EFFECTIVE COMMUNICATION AND LINGUISTIC CLARITY: A STUDY OF CONSTRUCTION MANAGEMENT PRACTICES IN ANAMBRA STATE

ABSTRACT

Researches have shown that effective communication is a challenge for project managers and stakeholders at all levels within an organization. Project managers experience the greatest challenge to set up and regulate communications that support a project overall. This, therefore, makes effective communication and linguistic clarity in construction management practices a *sine qua non* for achieving the expected results. Although a lot of studies have been carried out on effective communication both within construction management practices and beyond, very few studies have looked at effective communication and linguistic clarity among construction managers in Anambra State. Given the foregoing, there are several things we are not aware of. First, we do not know the types of language and methods of communication that are employed on construction sites in Anambra State. Also, our knowledge is limited to how effective communication aid in enhancing the performance of construction organisation in Anambra State. In addition, we are not aware of the challenges confronting effective communication and linguistic clarity in construction organisation within the state. Likewise, we do not know what identifiable solutions had been proffered towards language barrier and challenges confronting effective communication and linguistic clarity in construction organization in Anambra State. To attempt to answer the questions raised here, this study is aimed at evaluating the place of effective communication and linguistic clarity in construction management practices in Anambra State. The study employed survey research and the use of questionnaires to obtain data for the study. The researchers use a five-point scale to elicit information from the respondents. The results highlight that the use of spoken communication on construction sites in Anambra State will breed an improved professional organizational commitment, minimize accident rates and adopt better safety precautions. It further identified that the use of related words, synonym and antonym as well as easy-to-understand the written form of passing instruction or communications produces high performance, innovation and increase organizational stability and flexibility and improve work quality. The study recommends that hiring a multilingual workforce, getting translated plan or construction documents materials and offering immersive language training programs for the construction workforce will help to eliminate the challenges confronting effective communication and linguistic clarity in the construction organisation. It is recognized that, in some ways, this research work would have limitations ranging from geographical and scope coverage limitation as the study focused only on construction management practices in Anambra State, Nigeria which may inevitably introduce limited bias into the survey which could limit the application of the results to geographically dissimilar areas. This study had other limitations such as data limitation in measuring the variables of linguistic methods on construction sites, only seven (7) language methods were identified. Therefore there may be more variables if the study was extended. Secondly, there was also a methodological limitation due to the sample size as thirty-five (35) questionnaires were administered; also more construction professionals would have been included in the population area but only four (4) respondents group were interviewed due to time and financial constraints.

Keywords: Construction organization; Construction Professionals; Effective Communication; Construction Performance, Linguistic Clarity

1.0 INTRODUCTION

Studies have shown that the construction industry is one of the most booming industries in the world (Ball, Farshchi and Grilli, 2000; Lewis, 2004; Beach, Webster & Campbell, 2005). The construction industry accounts for about one-third of the world's gross domestic product, seven percent of

employment, half of all resource usage and up to forty percent of energy consumption. The construction industry is also a key indicator and driver of economic activity and wealth creation (Wilma and Marc, 2003). As Nathan, Stanley, Fidelis and Uchenna (2018) assert, construction site products such as buildings, roads, bridges are actualized via effective communication among the construction team. Effective and efficient communication depends upon the quality of relationships among clients, professionals (consultants), contractors and sub-contractors. In the words of Jiwat (2019)**,** language is a powerful mechanism that enables connection, collaboration and co-evolving, it had always played a pivotal role in bringing clarity of thoughts, actions and catalyzed for people to move forward in every aspect of life. Language therefore, is a powerful tool in resemiotizing a client's ideal vision from discourse to drawing, building plan and finally to physical structures. By resemiotization, we mean the transformation of the client's idea from one semiotic system to another to achieve the ideal physical structures desired by the client.

The challenges posed by linguistic barriers include difficulty in giving instructions (Basic Jobsite Communication), greater safety risks, loss of productivity/efficiency and lack of respect/ diminished team atmosphere. Considering the influence of language on thoughts, actions and behaviours, there is a need for construction professionals to use the right language to shape thinking patterns and behaviours. Construction Project Management is a profession practiced as it influences national economic activities as well as involves people from different linguistic backgrounds. While the construction project team members may come from different linguistic backgrounds, they still have to work together in applying common construction project management methods and processes to deliver the project objectives. According to Gil (2010), construction project managers can use language as a communication resource with both local hosts and stakeholders; such tools help protect the legitimacy of decisions and actions made on any project. When the expectations often from the residents, promoters and senior project management team are at a cross road then there may arise disputes. Gil's (2009) view reveals that construction managers must be able to acknowledge all claims as legitimate and addressed using three tones of communication - caring, assertive, and apologetic. The study recommends that first, managers consider that the claims as factually correct, fair, and precise as opposed to unfair, exaggerated, or opportunistic; secondly, managers find technical or institutional references available for constructing the accounts. It encourages congruence between what construction managers mean to say or said about what the project team should do and how listeners interpret what was said, and what the project team actually gets done. Communication is also part of the critical factors for determining project success, namely, the ability to communicate what the issues are with affected constituencies, to deal with the issues, and to sell the project output (Pinto and Slevin, 1987).

