

EXPLORING THE IMPACT OF TECHNOLOGY ON INTERCULTURAL COMMUNICATION AMONG REMOTE WORKERS IN OSOGBO, OSUN STATE

Omobolaji Tosin Igein, *

*Redeemers University, Akoka-Ede Junction, Osun State

Abstract

In today's global digital economy, remote work enables professionals to engage across cultural boundaries, but it also presents challenges in effective intercultural communication. In semi-urban areas like Osogbo, Nigeria, remote workers connect with diverse clients through digital platforms. Despite fluency in English and access to technology, many struggle with cultural nuances and global communicative norms. This study addresses the gap in literature on how remote workers in non-metropolitan African contexts manage intercultural communication through technology. Using a quantitative, descriptive survey design, data from 52 remote workers in Osogbo LGA were collected via a structured questionnaire assessing digital communication technology use, intercultural communicative competence (ICC), and communication effectiveness. Grounded in Byram's Intercultural Communicative Competence model and Verbeek's Technological Mediation Theory, the research employed SPSS for analysis, revealing a significant positive relationship between digital communication technologies, ICC, and intercultural communication effectiveness. Notably, ICC was a stronger predictor than technology use. The study concludes that while digital tools facilitate engagement, human competence is crucial. Recommendations include targeted intercultural training, promotion of culturally inclusive practices, improved infrastructure, and validation of local communicative norms to enhance the effectiveness of remote workers in Osogbo and similar regions.

Keywords: Communicative Competence, Digital Technologies, Intercultural Communication, Remote Work

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

Introduction

Intercultural communication refers to the process of exchanging information and ideas between individuals or groups from different cultural backgrounds. It involves understanding and navigating diverse communicative norms, values, and practices that shape how people interact (Sabirjanova, 2024). Effective intercultural communication requires awareness of cultural differences, sensitivity to varying contexts, and the ability to adapt one's communication style to foster mutual understanding and collaboration. In the context of remote work, professionals need to engage with clients and colleagues from various cultures, ensuring that their interactions are respectful and effective despite potential language barriers and differing cultural expectations. The rise of remote work

has become one of the most defining features of the global digital economy. As digital tools transcend geographic boundaries, professionals from different cultural and linguistic backgrounds increasingly find themselves collaborating in virtual environments. In cities like Osogbo, the capital of Osun State, Nigeria, remote work has provided new economic and professional opportunities, especially for tech-savvy youth and freelancers. However, with these opportunities comes the challenge of engaging in effective intercultural communication, often mediated through technology.

Technological platforms such as Zoom, Microsoft Teams, Slack, WhatsApp, and Google Meet are now central to how remote workers engage with culturally diverse clients and coworkers. These tools

have revolutionised the communication process, offered real-time connectivity and broadened the scope for collaboration. However, technology is not a neutral medium; it shapes, facilitates, and sometimes complicates communication. According to Palacios-Hidalgo (2024), the proliferation of Information and Communication Technologies (ICTS) has transformed not only how individuals interact but also how they perceive and engage with cultural differences. While digital tools can support inclusive communication, they also demand cultural awareness, empathy, and adaptability from their users.

The intersection of technology and intercultural communication is particularly significant in contexts where individuals from non-Western or previously marginalised regions are gaining visibility in the global digital workforce. Habib and Iqbal (2025) found that linguistic competence is strongly correlated with intercultural competence; individuals who are more proficient in a lingua franca such as English are often better equipped to handle intercultural challenges. In Osogbo, many remote workers are proficient in English but may have limited exposure to global workplace norms, values, and communicative styles, which can lead to unintentional misunderstandings or breakdowns in communication.

Moreover, the technology-mediated nature of remote work can obscure important aspects of communication, such as tone, facial expressions, gestures, and social cues, which are vital in intercultural contexts. Saputra and Lama (2025) noted the growing need to adapt speaking etiquette to digital environments, where emotional intelligence and cultural sensitivity play a critical role in maintaining respectful and effective communication. In the absence of physical presence, misinterpretation of words or silence, or even the misuse of emojis, can impact professional relationships.

While digital tools offer unprecedented opportunities for global connection, they also carry risks of stereotyping, exclusion, and the flattening of cultural diversity. As Vilimonovic and Bakic-Miric (2024) argue, intercultural interactions in digital spaces are susceptible to both positive and negative stereotyping. For instance, a remote worker in Osogbo may be misjudged by an international client based on accent, name, or communication style, which could affect their perceived competence or trustworthiness.

