Digital Gaming and Informal English Language Acquisition: Identity, Interaction, and Fluency Development among Indonesian Youth

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Rika Santosa[1], Muhammad Rizky Pratama[1]
[1]State University of Jakarta, Jalan Rawamangun Muka Raya No.11, Jakarta 13220, Indonesia

Abstract

This study explores how international online gaming communities serve as informal spaces for English language learning among Indonesian adolescents, focusing on communicative practices, fluency development, and linguistic identity formation. The study is motivated by the limited opportunities for authentic communication in Indonesian secondary schools, where English learning remains predominantly grammar- and exam-oriented. Employing a qualitative case study design, the research involved ten high school students in Jakarta who were active members of the Airaworlf gaming community. Data were collected through participant observation during international gaming sessions, voice chat recordings, chat log analysis, and in-depth interviews exploring participants' experiences and perceptions of language learning through gaming. Thematic analysis was applied to identify communicative patterns, linguistic strategies, and socio-technological factors influencing language acquisition. The findings reveal that online gaming fosters spontaneous, contextual, and collaborative use of English. Participants demonstrated improvements in fluency, mastery of technical vocabulary, and intercultural communicative competence. English was used not only for strategic coordination but also to build team solidarity and negotiate identities in global digital spaces. Key enabling factors include intrinsic motivation, real communicative needs, international exposure, and supportive peer environments, while challenges involve exposure to impolite language and the absence of pedagogical guidance. The study highlights international gaming communities as authentic ecosystems for informal language learning in Indonesia, revealing the emergence of hybrid linguistic identities. It contributes to applied linguistics and foreign language education, particularly within Computer-Assisted Language Learning (CALL) and digital informal learning.

INTRODUCTION

English has become an unavoidable global language in various aspects of modern life, ranging from education and business to digital entertainment. However, in Indonesia, English learning at the secondary level remains largely dominated by formal approaches that emphasize grammar-based instruction and exam preparation, while authentic communication practices are rarely facilitated. This condition leads many students to struggle in using English spontaneously and naturally in real-life contexts (Kusuma et al., 2024; Nugroho et al., 2022). Meanwhile, the development of digital technology has opened new spaces for Indonesian youth to interact with the global community through unexpected media, one of which is digital gaming. Within these virtual environments, players from

different countries communicate, collaborate, and compete in real time, creating a new form of language learning not governed by formal curricula but emerging organically from authentic communicative needs (Hamat & Abu Hassan, 2019; I. S. Ismail & Shafie, 2019).

This phenomenon is particularly intriguing because many Indonesian teenagers unknowingly use English actively in online gaming contexts, whether through voice chat or text. Their interactions with players from various countries require quick, effective, and contextually adaptive communication skills. Although such activities are not part of formal education, many players report improved fluency, vocabulary, and confidence in using English (S. Ismail et al., 2019; Ismiatun & Suhartoyo, 2022). These facts challenge the traditional assumption that language learning can only occur effectively within structured classroom environments. Nevertheless, this phenomenon remains underexplored academically, particularly regarding how online gaming practices contribute to English acquisition and how linguistic identity is shaped within cross-cultural and transnational interactions.

Previous studies have highlighted the potential of digital media in supporting language learning. Karjo (2020) and Muftah (2024), for instance, argue that online games create socially rich environments filled with authentic communication opportunities among speakers from diverse cultural backgrounds. Handayani et al. (2020) and Shortt et al. (2023) demonstrate that online gaming activities foster digital literacy while enhancing players' communicative competence. Similarly, Sundqvist, Singh & Guruprasad (2019), and Thorne & Smith (2011) found that students who actively engage in English-language gaming exhibit better speaking skills than those who do not, due to greater exposure to diverse and contextual language input. Arif (2019) and Maulida et al. (2022) further show that virtual spaces such as World of Warcraft function as social arenas where language learning occurs through collaboration and problem-solving.

Other research affirms that digital gaming facilitates experiential, informal language learning. Lee & Sylvén (2021) reveal that the communicative pressure in online games can enhance EFL (English as a Foreign Language) learners' willingness to communicate. Likewise, Lutfiana et al. (2021) found that gamers use English spontaneously to negotiate meaning and achieve game objectives. From a sociocultural perspective, Wijaya et al. (2021) note that digital games foster communities of practice where linguistic and social identities are shaped through repeated interaction. These studies emphasize that virtual spaces are not merely sites of entertainment but also socially dynamic arenas rich in opportunities for authentic language learning.

