of mathematical, statistical or algorithmic yardsticks used to raise permutations about it or verify its data, it is of great expedience that arts-based research be allowed to look artistic, even if statistical tendencies emerge in them. In arts-based quantitative research information can also be verified by some condensed approaches that are not overtly scientific, yet making meaning.

The Need for Domiciliary Disciplinary Sovereignty in Research

Art is fundamental to society, a network of useful, pleasurable, challenging and potentially transforming practices (Addison and Burgess, 2007). In a broad sense research constitutes any original investigation undertaken in order to gain knowledge and solve problems. Research in the arts is for the greater part of the time ingenuous and hardly follows strict formulae for methodology, analysis or findings. Golaszewska (1985) observes that art which realises beauty arouses our admiration; it is full of solemnity and dignity, balanced and varied, profound, encouraging quest and inciting

thinking, it is, of course, perfect in respect to mastery, originality, expressed ideas- in other words it is equipped with artistic values of a high order.

Arts-based research usually border on productive, fact-finding and solution-proffering considerations which relate to human resource and industrial development to produce new or substantially improved materials, devices, processes and products, including design and construction. Leavy (2009) states that arts-based practices are particularly useful for research projects that aim to describe, explore or discover. The use of arts-based representational strategies brings academic scholarship to a wider audience. Arts-based research is known to be qualitative for the greater part of the time but in recent times a lot has been pulled along. Denzin and Lincoln (2005) posit:

Arts-based inquiry uses the aesthetics, methods, and practices of the literary, performance, and visual arts as well as dance, theatre, drama, film, collage, video, and photography. Arts-based inquiry is intertextual [and] it crosses the borders of art and research... When grounded in critical performance pedagogy, arts-based work can be used to advance a progressive political agenda that addresses issues of social inequity.

There is no contemplation that stands as irrefutable as arts being unique, and therefore should be uniquely attended to in research cases. But since the world is a space in which matters are adjudged in both alphabetical and numerical parlances, there are instances where the scientist may be compelled to solve problems with qualitative appraisal, likewise, the art professional also occasionally gets confronted with challenges that demand calculative attention. In each case, let the sovereignty of the domicile faculty take upper hands.

This paper therefore proposes that it is the background of the research study that should prescribe its sovereignty base and not necessarily the cross-disciplinary nature of the topic of study. This implies that while students and researchers in the arts also do quantitative research, the 'quantitativeness' of the research should be qualitative enough. And this is no prescription for annihilating the independence of quantitative research in its scientific domains either. Interrogating the crossroads has become more important than ever before, especially because of the current spate of cross disciplinary studies world over. There are veritable places where studies in the arts meet the sciences, and vice versa. Other faculties of learning also apply. When one beholds or reads a research work in the arts, it should not impersonate the sciences so much that artistic disciplinary sovereignty is lost.

The Error of Scientific Supremacy Mindset

This paper offers a good opportunity for misled and upcoming researchers in the arts to drop the mindset that research in the sciences is

superior to that of the arts. Qualitative research apart, by what indices is quantitative research only veritable when it appears within the science domain? This question yearns for rapid response by educational policy makers who seem to have tethered the arts-based research on the rear side of intellectualism, and sometimes assuming that there is no worthwhile research in the arts, by the way.

Researchers using creative and arts-based research methods are often situated within the qualitative research tradition (Coemans & Hannes, 2017; Knowles & Cole, 2008). It could be on the basis of such assertions as above that most researchers erroneously conclude that all we do in arts-based research is qualitative, and that if at all quantitative aptitudes are seen in the arts, then it must strictly follow scientific measures, to claim veracity. But it is totally wrong. In the words of Kara (2015) it becomes clearer:

There is also very creative work going on in quantitative methodologies... creativity involves knowing about various methods but not being bound by that knowledge, such that, if the need arises, you can manipulate and develop theories and methods, within the constraints of good practice, to help you answer your research questions.

