Uses and Gratifications of Telegram Messenger Among University Students

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KWASU Journal of Information, Communication and Technology (KJICT.)2025, 4(1)
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URL: http://kjict.ng/

Abstract

This conceptual paper explores the uses and gratifications of Telegram messenger among university students within the framework of Uses and Gratifications Theory (UGT). As digital communication evolves, instant messaging applications have become essential tools for academic and social interactions in higher education. Telegram, distinguished by its enhanced privacy features, large group capacity, channel functionality, and unlimited file sharing, has emerged as a significant platform for educational communication. This paper synthesises existing literature to develop a conceptual framework explaining why and how university students adopt and utilise Telegram. Drawing on current empirical studies from diverse educational contexts, the paper identifies five primary gratifications sought by students through Telegram. These include information seeking and knowledge acquisition, social interaction and community building, convenience and accessibility for learning, entertainment and escapism, and self-expression and identity management. The paper discusses how Telegram's unique features align with these gratifications to support collaborative learning, facilitate instructor-student communication, enable peer-to-peer knowledge exchange, and create inclusive learning environments. The conceptual framework integrates individual factors, platform characteristics, and contextual variables that collectively influence Telegram adoption and usage patterns among students. The paper concludes by proposing directions for future empirical research. This framework contributes to understanding digital communication in higher education and provides insights for educators, administrators, and platform developers seeking to optimise technology-mediated learning experiences.

Keywords: Telegram Messenger, Uses and Gratifications Theory, University Students, Instant Messaging, Educational Technology, Digital Communication, Mobile Learning

1. Introduction

The proliferation of instant messaging applications has fundamentally transformed communication patterns in higher education, creating new opportunities for learning, collaboration, and social interaction among university students. Telegram Messenger, launched in 2013 by Pavel Durov, has emerged as a significant platform in the educational technology landscape, distinguished by features that particularly appeal to academic communities, such as robust privacy protections, support for large groups (up to 200,000 members), unlimited cloud storage, channel functionality for broadcast communication, and sophisticated bot integration capabilities (Iqbal et al., 2020; Sevnarayan, 2023).

The COVID-19 pandemic The COVID-19 pandemic accelerated the adoption of digital communication tools in education, positioning platforms like Telegram as essential infrastructure for remote and hybrid learning environments (Syed Mohd Khomsah & Ariffin, 2024). While WhatsApp remains dominant in many contexts, Telegram's unique features, particularly its channel system, advanced file-sharing capabilities, and absence of size limitations, have attracted growing interest from educational institutions and student communities worldwide. Recent research indicates that Telegram serves multiple pedagogical functions, from facilitating course discussions and distributing learning materials to enabling collaborative projects and supporting student engagement beyond traditional classroom boundaries (Mohammed & Kuta, 2021; Sevnarayan, 2023).

Understanding why and how university students adopt and use Telegram requires theoretical frameworks that account for user agency, motivations, and the interplay between platform affordances and individual needs. Uses and Gratifications Theory (UGT), which posits that individuals actively select media to satisfy specific needs and derive gratifications from media consumption, provides a robust lens for examining student engagement with instant messaging platforms (Katz et al., 1973; Ruggiero, 2000). Unlike traditional effects-based approaches that view audiences as passive recipients, UGT emphasises user intentionality and the functional role of media in fulfilling psychological and social needs.

This conceptual paper addresses gaps in the literature by synthesisng current research to develop a comprehensive framework for understanding Telegram use among university students through the UGT lens. The paper examines the gratifications students seek from Telegram, analyses how platform features align with these needs, identifies factors influencing adoption and usage patterns, and proposes directions for future research.

A Brief History of Telegram

Telegram was founded by Russian entrepreneurs, Pavel Durov and his brother Nikolai Durov and was officially launched on 14th August, 2013 (Telegram, 2013). The Durov brothers had previously co-founded VKontakte (VK), Russia's largest social network, before selling their stakes under pressure from Kremlin-aligned investors (Nechepurenko, 2014). This experience profoundly shaped Telegram's design philosophy, which is centred on resistance to surveillance and governmental interference.

The platform's cryptographic infrastructure is built on the proprietary MTProto encryption protocol developed by Nikolai Durov (Telegram, 2023). From its inception, Telegram was designed for speed and security; the founders offered a $300,000 bounty to anyone who could crack its encryption, a challenge that was unmet for several years (Telegram, 2014). Initially headquartered in Berlin and later relocating to Dubai, Telegram deliberately maintained a nomadic corporate structure to remain beyond the regulatory reach of any single jurisdiction (Telegram, 2023).

