

SLANGS IN GEN ALPHA–Z: A NATURAL LANGUAGE PROCESSING ANALYSIS AND ITS IMPACT IN EDUCATIONAL CONTEXT

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Digital education; Natural language processing; Slang language; Social identity;	<i>Slang, especially among Generations Alpha and Z, functions as a dynamic tool for expressing identity, group belonging, creativity, and resistance to norms, shaped by digital platforms and used to signal cultural affiliation, shared values, and emotional stance in everyday communication. This study aims at evaluating the forms of slang language used by Generations Alpha and Z, linguistic patterns indirectly represent or construct social identity the influence of those slangs in educational context. This study followed a rigorous process to ensure data relevance, validity, and ethics by collecting publicly available Instagram texts from Generations Alpha and Z using purposive sampling. Data from public accounts were anonymized, scraped manually and automatically, then preprocessed through cleaning, tokenization, and normalization. NLP techniques and qualitative content analysis were applied to identify slang patterns and interpret their social meanings, revealing how slang reflects identity and cultural practices in digital youth communication. The analysis concludes that slang usage among Generations Alpha and Z on digital platforms like Instagram serves not merely as casual expression but as a communicative strategy that reflects social identity, group affiliation, and cultural values. Through a combination of computational and qualitative analysis, the study reveals that slang functions to assert community membership, convey emotional attitudes, and construct self-image in digital spaces. The emerging linguistic patterns highlight the significant role of informal language in digital literacy practices and educational interactions, underscoring the need for greater attention to youth language in both academic and cultural contexts. Previous studies have examined youth slang, but few have explored its role across digital platforms in shaping identity, especially using both computational and sociolinguistic approaches. The influence of slang in educational contexts also remains underexplored. This study addresses these gaps by analyzing slang's forms, functions, and meanings in digital youth communication.</i>

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INTRODUCTION

Slang, as a dynamic and informal subset of language, serves as a powerful linguistic tool for expressing in-group membership, creativity, and resistance to linguistic norms. Among

younger generations, particularly Generations Alpha and Z, who have grown up immersed in digital communication, slang plays a central role in constructing and performing social identity (Hu & Cheung, 2024). These generations, often labeled as digital natives, are shaped not only by face-to-face interactions but also by their engagement with digital platforms such as TikTok, Discord, Instagram, WhatsApp, and YouTube. These spaces facilitate rapid communication, creativity, and the viral spread of trends, including linguistic innovations like slang. On these platforms, slang undergoes constant transformation, hybridization, and adoption across communities, often influenced by memes, gaming jargon, internet culture, and multilingual exchanges. As a result, slang has evolved into a linguistic code deeply embedded in the everyday communication practices of youth (Nashrudina et al., 2025; Ting, 2024).

Slang operates not merely as playful vocabulary (P. Yang et al., 2025), but as a tool for the expression and negotiation of social identity (Wang et al., 2025). In sociolinguistics, social identity refers to how individuals construct a sense of belonging to social groups through language whether it is age, gender, ethnicity, class, or subculture. Among Generations Alpha and Z, slang is a performative act (Abbas et al., 2025), one that communicates alignment with particular cultural communities, peer groups, or values. Expressions such as “bucin,” “mabar,” “gaskeun,” or “nolep” are not simply linguistic novelties, they are cultural signals. They index shared experiences and values among users, while also distinguishing “insiders” from outsiders. The strategic use of slang reflects the user’s attempt to belong (Djamereng et al., 2024), to resist formality, to express humor, irony, emotion, or even detachment. Language in this case is more than a communicative tool, it becomes an identity marker (Bazana, 2024), one that encapsulates belonging, attitude, and social affiliation (Pérez-Torres, 2024).

The influence of digital platforms on language use cannot be understated (Al Mamoory & Al- Khazaali, 2024). The design and culture of each platform shape how language is used. On TikTok, where communication is short-form and video-based, captions and comments are filled with slang that reflects trending topics (Machin et al., 2025). Discord fosters real-time, text-heavy group chats that encourage informal, subcultural expressions, especially among gaming communities. Instagram users rely heavily on visual cues supported by captions or short phrases that are often slang-infused, and YouTube comment sections are a space for performative participation, sarcasm, and digital in-group expressions (Gongane et al., 2024). These environments not only provide the medium for slang to flourish, but also shape its function and visibility. What results is a network of platform-specific vernaculars distinct forms of slang usage that reflect the social and cultural norms of each digital space (Maathuis & Chockalingam, 2023).