Comment [RN1]: Not in references (Gil, 2010)

Purpose of the Study: This paper seeks to investigate the need for effective communication and language clarity in construction management practice in Anambra State to encourage clear communication and enhance measures for improved productivity in construction organizations. In achieving this, the study looks into the characteristics of language, the impact of effective communications and challenges confronting effective communication and linguistic clarity in the construction organization.

1.1 RESEARCH QUESTIONS

For this study, the following research questions serve as guides:

1. What types of language and methods of communication are employed on construction sites in Anambra State?
2. In what ways do effective communication aid in enhancing the performance of construction organisation in Anambra State?
3. What are the challenges confronting effective communication and linguistic clarity on construction organization in Anambra State?

4. How do we proffer identifiable solutions towards the language barrier and challenges confronting effective communication and linguistic clarity in cConstruction oOrganisation within Anambra State?

2.0 LITERATURE REVIEW

In the words of Gil (2010), projects are sociotechnical enterprises, and technical know-how alone is insufficient to bring a project to successful completion. This premise makes communication skills central to project management, as well as a behavioural competence that professional associations require for certified project managers. The place of communication in construction management practices therefore cannot be undermined. According to Gadeken (1994), communication is a behavioural competence for construction project management practice. Project Management Institute's (PMI's) Code of Professional Conduct asserts that communication styles vary according to the personality of the construction project manager. It further highlights that there are a set of principles for effective communication: listening to the concerns of stakeholders, maintaining professional integrity, adhering to ethical standards, balancing stakeholder interests, and being aware of the emotional barriers (e.g., preconceived opinions and beliefs, prejudices, biases, egos, and politics). Project Management Institute (2004) identifies some construction management competencies required for successful project managers and effective communications. The first, assertiveness, involves stating one's position forcefully in the face of opposition from influential others. The second, strategic influence, involves building coalitions with influential players and others to overcome obstacles and obtain support. The third, relationship development, focuses on spending time and energy, getting to know program sponsors, contractors, and other influential people while the fourth, political awareness, deals with understanding who the influential players are, what they want, and how to work with them.

1.1 Characteristics of Language and Methods of Communication in Construction Sites

The impact-fullness of spoken words is a critical characteristic of any language. This is particularly important in the project management context, as projects are dedicated activities that require optimization of all possible levers. Examining the role of language's richness in impact-full words is very important in building knowledge on linguistic differences and project thinking patterns. It could trigger thoughts and actions. Therefore, examining the influence of languages that are rich versus those that are not so rich with these characteristics on project thinking is another potential avenue. Communication on a typical construction site according to Barry (1990) and Reinout (2008) takes place via the following means:

A. **Tones, Words and Vocabulary:** Several spoken languages include tonal variations resulting in different meanings for the same words. Such linguistic characteristics could influence the way people think.
B. **Signs, Gestures and Symbols:** Signs, gestures and symbols are some of the key components of spoken languages. The need for construction managers to adopt signs and gestures to express technical views rather than speaking words that can be too sophisticated for their workers to understand is very important. Since construction project management is a time-bound activity, there is a need for effective communication at all levels. The use of signs, gestures and symbols will therefore have some influence on thinking patterns for enhanced productivity.
C. **Synonyms and antonyms:** Adopting synonyms and antonyms is known to help communications and influence the way people think and behave. Using a word or phrase that means exactly or nearly the same as another word or phrase in the same language as well as a word opposite in meaning to another will be worthwhile communication skill. Construction management practice involves technical terms that may only be known by trained personnel while the unskilled workers cannot figure out what such instructions means. Recognizing that adopting any form of language that is clear to both parties is the aim of adopting synonyms and antonyms.
D. **Spoken Communication:** This is often face-to-face (direct) communication or an indirect telephone call or dictated message. It is a powerful method, although most people do not use it skillfully. Barry (1990) asserts that such communication needs careful planning, clear expression

and the ability to arouse the listener's interest and support. Spoken communication is usually adopted on-site in site meetings, informing, coordinating, allocating tasks, updating plans and checking progress. Its major drawback is the lack of permanent record and the ease of forgetting vital information

E. **Written Communication:** According to Barry (1990), written communication is a feature of most organization as it provides an accessible load of site information as large quantities of documents is stored and retrieved with ease. It ranges from notes on scrap paper to formal typeset reports. Retaining its contents is enhanced through restrictions to sentences. Its information should also be more direct, monotony and unnecessary words should be avoided.
F. **Graphical and Numerical Communication:** For extensive and complex information the reliance on graphical and numerical communication in the form of drawings, diagrams, schedules, and charts can convey a great deal of information in a much cheaper way than would be possible using other means. Drawings, Bar charts and network diagrams are valuable ways of presenting information that is partly numerical and partly written.
G. **Information and Communication Technology:** Reinout (2008) defines communication technology as the use of technologies to communicate with other people. This form of communication in construction management practice includes the use of postal services, wireless phones/handheld devices and the internet. Suleiman (2008) asserts that such devices can be used to communicate on construction sites and includes: personal digital assistants (PDAs), tablets, personal computers (PCs) such as notebook computers, handheld computers and wearable computers to transmit, collect and distribute information effectively on site.