Key milestones in Telegram's development include the introduction of group chats (2013), channels for broadcasting to unlimited audiences (2015), bots (2015), the Bot API (2015), voice calls (2017), video calls (2020), and the Telegram Open Network (TON) blockchain project, which, although eventually abandoned following a U.S. Securities and Exchange Commission injunction, demonstrated the platform's ambitions beyond messaging (Sedgwick, 2020). In January 2021, following WhatsApp's controversial privacy policy update, Telegram gained approximately 25 million new users in a single 72-hour period, reaching 500 million monthly active users (Telegram, 2021). By July 2023, Telegram reported 800 million monthly active users, and by early 2024, the platform surpassed 900 million (Telegram, 2024).

Comparative Analysis with Other Social Media Platforms

To situate Telegram within the broader social media ecosystem, it is instructive to compare it with WhatsApp, Facebook, Twitter/X, and Signal across dimensions of privacy, functionality, monetisation, and user base. WhatsApp, acquired by Meta (then Facebook) in 2014 for $19 billion, shares Telegram's messaging-first orientation but differs significantly in its data-sharing practices. WhatsApp employs end-to-end encryption (E2EE) by default for all private messages using the Signal Protocol, whereas Telegram applies E2EE only in its 'Secret Chats' feature; regular cloud-based chats are encrypted in transit but remain accessible on Telegram's servers (Sizor & Piller, 2016). This has been a persistent point of criticism from security researchers, though Telegram argues that its cloud architecture enables features such as multi-device access and message search that are incompatible with full E2EE.

Facebook (Meta), with over 3 billion monthly active users as of 2024, is the world's largest social media platform (Statista, 2024a). Unlike Telegram, Facebook's business model is founded on advertising revenue derived from extensive data collection. Telegram, by contrast, does not serve third-party advertisements in its standard interface and only recently introduced a premium subscription tier and channel-specific ads as monetisation mechanisms (Telegram, 2022). This distinction makes Telegram more aligned with users who are resistant to commercial surveillance.

Twitter/X, under Elon Musk's ownership since 2022, provides a comparable public broadcast function to Telegram Channels but operates differently in terms of algorithm-driven content curation. Telegram Channels deliver content chronologically without algorithmic filtering, which appeals to users who pre-

fer unmediated information consumption (Urman & Katz, 2022). Furthermore, Telegram Channels can accommodate unlimited subscribers, whereas Twitter/X restricts certain functionalities based on account verification status.

Signal, often considered Telegram's closest competitor in the privacy-conscious segment, applies full E2EE to all messages by default and does not store metadata (Signal Foundation, 2023). However, Signal's user base remains significantly smaller, with estimates suggesting approximately 40 million monthly active users in 2023, compared to Telegram's 900 million (Statista, 2024b). Signal's narrower feature set, lacking the channel broadcasting, bots, and file-sharing capabilities of Telegram, also limits its appeal for content creators and communities.

Features of Telegram and Engagement Metrics

Telegram's feature architecture is notably extensive relative to most messaging applications. Its core features can be categorised into communication tools, content distribution mechanisms, developer tools, and privacy controls. In terms of communication tools, Telegram supports private messaging, group chats of up to 200,000 members, voice and video calls, and voice chats in groups. The platform allows the sharing of files up to 2 GB per file, a capacity that far exceeds WhatsApp's 100 MB limit and positions Telegram as a viable tool for professional file exchange (Telegram, 2023). Telegram also supports self-destructing messages in Secret Chats, an edit history for sent messages, and scheduled messaging.

Telegram Channels represent one of the platform's most distinctive features, enabling administrators to broadcast messages to an unlimited number of subscribers. Channels have been widely adopted by media organisations, political actors, and influencers, particularly in regions where press freedom is constrained (Urman & Katz, 2022). According to Telegram's internal data, the most subscribed channels boast tens of millions of followers, illustrating the platform's potential as a mass media tool.

The Telegram Bot API, launched in 2015, has generated a thriving ecosystem of automated services including customer support bots, news aggregators, payment processing systems, and educational tools (Telegram, 2023). Developers can create bots that interact with users in groups or privately, significantly extending the platform's utility beyond peer-to-peer communication.