AI and automation are also playing a growing role in intercultural communication. Tools like real-time translation software, chatbots, and virtual assistants are being used in remote workspaces to overcome language barriers. Zhu Hua et al. (2024) explored the impact of AI in intercultural communication, cautioning that while AI can enhance accessibility, it also raises questions about cultural authenticity, algorithmic bias, and the erosion of

human nuance in conversation. For remote workers relying on AI-assisted platforms, these concerns are not abstract; they affect daily interactions and career trajectories.

In educational contexts, the role of technology in cultivating intercultural competence has been widely recognized. Simões et al. (2023) demonstrated that collaborative digital projects significantly improved students' global communication skills and cultural understanding. Their findings suggest that similar models could be applied in professional development programs for remote workers. Furthermore, the work of Mouboua et al. (2024) on multilingual global citizenship education supports the idea that technology can be leveraged to promote inclusive communication and cultural literacy.

In the specific context of Nigeria, where linguistic and ethnic diversity are rich and complex, and where internet infrastructure is steadily improving, there is a unique opportunity to investigate how remote workers navigate the digital global economy. Remote workers in Osogbo LGA face the dual task of asserting their cultural identity while aligning with global communication norms. This balancing act requires not only technical skills but also intercultural awareness and digital diplomacy. The evolving global power structures and the demand for more inclusive, decolonised knowledge systems also affect how intercultural communication is theorised and practised. Sun and Shi (2024) advocate for “knowledge strategies” that recognize the importance of Indigenous and non-Western contributions to intercultural dialogue. For remote workers in Nigeria, this perspective validates local ways of knowing and communicating while encouraging ethical participation in global conversations.

Statement of the Problem

The rise of digital communication technologies has transformed work dynamics, creating a global remote workforce that faces significant intercultural communication challenges. In Osogbo, Nigeria, remote workers encounter difficulties navigating diverse communicative norms, language expectations, and cultural differences while accessing international opportunities. Despite the potential of technology to enhance communication, it often obscures deep-rooted cultural disparities and may privilege Western norms over local identities. This situation is exacerbated by a lack of targeted intercultural training and insufficient representation of African perspectives in existing communication frameworks. Consequently, there is a critical need to investigate how technology influences intercultural communication among remote workers in Osogbo, focusing on the challenges they face and the strategies they employ to negotiate their identities and professionalism in a global context.

Research Objectives

1. Examine the extent of digital communication technologies use among remote workers in Osogbo LGA.
2. Examine the impact of digital communication technologies on the effectiveness of intercultural communication among remote workers in Osogbo LGA.
3. Examine the extent to which intercultural communicative competence predicts the effectiveness of intercultural communication technology among remote workers in Osogbo Local Government Area.

Research Questions

1. What is the extent of digital communication technology use among remote workers in Osogbo LGA?
2. What is the impact of digital communication technologies on the effectiveness of intercultural communication among remote workers in Osogbo LGA?
3. To what extent does intercultural communicative competence predict the effectiveness of intercultural communication technology among remote workers in Osogbo LGA?

Research Hypotheses

1. A significant relationship exists between the use of digital communication technologies and the effectiveness of intercultural communication among remote workers in Osogbo LGA.
2. Intercultural communicative competence significantly predicts the effectiveness of intercultural communication among remote workers in Osogbo Local Government Area.

Literature review

The concept of Technology as a Catalyst and Mediator of Intercultural Engagement

Digital technologies have significantly altered the landscape of intercultural communication, primarily through their capacity to compress time and space, enabling synchronous and asynchronous interactions across continents. Chen and Mei (2024) posit that mobile real-time speech technologies have enhanced the immediacy, interactivity, and personalisation of cross-cultural communication, especially in educational and training contexts. These technologies, particularly in remote work scenarios, serve as mediators that streamline interaction but also shape the structure, pace, and quality of intercultural dialogue.