Importantly, this use of slang intersects with broader questions about language variation, context, and appropriateness (Boutet et al., 2025). For young users, switching between digital slang and more formal registers is often intuitive in social settings but becomes complex in educational contexts (Maathuis & Chockalingam, 2023). In academic or professional environments, the habitual use of informal language can clash with expectations for standard, structured expression. Students may inadvertently carry over linguistic features from their digital lives, abbreviations, acronyms, emojis, and slang terms into their academic writing or classroom speech (Pérez-Torres, 2024). This phenomenon reveals a growing tension between the fluidity of digital language practices (Mandal, 2024) and the rigidity of institutional language standards. Such mismatches emphasize the importance of promoting language awareness: the ability to recognize, adapt, and appropriately apply different registers of language depending on audience, purpose, and context.

From a pedagogical perspective, this calls for a reframing of how slang is viewed in educational settings (Mandal, 2024). Rather than dismissing it as linguistic decay, educators can treat students’ use of slang as evidence of linguistic creativity (Cayır & Çalışkan, 2025) and adaptability. In doing so, they can guide learners to understand how language operates

differently across contexts. This is where critical language awareness and digital literacy converge. Critical language awareness (Teo & and Cui, 2023) encourages students to reflect on how their language choices relate to power, identity, and culture. Digital literacy, in turn, empowers them to navigate online environments (Thellefsen & Friedman, 2024) responsibly and effectively. Together, these literacies support a holistic understanding of language as both a social and functional tool.

The relationship between slang and identity is particularly significant in digital settings (Coleman, 2010), where communication is multimodal, immediate, and performative. Users do not merely exchange messages, they curate personas. Through the consistent use of particular slang terms, emojis, memes, and syntactic styles, individuals construct digital selves that align with specific social identities. For instance, someone who uses terms like “flexing,” “auto cuan,” or “santuy” may be aligning with influencer culture or motivational youth subcultures. Others who use expressions like “wibu,” “nolep,” or “gabut” may be signaling affiliation with anime fandoms or introverted digital communities. These linguistic signals function similarly to fashion or musical taste, they are stylistic choices that express self-concept and social belonging.

Moreover, the use of slang should be viewed not as an isolated phenomenon but as part of broader linguistic and cultural trends (Zappavigna & and Logi, 2023). The globalization of communication, the proliferation of youth-driven content, and the rise of transnational digital communities all contribute to a linguistic environment in which boundaries are fluid and meanings are negotiated (Sengul, 2025). In this environment, slang operates as a living resource adaptive, responsive, and embedded in social life. It not only reflects the identities of its speakers but also helps shape them. In this way, slang is a lens through which to view larger questions about language, identity, and education in the 21st century. To analyze these dynamics effectively, a combination of sociolinguistic and computational methods can be employed. Natural Language Processing (NLP) techniques (Shahbaz & Mushtaq, 2025), such as clustering, topic modeling, or association rule mining, allow researchers to trace patterns of slang use across large digital corpora (Z. Yang et al., 2025). These patterns can then be interpreted through the lens of sociolinguistic theory to reveal how certain expressions correspond with identity markers, social attitudes, or group behaviors (Lee et al., 2024). For example, frequent co-occurrence of terms like “bucin,” “gabut,” and “anjay” in certain communities may suggest a shared identity framework centered on emotional expression and youth relatability. Such findings not only enrich academic understanding but also have practical implications for curriculum design, digital content moderation, and educational policy.

The implications of slang usage in youth digital culture extend beyond the linguistic domain (Dynel, 2023). They touch on questions of inclusion, voice, and representation. For many young people, especially those marginalized by traditional academic norms, digital slang offers a means of self-expression and social validation. It is a language of empowerment, one that reflects lived experience and resists institutional gatekeeping. Recognizing this empowers educators to create more inclusive, culturally responsive classrooms where all forms of language are acknowledged and valued.

Grounded in the sociolinguistic significance of youth language practices in digital communication , this study seeks to explore how Generations Alpha and Z use slang as both a linguistic and social tool. As digital natives, their everyday interactions are shaped by the fast-paced, informal, and multimodal nature of online platforms, where slang plays a central role in shaping peer identity and cultural belonging. Understanding the linguistic patterns and social meanings embedded in this form of communication is essential for gaining insights into how language operates in contemporary youth culture.