Regarding engagement metrics, Telegram does not publicly disclose detailed per-channel engagement data in the manner of platforms like YouTube or Instagram. However, Telegram's own statistics feature within channels provides administrators with data on views per post, which has become a widely used proxy for audience engagement. Research by Hoseini et al. (2023) found that Telegram channels in politically polarised contexts exhibited high engagement rates, with average view-to-subscriber ratios frequently exceeding those observed on Twitter/X for similar content types.

Telegram introduced the 'Stories' feature in July 2023, bringing ephemeral content to the platform in a manner consistent with Instagram Stories and WhatsApp Status (Telegram, 2023). The introduction of Telegram Premium in June 2022 offered subscribers exclusive features such as faster downloads, exclusive stickers, and the ability to follow up to 1,000 channels, providing a monetisation pathway while preserving a free tier (Telegram, 2022).

Audience Statistics Compared to Other Platforms

Telegram's audience profile is characterised by geographic diversity, with particularly strong penetration in Eastern Europe, the Middle East, South and Southeast Asia, and Latin America (Statista, 2024b). This stands in contrast to platforms like Snapchat, which remains primarily concentrated in North America and Western Europe (Statista, 2024c). As of early 2024, Telegram reported surpassing 900 million monthly active users, placing it among the top ten most-used social media platforms globally (Telegram, 2024). For comparative reference, WhatsApp has approximately 2 billion monthly active users, while Facebook leads with over 3 billion; Instagram with 2 billion; TikTok with approximately 1.6 billion; and Twitter/X with approximately 550 million (Statista, 2024a). Telegram's user base, while smaller than these giants, is noteworthy given the platform's limited advertising budget and its growth driven predominantly by word-of-mouth and geopolitical events that prompted users to seek privacy-oriented alternatives.

Demographically, Telegram's user base skews younger, with a significant proportion aged between 18 and 34 years (Statista, 2024b). This demographic profile is broadly consistent with other messaging-centric platforms. However, Telegram distinguishes itself through the diversity of use cases represented in its user base, ranging from personal messaging and com-

munity building to journalism, political organising, and e-commerce via bots.

Engagement duration is another dimension of audience behaviour worth noting. DataReportal (2024) indicates that Telegram users spend an average of approximately 4.2 minutes per session, which is modest in comparison to algorithmically curated platforms like TikTok, where average session duration can exceed 10 minutes. This reflects the fundamentally different nature of Telegram as a utility-driven communication tool rather than an entertainment-optimised platform.

Telegram's user retention is also noteworthy. Unlike platforms that experience rapid user attrition, Telegram benefits from strong network effects within diaspora communities, activist groups, and professional networks, which drive sustained engagement (Urman & Katz, 2022). The platform's role in conflicts such as the Russia-Ukraine war, where both sides used Telegram as a primary information dissemination channel, further underscores its unique position in the global information ecosystem (Gorodnichenko, Pham, & Talavera, 2023).

Telegram has evolved from a privacy-focused messaging application into a multifaceted social media platform that challenges established paradigms of digital communication. Its historical trajectory, rooted in a principled resistance to governmental surveillance, continues to shape its design and positioning. When compared to dominant platforms such as WhatsApp, Facebook, and Twitter/X, Telegram occupies a distinctive niche defined by cloud-based flexibility, expansive file sharing, and community-building tools, though it remains subject to legitimate criticism regarding its default encryption model. Its audience statistics, while not matching those of the largest global platforms, reflect consistent and accelerating growth driven by genuine user demand.

2. Theoretical Foundation: Uses and Gratifications Theory

Uses and Gratifications Theory emerged in the 1940s as a response to prevailing media effects paradigms that conceptualised audiences as passive recipients of media messages. Early UGT researchers sought to understand not what media do to people, but rather what people do with media (Katz et al., 1973). This fundamental shift in perspective positioned audience members as active agents who consciously select media to satisfy specific needs and desires. The theory rests on several core assumptions articulated by Katz, Blumler, and Gurevitch (1973): (a) media users are active participants who make purposeful choices about media consumption; (b) media selection is goal-directed, with users seeking to fulfill specific needs; (c) media compete with other sources of need satisfaction; (d) users possess sufficient self-awareness to report their motivations and gratifications; and (e) value judgments about media consumption should be suspended in favour of understanding user perspectives.

