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Scroll, swipe, speak: The influence of instagram reels consumption speed on the verbal communication patterns of digital adolescents

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Abstract

Background: The rapid growth of short-form video platforms has transformed how digital adolescents consume information and communicate in everyday life. Instagram Reels, characterized by algorithm-driven recommendations, endless scrolling, and rapid content consumption, has become one of the most frequently used digital media platforms among adolescents. Despite the increasing popularity of Instagram Reels, empirical evidence regarding its relationship with adolescents' verbal communication patterns remains limited.
Aim: This study aimed to examine the influence of Instagram Reels consumption speed on the verbal communication patterns of digital adolescents.
Method: A quantitative cross-sectional survey design was employed involving 200 adolescents aged 15–24 years who actively used Instagram Reels. Data were collected using a structured questionnaire and analyzed using simple linear regression.
Result: The findings revealed that Instagram Reels consumption speed had a positive and statistically significant association with verbal communication patterns ($\beta = 0.482$, $p < .001$), explaining 23.2% of the variance in the dependent variable ($R^2 = .232$). These findings suggest that adolescents who consume Instagram Reels more rapidly tend to exhibit differences in verbal communication patterns, including speech rate, speech fluency, clarity of expression, responsiveness, and message organization. From the perspectives of Information Processing Theory, Cognitive Load Theory, and Attention Theory, the findings indicate that repeated exposure to rapidly changing audiovisual content may be associated with cognitive processing mechanisms that influence everyday verbal communication.
Conclusion: This study contributes to the growing literature by extending research on short-form video platforms beyond educational and marketing contexts and provides empirical evidence regarding the relationship between rapid Instagram Reels consumption and adolescents' verbal communication in digital environments.

INTRODUCTION

The rapid growth of short-form video (SFV) platforms, including TikTok, Instagram Reels, and YouTube Shorts, has fundamentally transformed how adolescents consume information and communicate in digital environments (Apasrawirote et al., 2022; Addo et al., 2022; Zawacki et al., 2023). Unlike conventional social media, SFVs employ algorithm-driven recommendation systems, continuous scrolling, and highly personalized content streams that encourage repetitive and rapid content consumption (Elahi et al., 2022; Trunfio & Rossi, 2021). This design enables users to process large volumes of audiovisual information within a short period while simultaneously reducing the time allocated to deeper cognitive processing and sustained attention (Xu et al., 2023; Al-Leimon et al., 2025). Recent evidence suggests that intensive exposure to SFVs is associated with changes in attention regulation, working memory, digital routines, and self-regulation among adolescents, indicating that the characteristics of these platforms may influence broader cognitive and communicative processes beyond entertainment (Al-Leimon et al., 2025; Chiossi et al., 2023).

Instagram Reels has emerged as one of the fastest-growing short-form video features, integrating algorithmic personalization with users' existing social networks (Meifilina, 2021). Compared with earlier forms of social media, Reels facilitates rapid transitions between audiovisual stimuli through infinite scrolling, encouraging users to consume dozens or even hundreds of videos in a single session. Such interaction patterns have been described as rapid content consumption, a behavioral pattern characterized by high-frequency exposure to brief, continuously changing information (Apasrawirote et al., 2022). While this mechanism successfully increases user engagement, researchers argue that it may also reshape users' information-processing strategies and communication behaviors by encouraging faster but shallower processing of digital content. Furthermore, systematic reviews have highlighted that the algorithmic architecture of TikTok and Instagram Reels amplifies repeated exposure to personalized content, potentially influencing users' cognitive habits and everyday communication patterns.