The design of charts, diagrams, tables and figures which appear in most scientific research are artistic overtures meant to simplify data and its categorisations. It is also important to state that photographs and illustrations that appear on scientific research are also art works. And of course the use of literature, in whatever language, to report methods and findings is also literary art. In the current world of multidisciplinary or cross-disciplinary research, effort should be made to locate every research topic in its domain, even if it somehow crosses into another. According to Gray and Malins (1993):

There is no one universally accepted methodological approach to research within the arts. Methodologies associated with creative practice as research may move beyond traditional approaches to research, inclusive of ongoing reflexive nature associated with the disciplines. Through the methodologies and because of multiple shifts of interpretive paradigms in the creative arts, there could be a difference, creating tensioning, between the creative and reflexive outcomes within the practice. Practice as research is identified as a 'generating' instrument. Research methods and processes are tailored to respond to practice and practice to research, continually re-orienting it to refine the research question through the reflexive processes.

Suffice it to say that the infringement of the sciences on the artistic research domain was permitted and even misconstrued by arts professionals and researchers who over the years have kept mum over the scientific eclipse of artistic research methods, not making deep efforts to sustain artistic balance.

The Inevitability of Hybridisation in Modern Research

In the context of this study the tendency upon which research could be termed quantitative and yet arts-based is the same as such that warranted a globally radical move towards solving research problems with amalgamation of methods and measures, irrespective of diversities in the disciplines involved. Most times when experts in different fields of study define research typologies, especially the cross-disciplinary ones they end up inadvertently ascribing some baselines to their disciplines.

Interestingly, there are researches domiciled in the sciences and other faculties which can be classified as arts-based because they adopt measures that involve images, historical, performing, literary and other forms of artistic evaluations. In her book "Creative Research Methods in the Social Sciences," Kara (2015) observes that researchers began to view their work as value-laden, symbiotically linked with society and inevitably affected by the researchers themselves ... researchers began to reach out beyond the bounds of conventional research to the arts, other research methods and technology, to find more useful ways to explore the world around us.

Hybridisation in education is therefore in the rise because of the quest for solving problems overboard. New methods and measures are globally being sought while old ones are being reviewed. According to Maggi & Katherine (2014), arts-based inquiry not only involves the artist (of which ever type) but also those who are involved in the art work in some way, including the participants and possible other researchers. Thus researchers and participants use art for personal exploration to make sense of the problem or medium, so that the research and the artistic process overlap. But approaches to certain ascriptions differ.

According to Jones & Leavy (2004), arts-based research is seen as any social research or human inquiry that adapts the tenets of the creative arts as a part of the methodology ... the arts may be used during data collection, analysis, interpretation and/or dissemination. But in raising angles to Jones and Leavy's social science-domiciled art-based research, Franz (2010) avers that there are many dimensions to arts-based research reflecting the large variety of art genres (such as performance, writing, painting, photography, collage and installation art) and these genres can be used in a variety of ways, for example, as a method or as technical, communication or aesthetic elements. Then Smith and Dean (2009) argue that:

We do not see practice-led research and research-led practice as separate processes, but as inter-woven in an iterative cyclic web... The reciprocal relationship between the research and the creative work has taken

numerous different forms. It has included symbiosis between research and creative practice in which each feeds on the other; hybridisation of the many discourses surrounding them; transference of the characteristics of research onto practice and vice versa; and alternations between research and creative practice, often within a single project.

In the seeming battle for current knowledge not to translate to some sort of irrelevant piece of old-time-usefulness in the morrows, educational experts in different fields are hell bent on emergent conceptualisations that will make their domains stand out stronger. Gray & Malins (2004) assert that knowing how to research is perhaps much more valuable than finding out a particular thing. Today's knowledge is tomorrow's joke. The earth is the centre of the universe and is flat! Atom is the smallest indivisible molecule! Research is about searching for alternatives. Being sceptical and critical are crucial research characteristics in progressing from one piece of knowledge to a better, more 'fit' version.

The Problem

Having spelt out the need for hybridisation in modern research it is now understood why some researches in the sciences may adopt arts-based measures to affect veracity. Likewise some arts-based research that bear the contents of scientific measures and statistics have necessitated quantitative research in the arts. It is therefore inevitable that quantitative research could be carried out in the arts, notably because of cross disciplinary exigencies emanating from the research topic, and further prescribing hybrid methodologies. The current crux however is that in Nigeria some quantitative research in the arts extremely toe the precepts of research in the sciences; scientific measurements and evaluations. The following question therefore arises; 'Must quantitative arts-based research consent in-depth statistical and mathematical calculations, so much that it begins to look science-based?' Another question is 'When artistic images, illustrations, charts and diagrams are used in science-based research do they erode scientific data presentation and analytical methods?' The permutations arising from the above questions therefore constitute the swivel-base of the current study.