Research on social media and instant messaging has identified gratifications specific to interactive digital platforms. Alhabash and Ma (2017) found that college students use social media for information seeking, entertainment, social interaction, and self-expression. Bhatiasevi (2024) identified purposive value, self-discovery, entertainment value, social enhancement, and maintaining interpersonal connectivity as key gratifications driving social media use. For university students specifically, research suggests that educational gratifications constitute an important additional category. Students use digital platforms not only for social and entertainment purposes but also to access learning resources, collaborate on academic projects, communicate with instructors, and enhance their educational experiences (Aghajani & Adloo, 2018; Al Mulhim & Ismaeel, 2024).

Telegram in Higher Education Contexts

Telegram Messenger, founded in 2013, represents a cloud-based instant messaging service that emphasises speed, security, and openness. The platform employs encryption for standard chats and optional end-to-end encryption for 'secret chats,' positioning privacy as a core value proposition. Several features make Telegram particularly suitable for educational applications: groups support up to 200,000 members, channels enable unlimited subscribers for broadcasting, file sharing accommodates files up to 2GB with no storage limits, and cross-device synchronisation ensures seamless access (Iqbal et al., 2020).

Emerging research documents diverse applications of Telegram in higher education. Sevnarayan (2023) investigated Telegram's implementation in an Open Distance e-Learning university in South Africa, finding that the platform enhanced student motivation and interaction in academic writing courses. Research from medical education by Iqbal et al. (2020) indicated that students valued Telegram for easy access

to learning materials, efficient communication, and support for collaborative learning.

Comparative studies reveal platform-specific advantages. Mohammed et al. (2024) found that Telegram's larger file size limits and better channel organisation made it preferable for sharing course materials. Language education research by Aghajani and Adloo (2018) demonstrated significant improvements in writing performance through Telegram use.

Syed Mohd Khomsah and Ariffin (2024) examined Telegram as a conversation hub in ESL blended classrooms, finding that chat history allowed students to review instructions at their own pace, reducing anxiety and supporting reflection. This 'scroll back to learn' capability proved particularly valuable for students with language difficulties.

3. Gratifications Sought from Telegram

Based on theoretical foundation and empirical evidence, this section presents a comprehensive framework of gratifications that university students seek from Telegram. This framework organises gratifications into five primary categories:

Information Seeking and Knowledge Acquisition: Information seeking represents a fundamental gratification that students pursue through Telegram. This encompasses both formal educational information (course materials, assignments, announcements) and informal knowledge exchange (study tips, resource recommendations). Telegram's channel functionality particularly serves information seeking needs, with unlimited file capacity enabling sharing of high-quality videos, large datasets, and comprehensive documents (Iqbal et al., 2020; Sevnarayan, 2023).

Social Interaction and Community Building: Social interaction and relationship maintenance constitute core gratifications sought from instant messaging platforms. Telegram facilitates one-to-one conversations, group chats creating communities of practice, and large-scale interactions enabling community building. Research highlights how Telegram groups foster sense of belonging among distance education students who otherwise experience isolation (Sevnarayan, 2023). Social support through peer networks provides important coping resources for various stressors students face.

Convenience and Accessibility for Learning: Convenience gratifications relate to ease, efficiency, and accessibility that Telegram provides for educational activities. Cross-platform functionality allows seamless work across devices. Notification management enables awareness while controlling distraction. Cloud-based architecture supports file access without local storage requirements. Asynchronous communication provides schedule flexibility, particularly valuable for diverse student populations (Syed Mohd Khomsah & Ariffin, 2024).

Entertainment and Escapism: Entertainment and escapism represent important motivations for students' media use. Telegram supports entertainment through memes, jokes, videos, and casual banter within groups. Channel features enable following entertainment content ranging from university humor to hobby-related topics. Moderate escapism serves adaptive functions by providing psychological respite and emotional regulation opportunities.

Self-Expression and Identity Management: Self-expression and identity management gratifications relate to constructing, presenting, and negotiating identities through communication. Telegram provides profile customisation, privacy features for selective identity presentation, and communication content as primary vehicles for identity expression. Academic identity development represents a specific dimension where students construct identities as engaged learners, subject enthusiasts, and intellectual contributors (Abu-Ayfah, 2019).

Factors Influencing Telegram Adoption and Usage

While gratifications explain motivations, understanding actual adoption requires consideration of factors that facilitate or constrain platform engagement. Such factors include:

Individual-Level Factors: Digital literacy and technological self-efficacy predict willingness to adopt new platforms. Communication preferences and learning styles matter, with text-preferring students gravitating toward messaging platforms more readily. Prior experience with instant messaging provides transferable knowledge. Privacy consciousness may attract security-focused students to Telegram's encryption features (Abu-Ayfah, 2019; Chinyere et al., 2025).