From a communication perspective, adolescence represents a developmental period during which verbal competence, articulation, and interpersonal communication continue to mature through social interaction and environmental exposure (Ehrenreich et al., 2021; Poll et al., 2021). Because digital media increasingly serves as a primary communication environment, repeated exposure to rapid audiovisual content may influence not only attention but also verbal expression. Previous studies have demonstrated that Instagram Reels can improve speaking fluency, multimodal awareness, pronunciation, and communication confidence when incorporated into language-learning activities (Anjarsari & Sholikhah, 2026; Swarnadani & Sofiana, 2026). Similarly, role-play content delivered through Instagram Reels has been shown to support learners' speaking engagement and communicative competence (Syahri et al., 2026). However, these studies conceptualize Reels as an educational intervention rather than as a naturally occurring digital consumption behavior.

Despite the growing body of literature on short-form video platforms, several important gaps remain. First, existing studies predominantly examine learning outcomes, digital marketing, psychological well-being, or user engagement, whereas empirical evidence concerning the influence of rapid short-form video consumption on adolescents' verbal communication remains scarce (Trunfio & Rossi, 2021). Second, most communication studies focus on TikTok, leaving Instagram Reels comparatively underexplored despite its rapidly expanding user base. Third, previous research has generally investigated speaking performance in formal educational settings rather than examining how habitual exposure to algorithmically curated short-form content may shape natural articulation patterns in everyday communication. Consequently, the relationship between rapid Reels consumption and adolescents' articulation patterns remains insufficiently understood and warrants empirical investigation.

Therefore, this study investigates the effect of Instagram Reels consumption speed on the articulation patterns of digital adolescents. By integrating perspectives from digital media studies, cognitive information processing, and communication research, this study extends the existing literature beyond educational applications of short-form videos and contributes empirical evidence regarding how algorithm-driven media consumption may influence verbal communication among digital-native adolescents.

LITERATURE REVIEW

Short-Form Video and Instagram Reels

Short-form video (SFV) refers to digital video content characterized by its brief duration, vertical format, and mobile-first design, enabling users to consume information quickly and continuously (Apasrawirote et al., 2022; Addo et al., 2022). In recent years, SFVs have become one of the dominant forms of digital media consumption through platforms such as TikTok, Instagram Reels, and YouTube Shorts. Unlike conventional social media, where users actively select content, SFV platforms rely on algorithm-driven recommendation systems that automatically deliver personalized videos based on users' viewing history, interactions, and behavioral preferences (Zawacki et al., 2023). This recommendation mechanism shifts users from active information seeking to passive information reception, thereby increasing the frequency and duration of media exposure. As a result, SFVs have transformed digital communication by providing an immersive, personalized, and highly engaging media environment that encourages continuous interaction with audiovisual content.

Among various SFV platforms, Instagram Reels has experienced remarkable growth since its introduction by Meta as a response to the increasing popularity of TikTok. Reels integrates seamlessly with Instagram's existing social ecosystem while incorporating artificial intelligence–based recommendation algorithms that continuously personalize users' content feeds. Unlike traditional Instagram posts, Reels prioritizes content relevance over social relationships, enabling users to discover videos from creators they do not follow. This algorithmic recommendation system continuously analyzes user interactions—including watch

time, likes, comments, shares, and viewing completion—to optimize subsequent content recommendations (Elahi et al., 2022; Trunfio & Rossi, 2021). Consequently, users experience a highly personalized content stream that maximizes engagement and prolongs platform usage. Recent developments indicate that improvements in Meta's AI recommendation system have significantly increased Reels engagement and viewing duration, highlighting the central role of recommendation algorithms in shaping users' digital consumption behavior (Wang, Y., 2026).

A defining characteristic of Instagram Reels and other SFV platforms is the implementation of endless scrolling, a user interface design that enables uninterrupted navigation through an infinite sequence of personalized videos. This mechanism minimizes users' decision-making effort by automatically presenting the next video immediately after the previous one ends. From a cognitive perspective, endless scrolling reduces friction in media consumption, encouraging users to remain engaged for extended periods without consciously deciding to continue viewing. Researchers argue that this interface design contributes to habitual and repetitive media use because it continuously provides novel stimuli while minimizing opportunities for reflection or intentional stopping behavior. Consequently, endless scrolling has become a fundamental design element that reinforces sustained engagement and repetitive content exposure across SFV platforms.