Palacios-Hidalgo (2024) expands on this by emphasising how digital tools can be leveraged within a culturally responsive pedagogical framework to promote intercultural awareness. In effect, platforms such as video conferencing tools, collaborative apps, and cloud-based learning environments not only facilitate interaction but also serve as sites for cultural exchange, adaptation, and sometimes tension. For remote workers in Osogbo, such technologies offer access to global employment opportunities while simultaneously demanding culturally nuanced forms of communication and self-representation. Moreover, AI-infused tools such as machine translation, sentiment analysis, and conversational bots, while expanding communication possibilities, raise concerns about algorithmic cultural biases and the reduction of nuanced, contextual human communication (Zhu Hua et al., 2024). These tools risk standardising language and meaning, potentially overlooking cultural subtleties essential to intercultural sensitivity and ethical engagement.

Language, Identity, and the Complexities of Global English

Language remains central to the enactment of intercultural communication. Scholars such as Habib and Iqbal (2025) argue that linguistic competence is not only a technical skill but a gateway to deeper cultural awareness. Their study underscores a bidirectional relationship: linguistic fluency enhances intercultural sensitivity, while cultural understanding improves language use. For Nigerian remote workers often operating in English-dominant virtual environments, this relationship becomes a site of negotiation, adaptation, and at times, resistance.

Baker and Ishikawa (2021) introduce the concept of Global Englishes, highlighting the hybrid, fluid nature of English usage across cultures. Rather than promoting a rigid standard, they advocate for the acceptance of English variations that reflect users' local identities. This is echoed in Khan's (2025) study, which critiques the potential erasure of cultural identity through the overreliance on English as a global lingua franca. For workers in Osogbo, this tension manifests in the pressure to communicate in a "global" way while preserving local linguistic identity and communicative authenticity.

Mouboua et al. (2024) argue that embracing multilingualism through translanguaging and content-integrated pedagogies can foster intercultural understanding and global citizenship. Their emphasis on linguistic diversity is particularly relevant in Nigeria, where remote workers often navigate multilingual realities but face implicit expectations to conform to Anglophone norms in digital professional spaces.

Digital Etiquette, Stereotypes, and Emotional Intelligence in Remote Interactions

The digital mediation of intercultural communication necessitates a reconfiguration of communicative competence. In virtual spaces where non-verbal cues are diminished or absent, the importance of emotional intelligence, tone management, and pragmatic adaptability becomes heightened. Saputra and Lama (2025) contend that the shift from face-to-face to screen-mediated communication demands new models of speaking etiquette and intercultural awareness. Misinterpretations rooted in differing politeness norms, turn-taking customs, or humour conventions can jeopardise collaboration and trust.

Equally critical is the role of stereotyping and cultural bias. Vilimonovic and Bakic-Miric (2024) examine how digital environments can perpetuate reductive cultural assumptions, either through linguistic profiling, visual markers (e.g., names, profile pictures), or accent discrimination. For Nigerian professionals, global digital spaces may reproduce hierarchies that favour Western communicative norms, leading to asymmetrical power dynamics in virtual teams. The literature suggests that successful intercultural communication in such contexts requires not only technical competence but also a cultivated openness to difference, active listening, and reflective self-awareness.

Education, Training, and the Development of Intercultural Competence

Numerous scholars advocate for structured educational models to cultivate intercultural communicative competence (ICC). Simões et al. (2023), through a cross-institutional digital project, demonstrated that collaborative online learning can significantly enhance students' linguistic fluency, cultural adaptability, and global readiness. Their findings support the idea that immersive, tech-enabled learning environments are effective in equipping individuals with 21st-century intercultural skills.

Similarly, Ayazbayeva et al. (2025) investigated digital competence and ICC development during the COVID-19 pandemic, showing that virtual exchange programs, online cultural immersion, and hybrid learning environments facilitated significant growth in intercultural sensitivity. These findings have direct implications for professional development programs targeting remote workers in digitally emerging economies such as Nigeria.

Furthermore, Sun and Shi (2024) offer a compelling critique of the Western-dominated epistemologies underpinning much of intercultural communication theory. They argue for the integration of Indigenous and non-Western conceptual frameworks that reflect the lived realities of knowledge

producers outside the Global North. This perspective resonates in a Nigerian context, where traditional cultural practices, communalism, and oral storytelling can enrich digital intercultural engagement if recognised as valid epistemological resources.

Theoretical Framework

This study is anchored in two interrelated models: Intercultural Communicative Competence (ICC) and Technological Mediation Theory. Together, they provide a lens for understanding the intersection of digital technology and cross-cultural interaction in remote work environments, particularly among remote workers in Osogbo LGA.

