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Emerging Morphological and Syntactic Patterns in Pakistani English: Evidence from Online Game Chats of Generation Z and Generation Alpha

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Abstract

This study investigates morphological and syntactic innovations in Pakistani English as used by Generation Z and Generation Alpha in online gaming interactions. Rapid expansion of digital communication and gaming communities has led to noticeable linguistic adaptations characterized by informal, efficient, and context-specific language use. The study aims to identify emerging morphological processes and syntactic patterns in game chat discourse while examining them through perspectives such as distributed morphology, word-formation processes, and principles of universal grammar. In addition, syntactic deviations from standard Pakistani English are explored using parse tree analysis and computer-mediated discourse analysis. The research adopts a qualitative design with purposive sampling. The target population comprises individuals born between 1999–2012 (Generation Z) and 2013 onwards (Generation Alpha). A sample of 50 participants was selected based on their active engagement in online gaming, particularly *Roblox*, *Minecraft*, and *Call of Duty* for more than two hours daily and their participation in gaming chat communities. To ensure privacy, data were collected through a survey questionnaire developed from authentic gaming chat scenarios. Data were analyzed using thematic analysis following Clarke and Braun (2006). Findings indicate a preference for simplified morphological constructions and flexible syntactic structures that facilitate rapid and meaningful communication in digital environments, reflecting ongoing linguistic innovation among Pakistani youth.

Keywords: Pakistani English, Morphological Innovation, Syntactic Variation, Computer-Mediated Discourse, Generation Z, Generation Alpha

Introduction

Nowadays, communication dynamics are radically changing at the fastest pace, ever witnessed in history, particularly with the penetration of regular use of social media platforms, video games, and chat applications (Dey & Dey, 2024) in day-to-day life. The digital natives include Generation Z; the people born between 1998 and 2012, and Generation Alpha; the people born after 2012, share similar traits in terms of digital social life that developed and sustained due to social interactions on various online tools and platforms. Both generations are rapidly adapting to the new trends to attain or provide entertainment and monetary benefits to meet the challenges of a fast-paced world. For faster and more effective communication, the language of online communication is developing on the maximum terms of adaptability due to globalization and the

emerging acceptability of innovations and technology. The digital natives' language has established new forms of linguistic expression (Fernando & Premadasa, 2024) not only in neologism; the developing and coining of new words, but the entire structures are changing or rather going through a process of flexibility.

Like other post-colonial countries in the world, Pakistan has also carried forward English as an official language and consider as the language of elite and educated class which is often labeled as "Pakistani English," due to addition and production of many words as per context and religion (Mahboob, 2009) exhibits significant neologism or morphological variations and syntactic deviations that are becoming more visible in these digital interactions. According to Li, Peterson & Wang (2024) in the context of online game chats, this generation frequently modifies English to fit their communication needs, fostering new linguistic patterns. The problem is that despite the ongoing exploration of digital use of language, there is still a significant gap in understanding neologism and syntactical innovations operating within the framework of nativization (Daradkeh, Zibin & Al-Badawi, 2024). This is especially true when examining Pakistani English in online game chats among Generation Z and Generation Alpha. While various studies have investigated game-based learning as an effective approach for these younger generations, contrasting it with traditional teaching methods (Qasim, 2021; Fernando, Premadasa, 2024), much of the existing research tends to focus on broader linguistic patterns or social media platforms. Consequently, this creates a significant gap in comprehending the unique linguistic features that emerge specifically in online gaming contexts. The purpose of this study is to focus on the morphological and syntactic innovations observed in the English language as used by Pakistani youth during online gaming. Game chats, with their fast-paced and informal nature, serve as an ideal platform for such linguistic creativity. The terms, syntax, and linguistic structures created in this environment reflect a blending of localized expressions with global gaming jargon, thus offering insights into how digital culture reshapes language in real time.

The objectives of the study are to identify the morphological innovations in Pakistani English as used by Gen Z and Gen Alpha in game chats, focusing on new word formations and adaptations in the digital gaming context. And to analyze the syntactic structures unique to game chats, highlighting deviations from standard English syntax and explore these variations that reflect the communicative needs of Pakistani youth. The study focuses on two research questions that what common morphological processes like compounding, blending, and affixation influence the unique morphological innovations found in Pakistani English used by Gen Z and Gen Alpha during game chats? And how do syntactic structures of sentences constructed by these generations differ from those of older generation's standard Pakistani English? This study has several limitations that need to be acknowledged. The sample size is relatively small, with only 50 online Pakistani gamers participating, which may not fully capture the diversity of linguistic behaviors across the broader population. The study isbased on semi structured questionnaires to provide a comprehensive understanding of the participants' language use and social interactions, as participants were reluctant to share original game chats due to privacy concerns. Additionally, the focus on Pakistani English might limit the generalizability of the findings to other linguistic contexts. Furthermore, the research is constrained by limited resources and time, which could affect the depth and breadth of the data collection and analysis. This study is significant as it explores the evolving digital-linguistic landscape of Pakistani English within the unique context of online game chats among Gen Z and Gen Alpha. By examining neologisms and syntactic innovations, the research provides insights into how digital communication environment influence language use. This can contribute to our understanding of language evolution in the digital age and inform educational and linguistic policies aimed at embracing these changes (Ahmad, Nawaz, Khan & Bukhari, 2023). Ethical considerations were ensured to give respect and maintain integrity. Participants have provided

informed consent, which means that they attain full awareness of the study's purpose, procedures, potential risks, and benefits before agreeing to take part. Maintaining confidentiality is equally critical; personal data was handled with utmost care, ensuring identities remain protected and information is not disclosed without explicit permission. Participation is voluntary, with individuals free to join or withdraw from study at any stage without facing any consequences. Furthermore, robust data security measures, such as encryption and restricted access, is implemented to safeguard sensitive information from unauthorized access or breaches, upholding trust and compliance with ethical standards.