However, most of these studies have focused on learners in developed countries or on the use of games as pedagogical tools within formal classroom settings. In the Indonesian context, research examining the relationship between gaming and English acquisition remains limited. Mulyono et al. (2024) explored the role of massively multiplayer online games (MMOGs) in improving EFL learners' vocabulary but did not address issues of identity or social dynamics behind player interactions. Soyoof et al. (2023) examined the enhancement of speaking skills through voice chat, but their study focused primarily on linguistic behavior without delving into sociolinguistic dimensions. Meanwhile, Rezai et al. (2024) identified how

online gaming helps learners expand their lexical repertoire but overlooked how intercultural interaction processes influence fluency and linguistic identity. Thus, there remains space to deepen our understanding of how cross-national communication practices within gaming communities shape meaningful language learning experiences among Indonesian youth.

Furthermore, recent literature underscores the importance of social context and motivation in digital language acquisition. Yurieva et al. (2021) emphasize that Informal Digital Learning of English (IDLE) offers flexible and personalized learning opportunities, particularly beyond formal institutions. Drajati et al. (2024) add that IDLE fosters high learner autonomy, as individuals can determine their own learning pace, content, and goals. Within this framework, online gaming serves as a natural environment where language users interact without evaluative pressures typically found in classrooms. Zhang & Liu (2024) even found that players engaged in cross-cultural communication through gaming demonstrated significant development in pragmatic and sociolinguistic competence. Nonetheless, most of these studies focus on contexts with advanced digital infrastructures and thus do not adequately represent the experiences of youth in developing countries like Indonesia, where social, economic, and educational contexts differ substantially.

From this literature review, it can be concluded that while studies on digital gaming and English learning have shown positive outcomes, several significant gaps remain. First, few studies have explored how communicative practices in international gaming communities simultaneously contribute to the development of fluency and linguistic identity among Indonesian youth. Second, most previous research positions games as pedagogical tools within classrooms rather than as authentic social spaces where language use emerges naturally and spontaneously. Third, little attention has been given to the social and technological factors that support informal language learning within local gaming communities. Fourth, the dimension of linguistic identity in intercultural virtual interactions remains underexamined, especially within the Southeast Asian context.

This study seeks to fill these gaps by examining international gaming communities as dynamic and living language-learning environments outside formal institutions. Focusing on the Airaworlf community, a group of Indonesian adolescent gamers actively interacting with international players, this research investigates how their communicative practices within games not only enhance English fluency but also shape hybrid linguistic identities that merge academic formality with global gamer slang. This approach provides new insights into how language learning can arise from real communicative needs, playful engagement, and cross-cultural digital experiences rather than formal curricula.

Beyond merely extending the discourse on technology-mediated language learning, this study asserts that digital communities can serve as potential alternative learning spaces for Indonesian youth. By exploring interactional patterns, linguistic functions, and socio-technological factors that support fluency development, this study broadens our understanding of the relationship between language, identity, and technology. The findings are expected to contribute not only to the fields of applied linguistics and Computer-Assisted Language Learning (CALL) but also to inform future language education policies by integrating

authentic digital experiences. Ultimately, this research seeks to demonstrate how a seemingly entertainment-oriented virtual world can transform into an authentic learning space where adolescents are not merely gamers but active global language users who build intercultural bridges.

RESEARCH METHOD

This study employs a qualitative approach with a case study design, as its main objective is to deeply and contextually understand the experiences, communicative practices, and linguistic identity formation of Indonesian adolescents within international online gaming communities. The qualitative approach was chosen because it allows the researcher to capture the subjective meanings constructed by players through their digital interactions, elements that cannot be adequately explained by numbers or statistics alone (Priya, 2021; Taquette & Souza, 2022). Through this approach, the researcher explores how language learning naturally occurs within virtual spaces rather than merely assessing language outcomes.

The research site is centered on the Airaworlf community, an online gaming group consisting of secondary school students in Jakarta. This community was selected because its members actively participate in international gaming sessions with players from countries such as the Philippines, Malaysia, the United States, and South Korea. Moreover, English is used as the primary medium of communication, both in voice and text chats. Jakarta was chosen due to its urban context and relatively strong technological access, enabling sustained and intensive international gaming interactions. Thus, this community provides an authentic representation of informal English use within cross-cultural digital environments.

The research informants consist of ten high school students aged 16–18 who have been active members of the Airaworlf community for at least one year. They were selected using purposive sampling because they met specific criteria: active interaction with international players, routine use of English during gaming communication, and reflective awareness of their language experiences (Doyle et al., 2020; Kawar et al., 2024). The number of ten informants was determined based on data depth and feasibility of observation rather than statistical representation. Each informant is treated as a unique and meaningful source of experience contributing to a rich understanding of the studied phenomenon.

Data were collected through several complementary techniques: participant observation, interaction recording, in-depth interviews, and digital documentation. Participant observation was conducted by having the researcher join selected gaming sessions to observe real-time English use in authentic communicative situations. This approach was chosen because it allows the researcher to understand the social and emotional contexts behind language use, including spontaneous collaboration and negotiation of meaning (Stanley, 2023). Recordings were made of both voice chats and text logs, with participants' consent, for further linguistic and communicative analysis.