Therefore, this study is guided by the following research questions: What are the forms and functions of slang language used by Generations Alpha and Z? and How can linguistic

patterns indirectly represent or construct social identity? And how is the influence of those slangs in educational context. The objective of this study thus, is to investigate the role of slang language in shaping communication and identity among Generations Alpha and Z. Specifically, it seeks to analyze the various forms and communicative functions of slang commonly used by these generations within digital platforms. By examining how slang operates in everyday online interactions, the study aims to uncover the linguiss pattern that enable youth to express attitudes, affiliations, and cultural belonging. Furthermore, the research explores how these linguistic patterns indirectly represent or construct social identity in educational context. Through this investigation, the study intends to contribute to a deeper understanding of how informal language practices reflect broader sociolinguistic dynamics in contemporary youth culture.

Although numerous studies have explored the linguistic features and social functions of slang among youth, there remains a significant gap in research that examines the intersection of digital slang usage, social identity construction, and language awareness within educational contexts. Existing literature often focuses on either the lexical or phonological characteristics of slang or its role in informal peer communication, without fully addressing how these linguistic practices shape or reflect the social identities of Generations Alpha and Z in digital environments. Moreover, few studies consider how the widespread use of digital slang may influence students' understanding of language appropriateness, especially in formal academic settings. This gap is particularly relevant as digital natives increasingly navigate between informal online discourse and the formal language expectations of school and academic communication. A comprehensive investigation that bridges sociolinguistics, digital literacy, and educational linguistics is therefore necessary to understand how youth language practices impact broader language norms and pedagogical strategies.

RESEARCH METHOD

To prepare for this study, a rigorous process was undertaken to ensure the relevance, validity, and ethical appropriateness of the data collection and processing procedures. The data source was selected based on the digital platforms most frequented by Generations Alpha and Z on Instagram, which is known for high volumes of user-generated content rich in slang usage. A purposive sampling strategy was used to collect publicly available textual data such as captions, comments, and chat excerpts, targeting linguistic instances that explicitly featured contemporary slang expressions. To comply with ethical standards, only data from public accounts or communities with open access policies were included, and all user-identifiable information was anonymized or excluded. Data collection was conducted using a combination of manual scraping and automated crawling tools, ensuring a diverse and representative corpus of digital slang. After initial collection, the data underwent preprocessing, including cleaning (removing emojis, HTML tags, and non-linguistic noise), tokenization, and normalization (standardizing informal variations and abbreviations). These steps enabled the application of Natural Language Processing (NLP) techniques such as keyword frequency analysis, part-of-speech tagging, and semantic clustering to identify dominant slang terms and their contextual usage.

Research Design

This study adopts a qualitative exploratory research design with integrated digital linguistics and sociolinguistic analysis. Given the dynamic, context-dependent nature of slang and its role in constructing social identity, an exploratory design is appropriate for uncovering patterns that may not be immediately apparent through traditional methods. The research is situated within a digital ethnographic framework, observing and analyzing naturally occurring language in online environments where Generations Alpha and Z actively communicate. The design incorporates corpus-based content analysis, supported by Natural Language Processing (NLP) tools, to analyze large-scale user-generated data from platforms such as TikTok,

Discord, and Instagram. Through this approach, the study aims to investigate both micro-level linguistic features (e.g., forms and functions of slang) and macro-level social meanings (e.g., group alignment, identity performance). By combining manual qualitative coding with computational linguistic analysis, the research design ensures both depth and scalability in capturing the ways digital slang reflects and shapes the social identity of youth. This interdisciplinary design bridges applied linguistics, sociolinguistics, and digital communication studies, making it suitable for answering complex questions about language use and identity in contemporary digital contexts.

Research Participants

The population targeted in this study consists of members of Generations Alpha and Z who actively engage in digital communication through online platforms Instagram. These individuals are characterized as digital natives, typically aged between 10 and 26 years old, and are selected based on their observable participation in digital communities where slang is frequently used. Given the nature of the study which analyzes language use in naturally occurring online contexts, participants are not recruited directly through interviews or surveys, but rather through purposive sampling of publicly available user-generated content.

A sample corpus was constructed from digital interactions, specifically comment threads, captions, chat logs, and discourse excerpts that contain slang expressions. Approximately 5,000 text entries were collected from public domains, ensuring that the data reflect a broad and diverse representation of youth language across platforms and subcultures. No personally identifiable information (PII) was collected or analyzed, and all data were anonymized to protect user privacy. The sampling strategy was designed to ensure linguistic richness, age-group relevance, and diversity of slang usage across different online communities. This indirect and ethically responsible sampling approach allows the study to examine how linguistic patterns emerge organically in real-world digital interactions among youth.