Literature review

The study of morphological and syntactic innovations in Pakistani English, particularly within the context of game chats among Generation Z and Generation Alpha, is an emerging field that intersects linguistics, digital communication, and sociocultural studies. Generally, morphological innovations refer to the creation of new word forms (neologisms) and structures (syntactic innovations). In the realm of digital communication, these innovations are often driven by the need for brevity and expressiveness. According to Crystal (2011), the internet has significantly influenced language, leading to the emergence of new words, abbreviations, and acronyms. This phenomenon is particularly evident in online gaming, where players frequently coin new terms to describe game-specific actions and experiences (Thurlow & Mroczek, 2011; Marsheva et al., 2024). Generation Z and Generation Alpha frequently utilize an emerging language, often considering slang as a means to enhance the intimacy of their conversations. This highlights the popularity of their language, which is directly linked to advancements in science and technology. The language used by Generation Z and Alpha is purposefully employed by players to establish affiliation, build connections, gain approval, attain rewards or game points, and align themselves with professional gamers. In the past, players in online games expressed a variety of emotions, such as crying, dancing, and waving, through written messages, emotive text using asterisks, and emojis or symbols. These expressions enhanced verbal communication through chat messages in writing, acting as a form of body language later comes the like calls and voice messages with the advancement of technology. However, today many new language structures, including vocabulary and phrases—have been developed to allow for even greater expressiveness both in written and spoken communication. For example, players commonly use "GG," which means "good game," and phrases like "feelin' skibidi right now," indicating a playful or goofy mood.

Moreover, due to extensive multipurpose use of keyboard as a means of movements of players and other game-based activities like shooting, climbing, sprinting and even voice messaging, the need for more efficient communication, players have increasingly adopted slangs and abbreviations such as acronyms and clippings. In gaming environments, where stress levels ishigher and players' hands are often more restricted than when typing on a computer, the use of abbreviations becomes particularly relevant (Nilsson, 2009). Now specifically exploring the context of Pakistani English, the influence of local languages such as Urdu and regional languages, further enriches the morphological landscape. Studies have shown that code-switching and borrowing are common, resulting in hybrid forms that reflect both English and Urdu linguistic features (Mahboob & Ahmar, 2017). This linguistic blending is particularly prominent among younger generations, who are more adept at navigating multiple linguistic and cultural contexts (Khan, 2020). Simultaneously a speaker needs to convey their message using multiple languages, they must adjust their language accordingly (Sagala & Rakhmat, 2019). As a result, Generation Z and Alpha consider multilingualism to be a vital skill in today's society (Rezeki, 2018). When communicating through direct messages on social media platforms or in online gaming communities or leaving

comments, it is not surprising that it has become a prevalent form of digital social language (Muzaffar et al., 2019). Hence, it is evident that the need of rapid communication and expression of emotional charge leads to morphological and syntactical innovations involve changes in sentence structure and grammar. Simultaneously, the informal and rapid nature of digital communication often leads to syntactic simplifications and deviations from standard grammar rules which at initial level is generally referred as slang. Tagliamonte and Denis (2008) found that digital communication platforms encourage the use of non-standard syntactic structures, such as ellipsis and sentence fragments, to convey meaning more efficiently.

In the context of Pakistani English, these syntactic innovations are influenced by both English and Urdu syntax. For instance, the use of Urdu sentence structures within English sentences is a common feature in the digital communication of Pakistani youth (Rahman, 2015). This syntactic hybridity reflects the dynamic and fluid nature of language in digital spaces, where traditional grammatical boundaries are often blurred (Georgakopoulou & Spilioti, 2016). Online gaming provides a unique context for studying linguistic innovations. The interactive and immersive nature of games fosters the creation of a distinct gaming lexicon, characterized by specialized jargon and slang (Consalvo, 2007). This lexicon is constantly evolving, driven by the need for efficient communication and the influence of gaming culture. Research has shown that game chats are rich sources of linguistic data, offering insights into how players negotiate meaning and identity through language (Gee, 2003). In the Pakistani context, game chats among Gen Z and Gen Alpha reveal a blend of English and Urdu, reflecting the bilingual proficiency of these generations (Khan, 2020). The conceptual framework for this study integrates several key linguistic theories to explore how digital communication environments, particularly game chats, influence neologisms and syntactic innovations among younger generations in Pakistan.