In addition to observation, semi-structured in-depth interviews were conducted with each informant to explore their perceptions of language experiences, motivational factors

behind English use, and its impact on fluency and self-identity. The semi-structured format was selected to provide a guiding framework while allowing flexibility for informants to share their experiences freely and reflectively (Yani et al., 2025). Interviews were conducted online via Discord and Zoom, depending on informants' preferences. Digital documentation, including screenshots, interaction notes, and technical terms used during gameplay, was also collected to enrich the linguistic and social analysis context.

Data analysis followed a thematic analysis technique based on Muurlink & Thomsen (2024). All interview and observation transcripts were coded to identify communication patterns, linguistic strategies, and themes related to fluency enhancement and identity formation. The analysis process was iterative, with the researcher moving back and forth between raw data, codes, and thematic categories to reach a deep understanding of the phenomenon. This approach enabled not only data categorization but also interpretive meaning construction from the participants' lived experiences.

To ensure the validity and reliability of the findings, the study employed data and source triangulation. Triangulation was achieved by comparing results from observations, recorded interactions, interviews, and digital documentation to confirm consistency (Sundler et al., 2019). Additionally, member checking was conducted by asking several informants to verify the researcher's data interpretations, ensuring that the analyses accurately reflected their experiences. Researcher triangulation was also performed through discussions with two peers experienced in applied linguistics and digital sociolinguistics to gain feedback on data interpretation and preliminary findings.

RESULTS AND DISCUSSION

Spontaneous and Contextual Use of English in Gaming Interactions

Findings from observation and data analysis reveal that participants' use of English in international online gaming contexts occurred spontaneously, rapidly, and was highly dependent on the ongoing game situation. During group sessions within the Airaworlf community, English emerged not as a consciously learned or taught language, but as a functional and immediate tool for communication. In this gaming space, language became a primary means of survival, collaboration, and achieving collective goals. One of the most striking moments observed occurred when players had to make quick decisions during enemy attacks. In such moments, players frequently issued commands such as "Go left!", "Cover me!", or "They're pushing mid!" without any time for translation or grammatical consideration.

The dynamic nature of gaming environments created genuine and contextual communicative pressure. Field observations indicated that the atmosphere during play sessions was intense and energetic, with players wearing headsets and conversing in a mix of English and Indonesian. During critical moments, everyone often spoke simultaneously yet managed to understand one another effectively. In these situations, English served as a spontaneous medium for timely message delivery, flowing naturally without prolonged cognitive processing or word-for-word translation. This phenomenon aligns with what

Darmawan and Namsem (2025) term situated language use, language use that emerges from the social activity in which individuals are engaged. Language, in this sense, does not stand apart as an abstract system but is inseparable from action, interaction, and shared social purposes.

Several participants mentioned that they did not feel they were "learning English" while gaming; rather, they "used it because they had to." One informant, AR, recounted that during his first interactions with foreign players, he felt nervous and tended to remain silent for fear of making mistakes. Over time, however, the necessity to communicate transformed into a natural habit. AR explained that during fast-paced gameplay, he no longer thought about grammar but spoke instinctively according to communicative needs. Here, language use became a reflexive response to situational demands, a cognitive process that reinforced fluency and spontaneity without academic pressure.

This observation aligns with Naghdipour's (2022) concept of emergent communication, wherein second language learners develop communicative ability organically through meaningful engagement. For Airaworlf players, interaction with international gamers required them to be flexible and adaptive to rapid conversational rhythms. For instance, when a player from the Philippines issued tactical instructions in English, Indonesian players immediately responded, even if their utterances were grammatically imperfect. Yet, the intended meaning was effectively conveyed, illustrating that authentic communication rests on socially constructed meaning rather than linguistic precision.

The gaming context also fostered a "natural communication space" where language errors were not barriers but integral to the interaction process. In several sessions, the researcher noted instances where players used nonstandard forms or incorrect grammar, but peers still understood and often responded with humor or gentle correction. For example, when RD exclaimed, "He go there, fast!" another player replied playfully, "You mean he went there, bro!" without disrupting the flow of the game. Such moments demonstrate that language learning occurred through social negotiation and informal correction, an effective mechanism for increasing linguistic sensitivity.

From a sociocultural perspective, these experiences highlight language learning as a process of social mediation. Players functioned as co-constructors of meaning, collaboratively helping one another to interpret and convey messages within real interactions. Communication in these digital spaces served not only instrumental but also developmental functions, fostering both linguistic and pragmatic awareness. Thus, English operated not merely as a communicative tool but as a symbol of belonging within the global gamer community.