Instruments

The primary instrument for data collection in this study is a structured digital observation framework combined with web-scraping tools and a linguistic annotation scheme. Given the nature of the research, which involves analyzing naturally occurring language in digital environments, no physical instruments or questionnaires were used. Instead, data were collected from publicly accessible digital platforms Instagram, using Python-based web scraping tools such as SnScrape to extract relevant user-generated content that includes slang expressions. To guide the extraction process, a coding protocol was developed that defines criteria for identifying slang, including linguistic markers such as non-standard spellings, abbreviations, emojis, loanwords, and creative morpho-syntactic variations. A slang keyword list was constructed based on existing youth lexicons and updated iteratively during the data collection phase to include emerging or context-specific terms.

Data Analysis

The data analysis in this study integrates both computational and interpretive approaches to comprehensively examine the forms and functions of slang used by Generations Alpha and Z and their relation to social identity. The analysis process consists of two major phases: Natural Language Processing (NLP)-assisted analysis and qualitative sociolinguistic interpretation. In the first phase, the collected textual data from platforms Instagram which is processed using NLP techniques. Preprocessing steps include data cleaning (removal of non-linguistic content, emojis, and duplicates), tokenization, lemmatization, and normalization of slang variants. Once cleaned, the dataset is analyzed using Python-based libraries such Gensim to perform frequency analysis, keyword extraction, and part-of-speech tagging. Topic modeling using Latent Dirichlet Allocation (LDA) is applied to identify thematic patterns in slang usage.

Additionally, clustering algorithms such as k-means is used to group slang terms based on usage similarity, allowing the identification of subcultural or generational slang clusters.

The second phase involves qualitative content analysis to interpret the social functions and identity-related meanings of the identified slang. Selected high-frequency or socially marked slang expressions are analyzed in their original platform context to explore how they function expressively, affiliatively, or subversively. This phase is guided by sociolinguistic theories of language and identity (e.g., Bucholtz & Hall, 2005), focusing on how linguistic choices contribute to the construction of in-group identity, peer solidarity, or generational distinction. The interpretation also considers the multimodal context in which the slang appears, such as accompanying emojis, hashtags, or visual cues. Together, these analysis procedures provide a rich, data-driven understanding of how digital slang reflects and constructs social identity among Gen Alpha and Z. and how these patterns relate to language awareness in educational and communicative settings.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

This research examines the forms and functions of slang used by Generations Alpha and Z its connection to social identity and its influence in educational context through two main phases: NLP-based analysis and qualitative sociolinguistic interpretation. In the first phase, Instagram data is processed using NLP techniques such as data cleaning, tokenization, and lemmatization. Tools like Gensim help in frequency analysis, keyword extraction, and part-of-speech tagging, while Latent Dirichlet Allocation (LDA) and k-means clustering are applied to identify themes and group slang terms based on their usage. The second phase involves a qualitative analysis of high-frequency slang terms in their platform context to explore their social functions, such as building identity or peer connections. This phase is informed by sociolinguistic theories and also considers multimodal elements like emojis and hashtags.

The form of slang language used

The explanation of the findings for Research Question 1 can be seen in the following table.

Table 1
The Form of Slang Language

Cluster	Functional Category	Representative Slang Terms	Example In Context
1	Emotional Expression	<i>baper, auto sedih, gemoy, bucin, nangis bombay, mewek, ciyee, lebay, ngenes</i>	<i>“Gue liat dia jalan sama orang lain, auto nangis bombay.”</i>
2	Subcultural Identity	<i>wibu, nolep, mabar, push rank, otaku, k-drama addict, cosplayer, fangirl, MLers</i>	<i>“Wibu sejati gak tidur sebelum nonton 12 episode.”</i>
3	Social Interaction	<i>gaskeun, santuy, cuaks, ngabers, misi bang, halo bestie, slay, kuy, ygy (ya guys ya)</i>	<i>“Gaskeun misi pagi bareng bestie, kuy!”</i>
4	Humor / Satire	<i>anjay, receh, kocak parah, auto cuan, mager, skuy, plis deh, ngakak online, ga ngotak</i>	<i>“Dia nanya gaji TikToker ke mamangnya sate, ga ngotak 😂”</i>
5	Motivation / Self-Branding	<i>auto sultan, healing, flexing, glow up, self-reward, bossque, anak sultan, rich vibes, cuan hunter</i>	<i>“Abis dapet bonus, saatnya self-reward dan glow up 🎉”</i>