The combination of algorithmic recommendation and endless scrolling has given rise to a behavioral phenomenon known as rapid content consumption. This concept describes users' tendency to consume large volumes of short audiovisual content within a relatively brief period while rapidly switching from one informational stimulus to another. Rather than engaging in deep cognitive processing, users are repeatedly exposed to brief and highly stimulating content sequences that encourage immediate attention shifts. Such consumption patterns have been associated with increased user engagement and platform retention, yet they may also alter information-processing strategies, attention regulation, and communication behaviors. Scholars suggest that repeated exposure to rapidly changing digital stimuli encourages users to prioritize speed and efficiency over reflective processing, potentially influencing broader cognitive and communicative outcomes. Therefore, rapid content consumption has emerged as one of the defining behavioral characteristics of contemporary digital media environments and serves as an important construct for understanding adolescents' interaction with Instagram Reels and other short-form video platforms.

Information Processing Theory

Information Processing Theory explains how individuals receive, encode, store, and retrieve information from their environment. The theory conceptualizes the human mind as an information-processing system that functions similarly to a computer, in which incoming stimuli pass through several cognitive stages before generating behavioral responses. The foundational model proposed by Atkinson and Shiffrin (1968) describes three interconnected memory systems: sensory memory, short-term memory (working memory), and long-term memory. Information first enters sensory memory through visual and auditory stimuli, after which selective attention determines whether the information is transferred to working memory for further processing. Through rehearsal and meaningful encoding, information can subsequently be stored in long-term memory for future retrieval. This model highlights the crucial role of attention and working memory in determining whether incoming information is effectively processed or discarded, making it particularly relevant for understanding how adolescents interact with highly dynamic digital media environments (Atkinson & Shiffrin, 1968).

Building upon the Information Processing Theory, Cognitive Load Theory (CLT) explains that the human working memory possesses limited processing capacity, making it susceptible to overload when individuals are exposed to excessive or rapidly changing information. Originally introduced by Sweller (1988), CLT distinguishes among intrinsic cognitive load, extraneous cognitive load, and germane cognitive load. Intrinsic load refers to the inherent complexity of information, extraneous load originates from ineffective presentation formats, whereas germane load represents cognitive resources devoted to meaningful learning (Sweller, J., 1988). Recent studies emphasize that digital learning environments and multimedia platforms frequently increase extraneous cognitive load due to the simultaneous presentation of visual, auditory, and interactive stimuli. Consequently, users may allocate substantial mental resources to processing interface elements rather than comprehending the information itself. In digital environments characterized by continuous multimedia exposure, excessive cognitive load may reduce processing efficiency, limit working memory capacity, and impair deeper cognitive processing.

Another theoretical perspective relevant to this study is Attention Theory, which posits that attention is a limited cognitive resource that must be selectively allocated to relevant information while suppressing competing stimuli. Because human attentional capacity is finite, continuous exposure to rapidly changing visual content may increase attentional switching and reduce sustained attention. Contemporary cognitive research suggests that environments characterized by high perceptual and cognitive load require individuals to constantly redirect their attention, potentially reducing the efficiency of information encoding and increasing mental fatigue. Therefore, digital environments designed to maximize engagement through continuous novelty may unintentionally encourage fragmented attention and shallow information processing rather than reflective cognitive engagement (Murphy et al., 2016).