Research Design

The action research typology was adopted for this research. The simplest way to understand action research is that it is about learning by doing; when you identify a problem you do something to solve it. According to O'Brien (2001), action research is known by many other names, including participatory research, collaborative inquiry, emancipatory research, action learning, and contextural action research, but all are variations on a theme. Put

simply, action research is “learning by doing” - a group of people identifying a problem, doing something to resolve it, seeing how successful their efforts were, and if not satisfied, trying again. According to the ABL group (1997), action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously. Thus, there is a dual commitment in action research to study a system and concurrently to collaborate with members of the system in changing it in what is together regarded as a desirable direction. Accomplishing this twin goal requires the active collaboration of researcher and client, and thus it stresses the importance of co-learning as a primary aspect of the research process.

O’Brien (2001) further states that several attributes separate action research from other types of research. Primary is its focus on turning the people involved into researchers, too - people learn best, and more willingly apply what they have learned, when they do it themselves. It also has a social dimension - the research takes place in real-world situations, and aims to solve real problems. Finally, the initiating researcher, unlike in other disciplines, makes no attempt to remain objective, but openly acknowledges their bias to the other participants. On this premise the art-based students in this study were actively involved in vigorously amalgamated pilot subjects. They were also questionnaire respondents.

Ethical Considerations

Ethical considerations are efforts made to consult the persons or authority involved before using the research subjects. It is mostly applicable in action or real-life situation researches. In ethical considerations all the research participants are allowed to affect the work in a way. In this case, the authorities of the Department of Fine and Applied Arts, University of Nigeria, and the Department of Fine and Applied Arts/Music, Alex Ekwueme Federal University, Ndufu Alike were contacted before the long vacation and they gave their consents for their students to be used in the research exercise.

Methods and Measures

The participants were put to four weeks; Mondays, Wednesdays and Fridays, rigorous amalgamated arts-based activities, during which observations were used by the researchers to gather comparative information that helped elicit weekly remarks. According to Marshal & Rossman (1989), observation is the systematic description of events, behaviours and artefacts in the social setting chosen for study. Participant observation methods of data collection are used during fieldworks or researches that are anthropological in nature. DeWalt & DeWalt (2002) clarify that fieldwork involves active looking, improving memory, informal interviewing, writing detailed field notes, and perhaps most importantly, patience. But in providing further clarity DeWalt & DeWalt (2002) state that participant observation is the process enabling researchers to learn about the activities of the people under study in the

natural setting through observing and participating in those activities. It provides the context for development of sampling guidelines and interviews guides. And Schmuck (1997) adds that observation methods are useful to research in a variety of ways. They provide researchers with ways to check nonverbal expression of feelings, determines who interacts with whom, grasp how participants communicate with each other, and check for how much time is spent on various activities. According to DeWalt and DeWalt (2002), when designing a research study and determining whether to use observation as data collection method, one must consider the types of questions guiding the study, the site under study, what opportunities are available at the site for observation, the representativeness of the participants of the population at the site, and the strategies to be used to record and analyse the data.

The primary instrument for data and information collection was the Sovereignty in Arts-based Research Syllabus (SA-bRS). It was designed to guide the researchers in order to achieve the sequenced subjects of amalgamated study in such a way that timeliness and variety of disciplines are respected all at the same time. While the researchers used observation to gather information that elicited weekly remarks, only the sampled students themselves elicited data that were used for verifications, by responding to questionnaire (see appendix 1).

The secondary instrument for data collection was a questionnaire structured in the Yes and No pattern, and used to gather responses from the sampled students direct. Each of the three guiding research questions had five contemplation options with which the subjects of weekly study were measured in terms of response. After the cumulative of the Yes and No responses have been gathered, there was a mean frequency of each row to ascertain the final affirmative or non-affirmative response gauge accruable to the contemplation in view. There were 60 copies of questionnaire issued and all 60 were returned (see appendix 2).