Distributed Morphology (DM) is a theoretical framework in linguistics that was introduced by Morris Halle and Alec Marantz in 1993. It suggests that morphological structures are not pre-defined units but are derived through syntactic operations, asserting that syntax is the primary mechanism for generating sound-meaning relationships in both complex phrases and individual words. This theory challenges the traditional separation between morphology and syntax. Instead, DM reorganizes the functions typically associated with the vocabulary across various grammatical components, thereby eliminating the need for a integrated vocabulary or lexicon as understood in earlier linguistic models (Halle & Marantz, 1993; Bobaljik, 2020). In the context of DM, the creation of utterances involves three essential components: the Formative List, which provides input to syntax; the Exponent List (or Vocabulary Items), which offers phonological content after syntax has been applied; and syntactic operations that manipulate these formatives. Notably, roots within this framework are considered to be category-neutral, requiring functional elements for categorization. Furthermore, DM emphasizes that vocabulary items compete for insertion at the point of spell-out, meaning their realization occurs after syntactic operations are completed (Bobaljik, 2020). This model allows for a detailed analysis of morphological phenomena, addressing discrepancies between grammatical combinations and phonological units while offering insights into language structure and usage.In online gaming, this concept isillustrated using specific jargon and slang that players develop to communicate effectively within their communities. For example, terms like "tank" refer to characters designed to absorb damage, while "DPS" (damage per second) describes characters focused on dealing damage. Such terms exemplify how gaming language evolves and adapts to meet the communicative needs of players in fast-paced environments. As players engage in complex interactions during games like *League of Legends* or Roblox, they utilize these specialized terms to convey tactical information quickly and efficiently. Moreover, in the dynamic and fast-paced environment of game chats, the boundaries between morphology and syntax become overlapping. DM helps explain how new

word formations (neologisms) emerge as gamers create and adapt language on the fly or during gaming. For instance, abbreviations, acronyms, and novel compound words often seen in game chats isanalysed as outcomes of these syntactic operations. For example, a term like “noob” (a neologism for a new or inexperienced player) isexamined through DM to understand its morphological construction and syntactic integration in sentences. Thus, this competition for vocabulary and syntactical items in gaming context reflects DM's principles, as players select language that best fits their communicative goals while navigating the dynamics of gameplay.

This also includes Morphological Word Formation (MWF) which is involve analysing how new words are created through processes such as compounding, blending, and affixation. For example, the creation of terms like “noob” (a blend of “new” and “beginner”) is examined to understand the morphological processes at play such as a term like “noob” is analysed through DM to understand its morphological construction and syntactic integration in sentences. Furthermore, Generation Zand Generation Alpha’s use of language also postulates the use to Computer-Mediated Discourse Analysis (CMDA) which is a methodological approach that examines how digital communication retains cultural and social characteristics. It focuses on the unique features of online discourse, such as brevity, informality, and multimodality which means multiple mode like linguistic (written or spoken language), visual (images, graphics), auditory (sound, music) and gestural (emojis) elements. It is provide a framework to analyse how the context of online games influences language use. It can also help to identify patterns in how gamers communicate, including the use of emojis, slang, and other digital-specific language forms. For example, the frequent use of abbreviations like “brb” (be right back) or ‘nrn’ (not right now) or ‘tytl’ (talk to you later) in game chats isstudied to understand how digital environments shape linguistic practices. When examining the language of Generation Z and Alpha, particularly in online gaming, it recalls Noam Chomsky's theory of universal grammar which indicates that humans are innately equipped to acquire language, which includes a shared underlying structure across different languages and therefore, the global players can connect within a single community without knowing their association with different ethnic backgrounds. Additionally, Cognitive Load Theory offers insights into how the demands of processing information can influence learning and performance. As Sweller (1988) states, "Cognitive load during problem solving can significantly affect learning outcomes" (p. 257). This theory is especially relevant for understanding how players simplify or modify syntactic structures during real-time communication. In the fast-paced and high-pressure environment of gaming, players often streamline their language to reduce cognitive load and communicate more effectively. For example, instead of saying "You are the winner," a player might simply type "u win" or use "W" to convey the same message in a more concise manner. Such simplifications highlight how cognitive load impacts the syntactic choices made by gamers.

Furthermore, Parse Tree diagram is a linguistic adaptation through which the frequent use of abbreviations and slang that have become integral to gaming culture is deeply analysed. Terms like "gg" (good game) and "lol" (laugh out loud) serve as quick responses that facilitate smooth interactions among players. By analysing these linguistic patterns, researchers can gain valuable insights into how cognitive load affects communication strategies in gaming contexts. Parse trees is visually representing the syntactic structure of sentences, showing how words are grouped and hierarchically organized. Parse trees isused to analyse the syntactic structures of sentences in game chats, highlighting how neologisms and syntactic innovations fit into the overall sentence structure. For example, a parse tree for a sentence like “gg wp” (good game, well played) can illustrate how these abbreviations function syntactically within the sentence.

The use of parse trees to analyse these chats uncover patterns of syntactic innovation and provide a deeper understanding of how language is used in gaming interactions (Jurafsky & Martin, 2021). The conceptual framework maps out the relationships between these theories and the variables

being studied. It provides a structured approach to explore how digital communication environments, particularly through the lens of CMDA, influence morphological and syntactic changes in Pakistani English. By combining DM, CMDA, UG, CLT and PT, the study aims to capture the multifaceted nature of linguistic innovation in game chats.

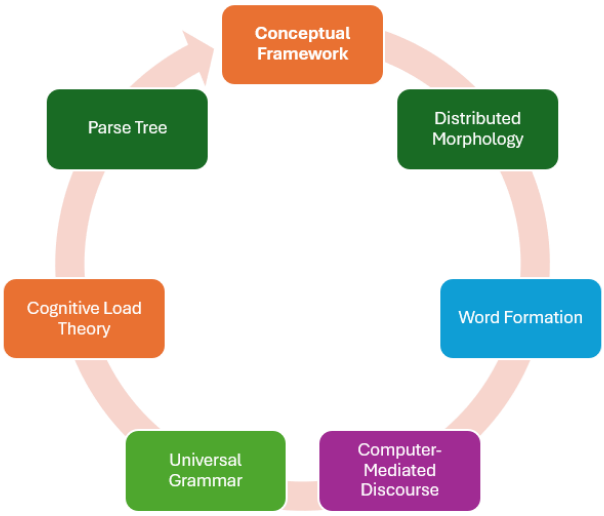

Fig 2.1: The Conceptual Framework for Morpho-Syntactical Analysis of Online gaming language.