The characteristics of short-form video platforms such as Instagram Reels closely align with the assumptions of Information Processing Theory, Cognitive Load Theory, and Attention Theory. Reels continuously present short audiovisual stimuli through algorithm-driven recommendations and endless scrolling, enabling users to rapidly switch between multiple pieces of information within seconds. Although this interaction pattern enhances engagement and entertainment value, it simultaneously increases cognitive demands by requiring users to repeatedly allocate attention to novel stimuli while processing large amounts of audiovisual information in a limited time. Recent evidence indicates that intensive engagement with short-form videos may influence attention regulation, working memory, and prospective memory because users experience frequent context switching between rapidly changing content. Such behavioral patterns may encourage rapid rather than reflective information processing, potentially influencing subsequent communication behaviors, including verbal fluency, speech organization, and articulation patterns among digital adolescents. Consequently, Information Processing Theory provides an appropriate theoretical foundation for explaining how rapid Instagram Reels consumption may influence adolescents' verbal communication through cognitive mechanisms involving attention allocation, working memory limitations, and information-processing efficiency (Nguyen & Chen, 2026).

Verbal Communication Patterns in Digital Communication

Verbal communication patterns refer to the habitual ways individuals express ideas, exchange information, and interact through spoken language in various social contexts. These patterns encompass multiple dimensions of oral communication, including speech fluency, speaking rate, clarity of expression, vocabulary selection, responsiveness, and message organization. Rather than focusing solely on linguistic accuracy, verbal communication patterns emphasize how individuals organize and deliver spoken messages effectively during interpersonal interactions. In the digital era, verbal communication has evolved beyond face-to-face interactions, as online platforms increasingly influence individuals' communication habits, language use, and conversational behaviors. Consequently, communication patterns are no longer shaped exclusively by direct social interaction but also by continuous exposure to digital media environments that mediate how people speak, respond, and express themselves in everyday life (Ehrenreich et al., 2021).

One important dimension of verbal communication patterns is speech rate, which refers to the speed at which individuals produce spoken language, commonly measured by the number of words or syllables spoken within a specific period. Speech rate contributes to communication effectiveness because excessively rapid speech may reduce comprehensibility, whereas overly slow speech may decrease listener engagement. Previous studies have demonstrated that speech rate is influenced not only by cognitive processing but also by environmental stimuli, communication context, emotional state, and media exposure. In digital communication environments characterized by rapid information exchange, individuals may gradually adapt to faster speaking styles that mirror the pace of the content they frequently consume, suggesting that media habits can influence natural speaking behavior over time.

Another essential component is speech fluency, which describes an individual's ability to produce continuous, coherent, and relatively effortless speech. Fluency is reflected through smooth transitions between ideas, minimal unnecessary pauses, reduced hesitation, and appropriate rhythm during communication. Unlike pronunciation, which concerns the accurate production of speech sounds, fluency emphasizes the continuity and efficiency of verbal expression. Communication research indicates that fluency develops through repeated communicative experiences and is influenced by cognitive processing efficiency, confidence, and communication practice. Therefore, changes in digital communication behavior may indirectly influence speech fluency by altering the frequency, style, and characteristics of verbal interaction among adolescents (Garrett et al., 2023; Valinatajbahnamiri & Siahtiri, 2021).

From a broader communication perspective, verbal communication serves as a fundamental mechanism through which adolescents construct interpersonal relationships, negotiate identities, and exchange knowledge. The rapid expansion of digital communication platforms has transformed traditional communication by integrating face-to-face interaction with technology-mediated communication. Adolescents increasingly communicate through multimedia platforms where spoken language is often combined with visual, textual, and audiovisual elements. Consequently, digital communication does not replace verbal communication; instead, it reshapes its characteristics by introducing new communication norms, interaction styles, and language practices. Contemporary research suggests that digital communication has become an integral component of adolescent development, influencing not only social relationships but also communication competence, self-expression, and interpersonal interaction (Duran, 2022).