Platform-Level Factors: Perceived usefulness and ease of use fundamentally influence adoption decisions. Specific features like large group capacity, unlimited file sharing, and channel functionality

address genuine educational needs. Platform reliability and performance affect sustained usage. Interface design influences user experience and adoption, with students valuing Telegram's ease of navigation compared to learning management systems (Sevnarayan, 2023).

Contextual-Level Factors: Social influence from peers, instructors, and institutions significantly affects adoption. Network effects create powerful adoption dynamics where platform value increases with user base size. Institutional policies and infrastructure shape the technology landscape through official recognition, training, and technical support. Cultural and regional contexts introduce variation in adoption patterns, regulatory environments, and economic factors (Chinyere et al., 2025).

4. Conclusion and Implications and Future Research Directions

The conceptual paper has developed a comprehensive framework for understanding Telegram Messenger use among university students through the Uses and Gratifications Theory. The framework identifies five primary gratifications: information seeking and knowledge acquisition, social interaction and community building, convenience and accessibility for learning, entertainment and escapism, and self-expression and identity management. Each category aligns with specific Telegram features facilitating gratification satisfaction. The framework extends beyond gratifications to incorporate individual factors, platform characteristics, and contextual variables that collectively shape adoption and usage patterns. Telegram's distinctive features, namely large group capacity, channel functionality, unlimited file sharing, bot integration, and privacy emphasis, create unique affordances differentiating it from competing platforms.

The framework advances Uses and Gratifications Theory by demonstrating continued relevance to emerging technologies. The addition of convenience/accessibility as primary gratification reflects importance of usability for digital natives. It highlights the need to consider educational gratifications explicitly in academic contexts rather than treating them as subcategories of information seeking. The framework advances theoretical understanding while offering practical guidance for educators, administrators, and developers.

For educators, understanding diverse gratifications suggests effective use should support multiple needs through channels for announcements and groups for interaction. For administrators, successful integration requires attention to social influence dynamics, institutional support, and policy clarification. For developers, understanding gratifications can inform feature development prioritising customisation, information management, and cross-device experiences.

Large-scale quantitative studies should test the proposed framework across diverse populations. Longitudinal research should track adoption and usage over time. Qualitative research should explore lived experiences revealing nuances not captured by surveys. Experimental research should examine causal relationships with educational outcomes. Comparative international research should examine how contexts shape Telegram use across cultures.

As higher education continues to evolve, understanding how students engage with communication technologies becomes increasingly critical. The conceptual framework provides foundation for inquiry, organising existing knowledge and charting pathways for future research that can deepen understanding of digital communication in service of learning.

References

Abu-Ayfah, Z. (2019). Telegram app in learning English: EFL students' perceptions. *English Language Teaching*, 13(1), 51-62. https://doi.org/10.5539/elt.v13n1p51

Aghajani, M., & Adloo, M. (2018). The effect of online cooperative learning on students' writing skills and attitudes through Telegram application. *International Journal of Instruction*, 11(3), 433-448. https://doi.org/10.12973/iji.2018.11330a

Al Mulhim, E. N., & Ismaeel, D. A. (2024). Learning sustainability: Post-graduate students' perceptions on the use of social media platforms to enhance academic writing. *Sustainability*, 16(12), 5138. https://doi.org/10.3390/su16125138

Aladsani, H. K. (2021). A narrative approach to university instructors' stories about promoting student engagement during COVID-19 emergency remote teaching in Saudi Arabia. *Journal of Research on Technology in Education*, 1-17. https://doi.org/10.1080/15391523.2021.1922958

Alhabash, S., & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students. *Social Media + Society*, 3(1), 2056305117691544. https://doi.org/10.1177/2056305117691544

Bhatiasevi, V. (2024). The uses and gratifications of social media and their impact on social relationships and psychological well-being. *Frontiers in Psychiatry*, 15, 1260565. https://doi.org/10.3389/fpsyt.2024.1260565

Chinyere O.E., Hayford M. A., Sikiru I.O., Eric W. D., Chidebe C.U. & Robert U. O. (2025). Determinants of WhatsApp and Telegram usage for learning support in Nigerian universities: A quantitative study. *Frontiers in Education*, 10, 1581514. https://doi.org/10.3389/feduc.2025.1581514

DataReportal. (2024). Digital 2024: Global overview report. *Kepios*. https://datareportal.com/reports/digital-2024-global-overview-report

Elom, C.O., Ayerakwa, H.M., Ibrahim, O. S. (2025). Telegram and WhatsApp in Blended Learning: Impact on Online Community and Academic Achievement Among Graduate Students. *Tehreem Zahra, Francesco Perono CacciafocoIdil: Journal of Art and Language*, 14 (118), 467-488.