To analyse online gaming language based on the conceptual framework there is a need to vigilantly conduct thematic analysis, particularly as outlined by Clarke and Braun (2006) that offers a robust framework for understanding the morpho-syntactic features (Talbot & Coulson, 2023). This analytical approach emphasizes six steps to analyze the themes within qualitative data, making it particularly useful in exploring how players communicate in digital environments. In the context of online gaming, where language is often informal and heavily influenced by the need for efficiency, thematic analysis can reveal the underlying structures and conventions that characterize player interactions. Clarke and Braun's six-step process for thematic analysis offers a clear framework that begins with the first step, familiarization with the data, involves thoroughly reading the dataset to understand its content and context to identify initial impressions and patterns. In a study of online gaming language, for example in this step common phrases or terms used by players is identified. Next, in the generating initial codes step, segments of the data with codes that highlight significant features are labelled. This process helps organize the data into manageable pieces. In the context of online gaming, codes could include "slang," "abbreviations," or "emojis," reflecting how players communicate efficiently. The third step is generating initial themes, where codes are categorized into broader themes that capture significant patterns within the data. For instance, a theme might emerge around "efficiency in communication," encompassing various codes related to gamers' use of abbreviations and slang. This leads to the reviewing themes phase, where the themes are refined and evaluated against the dataset to ensure they accurately represent the data's meaning. The fifth step, defining and naming themes, is to clarify what each theme represents and its relevance to the research question. Finally, the sixth step, writing up, is to compile findings into a coherent narrative that presents the analysis and interpretations. This structured approach ensures that the findings are robust and meaningful while contributing to existing knowledge in the field. For example, this study analyzes preferred choices among linguistic variations to communicate and identify recurring themes related to camaraderie or

competition among players, highlighting how language use fosters community and identity within the game (Hussain & Griffiths, 2014).

Moreover, Clarke and Braun's (2006) framework allow for a nuanced exploration of how morpho-syntactic structures are modified in real-time communication. For instance, in high-pressure situations, gamers may simplify complex sentences into more direct forms that not only reduces cognitive load but also enhances clarity during critical moments in gameplay. By identifying these patterns through thematic analysis, an insight has developed into the cognitive processes that influence language use in online gaming contexts. Connecting conceptual analysis with the thematic analysis through Clarke and Braun's methodology provides a valuable lens for examining the morpho-syntactic characteristics of online gaming language which uncovers how players navigate linguistic challenges while fostering social connections within their gaming communities.

Problem Statement

The rapid expansion of digital communication platforms and online gaming environments has significantly influenced language use among younger generations. In Pakistan, Generation Z and Generation Alpha increasingly interact through online gaming chats where communication is fast, informal, and highly context-dependent. These digital spaces have given rise to emerging morphological formations and unconventional syntactic structures that deviate from the norms of Standard Pakistani English. Despite the growing presence of such linguistic innovations, limited scholarly attention has been given to understanding how these changes manifest in computer-mediated communication among Pakistani youth. Moreover, the influence of gaming discourse on language evolution remains underexplored in the Pakistani context. Investigating these morphological and syntactic innovations is essential to understand contemporary language change, the communicative strategies of younger users, and the broader development of Pakistani English in digital environments.

Research Objectives

- To identify the morphological innovations occurring in Pakistani English used by Generation Z and Generation Alpha during online game chats.
- To examine the word-formation processes (e.g., compounding, blending, abbreviation, and affixation) contributing to these innovations.
- To analyze the syntactic structures used in gaming communication and compare them with those of standard Pakistani English.

Research Questions

1. What morphological processes contribute to the innovative word formations found in Pakistani English used by Generation Z and Generation Alpha in online gaming chats?
2. How do the syntactic structures used by these generations in gaming communication differ from those found in standard Pakistani English?
3. How does the digital gaming environment shape linguistic innovation and communicative practices among Pakistani youth?

Methodology

This study is qualitative research based on Clarke and Braun's thematic analysis using conceptual framework comprises of Distributed Morphology, Morphological Word Formation, Computer mediated Discourse analysis, Universal Grammar, Cognitive Load theory and Parse tree. These concepts are linked together and aid to analyse communication patterns to observe morphological and syntactical innovations in game chats. For this design the utilized research tools is a scenario-based, semi structure, surveys questionnaire, where a mix of close ended and open ended questions in five sections has been probed. The research population is Pakistani users from Gen. Z (born 1997-2012) and Gen. Alpha (born 2013-present) mainly based in Karachi Pakistan, however some

respondents are also from other cities of Pakistan or recently move abroad. The respondents are the active participants in online game chats and are quite experienced. This study has conducted through purposive sampling method in which the sample size is 50 participants who are active gamers who mostly exist in same online gaming community. Many respondents know each other due to online communities but all respondents belong to a diverse range of socio-economic backgrounds from Karachi, Pakistan.