Digital adolescents, commonly described as digital natives, have grown up in environments where smartphones, social networking platforms, and algorithm-driven media are embedded in everyday life. Their communication behaviors are increasingly characterized by rapid information exchange, multimodal interaction, abbreviated language, and immediate responsiveness. Continuous exposure to short-form video platforms such as Instagram Reels may reinforce these communication characteristics by encouraging concise verbal expression, rapid conversational pacing, and spontaneous interaction. Although digital platforms provide

opportunities to enhance communication confidence and self-expression, excessive dependence on rapidly changing digital stimuli may also modify communication habits by encouraging shorter, faster, and less reflective verbal exchanges. Consequently, verbal communication patterns among digital adolescents should be understood as dynamic behaviors shaped by the interaction between cognitive development, social experiences, and digital media consumption (Skulmowski, A., 2022; Saxena, 2026).

In the context of this study, verbal communication patterns are conceptualized as adolescents' habitual tendencies in expressing ideas and interacting through spoken language following repeated exposure to Instagram Reels. Rather than focusing on linguistic accuracy or pronunciation alone, this construct encompasses observable communication behaviors, including speech rate, speech fluency, clarity of expression, responsiveness during conversations, and message organization. These dimensions collectively represent how adolescents naturally communicate in everyday interactions and provide measurable indicators for examining whether rapid Instagram Reels consumption is associated with changes in verbal communication behavior. This operationalization is consistent with previous studies emphasizing that communication competence develops through the interaction of cognitive processes, social experiences, and digital communication environments (Ehrenreich et al., 2021; Garrett et al., 2023; Kippin et al., 2021).

METHODS

Research Design

This study employed a quantitative research approach using a cross-sectional survey design to examine the influence of Instagram Reels consumption speed on the verbal communication patterns of digital adolescents. A quantitative approach was considered appropriate because it enables the measurement of relationships between variables through statistical analysis and facilitates hypothesis testing based on empirical data (Creswell, 2023). The cross-sectional design allowed data to be collected at a single point in time, providing an overview of participants' Instagram Reels consumption behaviors and their verbal communication patterns.

The independent variable in this study was Instagram Reels Consumption Speed, while the dependent variable was Verbal Communication Patterns. A structured questionnaire was administered to collect participants' responses regarding both variables.

Participants

The participants consisted of digital adolescents aged between 15 and 24 years who actively used Instagram Reels. Participants were selected using purposive sampling, with the following inclusion criteria: (1) aged 15–24 years, (2) active Instagram users, (3) watched Instagram Reels at least three times per week, and (4) voluntarily agreed to participate in the study.

The minimum sample size was determined based on the recommendation of Hair et al. (2022), which suggests that quantitative studies employing regression analysis should include at least 150–200 respondents to ensure adequate statistical power and stable parameter estimation. Therefore, this study targeted approximately 200 respondents.

Instruments

Data were collected using a self-administered questionnaire developed from previous studies on short-form video consumption and verbal communication. All questionnaire items were measured using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

The Instagram Reels Consumption Speed scale consisted of five indicators: (1) viewing frequency, (2) scrolling speed, (3) video-switching frequency, (4) continuous viewing behavior, and (5) duration of Instagram Reels consumption. These indicators were adapted from previous studies on short-form video consumption, algorithm-driven media engagement, and rapid content consumption.

The Verbal Communication Patterns scale consisted of six indicators: (1) speech fluency, (2) speaking rate, (3) clarity of expression, (4) vocabulary usage, (5) responsiveness during conversation, and (6) organization of verbal messages. These indicators were adapted from communication competence and interpersonal communication literature.

Prior to data collection, the questionnaire was reviewed by experts in communication studies to establish content validity. A pilot study involving 30 respondents was conducted to evaluate the clarity and comprehensibility of the questionnaire items. Internal consistency reliability was assessed using Cronbach's Alpha, with values of 0.70 or above considered acceptable (Hair et al., 2022).

Data Analysis

The collected data were analyzed using IBM SPSS Statistics version 27. Descriptive statistics were first performed to summarize participants' demographic characteristics and response distributions. Before hypothesis testing, the data were examined through validity and reliability testing, followed by classical assumption tests, including normality, multicollinearity, and heteroscedasticity. Pearson correlation analysis was also conducted to examine the relationship between the study variables.