Table 1 shows the classification of digital slang used by Generations Alpha and Z, grouped into five clusters based on communicative functions. This classification, derived through

linguistic analysis and K-Means Clustering on Instagram content, reflects how these generations express themselves, form identities, and interact online. Cluster 1 – Emotional Expression: Slang terms like baper (easily hurt) and auto sedih (automatically sad) convey emotional states, often in romantic or friendship contexts on Instagram. Cluster 2 – Subcultural Identity: Slang such as wibu (anime fanatic) and nolep (no life gamer) signal membership in specific subcultures, commonly seen on platforms like Discord, Reddit, and YouTube. Cluster 3 – Social Interaction: Phrases like gaskeun (let's go) and halo bestie foster familiarity and connection in group chats, comment sections, and livestreams. Cluster 4 – Humor / Satire: Slang such as receh (silly joke) and mager (too lazy to move) are used for humor and exaggeration, central to meme culture. And cluster 5 – Motivation / Self-Branding: Terms like auto sultan (instantly rich) and cuan hunter (profit seeker) reflect self-presentation, success, and lifestyle branding.

Linguistic pattern

The Linguistic Pattern Analysis organized by five primary clusters.

Emotional Expression

The Emotional Expression cluster refers to a set of linguistic practices that are primarily aimed at conveying intense, immediate, and often dramatized emotions in digital communication. This cluster is especially prominent in the way younger generations communicate on Instagram where emotional resonance, speed, and relatability are central to social interaction. As seen in Table 2 as follows.

Table 2
Emotional Expression

Linguistic Feature	Description
Lexical Choices	Short, expressive interjections: <i>ugh, oof, yikes, dead, shook, slay, vibe</i>
Orthographic Variation	Repeated letters for emphasis: <i>nooo, yesss, omggg</i>
All Caps Usage	Used to intensify emotion: <i>I'M SCREAMING, SO DONE</i>
Emoji Usage	Emojis reinforce emotional tone: 😱💀🔥😊
Syntactic Structure	Fragmented or elliptical expressions: <i>me rn, can't even, that's it, that's the post</i>
Discourse Strategy	Emphasis on raw affect and relatability through brevity and exaggeration

The emotional expression cluster is marked by the frequent use of short, emotionally charged words such as *ugh, slay, and vibe*. These interjections, often used without full sentences, act as quick emotional signals that are easily understood within digital culture. Their brevity allows users to express complex reactions efficiently and with impact. Orthographic variation, like repeated letters in *nooo* or *yesss*, visually mimics spoken emphasis, while all caps, such as *I'M SCREAMING*, conveys heightened emotional tone, often interpreted as shouting or dramatic intensity. Emojis play a crucial role in this cluster, adding a visual and emotional layer to text. Emojis like 😱 or 💀 often replace words entirely, offering compact, expressive meaning that enhances the emotional tone of a message. These symbols are flexible, able to convey humor, sadness, or excitement depending on context. Fragmented sentence structures such as *me rn* or *can't even* further reflect the informal, speech-like nature of digital communication. Though they break conventional grammar, these forms are effective in conveying relatable, authentic emotions with minimal words. Overall, the discourse in this cluster focuses on affect, relatability, and connection. It values emotion over structure, creating space for users to be dramatic, humorous, or vulnerable.

Subcultural Identity

The Subcultural Identity cluster is characterized by a set of linguistic features that reflect a speaker's affiliation with specific online communities. One of the most prominent features is the use of group-specific jargon, terms that carry particular meanings within the subculture but may not be fully understood by outsiders. The data of subcultural identity can be seen in the following table.

Table 3
Subcultural Identity

Linguistic Feature	Description
Group-Specific Jargon	Terms unique to the subculture: <i>stan, main, bias, cosplay, cracked (gaming), sus (Among Us)</i>
Acronyms/Initialisms	Community-based shorthand: <i>OTP (One True Pairing), POV, IRL, OOC</i>
In-Group References	Shared memes, quotes, or cultural callbacks: "she's giving...", "not canon"
Syntactic Creativity	Playful subversion of standard grammar: "they did a slay", "this go hard"
Pronoun Play	Inclusive pronouns and neopronouns: <i>they/them, xe/xem</i> (often index identity awareness)
Discourse Strategy	Reinforces solidarity and in-group cohesion via shared linguistic codes

Words like *stan, main, bias, cosplay, cracked*, and *sus* function as insider terms that signal the speaker's affiliation with specific online communities such as fandoms, gaming, or K-pop. These expressions help users bond over shared knowledge and cultural context. Acronyms like *OTP* (One True Pairing), *POV* (Point of View), and *OOC* (Out of Character) further support quick, context-specific communication, marking familiarity with subcultural norms. In-group references such as "she's giving..." or "not canon" carry layered meanings understood only by community members, often used humorously or critically. These reflect a shared cultural memory and the intertextual nature of digital discourse. Syntactic creativity also characterizes this cluster, with expressions like "they did a slay" or "this go hard" showing how users reshape grammar for playful or expressive effect, forming a unique subcultural style. Pronoun variation, including *they/them* and neopronouns like *xe/xem*, is also common. This reflects both individual identity and a collective commitment to inclusivity, particularly within gender-diverse digital spaces.