Data Collection

These 50 participants have completed semi-structured survey questionnaire to provide information about preferred linguistics choices in their social-emotional interactions in gaming environments. This semi structured survey questionnaire is meant to provide maximum linguistic choices with which they can identify themselves within comfort zone while keeping intact the confidence for their privacy to gain deeper insights into their linguistic behaviours and perceptions.

Data Analysis

This study is based on Clarke and Braun's thematic analysis to examine the morpho-syntactical innovations exist in Pakistani English as often heard and observed while interacting with Generation Z and Generation Alpha. This analysis is rooted in a conceptual framework that intersects with various linguistic theories, including distributed morphology, morphological word formation, computer-mediated discourse analysis, universal grammar, cognitive load theory, and parse trees. The primary aim is to attain understanding about how these innovations signify changes in the everyday language practices of younger generations. Thematic analysis, as described by Braun and Clarke (2006), serves as a qualitative method for identifying patterns or themes within data. Based on the six steps of Clarke's and Braun Thematic analysis model, the first step is to identify the themes on which the survey questions are constructed that are based on three popular games: Roblox, Mine craft and Call of Duty. The thematic identification aids in finding out the most common responses in particular scenarios. The responses lead to comprehend various morpho-syntactical innovations occur to serve the need of communication in the game-based scenarios. Each theme reflects a situation or a scenario that a player encounters while going through different levels of the game which gradually raises the difficulty level.

Theme 1: Resource Needs

This theme has four scenarios. The first scenario is Roblox building challenge with a question, "you're building a house but need more materials. What do you say to ask for help?". 28% responses are "Yo, who's got extra wood? My house needs some serious help!" 24% are either "Fam, I'm low-key struggling here—who's got some extra wood or stone?" or "Yo, who's got extra wood? My house needs serious help!" The second scenario Roblox Item Request has a question, "You need a specific item to finish a quest. How do you ask someone for it?" 36% responses are "Need that [item] to finish my quest—anyone spare?" while 32% are "Yo, anyone got an extra [item]? Help… a friend out?" and 18% are "Hook me up with [item]? Almost done here!".

The third scenario is Roblox Donation Request has a question, "You're raising funds for a game project. How would you ask for support?" 48% responses are "Got a cool idea, need some funding. Any help?" 22 % are "Starting a new project – any donations would be clutch!" 16% are "Could use some coins for a new build. Anyone down to pitch in?" And the last scenario is Call of Duty Supply Drops has a question, "You are short of supplies how is you notifying team?"44% responses are "Supply drop spotted—move fast before it's gone!" 24% are "Package incoming, hustle if you need gear!" and 14% are "Loot inbound! Grab it while it's hot!". In all four scenarios

the rest of the responses are only selected by 1 to 2 % respondents therefore they is safely considered as insignificant and hence not included.

Theme 2: Advice and Suggestions

This theme has three scenarios. The first one is Roblox Obby (obstacle) Challenge with the question, "You're about to attempt a difficult jump. What advice would you give to others?" 28% responses are "Don't overthink it, just yeet yourself!" 26% are "Easy dub if you time it right. Don't stress." And 20% are "Low-key just hold jump and pray… trust me." The second scenario is Roblox Escape Room Hint with the question, "You know the way out of a tricky room. How would you guide others?" 36% responses are "Hint: look behind the painting – trust me." 22% are either, "Shortcut alert! Tap the floor tile on the left." or "Psst, it's the lever! Pull it and we're out." The last scenario is Roblox Lava Escape with a question, "Lava is rising in the level. How would you motivate your friends to hurry?" 36% responses are "Lava alert! Don't get cooked, hurry up!" 32% are "Lava's coming! Run or it's game over!" 16% are "Move it or lose it – lava's not waiting." In all the other responses are significantly low and hence ignored.

Theme 3: Asking help and Giving Alerts

The third theme has seven scenarios. The first one is Minecraft Mining Adventure with the question, "You've found a rare resource underground but sense danger nearby. What's your warning?" 32% responses are either "Found diamonds! But it's sus down here… need backup?" or "Bruh, creeper alert! Back me up or I'm toast." Whereas 14% are "OMG, there's something sketchy down here. Who's got my back?". The second scenario is Minecraft Creeper Alert with a question, "A creeper is near your base. How would you alert everyone?" 40% responses are "Creeper at base! Y'all watch out before we go boom." 20% are "Uh oh, green dude inbound. Someone handle it?" 18% are "Creeper vibes… RUN, unless you like respawning."

The third scenario is Minecraft PvP (player versus player mode) Alert with the question, "Another player is approaching your area. How do you signal a potential threat?", 32% responses are "Stay alert, someone's coming our way. Could get real." 24% are "Heads up – random approaching. Might get sus." 20% are "Got a player incoming! Everyone ready to go PvP?" The fourth scenario is Minecraft Nightfall Prep, with the question, "Night is coming, and you need shelter. How would you alert your group?" 34% responses are "Getting dark… everyone, find cover!" 30% are "Sun's going down! Let's get a base built ASAP", and 18 % are "Nightfall – let's go shelter up, fam!"