To test the proposed hypothesis, simple linear regression analysis was employed to determine the effect of Instagram Reels Consumption Speed on Verbal Communication Patterns. Statistical significance was determined at the 0.05 significance level ($p < .05$). The coefficient of determination (R^2) was calculated to evaluate the proportion of variance in verbal communication patterns explained by Instagram Reels consumption speed.

RESULTS AND DISCUSSION

A total of 200 digital adolescents participated in this study. Of these, 116 (58.0%) were female and 84 (42.0%) were male. Most respondents were between 18 and 21 years old (46.5%), followed by 22–24 years (31.5%) and 15–17 years (22.0%). Regarding Instagram Reels usage, approximately 71.5% of respondents reported watching Reels for more than one hour per day, indicating that short-form video consumption has become a routine activity among digital adolescents.

Table 1. Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	84	42.0
	Female	116	58.0
Age	15–17 years	44	22.0
	18–21 years	93	46.5
Daily Reels Usage	22–24 years	63	31.5
	< 30 minutes	18	9.0
	30–60 minutes	39	19.5
	1–2 hours	86	43.0
	> 2 hours	57	28.5

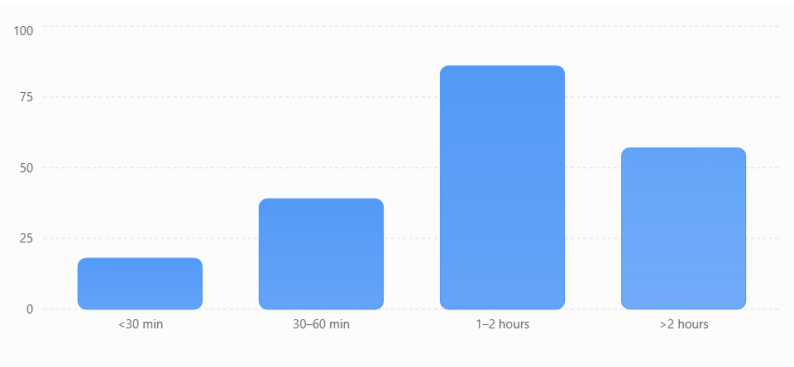

Figure 1. Distribution of Daily Instagram Reels Usage

Descriptive Statistics

The descriptive statistics indicate that respondents demonstrated relatively high levels of Instagram Reels consumption speed ($M = 3.94$, $SD = 0.63$). Similarly, the mean score for Verbal Communication Patterns was relatively high ($M = 3.76$, $SD = 0.58$), suggesting that respondents perceived themselves as having active and adaptive verbal communication behaviors.

Table 2. Descriptive Statistics

Variable	Mean	SD	Category
Instagram Reels Consumption Speed	3.94	0.63	High
Verbal Communication Patterns	3.76	0.58	High

Hypothesis Testing

Simple linear regression analysis was conducted to examine the influence of Instagram Reels Consumption Speed on Verbal Communication Patterns.

Table 3. Regression Analysis

Variable	β	T	p
Instagram Reels Consumption Speed	0.482	8.921	< .001

The regression results indicate that Instagram Reels Consumption Speed has a positive and statistically significant influence on Verbal Communication Patterns ($\beta = 0.482$, $t = 8.921$, $p < .001$). Therefore, H_1 is accepted.

The coefficient of determination (R^2) was 0.232, indicating that approximately 23.2% of the variance in Verbal Communication Patterns can be explained by Instagram Reels Consumption Speed, while the remaining 76.8% is attributable to other factors not included in the present study.

Table 4. Model Summary

R	R^2	Adjusted R^2	Std. Error
0.482	0.232	0.228	0.441

These findings suggest that adolescents who consume Instagram Reels more rapidly tend to exhibit noticeable differences in their verbal communication patterns. Although the effect size is moderate, the statistical significance demonstrates that rapid short-form video consumption is associated with changes in verbal communication behavior among digital adolescents.