Intercultural Communicative Competence (ICC), developed by Byram (1997), refers to the ability to interact effectively and appropriately with individuals from different cultural backgrounds. It encompasses attitudes (openness, curiosity), knowledge of other cultures, interpretive and relational skills, interaction strategies, and critical cultural awareness. For remote workers in Osogbo, these competencies are vital for navigating diverse cultural norms, avoiding miscommunication, and fostering trust in virtual collaborations. Research by Habib and Iqbal (2025) supports the link between higher levels of ICC and more effective engagement in intercultural professional settings.

Technological Mediation Theory, as proposed by Verbeek (2005), posits that technology actively shapes human communication rather than merely transmitting it. In the context of remote work, tools like video conferencing, AI-driven translation, and messaging platforms mediate tone, formality, and non-verbal cues. Recent studies (e.g., Zhu Hua et al., 2024; Palacios-Hidalgo, 2024) highlight how these technologies can both enable and hinder intercultural understanding. For remote workers in Osogbo, the way these tools frame communication is critical to effective cross cultural engagement.

Methodology

This study adopted a quantitative, descriptive survey design to investigate the impact of digital communication technologies and intercultural communicative competence (ICC) on the effectiveness of intercultural communication among remote workers in Osogbo Local Government Area (LGA), Nigeria. The choice of design enables the collection of empirical data and statistical testing of hypotheses relationships between the identified variables. The target population comprises individuals actively engaged in remote work across fields such as freelancing, virtual assistance, digital consultancy, writing, and tech-based roles provided they regularly interact with culturally diverse individuals through digital platforms. The population of this study consist of 52 remote workers and total

enumeration technique was adopted because the population for the study was of a manageable size.

Data will be collected using a structured questionnaire, divided into four sections: demographic information, use of digital communication technologies, intercultural communicative competence, and effectiveness of intercultural communication. Each item will be rated on a 4-point Likert scale ranging from strongly disagree to strongly agree. The instrument went through expert review for content validity and was pilot tested for reliability, with Cronbach's Alpha used to assess internal consistency ($\alpha \geq 0.70$ considered acceptable). Data was analysed using the Statistical Package for the Social Sciences (SPSS), applying descriptive statistics, regression analyses to explore relationships and predictive influences. An informed consent was secured from all participants, with assurances of confidentiality, anonymity, and voluntary participation.

Data Analysis and Presentation

Table 1: Socio-demographics of the respondents

Socio-demographics	Frequency	Percentage
Gender		
Male	22	42.3
Female	30	57.7
Age		
18-25	6	11.5
26-35	36	69.2
36-45	10	19.2
46 and above	0	0
Educational Qualification		
OND/NCE	0	0
B.Sc./B.A	36	69.2
M.Sc./M.A	16	30.8
PhD.	0	0
Type of remote work you engage in		
Freelancing	11	21.2
Virtual assistance	24	46.2
Tech/Software Development	6	11.5
Writing/Translation	11	21.2
Years of experience working remotely		
Less than 1 year	11	21.2
1-3 years	11	57.7
4-6 years	30	21.2
More than 6 years	0	0

Source: Field Survey, 2025

The survey involved 52 remote workers from Osogbo Local Government Area. The socio-demographic profile of the participants showed that the majority were female (57.7%), while males accounted for 42.3%. Most respondents (69.2%) were between the ages of 26 and 35, indicating a youthful and professionally active population. Educational attainment was relatively high, with 69.2% holding a bachelor's degree and 30.8% holding a master's. None of the participants had only OND/NCE or PhDs.

In terms of job roles, nearly half of the participants (46.2%) were engaged in virtual assistance, while freelancing and writing/translation roles each accounted for 21.2%. Only 11.5% of respondents worked in tech or software development. Most respondents (57.7%) had been working remotely for 1 to 3 years, with equal proportions (21.2%) having less than one year or between 4 to 6 years of experience. None had worked remotely for more than six years, suggesting that remote work is still a relatively new trend in the area.their careers. None reported working remotely for more than six years, which aligns with the global trend of increased remote work adoption following the pandemic.

Research Question One: What is the extent of digital communication technologies use among remote worker in Osogbo LGA?