A notable finding from the observations is how Indonesian players adapted their linguistic style to international norms of interaction. During team play, players frequently used polite expressions such as "Nice try, guys" or "Good job, bro" even after losing, to maintain morale. These expressions emerged spontaneously, reflecting digital politeness norms learned through repeated intercultural encounters. This indicates that English use was intertwined not only with linguistic competence but also with sociocultural adaptation.

Interviews further revealed that habitual English communication in gaming made participants more confident in using the language beyond virtual spaces. One participant, DN, reported that after months of gaming with international teams, he began to use English casually with his school friends, perceiving it as part of his self-expression. This illustrates how spontaneous, meaningful use of language enhances not only speaking ability but also emotional connection to the language, a phenomenon Lee et al. (2024) describe as language ownership.

Moreover, observations showed that English was also used to build team solidarity and emotional resonance. For instance, when a teammate executed a heroic move, others instantly reacted with exclamations such as "Nice clutch!" or "You saved the game, bro!" Such spontaneous reactions reinforced social bonds and group identity, with English serving as an emotional bridge rather than merely a directive tool.

Overall, spontaneity in English use emerged from genuine communicative needs rather than academic obligations. This supports Zadorozhnyy and Lee's (2025) argument that informal digital learning environments facilitate language learning through meaningful, socially grounded engagement. Within the Airaworlf community, the pressure to communicate effectively in real time encouraged linguistic adaptation without formal instruction, making English an inseparable part of social action rather than a classroom subject.

Fluency Development through Real-Time Communication

One of the most significant outcomes of participants' engagement in international online gaming communities was the enhancement of English fluency. Both observations and interviews revealed that this development was gradual, arising from repeated and intensive interaction with players worldwide. The real-time communicative demands of gameplay required participants to speak quickly, clearly, and relevantly, leading to spontaneous improvement in language production. In this sense, online gaming functioned as a natural training ground where communicative pressure replaced traditional language drills.

During field observation within the Airaworlf gaming community, participants actively communicated via voice chat. Equipped with headsets, they constantly exchanged instructions, warnings, and encouragement. In fast-paced games such as Valorant or Apex Legends, communication occurred within seconds, leaving no time for pre-planning or perfect sentence formulation. Consequently, fluency developed through necessity: the more frequently players engaged, the more fluidly they spoke English without pauses for lexical or grammatical recall. Time pressure and communicative urgency acted as natural "fluency trainers," sharpening their oral proficiency in authentic contexts.

Informant RF explained that he initially paused mid-sentence due to fear of errors or uncertainty about grammar. However, after months of gaming with international teammates, his speech rhythm became "accustomed" to English. He noted that because everything in the game happened so fast, he had to speak immediately, and this became habitual over time. RF's account shows that fluency here was not a product of memorized structures but of the practical need for effective real-time communication. This supports the updated Interaction

Hypothesis proposed by Yang et al. (2024), asserting that meaning negotiation and feedback during meaningful interaction can accelerate second-language fluency development.

Voice chat recordings further demonstrated that hesitation markers such as "uhm," "err," or "like" decreased over time. In early sessions, players often paused before responding; later, these pauses almost disappeared. In fast exchanges such as "Watch out! Behind you!" or "Let's flank from the left!", speech rate and syntactic fluency improved noticeably. This confirms that real-time speaking practice plays a crucial role in developing fluency by minimizing internal self-editing, a phenomenon common in formal classroom settings.

Another notable phenomenon was players' ability to imitate the speech patterns of native or proficient speakers they frequently interacted with. Through repeated exposure, participants unconsciously adopted global English intonation, rhythm, and expressions. Informant NS, for example, noted that after regularly gaming with American teammates, he naturally began using expressions such as "Let's go, guys!" or "We got this!" with a more authentic tone. This supports Khalid's (2023) view that repeated cycles of comprehensible input and output practice form a natural mechanism for fluency enhancement.

Beyond linguistic development, participants also experienced significant growth in confidence. Most informants reported that after consistent gaming and communication with international players, they no longer felt anxious speaking English outside gaming contexts. DN shared that he now confidently uses English in class or with foreigners, attributing this to his habit of "talking fast" in games. His experience highlights the affective dimension of language learning, where confidence and freedom from evaluative anxiety foster more natural fluency growth.

Field observations also showed that gaming interactions involved not only verbal exchange but emotional coordination. Under high-pressure situations, such as near-defeat moments, communication intensified with motivational remarks like "Keep pushing!" or "We can still win this!" Such moments revealed how fluency emerged in emotionally charged contexts requiring rapid and synchronized responses. Here, language operated as both information and emotion, echoing Wu's (2023) real-time communicative pressure concept, where high-pressure environments promote linguistic automatization.