The fifth scenario is Minecraft Food Supply Alert with the question, "Running low on food, and need to gather supplies. How would you announce this?" 48% responses are "We're low on food, who's down fora supply run?" 40% are "Running outta food, let's gathersome berries", and 12% are "Need more snacks! Can't survive on empty." The sixth scenario is Call of Duty Grenade Alert with the question, "You see a grenade near a teammate. How do you warn them?" 32% responses are "Heads up! Grenade incoming!" 24% are "Grenade, bro! Move it NOW!" and 20% are "Move! Grenade by your feet, quick!" The last scenario is Call of Duty Sniper Position with the question, You see sniper position, how you tell your teammates should stay hidden?" 36% responses are "I'm scoped in, stay low and stay unseen."26% are "Sniper zone, don't pop out or it's game over!" and 14% are "Found a nest, but stay ghost—eyes are everywhere!" All the other responses are significantly low and hence ignored.

Theme 4: Collaboration and Sharing

The theme has four scenarios. The first scenario is Roblox Pet Trading with the question, "You want to trade pets with a friend. How do you start the conversation?" 32% responses are "Trade pets? Got something rare to offer!" 30% are "I'm down to trade – got anything cool?" and 20% are "I'll give you my neon if you got something hype!" The second scenario is Minecraft Animal

Farm with the question, “Your friend needs help finding animals to breed. What do you say?” 36% responses are “Who’s down to help with the animal farm? I’ll split rewards.” 28% are "How about a pet swap? I’m looking for something rare." And 24% are "Yo, got any pets to swap? Let’s make a deal!"
The third scenario is Minecraft Map Exploration with the question, “You found a rare biome. How would you share this with the group?”, 30% responses are “Yo, found the rare biome! Who’s joining?”, 28% are “This biome’s epic! Let’s explore together.” And 26% are “Got a new spot on the map, let’s check it out!” Whereas the last scenario is Minecraft Treasure Hunt with the prompt, “Signaling Discovery” 34% responses are "Treasure chest found! Rally up for the loot!" 26% are "We hit the gold! Over here for the goodies!" and 20% are "Jackpot! Treasure over here, don’t miss out!" However other responses are only selected by 1 to 2 % respondents, so they are considered insignificant.

Theme 5: Emergency Backup and Help Requests

The theme has three scenarios. The first one is Call of Duty Team Match with the question, “Your team is under heavy fire, and you need backup. How do you call for help?” 36% responses are “Guys, I’m pinned! Pull up or I’m done for!” 24% are “Y’all, I need backup like right now!! Let’s clutch this!” and 20% are “Guys, I’m pinned! Pull up or I’m done for!” The second scenario is Call of Duty Revive Request with the question, “You’re down and need reviving. How do you quickly ask for assistance?” 30% responses are either “Help! Downed over here – anyone got me?” or “Yo, I’m down… revive or I’m spectating.” Whereas 24% responses are “Not like this, guys. Need a revive ASAP!”
The last scenario is Call of Duty Base Defense with the question, “Your team’s base is under attack. How do you coordinate defense?”38% responses are “We’re under attack! Hold the fort, don’t let ‘em through!” 22% are “Everyone on defense! Let’s make ‘em regret coming.” Whereas 20% responses are “Defend the base! Let’s give ‘em a tough time.” In all the scenarios the other responses are significantly low and hence ignored.

Theme 6: Coordination

The last theme has three scenarios. The first one is Call of Duty Cover Fire with a question, “A teammate is running towards you. How do you tell them you’ll cover them?” 36% responded as “Keep going, I’ll cover from here!” 30% “Move up, I got your back!” and 20% “I got you, run for it!” The second scenario is Call of Duty Silent Mission with the question, “Your team must stay quiet to avoid detection. How do you remind them?” 28% respondents have either replied “No noise, guys! Let’s sneak through” or “Not a sound – we gotta move in like ghosts.” Whereas 24% responded as “Stay quiet or we’re toast. Stealth mode!” The last scenario is Call of Duty Vehicle Extraction with the question, “You’ve found an escape vehicle. What’s your instruction to the team?” 34% responses are “Vehicle’s here, everyone hop in!” 26% responses are “Ride’s ready! Move fast before they catch on.” And 22% responses are “Extraction point secured – roll out!” In all four scenarios the rest of the responses are only selected by 1 to 2 % respondents therefore are considered insignificant and hence not included.

Discussion / Findings

The above thematic analysis identified most common responses uttered either orally or in writing while playing which is now discuss in detail based on conceptual framework. The table given below is however displaying few, most common utterances in particular game-based situations.

Themes	Most Common Responses
Theme 1	“Yo, who’s got extra wood? My house needs some serious help!”
	"Fam, I’m low-key struggling here—who’s got some extra wood or stone?"
	“You need a specific item to finish a quest. How do you ask someone for it?”
Theme 2	“Don’t overthink it, just yeet yourself!”
	“Low-key just hold jump and pray… trust me.”
	“Psst, it’s the lever! Pull it and we’re out.”
Theme 3	“Found diamonds! But it’s sus down here… need backup?”
	“Bruh, creeper alert! Back me up or I’m toast.”
	“OMG, there’s something sketchy down here. Who’s got my back?”.
Theme 4	“Trade pets? Got something rare to offer!”
	“Yo, found the rare biome! Who’s joining?”,
	“This biome’s epic! Let’s explore together.”
Theme 5	“Guys, I’m pinned! Pull up or I’m done for!”
	“Yo, I’m down… revive or I’m spectating.”
	“Not like this, guys. Need a revive ASAP!”
Theme 6	“Keep going, I’ll cover from here!”
	“Move up, I got your back!”
	“Extraction point secured – roll out!”