Table 2: Use of Digital Communication Technologies

Items	SA		A		D		SD		Mean	STD
	N	%	N	%	N	%	N	%		
I frequently use digital communication tools (e.g., Zoom, Slack, WhatsApp) in my remote work.	0	0	0	0	0	0	52	100.0	4.00	.000
I rely on digital platforms to communicate with clients/colleagues from other cultural backgrounds.	41	78.8	11	21.2	0	0	0	0	3.79	.412
I am confident using online tools for real-time conversations (e.g., video conferencing).	47	90.4	5	9.6	0	0	0	0	3.90	.298
I use AI-based tools (e.g., translation apps, chatbots) to assist with intercultural communication.	35	67.3	0	0	17	32.7	0	0	3.35	.947
Digital technologies make it easier for me to collaborate with international teams.	35	67.3	17	32.7	0	0	0	0	3.67	.474
I have access to stable internet and relevant digital tools for remote communication.	35	67.3	17	32.7	0	0	0	0	3.67	.474
I am familiar with the etiquette and norms of communicating professionally online.	34	65.4	18	34.6	0	0	0	0	3.65	.480

Source: Field Survey, 2025

Findings on the use of digital communication technologies revealed a high level of technological engagement. Every respondent (100%) reported frequent use of tools such as Zoom, Slack, and WhatsApp for remote work. Furthermore, 78.8% indicated that they rely on these platforms specifically to communicate with clients or colleagues from different cultural backgrounds. Confidence in using real-time tools like video conferencing was remarkably high, with 90.4% affirming their ease with such tools.

Additionally, 67.3% reported using AI-based tools like translation apps or chatbots to facilitate intercultural communication, though 32.7% did not, suggesting some limitations or reservations about AI tools. Similarly, 67.3% agreed that digital technologies

made it easier to collaborate with international teams, and an equal percentage indicated they had reliable internet access and digital tools. Moreover, 65.4% stated that they were familiar with professional online communication etiquette, reflecting an overall preparedness for digital interaction.

Research Question Two: What is the influence of digital communication technologies use on the effectiveness of intercultural communication among remote worker in Osogbo LGA?

Table 3: Intercultural Communicative Competence (ICC)

Items	SA		A		D		SD		Mean	STD
	N	%	N	%	N	%	N	%		
I can adjust my communication style when interacting with people from different cultural backgrounds.	34	65.4	12	23.1	6	11.5	0	0	3.54	.699
I am aware of how cultural differences affect professional communication.	34	65.4	18	43.6	0	0	0	0	3.65	.480
I make efforts to understand the cultural context of those I interact with online.	12	23.1	34	65.4	6	11.5	0	0	3.12	.583
I feel confident interpreting communication cues from people of different nationalities.	11	21.1	29	55.8	12	23.1	0	0	2.98	.671
I am open to learning from people with different cultural values or norms.	35	67.3	17	32.7	0	0	0	0	3.67	.474
I recognize and avoid culturally insensitive behavior when communicating online.	24	46.2	28	53.8	0	0	0	0	3.46	.503
I understand how to resolve misunderstandings rooted in cultural differences.	5	9.6	23	44.2	24	46.2			2.63	.658

Source: Field Survey, 2025

Regarding intercultural communicative competence (ICC), 65.4% of respondents affirmed their ability to adapt communication styles across cultures, and the same proportion acknowledged an awareness of how cultural differences impact professional communication. Most participants (65.4%) reported making efforts to understand others' cultural contexts, but only 21.1% strongly agreed that they felt confident interpreting intercultural cues, indicating a potential area for skill development.

All participants expressed openness to learning from individuals with different cultural norms and values, and 100% stated they recognize and avoid culturally insensitive behavior. However, only 9.6% strongly agreed they knew how to resolve misunderstandings based on cultural differences, while 46.2% were uncertain or disagreed, revealing a significant gap in intercultural conflict resolution skills.

Research Question Three: What is the extent to which intercultural communicative competence predict the effectiveness of intercultural communication technology among remote worker in Osogbo LGA?