Validation of Instruments

The Instruments were tested and validated by three experts in the Art Education section of the Department of Fine and Applied Arts, University of Nigeria, Nsukka.

Research Objectives

The main objective of the study was to shuffle the arts-based students into a mixed experimental class of the visual, literary and performing artists with a common task aimed at exhuming both qualitatively and quantitatively presentable findings. The specific objectives of the study were to;

- i. Simplify amalgamated learning in humanities with multifaceted approaches,
- ii. Find out the best ways to present quantitative research findings under cross-disciplinary topics, and

- iii. Domesticate quantitative research in the arts with comparative design elements.

Scope

The study covered holidaying arts-based students from the Faculty of Arts, University of Nigeria, Nsukka, and the Faculty of Humanities, Alex Ekwueme Federal University, Ndufu Alike. For the purposes of convenience the students were drawn from departments that were further clustered into three; visual arts, literary arts and performing arts. The study concentrated on proposing a trajectory that will emancipate quantitative research in the arts from extreme scientific infringements.

Research Questions

The following research questions guided the current study:

- i. What are the most effectual ways to simplify amalgamated learning in a class of general humanities?
- ii. How best can findings in arts-based quantitative research be presented under cross-disciplinary topics?
- iii. What are the most auspicious factors that should guide quantitative research in the arts?

Participants and Eligibility Criteria

There were 60 arts-based students from selected Departments in the Faculty of Arts, University of Nigeria, Nsukka and the Faculty of Humanities, Alex Ekwueme Federal University, Ndufu Alike for the study: Visual arts (n=20), Literary arts (n=20), and Performing arts (n=20). The following is an encapsulation of the participants and eligibility criteria:

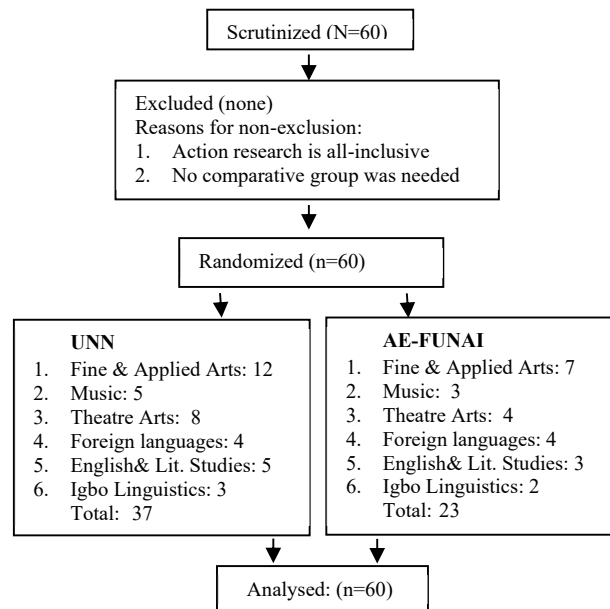


Figure 1: Participants and Eligibility Criteria. Source: (Fieldwork, 2019)

Sampling

The population of the research subjects was immediately controllable, so sampling was not called for. More so, action research usually involves a random inclusion of all in the target population.

Procedure for Data Analysis

Data were presented and analysed using a simple method of subtracting the number of persons who ticked Yes or No per row, from the entire population of 60, to get the balanced response. The number of those who ticked Yes and No under the same subjects, correlating with the same guide contemplations, must always add up to 60. If a greater number ticked No than Yes it means that the option was a rejected one, but if otherwise it means that the option was accepted. The rates of acceptance and rejection were also adjudged. Acceptance and rejection were predetermined by the experiences gathered by the respondents during the experimental amalgamated classes. At last, a mean rating of the entire Yes and No options in a row were done, to determine the grand score. It was based on the mean of frequencies that analyses were made. The idea was to make calculations and figures as simple as possible, as this paper prescribes. See Tables 1-3.