Moreover, analysis of conversation recordings indicated that players learned to adjust their speaking style according to social context. When speaking with unfamiliar international players, they used more polite and complete sentences such as "Can you cover that side, please?" However, with close teammates, language became shorter and more casual, "Yo, left side!" or "Nice one, bro!", reflecting the development of pragmatic fluency (Lee & Xie, 2023), or the ability to use language appropriately within social contexts.

These adaptive shifts were reinforced by the social dynamics of international gaming communities, which required players to manage conversational turn-taking, align speech tempo with others, and maintain coherence under pressure. In this setting, efficient communication became a practical necessity rather than an academic exercise. Thus, unlike classroom contexts where correctness dominates, online gaming emphasized immediacy,

communicating now, not perfectly.

Finally, the analysis revealed a phenomenon of self-monitoring reduction, where players minimized excessive self-correction while speaking. Their primary focus was on gameplay success, not linguistic accuracy. According to Nugroho et al. (2022), such conditions accelerate linguistic automatization, the cognitive foundation of genuine fluency. Airaworlf players, through repeated real-time practice, internalized faster language processing mechanisms, allowing them to think and speak in English almost simultaneously.

Acquisition of Technical and Communicative Vocabulary

The findings reveal that one of the most compelling aspects of informal English learning through international online gaming is the rapid development of both technical and communicative vocabulary among participants. In gaming environments such as Valorant, Dota 2, and PUBG, Indonesian players within the Airaworlf community did not merely use English for strategic purposes but actively absorbed domain-specific terminology related to game mechanics and social interaction within the global gaming community. Analysis of chat logs and voice chat recordings indicated that terms such as "respawn," "cover me," "push mid," "rotate," and "flank left" became routine components of their communication. Interestingly, these lexical items were not explicitly taught through formal instruction but were acquired through repeated exposure and meaningful contextual use, consistent with the Usage-Based Language Learning theory proposed by Nugroho et al. (2022), which emphasizes that language acquisition occurs naturally through frequency and meaningful use in authentic contexts.

Field observations during gameplay sessions highlighted the dynamic and situated nature of this lexical learning process. When the researcher observed a scrimmage between international teams, communication unfolded rapidly and was filled with tactical directives. Indonesian players demonstrated their ability to respond to commands and provide accurate instructions. In one notable instance, a player, RM, shouted, "They're pushing mid! Cover me!" which was immediately followed by a teammate's response, "Roger that, rotate right!" Such exchanges occurred repeatedly throughout the game. These observations clearly indicated that players understood and used technical vocabulary not because they had learned it in a classroom, but because the gaming context required comprehension for effective team coordination. In other words, genuine communicative necessity served as the primary driver of lexical acquisition.

Interview data further confirmed this pattern. Most informants stated that they initially did not understand these terms but gradually learned their meanings through frequent exposure in context, especially from interactions with foreign players. One participant, AF, shared that when he first heard the word "respawn," he had no idea what it meant, but soon realized it referred to the event when a character "dies" and reappears in the game. He explained that by listening to others and observing the accompanying visual cues on the screen, he was able to grasp the meaning without translation. This illustrates how visual and situational contexts strongly support semantic understanding, aligning with Huang et al. (2022), who argue that repeated use in meaningful contexts reinforces natural language

acquisition without explicit instruction.

Beyond technical terms, the study also found the emergence of communicative vocabulary that reflects the social dimension of international gaming communities. Expressions such as "nice clutch," "GG bro," "good comms," and "you carried us" were integral to the players' daily interactions. These expressions not only served as forms of appreciation for gameplay performance but also symbolized solidarity, encouragement, and a sense of belonging among players from different countries. Observations of several voice chat sessions revealed that after winning a match, team members would cheer and exchange compliments such as "Nice clutch, man!" or "Good teamwork, bro!" In this context, English functioned as a social tool that reinforced interpersonal relationships and cultivated a shared sense of community.

Interestingly, mastery of communicative vocabulary extended beyond gaming contexts. Several informants reported that they frequently used these expressions in everyday conversations. One participant, ZH, mentioned that he often said "GG" jokingly to his school friends after accomplishing something successfully. He admitted that using the term made him feel part of a "global community," since gamers worldwide understand its meaning. This phenomenon indicates that lexical acquisition transcends technical domains and becomes integrated into participants' social and linguistic identities. The use of such expressions exemplifies translingual practice, in which the boundaries between formal language and community slang become fluid and mutually influential (Shadiev & Yang, 2020; Wang et al., 2021).