Ermoshina, K., Musiani, F., & Halpin, H. (2016). Move fast and encrypt things. In Proceedings of the 8th ACM Conference on Web Science (pp. 126–135). ACM. https://doi.org/10.1145/2908131.2908158

Gorodnichenko, Y., Pham, T., & Talavera, O. (2023). Social media, sentiment and public opinions: Evidence from #Brexit and #USElection. *European Economic Review*, 136, 103772. https://doi.org/10.1016/j.euroecorev.2021.103772

Hoseini, M., Melo, P., Benevenuto, F., Feldmann, A., & Zannettou, S. (2023). On the globalization of the QAnon conspiracy theory through Telegram. *Social Networks*, 71, 86–102. https://doi.org/10.1016/j.socnet.2022.07.006

Iqbal, M. Z., Alradhi, H. I., Alhumaidi, A. A., Alshaikh, K. H., AlObaid, A. M., Alhashim, M. T., & AlSheikh, M. H. (2020). Telegram as a tool to supplement online medical education during COVID-19 crisis. *Acta Informatica Medica*, 28(2), 94-99. https://doi.org/10.5455/aim.2020.28.94-99

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59–68. https://doi.org/10.1016/j.bushor.2009.09.003

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509-523. https://doi.org/10.1086/268109

McQuail, D., Blumler, J. G., & Brown, J. R. (1972). The television audience: A revised perspective. In D. McQuail (Ed.), *Sociology of mass communications* (pp. 135-165). Penguin Books.

Nechepurenko, I. (2014, April 21). VKontakte's Pavel Durov says he has been fired. The Moscow Times. https://www.themoscowtimes.com/2014/04/21/vkontaktes-pavel-durov-says-he-has-been-fired-a34512

Pi, S. N. M. S., & Majid, M. A. (2020). Components of smart chatbot academic model for a university website. In *Emerging Technology in Computing, Communication and Electronics* (ETCCE) (pp. 1-6). IEEE. https://doi.org/10.1109/ETCCE51779.2020.9350903

Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication & Society*, 3(1), 3-37. https://doi.org/10.1207/S15327825MCS0301_02

Sevnarayan, K. (2023). The implementation of Telegram as a pedagogical tool to enhance student

motivation and interaction. *Journal of Education Technology*, 7(1), 71-79. https://doi.org/10.23887/jet.v7i1.52488

Signal Foundation. (2023). Signal technical documentation. https://signal.org/docs/

Statista. (2024a). Most popular social networks worldwide as of January 2024, ranked by number of monthly active users. https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

Statista. (2024b). Telegram—Statistics & facts. https://www.statista.com/topics/5540/telegram/

Statista. (2024c). Snapchat—Statistics & facts. https://www.statista.com/topics/1882/snapchat/

Syed Mohd Khomsah, S. N. F., & Ariffin, A. (2024). Enhancing hybrid ESL classrooms through instant messaging applications: A case study. *Gading Journal for the Social Sciences*, 27(1), 89-98.

Telegram. (2013, August 14). Telegram launch [Blog post]. https://telegram.org/blog/telegram-launch

Telegram. (2014). $300,000 cryptocheck. https://telegram.org/blog/cryptocheck

Telegram. (2021, January 12). 500 million users [Blog post]. https://telegram.org/blog/500-million

Telegram. (2022, June 18). Premium for powerful users [Blog post]. https://telegram.org/blog/premium

Telegram. (2023). About Telegram. https://telegram.org/faq

Telegram. (2024, March). Telegram reaches 900 million users [Blog post]. https://telegram.org/blog/900-million

Wei, C., Nawi, H. M., & Naeem, S. B. (2024). The uses and gratifications (U&G) model for understanding fake news sharing behavior on social media. *Journal of Academic Librarianship*, 50, 102938. https://doi.org/10.1016/j.acalib.2024.102938