Results

The findings of the exemplified quantitative Arts-based research are presented in correlation with the research questions that elicited them:

Table 1: Data tabulation on the most effectual ways to simplify amalgamated learning in a class of general humanities

Research Question 1: What are the most effectual ways to simplify amalgamated learning in a class of general humanities? (n=60)										
Rating Contemplations	<u>Mon:</u> <u>Wk 1:</u>		<u>Mon:</u> <u>Wk 2:</u>		<u>Mon:</u> <u>Wk 3:</u>		<u>Mon:</u> <u>Wk 4:</u>		$\bar{(xf)}$	$\bar{(xf)}$
	Cultural Studies in Nigerian Visual, Literary & Performing Arts	Impact of Westernisation on Nigerian Visual, Literary & Performing Arts	Analog ue Exploration in Visual, Literary & Performing Arts	Digitisation in Visual, Literary & Performing Arts						
(f)	YES	NO	YES	NO	YES	NO	YES	NO	$\frac{f}{N}$ <u>YES4/4</u>	$\frac{f}{N}$ <u>NO4/4</u>

Personal research and practice	5	55	8	52	0	60	28	32	10.3	49.7
Demonstrative & interactive methods	0	60	0	60	60	0	60	0	30	30
Illustrative & instructional education	40	20	55	5	60	0	60	0	53.7	6.25
Statistical and logical methods	0	60	0	60	0	60	0	60	0	60
Lottery of chance and experiment	0	60	0	60	0	60	0	60	0	60

KEY: f = frequency; xf = mean frequency
 Source: (Fieldwork, 2019)

Data on Table 1 shows that under the four subjects of study in view; Cultural studies, impact of westernisation, Analogue exploration and Digitisation in Visual, Literary and Performing arts, Illustrative and Instructional Education was the most accepted as an effectual approach to simplifying amalgamated learning in a class of general humanities, with a mean score of 53.7 out of 60 in the affirmative and only 6.25 in the non-affirmative response. It was followed by Demonstrative and Interactive methods, with a 30/60 Yes and No response rating apiece. Personal research and practice got only 10.3/60 in the affirmative and 49.7 in the No response. The rest of the options were wholesomely rejected with all 60 respondents ticking No each. The implication of the studies on Mondays of the four weeks are that in both theoretical and practical visual, literary and performing art courses Illustrative and instructional education is held uppermost (presumable for arts-based theory courses), followed by the Demonstrative and interactive methods (which find sway in the practical aspects of arts-based research).

Table 2: Data distribution of how best findings in arts-based quantitative research could be presented under cross-disciplinary topics.

Research Question 2:						
How best can findings in arts-based quantitative research be presented under cross-disciplinary topics? (n=60)						
Rating Contemplations	Wed. Wk 1:	Wed.: Wk 2:	Wed. Wk 3:	Wed. Wk 4:	$\bar{(xf)}$	$\bar{(xf)}$
	Processes in Visual, Literary & Performing Arts solo practica	Processes in Visual, Literary & Performing Arts group practic	Improvisation in Visual, Literary & Performing Arts	Psychotherapy and emotional impacts in Visual, Literary &		

	l/perfor mances		al/per forma nces		practic al/per forma nces		Perform ing Arts			
(f)	Y E S	N O	Y E S	N O	Y E S	N O	Y E S	N O	<u>f- YES</u> /4	<u>f- NO</u> /4
Direct analysis	60	0	0	50	12	48	20	40	23	34.5
Alpha-numeric tabulations only	30	30	46	14	0	60	55	5	33	27
Illustrations and diagrams	40	20	52	8	40	20	58	2	47.5	12.5
Simplified statistical methods	30	30	40	20	36	24	40	20	36.5	23.5
No statistical approach at all	0	60	0	60	10	50	8	52	4.5	55.5

KEY: f = frequency; \bar{x} = mean frequency

Source: (Fieldwork, 2019)

The Wednesday's courses; Processes in solo and group practical, then improvisation and psychotherapy; all in Visual, Literary and Performing arts, under which five contemplations guided, simplified statistical methods, with a mean affirmation of 36.5/60 and 23.5/60 non-affirmative response, was averagely accepted as an approach for presenting data in cross-disciplinary research. But Illustrations and diagrams polled 47.5 affirmative mean responses and 12.5 non-affirmatives, making it a highly accepted way to present data in arts-based cross-disciplinary research. On the option of Alpha-numeric tabulations only 33/60 affirmative responses were polled against 27 in the No answer scale. This is not a negative result since those who accepted the option were over fifty percent of the population. On Direct analysis, 23 respondents ticked Yes, while 34 ticked No. The implication is that whereas Illustrations and Diagrams were accepted the highest as suitable ways to present data in cross disciplinary quantitative arts-based research, Simplified statistical methods were also accepted. This portends a methodical combination of the diagrammatic and simple calculations. In any case, the option of direct analysis also being accepted means that whereas diagrams and

illustrations represent artistic data presentation, analytical methods are also commendable and applicable to quantitative arts-based research.