Table 4: Effectiveness of Intercultural Communication

Items	SA		A		D		SD		Mean	STD
	N	%	N	%	N	%	N	%		
I can communicate effectively with people from diverse cultures through digital platforms.	34	65.4	12	23.1	6	11.5	0	0	3.54	.699
I rarely experience communication breakdowns due to cultural misunderstandings.	17	32.7	29	55.8	6	11.5	0	0	3.21	.637
My intercultural communication in remote work settings is smooth and efficient.	29	55.8	23	44.2	0	0	0	0	3.56	.502
Clients and colleagues from other cultures understand me clearly during digital exchanges.	18	34.6	34	65.4	0	0	0	0	3.35	.480
I am often able to resolve intercultural miscommunication when it occurs.	11	21.2	23	44.2	18	34.6	0	0	2.87	.742
My ability to build professional relationships online is not limited by cultural differences.	29	55.8	23	44.2	0	0	0	0	3.56	.502

Source: Field Survey, 2025

In terms of communication effectiveness, 65.4% of respondents believed they communicated effectively with people from diverse cultural backgrounds through digital platforms. More than half (55.8%) said they rarely experienced communication breakdowns due to cultural misunderstandings. Notably, all participants agreed their intercultural communication in remote work settings was smooth and efficient, and they felt clearly understood by clients and colleagues from different cultures.

Nevertheless, fewer participants (21.2%) reported being able to resolve miscommunication when it occurred, while 34.6% did not feel confident in this area. Yet, all respondents stated that cultural differences did not limit their ability to build professional relationships online, suggesting that while misunderstandings may occur, they do not significantly hinder relationship-building.

Hypotheses Test

Hypotheses where tested at .05 significance

Table 5: Influence digital communication technologies (DCT) towards effectiveness of intercultural communication among remote workers in Osogbo LGA.

Variables	Beta (β)	T	Sig.	R ²	Adj. R ²	F	P
(Constant)		-1.506	.000				
DCT on the effectiveness of intercultural communication	.437	4.642	.000	.585	.586	34.474	.000
Dependent Variable: Effectiveness of intercultural communication							
Predictor: Digital Communication Technologies							
Source: Field Survey, 2025							

The regression analysis in Table 5 showed that the use of digital communication technologies had a statistically significant positive effect on the effectiveness of intercultural communication. With a beta coefficient of 0.437 and a significance level of $p = .000$, the results indicate that digital tools contribute substantially to effective communication across cultures. The model accounted for 58.5% of the variance in communication effectiveness, reflecting a strong relationship.

Table 6: Influence Intercultural communicative competence (ICC) on the effectiveness of intercultural communication among remote workers in Osogbo LGA.

Variables	Beta (β)	T	Sig.	R ²	Adj. R ²	F	P
(Constant)		1.506	.000				
ICC on the effectiveness of intercultural communication	.545	5.799	.000	.585	.586	34.474	.000
Dependent Variable: Effectiveness of intercultural communication							
Predictor: Intercultural communicative competence (ICC)							
Source: Field Survey, 2025							

Table 6 showed that intercultural communicative competence had an even stronger impact, with a beta value of 0.545 and the same level of statistical significance ($p = .000$). This implies that individuals who possess strong intercultural awareness, flexibility, and communication skills are more likely to communicate effectively in multicultural digital environments than those who rely solely on technology. Both variables technology use and ICC jointly explain a significant portion of what makes intercultural communication successful in remote work.

Discussion of the Findings

The findings of this study provide meaningful insights into the intersection of technology and intercultural communication among remote workers in Osogbo Local Government Area (LGA), Nigeria. Drawing from existing literature, the results affirm and expand upon several key theoretical and empirical claims. First,

the widespread use of digital communication technologies such as Zoom, Slack, WhatsApp, and AI-based translation tools among respondents aligns with Palacios-Hidalgo's (2024) assertion that digital tools have become central to modern intercultural communication. All participants reported frequent use of such technologies, and most expressed confidence in using them to communicate across cultural lines. This reflects the growing integration of these tools into the fabric of remote professional interactions and supports Chen and Mei's (2024) view that real-time technologies enhance immediacy and interactivity, particularly in cross-cultural settings.

Furthermore, the study revealed that digital platforms ease collaboration with international teams and contribute positively to communication effectiveness. This supports Saputra and Lama's (2025) argument that the digital environment demands new forms of communicative etiquette ones that Nigerian remote workers appear to be adapting to, as shown by their familiarity with online professionalism. However, while technology enables communication, the study also confirms the literature's cautionary notes: tools like AI translators, although useful, cannot fully capture human nuance. This echoes Zhu Hua et al.'s (2024) concerns about algorithmic limitations and cultural flattening. Intercultural Communicative Competence (ICC) emerged as a strong predictor of effective communication, even more so than technology use. This validates the claims of Habib and Iqbal (2025), who emphasized the reciprocal relationship between linguistic fluency and intercultural sensitivity. Respondents who expressed high self-awareness, adaptability, and openness were more likely to report success in managing digital intercultural interactions. These traits reflect Byram's (1997) model of ICC, which underpins this study's theoretical framework.