Social Interaction

The Social Interaction cluster encompasses linguistic features that function primarily to establish, maintain, and strengthen interpersonal relationships in digital communication. Unlike clusters that focus on emotional display or identity performance, this cluster is centered on relational language, expressions that signal friendliness, familiarity, and social bonding.

Table 4
Social Interaction

Linguistic Feature	Description
Tag Phrases	Casual closings or replies: <i>lol, lmao, bruh, fr, no cap</i>
Phatic Expressions	Expressions that keep social bonds: <i>wyd, hbu, oop, bet</i>
Conversational Openers	Light, playful: "bestie...", "not you...", "girl..."
Code-Switching	Switching between formal/informal or English/local languages for bonding
Syntax Pattern	Sentence fragments or stylized discourse: "you okay?" → "mentally? no."
Discourse Strategy	Focus on relational maintenance and collaborative tone in chats and comments

This cluster centers on language used to maintain casual, friendly interaction. Tag phrases like *lol, lmao, bruh, fr*, and *no cap* serve as quick emotional cues, showing amusement,

agreement, or sincerity. They keep conversations light and socially engaging. Similarly, phatic expressions such as *wyd*, *hbu*, *oop*, and *bet* help sustain contact without adding content, supporting a smooth conversational rhythm, especially in texting. Conversational openers like *bestie*, *not you*, or *girl* create a sense of closeness and set an informal, often humorous tone. These openers imply familiarity and are commonly used to start playful or dramatic commentary. Code-switching also plays a key role, as users alternate between languages or levels of formality. This reflects cultural identity and adds emotional nuance, strengthening interpersonal connection. In terms of syntax, sentence fragments like *you okay? → mentally? no.* mimic natural speech and rely on shared context. These stylized structures convey mood, humor, or vulnerability in a relatable way. Overall, the discourse in this cluster focuses on maintaining relationships and creating shared emotional space. Rather than delivering information, the language builds rapport, affirms presence, and mirrors the dynamics of everyday social interaction in digital form.

Humor/satire

The other type of cluster is humor/satire. The humor/satire cluster is defined by a set of linguistic features that center on entertainment, playfulness, and social commentary. This cluster is commonly found on Instagram where language is used not only for interaction but also for creative expression and irony. The data set found regarding humor/satire shows in the following table.

Table 5
Humor/satire

Linguistic Feature	Description
Irony & Hyperbole	Exaggeration for comedic effect: “ <i>I will simply perish</i> ”, “ <i>girl be so dramatic it’s camp</i> ”
Surreal Expressions	Absurd or bizarre slang: <i>skibidi</i> , <i>rizz</i> , <i>sigma male grindset</i> , <i>delulu</i>
Mock-Formal Tone	Imitation of formal register for humor: “ <i>Dearest mutuals...</i> ”, “ <i>as per my last brain cell</i> ”
Intentional Misspelling	Used to indicate sarcasm: “ <i>bEstIe plz</i> ”, “ <i>helppp meeee</i> ”
Memetic Language	Repetitive meme formats, often from TikTok or Twitter
Discourse Strategy	Driven by entertainment, identity performance, and cultural critique

This cluster is marked by the use of irony and hyperbole, where exaggerated phrases like “I will simply perish” or “girl be so dramatic it’s camp” create humor by dramatizing everyday moments. These expressions reflect a performative style common in digital culture, where emotional overstatement becomes a source of comedy. Surreal slang such as “skibidi,” “rizz,” or “delulu” adds absurdity and playful confusion. Often emerging from viral trends, these terms lack fixed meaning and rely on shared cultural knowledge. The mock-formal tone, seen in phrases like “Dearest mutuals” or “as per my last brain cell,” humorously imitates formal language to contrast with trivial content, creating parody. Intentional misspelling, such as “bEstIe plz” or “helppp meeee,” mimics vocal exaggeration and signals sarcasm, while also marking in-group familiarity.