2.2 Impacts of Effective Communication towards Performance of Construction Organization

Mohammed *et al.* (2019) point out that effective communication helps to facilitate better understanding among all parties in the construction organization. It was recommended that stakeholders in the construction organization should adopt the use of effective communication tools and robust language utilizations for organizational performance. The following were identified as the impacts of effective communication and language clarity towards the performance of construction organization impacts in terms of efficacy and efficiency.

1. **Improve productivity of an organization:** According to Olanrewaju, Tan and Kwan (2017), having the right communication or linguistic clarity help to improve the productivity of construction organizations since the right information must be passed and received enhances the expected results.
2. **Reduce disputes in the organization:** Language or linguistic clarity helps to reduce disputes on construction sites since construction managers can communicate with their workers and the workers also can communicate with clarity across the board thereby reducing tendencies for disputes or misunderstanding (Mitkus(a) and Mitkus(b), 2014).
3. **Minimized accident rates on construction sites and Better safety precautions on construction sites:** According to Spillane and Oyedele (2013), where there is language clarity and effective communications, the accidents rate is often reduced as construction workers can maintain safety precautions on the construction sites. Accidents often occur when unsafe practices are adopted due to unclear communications of intentions.
4. **Improve professional commitment to the organization:** Olanrewaju, Tan and Kwan (2017) point out that when there is effective communication in construction management practice, there is often a professional commitment to the organizations because every professional feels carried along and knows why decisions are made.
5. **Increase organizational stability and flexibility and improve work quality:** When information moves in the right channel and a clear order, the construction organization can remain stable and flexible to adjust to changes. These factors are what improve work quality on construction sites (Zulch, 2014). Also, the study added that effective communications and language clarity reduces rework from unsatisfactory work done on construction activities**.**

6. **High performance and innovation:** In the words of Zekavat, Moon and Bernold (2014), effective communication and linguistic clarity create high performance by the construction stakeholders as they do not need more supervision because the workmanship is improved in a trusty environment which comes with the benefits of reduced project delay, reduce wastages of construction materials and better use of materials and equipment.

2.3 Challenges Confronting Effective Communication and Linguistic Clarity in Construction Organization

An effective system for passing on information and instructions and for receiving feedback is essential for successful site management and control (Abdul, 2006; Reinout, 2008; Mohammed, 2010). To Emmit and Gorse (2003), most problems encountered in construction are traceable to faulty communication and communication gaps. Typical information and data on construction sites that have to be passed across or communicated from one point to the other include architectural and structural drawings, service drawings, bills of quantities, specifications and the like. The adoption of sophisticated means of gathering, processing, transmitting data and information has thus become necessary (Usman, 2009). It is therefore, necessary to use recognized channels of communication to ensure that all parties to the construction contract get the information they need. According to Reinout (2008), some of these challenges are the reasons why communication fails on construction sites:

Comment [RN2]: List alphabetically

1. Inability to determine project stakeholders` needs for information, inability to determine communication channels in projects, insufficient interaction between project managers and team members or between the main contractors and sub-contractors or within team members, inappropriate communication media.
2. Timing or distributing incorrect information to the right stakeholders, wasting a large amount of time and resources on unnecessary meetings and the like.
3. Inability to combine verbal and non-verbal communication to achieve targets.
4. Abusive emotions or emotional outbursts during an interaction between project management and team members such as intimidation, instilling fear and threats, aversive stimulation and other similar attitudes.
5. Poor expression: the communicator does not encode his message clearly because of difficulties in self-expression, poor vocabulary, or even nervousness.
6. Overloading: Managers often give and receive too much information at once. This causes confusion and misunderstanding. Research has shown that the amount of information a person can cope with at one time is quite limited, especially when the subject matter is unfamiliar and several communication channels (spoken, written and graphical) are used (Barry, 1990).

2.4 Solutions to Language Barrier and Challenges confronting Effective Communication and Linguistic Clarity in Construction Organization

Language barriers in construction can lead to delays, losses, inefficiencies, injuries, or death. Therefore overcoming these language gaps should be a priority for the industry. Based on researches on related literature on construction communication and linguistic clarity, the following solutions are recommended:

A) **Determine the Present and Future Language Needs:** The first step should be to assess the current situation in the organization, the linguistic strengths and weaknesses of the stakeholders should be identified. Language experts can help project the future needs of the company and devise plans accordingly.

B) **Teach Pidgin English to Non-English speaking industry members:** Research agrees that Pidgin English which is a middle ground between technical English and the local dialect be introduced where English could not be taught nor the local dialect well understood.

C) **Effective communication** both clear to both parties through the use of signs and other non-oral communication channels should be adopted as a key to success in construction management practice; therefore, companies and workers need to work together to lessen the impacts of these linguistic barriers in the industry.

D) **Hire Multilingual Workforce:** Keeping a strategic focus on the foreign language skills of the workers during the recruitment process especially multilingual and cross-cultural competencies comes as an added advantage. Organizations can get in touch with training institutes and colleges that have foreign language fresh graduates proficient in more than one language and hire them to bridge language barrier gaps.