Interestingly, while most respondents claimed to avoid culturally insensitive behaviour and were open to learning from others, fewer felt confident in resolving misunderstandings rooted in cultural differences. This gap highlights a key challenge noted by Saputra and Lama (2025): that the absence of physical cues in digital environments increases the risk of misinterpretation. It also resonates with Vilimonovic and Bakic-Miric's (2024) argument that digital spaces can reproduce stereotypes and hierarchical communication norms. These risks may especially affect Nigerian remote workers operating in global, often Western-centric virtual spaces, where their accent, names, or discourse style might be misread or devalued. The respondents' generally high educational levels and relatively recent entry into remote work (mostly within 1-3 years) further contextualize these findings. As young professionals embedded in Nigeria's multilingual, multicultural environment, they embody

both the opportunities and challenges that Mouboua et al. (2024) describe having the potential to engage globally while simultaneously negotiating the relevance and preservation of their cultural identities. This dual task aligns with Khan's (2025) critique of the dominance of global English, and reinforces Baker and Ishikawa's (2021) advocacy for Global Englishes that reflect local identities rather than suppress them.

The study affirms the importance of intercultural training and ethical frameworks that reflect local realities, as advocated by Sun and Shi (2024). Without conscious efforts to include non-Western epistemologies and communication practices, digital interactions risk perpetuating inequities. As such, while the technological infrastructure is present, what remains essential is the cultivation of intercultural awareness and the creation of inclusive, decolonized digital communication spaces.

Conclusion

This study explored how digital communication technologies and intercultural communicative competence (ICC) influence the effectiveness of intercultural communication among remote workers in Osogbo LGA, Nigeria. The findings show that while digital tools like Zoom and translation apps facilitate global collaboration, effective intercultural communication depends more strongly on individuals' cultural awareness, adaptability, and openness. Although respondents reported confidence in using digital tools and communicating across cultures, fewer felt equipped to resolve cultural misunderstandings. This highlights the need for targeted intercultural training. Ultimately, while technology enables connection, human competence remains the key to meaningful and respectful intercultural engagement in remote work settings.

Recommendations

1. Organizations and professional networks supporting remote workers in Osogbo should offer targeted training programs to enhance intercultural communicative competence, particularly in conflict resolution and interpretation of cultural cues.
2. Remote workers should be encouraged to adopt communication styles that reflect both global professionalism and respect for cultural diversity, in line with the principles of Global Englishes.
3. Policymakers and educators should develop frameworks that validate Indigenous languages, norms, and communicative styles in digital environments to promote cultural representation and decolonized communication.
4. Continued investment in stable internet access

and affordable digital tools is essential to ensure equitable participation in global remote workspaces for professionals in semi-urban regions like Osogbo.

5. Remote workers should be trained to use digital tools not just for functional communication, but for fostering empathy and awareness such as using video conferencing for face-to-face interaction and leveraging feedback tools to monitor communication effectiveness.

References

1. Benyahia, M., & Mellouk, F. (2025, March). *Exploring the impact of Nonviolent Communication on creating and maintaining an effective intercultural communication for language learners in EFL classes*.
2. Bol'shunova, S., Dyagilev, V., Voevodina, E., & Yarasheva, A. (2023, February). Intercultural communication in the global world: Modeling efficiency, trust. <https://doi.org/10.12737/1895951>
3. Caprice, L.-D., & Golubeva, I. (2020, October). *Intercultural competence for college and university students: A global guide for employability and social change*.
4. Chen, H., & Mei, K. (2024, September). Exploring a mobile technology-driven model for intercultural communication education. *International Journal of Interactive Mobile Technologies (IJIM)*, <https://doi.org/10.3991/jim.v18i18.51491>
5. Dasih, I. G. A. R. P., Triguna, I. B. G. Y., & Winaja, I. W. (2019, September). Intercultural communication based on ideology, theology and sociology. *International Journal of Linguistics Literature and Culture*. <https://doi.org/10.21744/ijllc.v5n5.738>
6. Fedotova, L. L., & Yin, Y. (2025, March). Intercultural communication as the basis of intercultural competence. *Language and Text*. <https://doi.org/10.17759/langt.2025120114>
7. Ghorbani, V., & Kianifard, S. (2024, December). Exploring ways of assessing intercultural competence: Introducing the bimodal assessment model. <https://doi.org/10.71703/cure.2024.1129165>
8. Habib, S., & Iqbal, F. (2025, January). *A study of the correlation between intercultural competence and linguistic competence at postgraduate level: From theory to practice*.
9. Hua, Z. (2018, July). *Exploring intercultural communication: Language in action* (2nd ed.). <https://doi.org/10.4324/9781315159010>
10. Hua, Z., Dai, D. W., Suzuki, S., & Brandt, A. (2024, July). Exploring AI for intercultural communication: Open conversation.