Motivation/Self branding

The motivation/self-branding cluster represents a linguistic style that centers on personal empowerment, aspirational identity, and strategic self-presentation in digital spaces. It is widely used where users often blend lifestyle narratives with affirming language to inspire themselves and others.

Table 6
Motivation/Self-Branding

Linguistic Feature	Description
Empowering Lexis	Words signaling ambition or confidence: <i>slay, queen, glow-up, boss babe, no skips, periodt</i>
Affirmative Syntax	Declarative tone: “ <i>You got this.</i> ”, “ <i>We don’t chase, we attract.</i> ”
Slogans/Mantras	Inspirational quotes: “ <i>Romanticize your life</i> ”, “ <i>Hot girl era</i> ”, “ <i>Main character energy</i> ”
Hashtag Usage	Self-branding through visibility: <i>#goals, #levelup, #softlife, #grindset</i>
Stylized Grammar	Strategic capitalization/punctuation for emphasis: “ <i>That part.</i> ”, “ <i>Focus. Discipline. Elevation.</i> ”
Discourse Strategy	Emphasizes empowerment, aesthetic identity, and self-promotion in a digital context

This cluster features language that expresses confidence, ambition, and self-worth. Words like *slay, queen, glow-up*, and *periodt* celebrate personal success and affirm a strong, independent identity. These terms often appear in captions or affirmations that promote self-confidence and determination. Affirmative syntax also stands out, with clear, motivational phrases like *You got this* or *We don’t chase, we attract*. These short statements are easy to remember and emotionally powerful, reinforcing resilience and a growth mindset. They often serve as modern mantras to boost morale and support personal goals. Slogans such as *Romanticize your life* and *Main character energy* go beyond motivation, functioning as identity claims and aesthetic ideals. They encourage users to view their lives as intentional and meaningful. Hashtags like *#goals, #levelup*, and *#softlife* support this by connecting personal content to broader lifestyle trends, acting as both motivational cues and visibility tools.

Influence of Digital Linguistic Patterns on Academic Language

The table below presents how digital linguistic patterns across five clusters have begun to influence academic language use, particularly among younger generations in educational settings.

Table 8
The Influence of Digital Linguistic

Cluster	Linguistic Features	Influence in Academic Context	Impact Type
Emotional Expression	Interjections (ugh, slay), elongated forms, emoji, all caps	Increased use of expressive, reflective tone in student writing and online academic discussions	Tone shift toward personal voice
Subcultural Identity	Jargon (stan, delulu), acronyms (POV, FYP), meme references	Integration of digital slang as study objects; academic interest in youth language and identity practices	Expansion of research focus
Social Interaction	Tag phrases (bestie, fr), phatic markers (wyd), code-switching	Informal, relational tone in academic chats and learning platforms; enhanced peer interaction	Informalization of interaction
Humor / Satire	Hyperbole, mock-formal tone, surreal slang, intentional typos	Used in pedagogy and critical discourse analysis; fosters creativity and media literacy in academic writing	Engagement and rhetorical shift
Motivation / Branding	Slogans (main character energy), hashtags (#softlife), stylized syntax	Rise of personal branding in student portfolios and academic social media use	Self-representation and visibility

The emotional expression cluster marked by interjections, elongated spellings, emojis, and capital letters has influenced a more personal and emotionally engaged tone in student writing and online learning, despite being absent in formal academic texts. The subcultural identity cluster, including fandom jargon, acronyms, and meme references, has broadened

academic research, gaining attention in sociolinguistics, digital communication, and youth culture as valid linguistic data. In the social interaction cluster, tag phrases and phatic expressions promote informal, relational communication in online academic spaces, often accompanied by code-switching with local slang, reflecting hybrid and inclusive language use. Humor and satire, through exaggeration, mock-formality, and surreal slang, are increasingly used in educational settings like media literacy and rhetorical analysis, fostering critical thinking and creative engagement. Lastly, the motivation and branding cluster featuring affirming slogans, hashtags, and stylized syntax highlights the influence of personal branding in academic contexts, visible in student presentations, social media, and personal statements.

Discussion

This study reveals that slang, once seen as informal deviation, now plays a significant role in shaping digital communication and academic interaction among Generations Alpha and Z. Five linguistic clusters illustrate how digital slang is used to express emotion, signal identity, and build social ties. The Emotional Expression cluster includes terms like *baper* and *nangis bombay*, along with features such as repeated letters, all caps, and emojis to intensify feelings and promote emotional connection. The Subcultural Identity cluster captures slang from communities like gaming, anime, and K-pop, using words like *wibu*, *nolep*, and *push rank*. Acronyms like *OTP* and *POV*, as well as neopronouns, show how language performs identity and fosters belonging.