Table 3: Data distribution on the most auspicious factors that should guide quantitative research in the arts

Research Question 3: What are the most auspicious factors that should guide quantitative research in the arts? (n=60)										
Rating Contemplations	Fri. Wk <u>1:</u> Enumera tions in Visual, Literary & Performi ng Art works		Fri. <u>Wk 2:</u> Analy ses in Visual, Literar y & Perfor ming Art works		Fri. Wk <u>3:</u> Ethno- aestheti cs in Visual, Literary & Perfor ming Arts		Fri. Wk <u>4:</u> Anthro pology & psychol ogy of Visual, Literary & Perfor ming Arts		$\bar{(xf)}$	$\bar{(xf)}$
	YE S	N O	Y E S	N O	Y E S	N O	Y E S	N O	$\frac{f-}{YES}$ <u>4/4</u>	$\frac{f-}{NO4}$ <u>/4</u>
(f)										
Well defined objectives	60	0	60	0	60	0	30	30	52.5	7.5
Humanities background & rationale	60	0	60	0	60	0	60	0	60	0
Statistical dominance	20	40	0	60	0	60	5	55	6.25	53.75
Suitable research design	60	0	60	0	60	0	60	0	60	0
Mathematical derivatives	10	50	0	60	0	60	0	60	2.5	57.5

KEY: f = frequency; \bar{xf} = mean frequency

Source: (Fieldwork, 2019)

Data distribution on Table 3 above shows that while well defined objectives, with 52.5/60 mean frequency affirmation and only 7.5 No response, is a very highly auspicious factor that should guide quantitative research in arts-based research, Humanities background and rationale, in addition to Suitable

research design, with all 60 respondents in the affirmative are the most auspicious factors apiece. Statistical dominance, with a paltry 6.25/60 acceptance was a highly rejected factor with a whopping 53.75ticking No. Likewise mathematical derivatives polled 2.5 affirmative reports, and 57.5 negative responses. The implication is that once the right objectives are definitely set, in addition to having credible research backgrounds in the arts, quantitative research in arts-based research should bear minimal statistical or mathematical data reports.

Discussion of Findings

Findings from the current study showed that most importantly arts-based research is not all about qualitative designs all the time. Sometimes due to cross-disciplinary derivatives arts-based research could be quantitative. But more important is the fact that it does not require an eclipse of the arts-based research by scientific and mathematical formulae for quantitative research in the humanities to occur. In the current study, however, the following were discovered:

1. The most effectual ways to simplify amalgamated learning in a class of general humanities are twofold; Illustrative and instructional education, for arts-based theory courses, and the Demonstrative and interactive methods, for the practical aspects of arts-based learning.
2. Illustrations, Tabulations and Diagrams are artistic design works. They are the most summative options for presenting data in cross disciplinary quantitative arts-based research.
3. While the tables may contain alphabetical, numeric or alpha-numeric data, statistical and calculative methods must be used very minimally in arts-based quantitative research.
4. Very careful measures must be taken for arts-based research not to look artistically deactivated. One of such is by adopting theoretical, empirical or non-empirical backgrounds in related arts-based studies.
5. Well defined objectives and good backgrounds in the arts are the leading factors that should guide quantitative research in the arts.
6. Qualitative research in the studio areas of Fine and Applied arts, Music, Theatre Arts and other sections in the Visual, Literary and Performing arts should be 70% practical and only 30% theory. This is because every art working or performance session is targeted at solving a problem by practical indulgence preceding discoveries. However, in quantitative arts-based research it should be 30% practical and 70% theories.
7. The problems solved by arts-based research transcend academics. They produce recipes for societal development.
8. Arts-based research is not less academic than science-based research. In fact arts-based research is even more humanistic.

9. Since evaluation principles in the arts differ from that of the sciences, quantitative arts-based research should be subjected to evaluation processes in the humanities.