E) **Get Materials Translated:** Construction companies should have plenty of written materials translated. Construction companies often have materials such as safety training; employee handbooks, construction plans, and other documents translated professional translators.

F) **Offer Immersive Language Training Programs for Your Workforce:** A construction company can significantly reduce the language barrier breaches by offering immersive language training programs for the workers.

3.0 METHODOLOGY

This study is a survey research conducted in Anambra State, Nigeria. According to Nathan *et al.* (2018), Anambra is one of the thirty-six states in Nigeria. Statistically, the study serves as a true reflection of entire Nigeria. However, in terms of technology, there is no barrier or limit of penetration in any part of the country. So whatever affects one part also transcends to other parts of the country. Based on this, the result of this study can be generalized to reflect the views of other construction professionals in Nigeria. The target population of this research consists of building construction professionals fully registered with their various professional bodies and practicing in the State. Questionnaires were distributed to the randomly selected building construction professionals via electronic means. Respondents were requested to fill and submit the form online for further coding and analysis. In obtaining the data for the study, the researchers use a five-point scale of: 5 = Strongly Agree; 4 = Agree; 3 = Slightly Agree; 2 = Disagree; 1 = Strongly Disagree to elicit information from the respondents. Data collection and responses were analyzed using cross-tabulation qualitative data analysis.

Comment [RN3]: Give more detail to explain the random selection process

4.0 RESULTS and Discussion

Table 1(a-d) highlights the result from the demographic data contained in the questionnaires administered to 34 respondents.

Comment [RN4]: The following Tables and Graphs are confusing and hard to follow Table1 (a) - (c) are about the 'respondents'; Table 1(d) onwards seem to be about the 'sites'. Perhaps expanding this sentence to prepare the reader for this would help make it all clearer.

4.1(a): RESPONDENTS' TRADE

Graph 1(a) Showing Respondent`s Trade

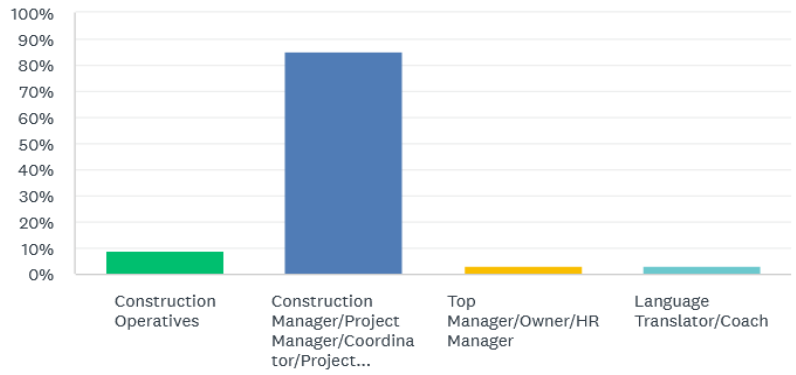

Table 1(a) Showing Respondents' Trade

Answer Choices	Responses
Construction Operatives	8.82% 3
Construction Manager/Project Manager/Coordinator/ Project Engineer	85.29% 29
Top Manager/Owner/HR Manager	2.94% 1
Language Translator/Coach	2.94% 1
Total Respondents: 34	

Source: Surveymonkey (2021)

The findings from the questionnaire developed and samples administered identified the following findings:

On the respondent's trade, data collected showed that 85.29% were Construction Manager/Project Manager/Coordinator/Project Engineer; 8.82% were Construction Operatives while Top Manager/Owner/HR Manager and Language Translator/Coach were 2.94% respectively as shown in Graph 1(a) and Table 1(a) above. The data above placed emphasis on the Construction Manager/Project Manager/Coordinator/Project Engineer followed by the construction operatives who are in a better state to provide the required information.

4.1(b) RESPONDENTS' YEARS OF OPERATING

Graph 1(b) Showing Years of Operating Expertise

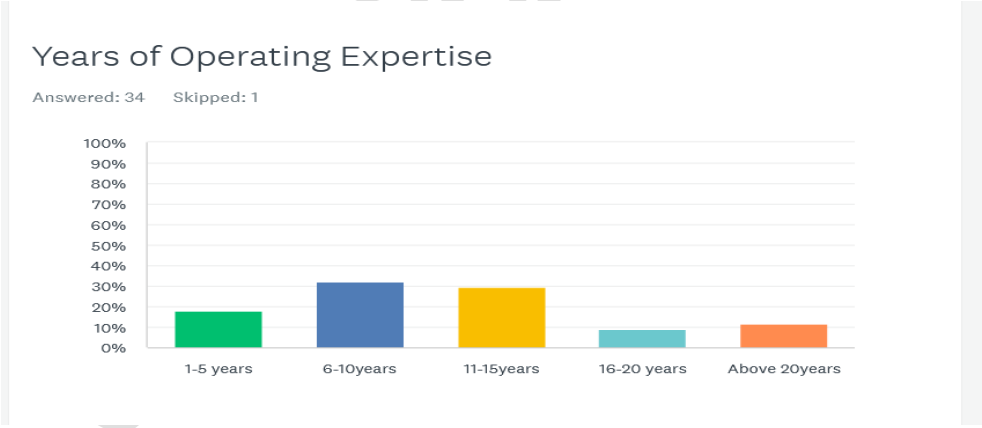

Table 1(b) Showing Years of Operating Expertise

Answer Choices	Responses
–1-5 years	17.65% 6
–6-10years	32.35% 11
–11-15years	29.41% 10
–16-20 years	8.82% 3
–Above 20years	11.76% 4
TOTAL	34