From a sociolinguistic perspective, the mastery of technical and communicative vocabulary within the gaming community demonstrates that language learning is inherently collaborative and situational. Players naturally modeled, corrected, or introduced new terms to one another. When a player failed to understand an instruction, peers immediately provided clarification. In one observed session, an Indonesian player appeared confused by the command "rotate mid." A Filipino teammate clarified by saying, "It means move to the middle part of the map." Such spontaneous clarification exemplifies peer scaffolding, where player-to-player interaction becomes a direct channel for learning. In line with the Usage-Based Learning framework, repeated experiences with particular linguistic forms reinforce associations between words, contexts, and meanings, facilitating long-term lexical retention.

Analysis of written chat logs also revealed variation in players' use of technical vocabulary. Some participants mixed English with Indonesian, producing utterances like "Push mid bareng ya!" (Let's push mid together) or "Cover aku dulu." (Cover me first). This code-mixing is not a sign of linguistic deficiency but an adaptive strategy for maintaining communicative efficiency under time pressure. As Dewaele (2019) notes, such practice constitutes translanguaging, the flexible use of linguistic resources to fulfill communicative needs. Accordingly, interaction in online gaming reflects a natural human adaptation to complex social and technological contexts.

In addition to enriching vocabulary and enhancing semantic comprehension, these lexical practices contribute to the players' social identity formation. Players do not merely

learn new words, they also internalize the social norms and values embedded within the community's language. When a player says "GG bro," for example, they are not only expressing praise but also reaffirming their membership in the global gamer culture that values sportsmanship and camaraderie. Another participant, DN, mentioned that using such expressions made him feel "more accepted" by foreign players because his language sounded natural and familiar to them. In this sense, vocabulary mastery functions as a form of linguistic accommodation, the adjustment of speech style to signal social closeness and solidarity (Hiver et al., 2024).

The gaming context also enhances players' pragmatic competence. They learn when, to whom, and in what situations certain expressions are appropriate. For example, the term "GG" is typically used after a match to show respect toward opponents, while "nice clutch" is reserved for praising an individual's heroic play under pressure. Such pragmatic awareness arises not from explicit instruction but through direct experience and social observation. This supports Khalid's (2023) view that meaningful language use in socially rich contexts fosters the natural development of pragmatic intuition.

Intercultural Interaction and Communicative Competence

In the context of international online gaming, intercultural interaction emerges as a highly dynamic and authentic learning space for players from diverse cultural backgrounds. This study found that participation in international gaming communities such as Airaworlf not only enhances Indonesian players' English proficiency but also develops what MacIntyre et al. (2020) refer to as intercultural communicative competence, the ability to communicate effectively and appropriately with individuals from other cultures, encompassing linguistic, sociocultural, and affective dimensions. Through spontaneous and intensive communication in virtual environments, players learn to navigate cultural differences, adjust their speech styles, and cultivate empathy and sensitivity toward global communicative norms.

Interview data revealed that most informants perceived interaction with foreign players as an eye-opening experience that taught them to communicate more politely and adaptively across cultural contexts. One informant, AR, explained that he initially tended to use a very direct tone when giving in-game instructions. However, after playing several times with players from countries such as the Philippines and Canada, he realized that his way of speaking often sounded "aggressive" to them. He then began to adjust his intonation and word choice to sound friendlier. For instance, instead of saying, "You go left now!", he preferred, "Could you go left, please?" This experience serves as concrete evidence that pragmatic awareness, the ability to adapt linguistic forms to the social and cultural norms of one's interlocutor, develops naturally through repeated intercultural interaction.

Field observations during gameplay sessions further illustrated that Indonesian players learned to read communicative situations more subtly. In one observed voice chat, the researcher noted how an Indonesian player, DN, interacted with teammates from Japan and Germany. When the Japanese player made a tactical error, DN refrained from harshly correcting him and instead said, "It's okay, we got this next round," while laughing about the situation. His communicative style demonstrated the ability to manage mistakes through

socially harmonious strategies (face-saving strategies), which are crucial in intercultural communication. In the same observation, a German player, who typically spoke quickly, began slowing down his speech so teammates from other countries could follow the conversation. This phenomenon illustrates that linguistic adaptation was mutual, consistent with Communication Accommodation Theory, which posits that individuals adjust their communicative behavior to facilitate understanding and social closeness.

In addition to adjusting communication styles, players also learned to recognize and interpret the cultural meanings behind expressions used by teammates from different countries. Several informants mentioned experiencing initial misunderstandings. Another informant, FR, admitted that he once misinterpreted the American expression "Are you kidding me?" as a sign of anger, when in fact it was a common informal expression of surprise. He explained that this experience taught him to be more cautious in interpreting idiomatic expressions and intonation in English. Over time, he developed the ability to infer meaning not only from words but also from tone and interactional context. Within the framework proposed by Muhdi et al. (2020), this reflects the development of interpretive skills and relativizing of self, the capacity to understand meaning from another culture's perspective while suspending one's own cultural judgments.