Table 2: Most Common Response on Game Based Scenarios

The above table is utilized to show how Distributed Morphology principles such as decomposition into morphemes, syntax-to-morphology relations, and contextual interpretation helps realizing the informal lexical changes bringing in use the slang terms like dub, yeet and fam to indicate sub standard morphological elements. Also, DM helps to understand a common use of roots words like wood, and hook to serve the need of faster communication in these games. DM principles also signify how syntax adjusts to accommodate informal and fast communication typical of game environments. The table given below serves the purpose of a morphological and syntactic analysis of the selected responses.

Sentence	**Decomposition (Morphemes/Roots)**	**Syntax-Morphology Interface**	**Operation/Interpretation**
"Yo, anyone got an extra [item]? Help… a friend out?"	yo (interjection), extra (adjective), item (noun)	Root + discourse marking	Casual plea for resources emphasizes interpersonal tone.
"Hook me up with [item]? Almost done here!"	hook (verb), me (pronoun), up (preposition)	Argument structure: verb-prep interaction	Informal phrasing for immediate resource assistance.
"Shortcut alert! Tap the floor tile on the left."	shortcut (noun), tap (verb), tile (noun)	Compound noun with specific action instruction	Direct command for efficient progression.
"Psst, it’s the lever! Pull it and we’re out."	lever (noun), pull (verb)	Syntax guides object-to-action mapping	Low-key advisory with an encouraging undertone.
"Heads up, creeper near the base!"	heads up (idiom), creeper (noun)	Root-to-object mapping for game-specific term	Alert using contextual, in-game terminology.
"Silent mode activated. Let’s sneak past them."	silent (adjective), mode (noun), sneak (verb)	Syntax aligns action with descriptive state	Combines stealth mechanics with a planned action.

Table 3 The Distributed Morphological Analysis of Game Based Responses.

In the chosen responses there are number of word formation processes evident blatantly, however some word formation requires careful analysis. The word formation processes are identified in the table given below.

Sentences	Word Formation Process	Explanation
"Yo, who's got extra wood? My house needs some serious help!"	Clipping (yo)	"Yo" is a clipped form of "your" or a colloquial interjection.
"Fam, I'm low-key struggling here—who's got some extra wood or stone?"	Compounding (low-key)	Combines "low" and "key" to create a slang term indicating modest intensity.
"You need a specific item to finish a quest. How do you ask someone for it?"	Affixation (specific)	The root "specify" is modified with the suffix "-ic" to form "specific."
"Need that [item] to finish my quest—anyone spare?"	Derivation (finish)	Derived from "fin" with the suffix "-ish" to denote completion.
"Got a cool idea, need some funding. Any help?"	Borrowing (idea)	Borrowed from Greek "idea" (appearance, thought).

Table 4 The Morphological Word formation Processes in Game Based Responses.

The above table is a comprehensive analysis of Morphological Word Formation Types that includes; 'Clipping', shortening of words, particularly in informal speech for e.g., *yo, dub* is observed, 'Compounding' which is the combining of two root words like *low-key, treasure chest* is also present, 'Derivation' which is the addition of prefixes or suffixes to root words such as specific and extraction is also there. Then there is 'Conversion' occurs while changing word class without altering form for e.g., *trust, herd*. The process of 'Blending' which is merging parts of words like *biome, heads-up* is also identified. The process of 'Borrowing' or adopting from other languages for e.g., *loot, lava* also becomes common. Surprisingly 'Neologism' or newly coined words like *yet* is there. Then a frequent use of 'Acronym' in the terms of 'Abbreviations' forming pronounceable words like *PvP* is there. And in the end 'Onomatopoeia' or Words imitating sounds for e.g. *psst* is also identified through the table.

The 'Computer-mediated discourse analysis' emphasizes the impact of digital communication on language use. The research explores how platforms like social media and online gaming influence morpho-syntactical choices among Generation Z and Alpha. The CMDA framework identifies several dimensions for analysis, including linguistic features, interaction patterns, and discourse functions. This matrix incorporates elements such as orthographic/typographic strategies, interactional coherence, speech acts, turn-taking, and pragmatic strategies.

Sentence	Linguistic Features	Interactional Coherence	Speech Acts	Pragmatic Strategies	Turn-Taking Dynamics
"Yo, who's got extra wood? My house needs some serious help!"	Informal tone, use of "Yo," contraction "who's"	Directly requests assistance	Request	Persuasion, urgency implied	Initiates conversation
"Fam, I'm low-key struggling here—who's got some extra wood or stone?"	Slang ("Fam," "low-key"), casual punctuation	Aligns with informal online culture	Request	Builds rapport through shared vernacular	Initiates, expects a supportive reply
"Need that [item] to finish my quest—anyone spare?"	Ellipsis ("Need that"), informal tone	Direct question, assumes community assistance	Request	Assumes shared goal, highlights necessity	Prompting response
"Supply drop spotted—move fast before it's gone!"	Command structure, urgency emphasized	Highlights a time-sensitive opportunity	Alert	Creates a sense of immediacy and action	Encourages rapid action from group
"Shortcut alert! Tap the floor tile on the left."	Informative, clear instruction	Facilitates efficiency and shared knowledge	Instruction	Encourages collective strategy	Turn shared knowledge into action

Table 5 The Computer Mediated Discourse Analysis in Game Based Responses.