Source: Surveymonkey (2021)

Graph 1(b) and Table 1(b) above showing data on the years of operating expertise highlighted that the construction industry has professionals with age brackets of 1-5 years representing 17.65% as the starting point while those with 6-10yrs (32.35%) and 11-15yrs (29.41%) represent the construction industry's peak years of activity after which there is a loss of its talents due possibly to retirement or seeking a greener pasture like going into the academics as shown in 16-20years of operating represented by 8.82% and 20 years above represented by 11.76%. However, having respondents falling in these categories qualifies them to be able to offer valid and dependable data responses.

4.1(c): RESPONDENTS' ACADEMIC QUALIFICATION

Graph 1(c) showing respondents' Highest Academic Qualification

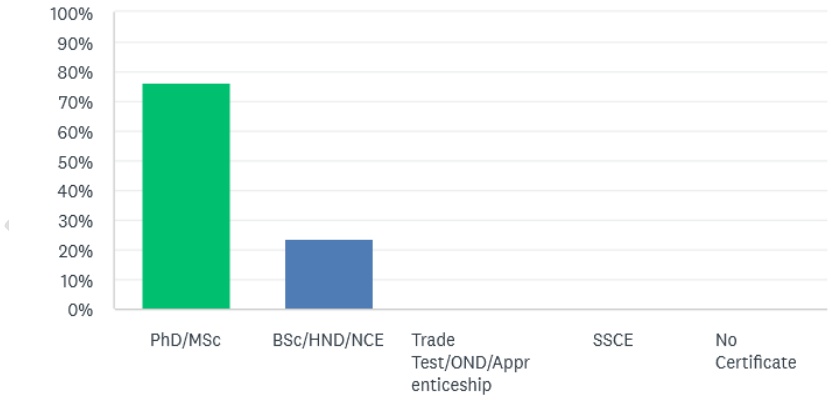

Table 1(c) showing respondents' Highest Academic Qualification

Answer Choices	Responses
PhD/MSc	76.47% 26
BSc/HND/NCE	23.53% 8
Trade Test/OND/Apprenticeship	0.00% 0
SSCE	0.00% 0
No Certificate	0.00% 0
TOTAL	34

Source: Surveymonkey (2021)

Table 1(c) as well as Graph 1(c) data above further showed that the respondents were majorly Ph.D./MSc holders represented by 76.47% while the other categories were BSc/HND and NCE holder represented by 23.53%. This highlighted the relevance of academic training to the industry because of its technicality and complexities. Academic qualification as well as professional training or certification, therefore, plays a major role in the construction industry.

4.1(d): RESPONDENTS' LANGUAGE CHOICE AND METHOD OF COMMUNICATION

Graph 1(d) showing Characteristics of Language and Methods of Communication on Construction Sites in Anambra State

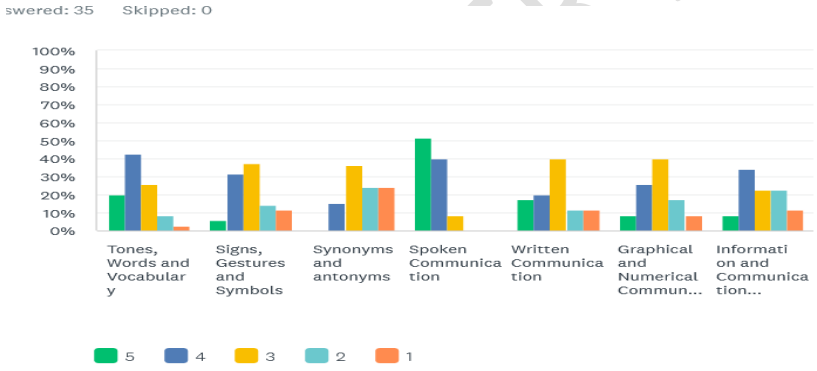

Table 1(d) showing Characteristics of Language and Methods of Communication on Construction Sites in Anambra State

_	5 –	4 –	3 –	2 –	1 –	Total	Weighted Average
Tones, Words and Vocabulary	20.00% 7	42.86% 15	25.71% 9	8.57% 3	2.86% 1	35	3.11
Signs, Gestures and Symbols	5.71% 2	31.43% 11	37.14% 13	14.29% 5	11.43% 4	35	3.17
Synonyms and antonyms	0.00% 0	15.15% 5	36.36% 12	24.24% 8	24.24% 8	33	3.58
Spoken Communication	51.43% 18	40.00% 14	8.57% 3	0.00% 0	0.00% 0	35	3.63
Written Communication	17.14% 6	20.00% 7	40.00% 14	11.43% 4	11.43% 4	35	3.49
Graphical and Numerical Communication	8.57% 3	25.71% 9	40.00% 14	17.14% 6	8.57% 3	35	3.26
Information and Communication Technology	8.57% 3	34.29% 12	22.86% 8	22.86% 8	11.43% 4	35	3.29

Source: Surveymonkey (2021)

Moreover, for better communication on construction sites, the respondents as indicated in Graph 1(d) and Table 1(d) above supported the view that spoken communication (3.63) and the use of synonyms/antonyms (3.58) that better explain the technical instruction being passed as well written communication (3.49) are a critical necessity for effective communication. The use of modern methods like the Information and Communication Technology (3.29), Graphical and Numerical Communication (3.26%), using signs, gestures and symbols (3.17%), tone of instruction, words and the use of technical vocabulary (3.11%) are important factors for ensuring effective communication method on construction sites in Anambra State.