Observations of the Airaworlf community revealed that the digital gaming space functions as an active arena for intercultural learning. Players from various countries gather in teams to coordinate, joke, and sometimes debate strategies. Beneath this dynamic interaction lies a continuous negotiation of cultural meanings. For example, during one observed session, a difference emerged between Indonesian and European players regarding feedback styles. European players tended to provide direct comments such as, "You missed that shot," while Indonesian players were more cautious, preferring, "Maybe next time try holding the angle longer." After several sessions, both parties began to understand and adjust to each other's communication styles to maintain harmony. Such interactions create what Damanik et al. (2023) describe as a transcultural space, a space where cultural identities and communicative norms interact and mutually shape one another.

From the affective dimension, players also developed a heightened sense of cultural empathy. Many informants expressed that they became more tolerant of differences in ways of thinking and expressing themselves. One informant, ZH, mentioned that after frequently playing with teammates from the Middle East, he began to understand that their seemingly loud speech style was not anger but a form of enthusiasm. He stated that this experience taught him "not to be easily offended" and to try seeing things from another cultural perspective. This illustrates the development of the attitudinal dimension in Uğraş et al.'s (2023) model, curiosity, openness, and appreciation for cultural differences as foundations of intercultural communicative competence.

Observation of interactions within the Airaworlf Discord community also revealed intriguing forms of cross-cultural solidarity. In several instances, when a player from another country experienced connection issues, Indonesian players often offered to wait patiently or said, "No worries, take your time." Such acts of empathy demonstrate that communication

transcended instrumental goals of winning the game, reflecting instead warmer and more humanistic social relationships. From an intercultural learning perspective, this shows that digital environments can foster universal values such as patience, respect, and cross-cultural cooperation.

Beyond strengthening intercultural awareness, interaction in online gaming also expanded players' pragmatic competence in using English appropriately across diverse social contexts. For instance, they learned when to use politeness markers such as "please," "thank you," or "sorry," and how to use them naturally. One informant, AF, stated that he often observed how foreign players made requests or suggestions and then imitated them in subsequent interactions. He added that the more he played, the more he realized that politeness in communication was not merely about grammar but about empathy toward one's interlocutor. This statement highlights that language learning in virtual spaces extends beyond linguistic knowledge, it cultivates broader social awareness.

Ultimately, the virtual gaming space can be seen as a transcultural learning space, where the boundaries between language learning and cultural learning blur and complement one another. Players do not merely interact to achieve in-game goals; they also unconsciously engage in processes of identity and cultural value negotiation. Through sustained interaction, they construct new forms of communicative competence that emphasize not only fluency but also sensitivity to norms, meanings, and social expectations across cultures. In this sense, online gaming worlds function as social laboratories in which language learners practice intercultural communication in real, repetitive, and meaningful situations.

Formation of Hybrid Linguistic Identities

The phenomenon of hybrid linguistic identity formation among young Indonesian players in international gaming communities demonstrates how language functions not merely as a communication tool but also as a medium of social and cultural self-expression. Based on observation and interview findings, players consistently exhibited a tendency to mix English and Indonesian in their daily virtual interactions. This mixture was not merely spontaneous code-switching, but a more complex and strategic linguistic practice, what Ford et al. (2021) call translanguaging, the flexible use of multiple linguistic resources to construct meaning, identity, and social solidarity. In this context, young Indonesian players use English not only as a global communicative medium but also as part of their performative digital identity, while maintaining local familiarity through Indonesian language and community-specific slang.

Observation of the Airaworlf community revealed that interactions in both voice and text chats occurred in fluid bilingual mixtures. In one gaming session, for instance, players were heard saying, "Bro, rotate ke mid cepat!" or "Nice aim, woi!" This natural mixing of English and Indonesian occurred without deliberate reflection, yet it represented the formation of hybrid linguistic identity, in which players negotiate between two worlds: the global realm where English is the communicative norm and the local realm where emotional and social expressions are rooted. In fast-paced situations such as first-person shooter games, translanguaging serves both as a communicative adaptation and as an authentic expression

of identity.

In interviews, one informant, RN, expressed that he felt "more comfortable" using a language mix because "full English feels too stiff." He explained that by incorporating Indonesian, he could express emotions and closeness with fellow Indonesians, while English terms allowed him to communicate effectively with foreign players. RN's statement illustrates how translanguaging becomes a strategy to balance two identity needs: the desire to be recognized as part of the global gaming community and the desire to remain connected to one's local linguistic roots. This aligns with Kurupınar and Kanmaz (2023), who describe translanguaging as "the deployment of linguistic repertoire as an identity act", a symbolic act of shaping one's self within a social community.