In the above table several linguistic features are identified such as slang, punctuation, sentence structure, and stylistic choices typical of computer-mediated communication. Moreover, to specify how coherence, the sentences are analysed based on discourse flow. The Speech Acts are also identified in the table to classify sentences based on functions like requesting, alerting, or instructing. The pragmatic strategies are also analysed in terms of social or cultural requirements for example, humor, urgency, or rapport-building. And in the end the table has identified the Turn-Taking Dynamics to analyze how the utterances are initiated, responded and maintained conversational flow.

To extend the discussion, Universal Grammar (UG) and Cognitive Load Theory (CLT) is also applied on similar sentences. Universal grammar posits that all human languages share a fundamental structural basis. This study investigates whether the observed morpho-syntactical innovations align with universal grammatical principles or diverge from them due to considerations related to cognitive load. Cognitive load theory suggests that the complexity of language can affect processing efficiency; thus, innovations may emerge as speakers strive to minimize cognitive effort while communicating in fast-paced contexts. The table given below explores relation to the innate grammatical framework (UG) and the cognitive effort involved in processing and responding (CLT).

Sentence	Universal Grammar (UG)	Cognitive Load Theory (CLT)
"Yo, who's got extra wood? My house needs some serious help!"	Relies on innate question formation structures (WH-questions). Informal register aligns with UG adaptability.	Intrinsic load: simple request. Extraneous load minimized with casual phrasing.
"Fam, I'm low-key struggling here—who's got some extra wood or stone?"	Uses embedded clauses and slang. Demonstrates UG's ability to accommodate variation in linguistic styles.	Higher cognitive load due to added emotional undertones and multiple material requests (wood and stone).
"Need that [item] to finish my quest—anyone spare?"	Elliptical construction shows how UG accommodates context-specific ellipses.	Germane load: focuses attention on the task completion goal, supporting problem-solving within a game scenario.
"Fam, lava is rising—move it!"	Registers an exclamatory and directive statement, reflecting UG's universal expressive patterns for urgency.	Cognitive load increases due to urgency, but split attention is reduced by short and clear phrasing.
"Yo, loot inbound! Grab it quick!"	Integrates UG's use of imperatives and slang to deliver time-sensitive instruction.	Cognitive load is increased by urgency but is balanced with clear and concise language.

Table 6 The Universal Grammar and Cognitive Load Theory in Game Based Responses.

The above table utilizes Universal Grammar (UG) to demonstrate innate grammatical structures like WH-questions, ellipses, and imperative forms. It also shows the adaptability to informal registers, game-specific contexts, and new lexical items. Whereas the Cognitive Load Theory aids in analysing intrinsic load to comprehend utterances due to task complexity, extraneous load to understand pressure due to unnecessary effort to get the maximum output, and germane load which signifies the learning-focused cognitive load.

The parse trees offer a visual representation of syntactic structures. By examining the parse trees associated with innovative constructions in Pakistani English, the study seeks to clarify how these structures differ from conventional English syntax. Such comparisons can provide significant understanding into the cognitive processes involved in language production among younger speakers.

Sentence	Phrase Structure Components	Parse Tree Description
"Yo, who's got extra wood? My house needs some serious help!"	WH-question (CP), Main clause (TP), VP (verb phrase), NP (noun phrase)	Root: CP → Subtree 1: TP (Subject: NP) → VP (Predicate: "got extra wood")
"Fam, I'm low-key struggling here—who's got some extra wood or stone?"	Address term (NP), Main clause (TP), VP, Embedded WH-question (CP)	Root: NP → TP (Subject: "I'm low-key struggling") → CP ("who's got wood/stone")
"Need that [item] to finish my quest—anyone spare?"	VP (verb phrase), Infinitive clause, Embedded question (CP)	Root: VP ("Need that [item]") → Subtree: Infinitive clause ("to finish quest"), CP ("anyone spare")
"Got a cool idea, need some funding. Any help?"	VP (verb phrase), NP (noun phrase), Fragmentary interrogative	Root: VP ("Got idea") → Conjoined VP ("Need funding") → Fragmentary NP ("Any help")
"Anyone got some [item]? Let me borrow it!"	Embedded question (CP), Imperative clause	Root: CP ("Anyone got [item]?") → VP ("Let me borrow it")

Table 7 The Comparison of Phrase Structure and Parse Tree in Game Based Responses.

The table given above represents syntactic components like NP, VP, TP, CP, and clauses while decomposing sentences. It also categorizes the phrase, and clause structures and shows the sentence hierarchy. It also represents the analyses through Parse tree structure to show the integration among syntactic components through subtrees for embedded clauses, sentence coordination and component dependencies. The table identifies that to the point instructions and concise phrasing has become common in the language structures of Generation Z and Alpha as it generally reduces cognitive load, enhances task performance, and cater the practical, problem solving, collaborative and interactive gaming environment.

Conclusion

The findings reveal notable morph-syntactic innovations in Pakistani English used by Generation Z and Generation Alpha in online gaming communication. Thematic analysis shows a strong preference for simplified grammatical structures and efficient linguistic forms suited to rapid digital interaction. Hybrid expressions combining English with local linguistic influences also emerged, reflecting the interaction between global digital culture and local language practices. These innovations further indicate that language functions as a marker of generational identity within gaming communities. Overall, the study highlights the dynamic nature of language change shaped by technological environments and evolving communicative needs. Despite its limited sample size, the research contributes to ongoing discussions in morphology, syntax, and sociolinguistics by illustrating how digital spaces influence linguistic practices. Future studies with larger and more diverse datasets are recommended to further examine language innovation in digital discourse.

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