Table 1(e) shows core languages adopted to speak to operatives on Site

Languages
English 2nr
Igbo 2NR
Yoruba, Pidgin ,and English

Source: Surveymonkey (2021)

Also, regarding the demographic information on the characteristics of language and method of communication on construction sites in Anambra State, the data presented indicated that common language use on the construction site were categorized into the English Language, the indigenous language (Igbo) and a developed language called Pidgin/Creole that accommodates speaking in a way the site operatives can clearly understand. This underscores the need for a linguistic choice of a language that offers clarity and an effective communication mechanism.

4.2: EFFECTIVE COMMUNICATION AND CONSTRUCTION ORGANIZATION PERFORMANCE

Graph 2 shows the impacts of effective communication towards enhancing the performance of construction organization

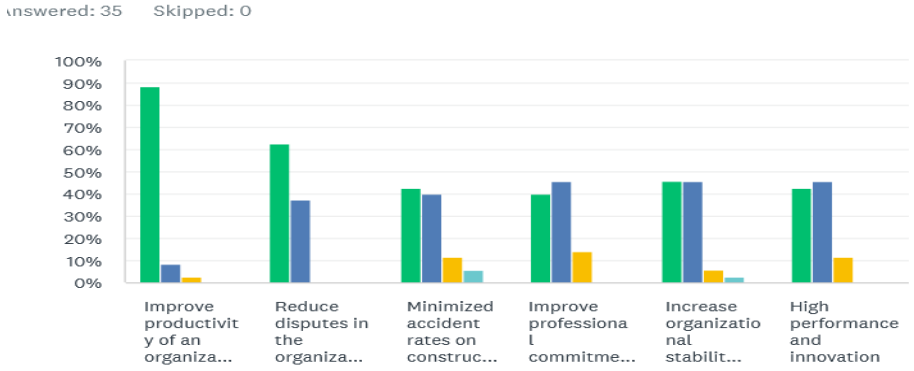

Table 2 shows the impacts of effective communication towards enhancing the performance of construction organization

–	5 –	4 –	3 –	2 –	1 –	Total –	Weighted Average
Improve productivity of an organization	88.57% 31	8.57% 3	2.86% 1	0.00% 0	0.00% 0	35	1.14
Reduce disputes in the organization	62.86% 22	37.14% 13	0.00% 0	0.00% 0	0.00% 0	35	1.37
Minimized accident rates on construction sites and Better safety precautions on construction sites	42.86% 15	40.00% 14	11.43% 4	5.71% 2	0.00% 0	35	1.80
Improve professional commitment to the organization	40.00% 14	45.71% 16	14.29% 5	0.00% 0	0.00% 0	35	1.74
Increase organizational stability and flexibility and Improve work quality	45.71% 16	45.71% 16	5.71% 2	2.86% 1	0.00% 0	35	1.66
High performance and innovation	42.86% 15	45.71% 16	11.43% 4	0.00% 0	0.00% 0	35	1.69

Source: Surveymonkey (2021)

Furthermore, effective communication has a great impact in enhancing the performance of construction organizations because it minimized accident rates on construction sites and better safety precautions on construction sites (1.80%) and improve professional commitment to the organization (1.74%). Another benefit of adopting effective communication and ensuring linguistic clarity are enhancing high performance and innovation (1.69%) as indicated in both Graph and Table2 above. Effective communication also helps to increase organizational stability and flexibility and improve work quality (1.66%). Other important benefits are its attendant reduction of disputes in the organization (1.37) and its ability to improve the overall productivity of an organization (1.14%) as presented above.

4.3: CHALLENGES CONFRONTING EFFECTIVE COMMUNICATION AND LINGUISTIC CLARITY

Graph 3 showing Challenges Confronting Effective Communication and Linguistic Clarity in Construction Organization

Table 3 showing Challenges Confronting Effective Communication and Linguistic Clarity in Construction Organization
Source: Surveymonkey (2021)

–	5 –	4 –	3 –	2 –	1 –	Total –	Weighted Average
Inability to determine project stakeholder's needs for information	17.14% 6	34.29% 12	40.00% 14	2.86% 1	5.71% 2	35	2.46
Timing or distributing incorrect information to the right stakeholders	11.43% 4	65.71% 23	20.00% 7	0.00% 0	2.86% 1	35	2.17
Inability to combine verbal and non-verbal communication in order to achieve targets	17.14% 6	34.29% 12	40.00% 14	5.71% 2	2.86% 1	35	2.43
Abusive of emotions or emotional outbursts during interaction between project management and team members	20.00% 7	31.43% 11	37.14% 13	8.57% 3	2.86% 1	35	2.43
Poor expression	28.57% 10	34.29% 12	25.71% 9	11.43% 4	0.00% 0	35	2.20
Overloading	11.43% 4	25.71% 9	42.86% 15	17.14% 6	2.86% 1	35	2.74