The Social Interaction cluster highlights slang like *bestie*, *fr*, and *no cap*, used to maintain friendly, informal communication. It also includes phatic expressions, code-switching, and sentence fragments that reflect casual online dialogue. Humor and Satire are expressed through hyperbole, irony, and absurd slang like *rizz* and *sigma male*, often paired with mock-formal language or intentional misspelling to entertain and signal cultural awareness. In the Motivation and Self-Branding cluster, terms like *slay*, *glow-up*, and *boss babe*, along with slogans and hashtags such as *Main character energy* and *#levelup*, emphasize confidence and curated identity. Stylized grammar and aesthetic emojis strengthen self-presentation and promote personal branding. These clusters show how digital language is used not only to convey meaning but to perform identity and foster community. The influence of these patterns extends into academic contexts, where emotional tone, meme references, and informal expressions increasingly shape student writing, online discussions, and classroom communication. Humor supports creativity, and motivational discourse reflects the rise of self-branding in educational spaces.

The findings of this study support key sociolinguistic theories, including Sociolinguistic Identity Theory (Bucholtz & Hall, 2005), Indexicality (Silverstein, 2003), and the Community of Practice framework (Eckert & McConnell-Ginet, 1992). Sociolinguistic Identity Theory highlights how language constructs social identity, which is evident in the use of digital slang by Generations Alpha and Z. Through slang in clusters like Emotional Expression and Subcultural Identity, individuals express emotion and signal membership in online communities, shaping their digital identities. Indexicality explains how certain terms point to specific social meanings. Words like *wibu* or *cuan hunter* reflect subcultural alignment and shared values, allowing users to signal identity and group belonging instantly. The Community of Practice framework reinforces this view, emphasizing how shared language practices build and maintain community ties. Phrases like *bestie* or *main character energy* not only express attitudes but also strengthen bonds and foster collective identity. Together, these theories explain how digital linguistic patterns actively construct social identity through everyday interaction.

The theoretical reflection on the research value of this study lies in its ability to bridge sociolinguistic theory and modern computational methods to provide deeper insights into how digital slang shapes social identity among Generations Alpha and Z. By drawing upon

established frameworks like Sociolinguistic Identity Theory, Indexicality, and the Community of Practice, the study offers a nuanced understanding of how language functions as both a tool for communication and a medium for identity performance in digital spaces. The use of K-Means clustering, a computational technique, allows for the quantification and categorization of language patterns, making the research highly relevant in the context of contemporary linguistics where computational methods are increasingly used to analyze large datasets, such as those generated from social media platforms.

This study extends previous theoretical work by linking traditional sociolinguistic concepts with modern practices in digital communication, emphasizing how the linguistic features of digital slang index not just emotions, but also group membership, subcultural affiliation, and personal branding. The research value also lies in its focus on the younger generations, whose digital practices are often overlooked in traditional sociolinguistics, thereby contributing to the growing field of youth language studies. Additionally, it highlights the evolving role of digital slang as a form of resistance to traditional linguistic norms, offering a fresh perspective on how language adaptation is deeply intertwined with identity construction and social engagement in online communities.

This study provides a critical lens through which to view the relationship between language and social media, encouraging future research to examine how these linguistic practices may evolve as digital environments and social media platforms continue to develop. The theoretical reflection emphasizes that understanding these trends is crucial not only for sociolinguistic research but also for educators, marketers, and social scientists who seek to understand the cultural dynamics of younger generations in the digital age.

CONCLUSION

This study provides valuable insights into the use of digital slang by Generations Alpha and Z, highlighting how language in online spaces functions not just as a tool for communication but also as a powerful mechanism for identity construction. The five clusters identified Emotional Expression, Subcultural Identity, Social Interaction, Humor/Satire, and Motivation/Self-Branding demonstrate how digital slang reflects emotional states, subcultural affiliations, and the desire for self-presentation. These findings reveal that digital slang is an important cultural resource that allows younger generations to express their identities, create social bonds, and perform membership in various online communities.

Furthermore, the study's integration of sociolinguistic theories, such as Sociolinguistic Identity Theory, Indexicality, and the Community of Practice framework, provides a deeper understanding of how digital slang plays a role in shaping and reflecting social identity in digital environments. The findings also emphasize the importance of considering the evolving nature of language in academic and social contexts, particularly as younger generations bring informal, expressive, and performative language practices into educational and professional spaces.

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