Conclusion and Recommendations

The study elicited knowledge on the aspects of study that unify or departmentalise research and investigations in the arts or humanities. In bringing students from the sampled Visual, Literary and Performing Arts departments to a common front it was discovered that even within the arts there are various methods for attending to artistic investigations, and that these methods are largely prescribed by the nature of each art course. But in the arts, generally, illustrative and instructional research methods augur well with the theoretical art courses while demonstrative and interactive methods are easily assimilated by the studio-based or practical arts courses. It was also discovered that whereas qualitative research in the arts should encumber 70% practicals and only 30% theories, cross disciplinary necessities may indulge quantitative tendencies, and in that case, quantitative arts-based research should include 30% practicals and 70% theories. Data or information finding, presentations and analyses should also not appear overtly scientific.

The simplicity of data presentation in quantitative arts-based research being projected has been exemplified in this paper, using a simple Yes and No frequency table, as drawn from the questionnaire structure. There are so many other ways to present simple quantitative data in the arts, for example, by using the simple percentage rating. Also the use of simple research questions can effectively guide a research work, and not necessarily in addition to hypothesis, since both are suppositions of limited proof seeking further investigations, and meant to raise guiding questions or assumptions that must be answered or responded to. It is also recommended that measurement and evaluation principles in the sciences be restricted to the barest minimum in the arts-based quantitative research.

References

- ABL Group. (1997). *Future research process design*. Toronto: York University.
- Addison, N. & Burgess, L. (2007). 2nd ed. *Learning to Teach Art and Design in the Secondary School: A Companion to School Experience*. (Eds.) New York: Rutledge. P. 1
- Coemans, S. Wang, Q., Leysen, J. & Hannes, K. (2015). The use of arts-based methods in community-based research with vulnerable populations: Protocol for a scoping review. *International Journal of Educational Research*, 71, 33-39. Assessed: June 09, 2019
- Denzin, N. K. & Lincoln, Y. S. (2005). (Eds.) *Sage handbook of qualitative research*. P. 642
- DeWalt, K. M. & DeWalt, B. R. (2002). *Participant observation*. In Benard, H. R. (Ed.), *Handbook methods in cultural anthropology*. Walnut Creek: AlaMira Press. Pp. 7, 10.

- Franz, J. M. (2010). *Arts-based research for teachers, researchers and supervisors*. Brisbane: Queensland University of Technology.
- Gillis, R. (2012). Arts-Informed research. Mount Saint University Library and Archives. <https://libguides.msvu.ca/arts-informed-research>. Assessed: September 18, 2019
- Gray, C. & Malins, J. (1993). Research procedures/methodology for Artists and designers.
- Gray, C. & Malins, J. (2004). *Visualizing Research: a guide to the research process in art and design*. England: Ashgate Ltd
- Golaszewska, M. (1985). Artistic and aesthetic values in the axiological situation. *Philosophica* Vol. 36 (2) Pp 28, 32, 38, 40 <https://www.philosophica.ugent.be> Assessed: August 13, 2019.
- Jones, K. & Leavy, P. (2014). A conversation between Kip Jones and Patricia Leavy: Arts-based research, performative social science and working on the margins. *The Qualitative Report*, Vol.19(38), <https://nsuworks.nova.edu/cgi/viewcontent.cgi> Pp. 1-7. Assessed: September 20, 2019. Pp. 1-2
- Kara, Helen. (2015). *Creative research methods in the social sciences. A practical guide*. Bristol: Policy Press. P.34, pp. 21-22
- Leavy, P. (2009). Method meets art: Arts-based research practices. Pp12-14
- Maggi, S. & Katherine, W. (2014). *A practical guide to arts-related research*. Rotterdam: Sense Publishers. <https://www.sensepublishers.com/media/2174-a-practical-guide-to-arts-related-research.pdf> Assessed: August 20, 2019.
- Marshall C, & Rossman, G. (1995). *Designing qualitative research*. Newbury Park: CA: Sage.
- Marshall, C. & Rossman, G. B. (1989). *Designing qualitative research*. Newbury Park, CA: Sage. P.79
- O'brien, R. (2001). An overview of the methodological approach of action research. In Roberto Richardson (Ed.), *Theory and practice of action research*. Brazil: Universidade Federal La Paraiba. <http://www.web.ca/~robrien/papers/arfinal.html> Assessed: September 26, 2019
- Schmuck, R. (1997). *Practical action research for change*. Arlington Heights, IL: IRI/Skylight Training and Publishing.
- Smith, H. and Dean, R.T. (Eds.) (2009). *Practice-led Research, Research-led Practice in the Creative Arts*.