- <https://doi.org/10.1515/applirev-2024-0186>
11. Khan, M. (2025, February). *English as a global lingua franca: Effects on cultural identity and intercultural communication*.
 12. Lachica, L. P., & Arintoc, G. D. (2023, November). Analyzing science communication discourses in a global society: A case study of a graduate school classroom. <https://doi.org/10.59762/rer904105361120231117123115>
 13. Lantz-Deaton, C., & Golubeva, I. (2020, October). *Intercultural competence for college and university students: A global guide for employability and social change*.
 14. Malirong, J. P., & Gallardo, L. R. D. (2024, June). Global citizenship development and intercultural communication competence of junior high school students. *International Journal of Innovative Science and Research Technology*, <https://doi.org/10.38124/jjisrt/IJISRT24JUN627>
 15. Mouboua, P. D., Akintayo, O. T., & Atobatele, F. (2024, May). Language as a tool for intercultural understanding: Multilingual approaches in global citizenship education. *Magna Scientia Advanced Research and Reviews* <https://doi.org/10.30574/msarr.2024.11.1.0071>
 16. Muthyala, U. (2024, December). *Intercultural communication and cognitive development*
 17. Olabode, O. O., & Akande, O. D. (2025, January). Intercultural communication competency in multiethnic church community. *African Journal of Social Sciences and Humanities Research*. <https://doi.org/10.52589/AJSSHR-5S0E1GUR>
 18. Palacios-Hidalgo, F. J. (2024, July). The role of technology in socially and culturally responsive language teaching: *Exploring its potential in the language classroom*.
 19. Sabirjanova, G. (2024, October). Intercultural communication as a multidimensional interethnic interaction (similarities and differences). *Foreign Languages in Uzbekistan*. <https://doi.org/10.36078/1729153109>
 20. Simões, A., Moreira, G., & Oswald, T. (2023, November). Empowering EFL learners for the global stage: A collaborative approach to cultivating 21st-century skills and intercultural competence in higher education. <https://doi.org/10.21125/iceri.2023.2516>
 21. Sobre, M., & Bardhan, N. (2013, June). *Cultivating cosmopolitanism for intercultural communication: Communicating as a global citizen*. <https://doi.org/10.4324/9780203078150>
 22. Sun, Y., & Shi, C. Y. (2024, August). “Knowledge strategies” for indigenous studies on intercultural communication in non-Western countries in the global power structure. *Journalism and Media*. <https://doi.org/10.3390/journalmedia5030067>
 23. Tsai, Y. (2025, March). Culture shock as the learning outcome of intercultural communication among international students in the host culture. *International Journal of Higher Education*, 14(2), 17-30. <https://doi.org/10.5430/ijhe.v14n2p17>
 24. Vilimonovic, J., & Bakic-Miric, N. (2024, January). The impact of stereotypes on intercultural communication. *Zbornik radova Filozofskog fakulteta u Pristini*. <https://doi.org/10.5937/zrffp54-48293>
 25. Xiaowen, T., & Dervin, F. (2023, January). Intercultural communication education beyond 'Western' democracy-talk: Zhongyong as a way of decentring democracy-based teaching. In *Interculturality in Education* (pp. 159-175). https://doi.org/10.1007/978-3-031-15896-4_10
 26. Zhu, H., Ishikawa, T., & Baker, W. (2021, June). *Transcultural communication through Global Englishes: An advanced textbook for students*.