Discussion

The findings demonstrate that Instagram Reels Consumption Speed has a positive and statistically significant influence on the Verbal Communication Patterns of Digital Adolescents ($\beta = 0.482$, $p < .001$). This result supports the proposed hypothesis and indicates that adolescents who consume Instagram Reels more rapidly tend to exhibit different verbal communication patterns. Although the coefficient of determination ($R^2 = 0.232$) suggests a moderate explanatory power, the findings imply that rapid short-form video consumption represents one of several factors contributing to adolescents' communication behavior.

From the perspective of Information Processing Theory (Atkinson & Shiffrin, 1968), the findings suggest that the continuous exposure to rapidly changing audiovisual stimuli influences the way adolescents encode, process, and retrieve information during communication. Instagram Reels presents highly personalized and sequential content through algorithmic recommendations and endless scrolling, requiring users to repeatedly shift their attention within a short period. Such repetitive cognitive processing may gradually shape communication habits characterized by quicker responses, concise verbal expression, and rapid conversational transitions. These findings are consistent with evidence indicating that intensive short-video use is associated with changes in adolescents' cognitive functioning, particularly working memory and verbal ability, with younger users being more susceptible to these effects (Xu et al., 2023; Al-Leimon et al., 2025).

The findings also support the assumptions of Cognitive Load Theory, which argues that working memory has limited processing capacity. Instagram Reels continuously delivers novel audiovisual information with minimal interruption, thereby increasing the amount of information processed within a limited period. Repeated exposure to rapidly changing stimuli may encourage users to prioritize efficiency over reflective processing. Consequently, adolescents may adopt faster verbal communication styles that emphasize immediacy and spontaneity rather than elaborated expression. Previous experimental research has similarly shown that frequent context switching induced by short-form videos can impair cognitive performance related to memory and information processing, suggesting that the design characteristics of these platforms influence broader cognitive behaviors (Chiossi et al., 2023).

The results can also be interpreted through Attention Theory, which proposes that attention is a limited cognitive resource. Endless scrolling and algorithmic recommendations continuously compete for users' attention by presenting highly stimulating content in rapid succession. This constant attentional switching may encourage communication behaviors that mirror the pace of digital media consumption, including shorter verbal responses, quicker topic transitions, and greater reliance on concise expressions. Recent studies likewise report that intensive short-form video use is associated with reduced attention regulation, mental fatigue, and changes in cognitive performance among adolescents (Al-Leimon et al., 2025; Xu et al., 2023).

From a communication perspective, these findings indicate that Instagram Reels functions not merely as an entertainment platform but also as an environment that shapes adolescents' communication habits. Digital adolescents spend considerable time interacting with algorithmically curated short-form videos, making these platforms influential socialization agents. This finding aligns with previous studies suggesting that digital communication environments contribute to the development of adolescents' communication behaviors, while short-video platforms encourage rapid interaction, immediate feedback, and highly dynamic communication styles.

Nevertheless, the moderate explanatory power of the regression model indicates that verbal communication patterns are influenced by numerous additional factors beyond Instagram Reels consumption speed. Variables such as personality traits, communication competence, family communication climate, peer interaction, educational background, and overall digital literacy are also likely to contribute to adolescents' communication behavior. Therefore, Instagram Reels consumption should be understood as one contributing factor rather than the sole determinant of verbal communication patterns.

Implication. This study provides both theoretical and practical implications. Theoretically, it extends Information Processing Theory, Cognitive Load Theory, and Attention Theory into the context of short-form video consumption by demonstrating that rapid media consumption behaviors are associated with adolescents' verbal communication patterns. While previous studies have primarily focused on cognitive functioning, academic performance, or educational outcomes, the present study contributes empirical evidence that rapid Instagram Reels consumption is also associated with everyday communication behaviors among digital adolescents. Practically, the findings highlight the importance of promoting balanced digital media consumption among adolescents. Parents, educators, and policymakers should encourage healthy digital habits by fostering

critical media literacy and mindful media use rather than merely limiting screen time. Educational institutions may also integrate digital communication literacy into learning activities to help adolescents develop effective communication skills while adapting to increasingly algorithm-driven media environments.