As shown in Graph and Table 3 above, the challenges confronting adopting an effective communication and linguistic clarity in construction organization include its tendency to lead to overloading of instructions (2.74%), inability to determine project stakeholder's needs for information (2.46%), the tendency of abusive of emotions or emotional outbursts during interactions between project management and team members (2.43%) and its inability to combine verbal and non-verbal communication to achieve targets (2.43%). The least important challenges are Poor expression of information/instructions (2.20%) and poor timing or distributing incorrect information to the right stakeholders (2.17%).

4.4: SOLUTIONS TO LANGUAGE BARRIER AND CHALLENGES CONFRONTING EFFECTIVE COMMUNICATION AND LINGUISTIC CLARITY

Graph 4 shows Solutions to Language Barrier and challenges confronting effective Communication and Linguistic Clarity in Construction Organization

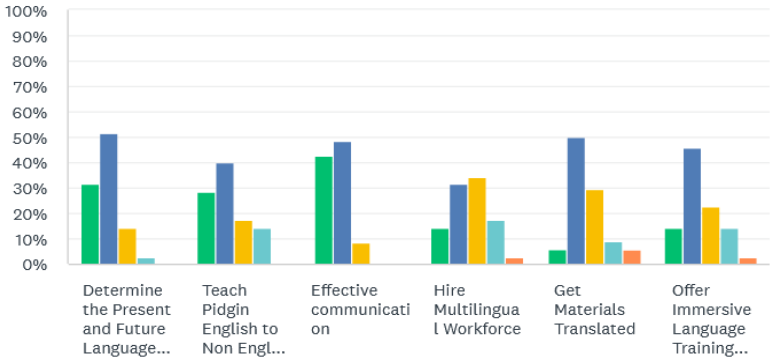

Table 4 shows Solutions to Language Barrier and challenges confronting effective Communication and Linguistic Clarity in Construction Organization

–	5 –	4 –	3 –	2 –	1 –	Total –	Weighted Average –
Determine the Present and Future Language Needs	31.43% 11	51.43% 18	14.29% 5	2.86% 1	0.00% 0	35	1.89
Teach Pidgin English to Non English speaking industry members	28.57% 10	40.00% 14	17.14% 6	14.29% 5	0.00% 0	35	2.17
Effective communication	42.86% 15	48.57% 17	8.57% 3	0.00% 0	0.00% 0	35	1.66
Hire Multilingual Workforce	14.29% 5	31.43% 11	34.29% 12	17.14% 6	2.86% 1	35	2.63
Get Materials Translated	5.88% 2	50.00% 17	29.41% 10	8.82% 3	5.88% 2	34	2.59
Offer Immersive Language Training Programs for Your Workforce	14.29% 5	45.71% 16	22.86% 8	14.29% 5	2.86% 1	35	2.4

Source: Surveymonkey (2021)

Finally as shown in the Graph and Table 4 above**,** the respondents agreed that in proffering solutions to language barrier and challenges confronting effective communication and linguistic clarity in construction organization, there is a need to hire a multilingual workforce (2.63%) who understands diverse languages for easy communication, ensuring that the design and construction documents/work materials are translated into site operatives understandable format (2.59%) and offering an Immersive Language Training Programs for the Workforce (2.40%). Other solutions for ensuring linguistic clarity are teaching Pidgin English to Non-English speaking industry members (2.17%), determining the Present and Future Language Needs (1.89%), as well as learning and investing in effective communication (1.66%).

5.0 CONCLUSION AND RECOMMENDATIONS

a. Conclusion:

Findings from the study have shown that different methods of communication can be employed on construction sites in Anambra State from the use of synonyms and antonyms, spoken communication, written communications, etc. This is geared towards enhancing the performance of construction organization by improving professional's/workers' commitment to their organization, minimize accident through better safety precautions, ensure high performance, grows innovation, increase organizational stability/flexibility and improve work quality. The study found out that the challenges confronting effective communication and linguistic clarity on construction organization include instructions overload, inability to determine project stakeholders` information needs, and abusive emotions or emotional outbursts during interactions. The study recommends that the practical solutions to eliminating the language barrier and anti-effective communication as well as linguistic clarity on construction sites include hiring a multilingual workforce, getting instructional materials that is translated to site-based understandable language and offering immersive language training programs for the organizational workforce.

b. Recommendations:

The study recommends that the use of spoken communication be encouraged on construction sites in the study area to improve workers/professionals commitment to the organization, minimize accident rates and adopt better safety precautions. The study added that adopting an easy-to-understand written form of communications, using related words, synonym and antonyms will produce increased performance/organizational stability/flexibility, innovation and improve work quality. Finally, the study recommends that hiring a multilingual workforce, getting translated construction documents and offering immersive language training programs will help to eliminate the challenges confronting effective communication and linguistic clarity in the construction organisations.