Field observations also showed that this language-mixing practice evolved into a kind of social code among players. In the Airaworlf community, new members who spoke only English were sometimes perceived as "less integrated," while those who could fluidly mix both languages were seen as more in-group. In one observed Discord session, players celebrated after a victory with: "GG bro, kita nge-clutch bareng, mantap banget sumpah!" This utterance not only marked tactical success but also reaffirmed social closeness among players. The combination of English words such as "GG" and "clutch" with local expressions like "mantap banget sumpah" created a form of linguistic hybridity that embodied a unique transnational identity, global in discourse yet local in sentiment.

Another informant, DF, a high school student who had played in international communities for two years, stated that the English used in school and in gaming worlds felt very different. In school, English was formal and rule-bound; in gaming, it felt alive. He said that in games, language "has more life," as it is used to interact, joke, and even argue. He added that although his teachers often emphasized grammar, in gaming he learned that what mattered most was being understood. This reflects how translanguaging in gaming enables learners like DF to build an emotional connection with English that is organic and situated beyond the structural constraints of formal education. As Egan et al. (2021) note, translanguaging serves not only communicative but also affective functions, fostering a sense of ownership over the learned language.

From a sociolinguistic perspective, this phenomenon aligns with Sari's (2020) view that linguistic identity in the digital era is increasingly fluid and performative. Individuals are no longer bound to a single language or identity but actively construct and display their identities through context-sensitive language choices. In this sense, young Indonesian players demonstrate that English is no longer a foreign language to be "learned," but a lived and practiced language shaped by social needs. They have created a new form of Indonesian English, where words such as "push," "cover," or "rush" coexist with local particles like "lah," "woi," and "dong." This hybridization does not signify linguistic deficiency but represents a creative and adaptive bilingual identity.

Field data reinforced this finding. During observations, code-mixed language patterns appeared most frequently in emotionally charged moments such as major victories or sudden defeats. In one session, after an Indonesian team defeated a foreign team, players shouted

collectively, "Nice one! Gas terus, jangan kasih ampun!" This demonstrates how emotional intensity triggers spontaneous bilingual expression, reflecting both linguistic flexibility and collective solidarity. In such contexts, translanguaging functions not only as a linguistic strategy but also as an emotional and social practice that strengthens group identity.

Several informants also reported that this mixed linguistic style extended beyond gaming contexts. For instance, MS, a 17-year-old informant, said that he and his school friends often used terms like "AFK," "lag," or "noob" in everyday conversation. He added that these words made conversations feel "more fun" and signaled their membership in the global gamer community. This illustrates how gaming language expands beyond digital spaces, becoming part of the linguistic identity of Indonesia's urban youth. Thus, hybrid linguistic identity formation occurs not only in virtual worlds but also in daily linguistic practices reflecting cultural globalization.

Further analysis revealed that translanguaging also carries symbolic value in positioning players between two worlds: the formal educational sphere, which evaluates English proficiency by standard norms, and the digital world, which values fluency, spontaneity, and adaptability. Players consciously select linguistic forms appropriate to their social spaces. In gaming, language mixing symbolizes community membership, while in academic contexts they can revert to formal English in accordance with institutional demands. This flexibility demonstrates that their linguistic identities are context-dependent and dynamic, a form of social intelligence reflecting their ability to navigate multiple cultural spaces with ease.

CONCLUSION

This study concludes that international online gaming communities function as authentic, non-formal environments for English language learning among Indonesian adolescents, where language acquisition occurs naturally through meaningful, contextual, and intercultural interaction. Unlike formal language learning, which often emphasizes grammar and testing, gaming experiences encourage spontaneous, collaborative, and contextually reflective use of English. Participants not only demonstrated improved fluency and mastery of technical vocabulary but also developed intercultural communicative competence and hybrid linguistic identities that merge global English with local expressions, reflecting their flexibility and creativity as young speakers in the digital era. These findings affirm that virtual spaces such as the Airaworlf community can serve as productive ecosystems for language learning without relying on formal pedagogical structures, offering new perspectives for applied linguistics and foreign language education in Indonesia. Accordingly, this research contributes to a broader understanding of digital informal language learning, emphasizing the importance of integrating authentic digital experiences into more adaptive, contextual, and learner-centered approaches to language education.

ETHICAL STATEMENT AND DISCLOSURE

This study was conducted in accordance with established ethical principles, including informed consent, protection of informants' confidentiality, and respect for local cultural

values. Special consideration was given to participants from vulnerable groups to ensure their safety, comfort, and equal rights to participate. No external funding was received, and the authors declare no conflict of interest. All data and information presented were collected through valid research methods and have been verified to ensure their accuracy and reliability. The use of artificial intelligence (AI) was limited to technical assistance for writing and language editing, without influencing the scientific substance of the work. The authors express their gratitude to the informants for their valuable insights, and to the anonymous reviewers for their constructive feedback on an earlier version of this manuscript. The authors take full responsibility for the content and conclusions of this article.

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