For social media platform developers, the findings suggest the importance of considering user well-being when designing recommendation systems. Although algorithm-driven personalization successfully increases user engagement, platform designers should also consider features that encourage reflective consumption and reduce excessive rapid scrolling, thereby supporting healthier communication and cognitive development among adolescent users.

Limitation and Suggestion for Further Research. Several limitations should be acknowledged. First, this study employed a cross-sectional survey design; therefore, causal relationships cannot be established with certainty. Longitudinal or experimental studies are recommended to examine whether prolonged exposure to rapid Instagram Reels consumption directly changes adolescents' verbal communication patterns over time.
Second, the study relied exclusively on self-reported questionnaire data, which may be affected by recall bias and subjective perception. Future studies are encouraged to complement survey data with objective behavioral measures, such as digital usage logs, screen-time records, or speech analysis derived from recorded conversations. Third, the regression model explained only 23.2% of the variance in verbal communication patterns, indicating that numerous other factors remain unexplored. Future research should incorporate additional variables, including digital literacy, communication competence, personality traits, self-regulation, peer interaction, and family communication environments, to develop more comprehensive explanatory models.
Finally, the present study focused solely on Instagram Reels. Future comparative studies involving TikTok, YouTube Shorts, or other short-form video platforms would provide broader insights into whether platform-specific characteristics differentially influence adolescents' verbal communication patterns.

CONCLUSIONS

This study examined the influence of Instagram Reels consumption speed on the verbal communication patterns of digital adolescents. The findings revealed that Instagram Reels consumption speed has a positive and statistically significant effect on adolescents' verbal communication patterns. Adolescents who engage more frequently in rapid short-form video consumption tend to exhibit changes in their communication behaviors, including speaking rate, speech fluency, clarity of expression, responsiveness, and the organization of verbal messages. These findings indicate that the fast-paced and algorithm-driven nature of Instagram Reels extends beyond entertainment, shaping how adolescents process information and communicate in their daily lives.

The study also contributes to the growing body of literature on digital communication by integrating Information Processing Theory, Cognitive Load Theory, and Attention Theory to explain the relationship between rapid media consumption and verbal communication. The findings suggest that continuous exposure to personalized, rapidly changing audiovisual content encourages faster cognitive processing, which may subsequently influence adolescents' communication habits. Thus, digital media platforms should be understood not only as channels for information and entertainment but also as environments that actively shape communication behaviors among digital natives.

Despite these contributions, Instagram Reels consumption speed explained only part of the variance in verbal communication patterns, indicating that communication behavior is influenced by multiple cognitive, social, and environmental factors. Therefore, future studies should incorporate additional variables, such as digital literacy, communication competence, self-regulation, personality traits, and family communication climate, to develop a more comprehensive understanding of adolescents' communication in the digital era. Longitudinal and experimental research is also recommended to examine causal relationships and explore the long-term effects of short-form video consumption on verbal communication development. Overall, this study highlights the importance of understanding the broader implications of short-form video consumption in contemporary digital society. As algorithm-driven media platforms continue to dominate adolescents' daily routines, promoting balanced media consumption and strengthening digital communication literacy will be essential for fostering effective verbal communication and healthy cognitive development among future generations.

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AUTHOR CONTRIBUTIONS STATEMENT

The author solely conceived and designed the study, conducted the literature review, developed the research instrument, collected and analyzed the data, interpreted the findings, and wrote, revised, and approved the final version of the manuscript. The author takes full responsibility for the content of this article.

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