6.0 CONTRIBUTION TO KNOWLEDGE AND PRACTICAL IMPLICATIONS

The place of effective communication can only be achieved through linguistic clarity which its absence has been responsible for disputes on construction sites, frequent disengagement, loss of productivity, double handling and other factors that affect productivity. This study has practically been able to point out specific types of language and methods of communication employed on construction sites, what ways effective communication aid in enhancing construction organization performance, identify the challenges confronting effective communication and linguistic clarity on construction organizations as well as proffer identifiable solutions towards language barrier and challenges confronting effective communication and linguistic clarity in Construction Organization within the study area.

This paper has contributed practically to knowledge by identifying and filling the existing gap in literature on effective communication and linguistic clarity on construction management practices in Anambra State which serves as an area for further development for students and researchers. It will serve as a potent panacea for human resource management framework and inputs for construction managers and organisational leaders to handle existing communication breakdowns and better improve productivity. The study will also be of use the government and professional organization to manage the construction industry incessant industrial disputes in order to harness the pivotal place of the construction industry to national development. It will as well empower construction operatives and site-based workers to understand their communication path and make demands as appropriately.

Compliance with Ethical Standards

i. Ethical Approval: Ethical approval is not required.

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Comment [RN5]: Commas after last names needed

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QUESTIONNAIRES

Nnamdi Azikiwe University

Dear Respondents,

REQUEST FOR COMPLETION OF QUESTIONNAIRES

We, the undersigned, are conducting a study on **Effective Communication and Linguistic Clarity: A Study of Construction Management Practice in Anambra State**. We therefore solicit your candid support in filling the questionnaires below. The questionnaire is intended for research purpose only. Also, information provided shall be treated confidentially and used for academic purposes only.

Thank you for your anticipated support.

SECTION A: DEMOGRAPHIC DATA

1. **Name and Address of your Company (Optional)……**
2. **Gender:** Male ( ) Female ( )
3. **Respondent`s Trade:**
   (a) Construction Operatives [ ]
   (b) Construction Manager/Project Manager/Coordinator/Project Engineer [ ]
   (c) Top Manager/Owner/HR Manager [ ]
   (d) Language Translator/Coach [ ]
4. **Years of Operating Expertise:**
   (a) 1-5 years [ ] (b) 6-10years [ ]
   (c) 11-15years [ ] (d) 16-20 years [ ]
   (e) Above 20years [ ]
5. **Highest Academic Qualification**:
   (a) PhD/MSc [ ] (b) BSc/HND/NCE [ ]
   (c) Trade Test/OND/Apprenticeship [ ] (d) No Certificate [ ]
   (e) SSCE [ ]
6. Kindly indicate your level of agreement with the following **characteristics of language and methods of communication on Construction Sites in Anambra State** using the scale, 5 = Strongly Agree; 4 = Agree; 3 = Slightly Agree; 2 = Disagree; 1 = Strongly Disagree

S/N	Statement	5	4	3	2	1
1.	Tones, Words and Vocabulary					
2.	Signs, Gestures and Symbols					
3.	Synonyms and antonyms					
4.	Spoken Communication					
5.	Written Communication					
6.	Graphical and Numerical Communication					
7.	Information and Communication Technology					

7. Kindly indicate the **impacts of effective communication towards enhancing the performance of construction organization** on a five-point scale: 5 = Strongly Significant; 4 = Significant; 3 = Slightly Significant; 2 = Not Significant;1 = Strongly Not Significant

S/N	Statement	5	4	3	2	1
1.	Improve productivity of an organization					
2.	Reduce disputes in the organization					
3.	Minimized accident rates on construction sites and Better safety precautions on construction sites					
4.	Improve professional commitment to the organization					
5.	Increase organizational stability and flexibility and Improve work quality					
6.	High performance and innovation					

8. Kindly indicate the level of significance of the following **challenges confronting effective communication and linguistic clarity in Construction Organization** on a five-point scale: 5 = Strongly Significant; 4 = Significant; 3 = Slightly Significant; 2 = Not Significant; 1 = Strongly Not Significant

S/N	Statement	5	4	3	2	1
1.	Inability to determine project stakeholder's needs for information					
2.	Timing or distributing incorrect information to the right stakeholders					

3.	Inability to combine verbal and non-verbal communication in order to achieve targets					
4.	Abusive of emotions or emotional outbursts during interaction between project management and team members					
5.	Poor expression					
6.	Overloading					

9. Kindly indicate your level of agreement on the following **Solutions to language barrier and challenges confronting effective communication and linguistic clarity in Construction Organization** on a five-point scale: 5 = Strongly Agree; 4 = Agree; 3 = Slightly Agree; 2 = Disagree; 1 = Strongly Disagree

S/N	**Statement**	**5**	**4**	**3**	**2**	**1**
1.	Determine the Present and Future Language Needs					
2.	Teach Pidgin English to Non English speaking industry members					
3.	Effective communication					
4.	Hire Multilingual Workforce					
5.	Get Materials Translated					
6.	Offer Immersive Language Training Programs for Your Workforce					