Appendix 1: Sovereignty in Arts-based Research Syllabus (SA-bRS)

Stage one: Amalgamated classes in the Arts				
	Monday	Wednesday	Friday	Weekly Remark
Week 1 (2 hours)	Cultural Studies in Nigerian Visual, Literary & Performing Arts	Processes in Visual, Literary & Performing Arts solo practical/performances	Enumerations in Visual, Literary & Performing Art works	
Week 2 (2 hours)	Impact of Westernisation on Nigerian Visual, Literary & Performing Arts	Processes in Visual, Literary & Performing Arts group practical/performances	Analyses in Visual, Literary & Performing Art works	
Week 3 (2 hours)	Analogue Exploration in Visual, Literary & Performing Arts	Improvisation in Visual, Literary & Performing Arts practical/performances	Ethno-aesthetics in Visual, Literary & Performing Arts	
Week 4 (2 hours)	Digitisation in Visual, Literary & Performing Arts	Psychotherapy and emotional impacts in Visual, Literary & Performing Arts	Psychotherapy and emotional impacts in Visual, Literary & Performing Arts	
Stage Two: Questionnaire distribution and responses				

Appendix2: The Questionnaire

SECTION A

INSTRUCTION:

This section reports your bio data and experience, answer appropriately on the corresponding dotted lines:

1. Name:
2. Sex:
3. Age:
4. Institution:
5. Department:
6. Academic year:
7. Amalgamated class experience (discuss in a sentence):
.....
.....

SECTION B

INSTRUCTION:

From your experience during the amalgamated classes, you are now set to respond to questionnaire. Please read the question above each table carefully, study the guide contemplations as outlined, and then tick in the appropriate (YES or NO) box correlating with the weekly course topics in the guide contemplations.

What are the most effectual ways to simplify amalgamated learning in a class of general humanities?								
Guide Contemplations	Mon: Wk 1; Cultural Studies in Nigerian Visual, Literary & Performing Arts		Mon: Wk 2; Impact of Westernisation on Nigerian Visual, Literary & Performing Arts		Mon: Wk 3; Analogue Exploration in Visual, Literary & Performing Arts		Mon: Wk 4; Digitisation in Visual, Literary & Performing Arts	
	YES	NO	YES	NO	YES	NO	YES	NO
(f) Personal research and practice								
Demonstrative & interactive methods								
Illustrative & instructional education								
Statistical and logical methods								
Lottery of chance and experiment								
How best can findings in arts-based quantitative research be presented under cross-disciplinary topics?								

Guide Contemplations	Wed. Wk 1: Processes in Visual, Literary & Performing Arts solo practical/performance s		Wed.: Wk 2: Processes in Visual, Literary & Performing Arts group practical/performance s		Wed. Wk 3: Improvisation in Visual, Literary & Performing Arts practical/performance s		Wed. Wk 4: Psychotherapy and emotional impacts in Visual, Literary & Performing Arts	
	YES	NO	YES	NO	YES	NO	YES	NO
(f)								
Direct analysis								
Alpha-numeric tabulations only								
Illustrations and diagrams only								
Simplified statistical methods								
No statistical approach at all								
What are the most auspicious factors that should guide quantitative research in the arts?								
Guide Contemplations	Fri. Wk 1: Enumerations in Visual, Literary & Performing Art works		Fri. Wk 2: Analyses in Visual, Literary & Performing Art works		Fri. Wk 3: Ethno-aesthetics in Visual, Literary & Performing Arts		Fri. Wk 4: Anthropology & psychology of Visual, Literary & Performing Arts	
	YES	NO	YES	NO	YES	NO	YES	NO
(f)								
Well defined objectives								
Humanities background & rationale								
Statistical dominance								
Suitable research design								
Mathematical derivatives								

Source: (Fieldwork, 2019)