

DIGITAL TECHNOLOGY, HUMAN RELATIONSHIPS AND SOCIAL CONNECTION IN CONTEMPORARY SOCIETY

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Abstract

This conceptual paper examines digital technology, human relationships and social connection in contemporary society through a critical, literature-based analysis. It addresses the central philosophical and social problem by clarifying key concepts, reviewing relevant theoretical perspectives, and organising the discussion around mediated presence and intimacy, identity and self-presentation, connection, loneliness and displacement. The paper argues that the issue should not be understood through narrow causal or measurement language alone; it requires attention to values, institutions, professional judgement and the Nigerian context. The synthesis shows that durable educational and social outcomes depend on coherent relationships among ideas, practices and institutional conditions. Practical implications are developed for policy, professional practice and further scholarly debate. The paper concludes that a context-sensitive, ethically defensible and analytically integrated approach provides a stronger basis for action than isolated technical interventions.

Introduction

Digital technology has become an integral part of contemporary social life, fundamentally changing how people communicate, develop relationships, share experiences and maintain social connections. The widespread availability of smartphones, social networking platforms, instant messaging applications, video-conferencing tools and other internet-enabled technologies has made communication faster, more convenient and less restricted by geographical distance. Young adults are particularly active participants in this digital environment because they have generally adopted digital technologies as part of their everyday communication, socialisation and self-expression. Digital platforms such as WhatsApp, Facebook, Instagram, TikTok and X provide opportunities for individuals to establish new connections, maintain existing relationships and participate in online communities. Consequently, interpersonal relationships among young adults are increasingly shaped by interactions that occur both physically and through digital spaces (Habito et al., 2022; Taylor et al., 2022).

Human relationships refer to the social, emotional and interpersonal connections individuals establish with family members, friends, peers, romantic partners and other members of society. Such relationships provide companionship, emotional support, intimacy, belonging and opportunities for social development. Traditionally, the development and maintenance of these relationships have depended heavily on face-to-face communication and physical interaction. Digital technology, however, has introduced alternative channels through which individuals can initiate conversations, express emotions, share personal information and maintain relationships over considerable distances. This development has created both opportunities and challenges. While digital communication can strengthen social connection by making interaction more frequent and accessible, excessive or inappropriate use may reduce the quality of face-to-face interaction and create

relational problems. Taylor et al. (2022) therefore described social media and close relationships as involving a dual process of connection and disconnection, because the same digital behaviours can simultaneously facilitate closeness and generate relational difficulties.

One important way digital technology may influence human relationships among young adults is through the frequency and nature of communication. Instant messaging and social networking applications allow young adults to communicate continuously through text messages, voice notes, photographs, video calls and other forms of digital content. These technologies can make it easier for friends and family members to remain connected despite physical separation and can facilitate the rapid exchange of information and emotional support. Evidence from Nigeria also demonstrates the relevance of virtual communication to young people's interpersonal relationships. Lasode et al. (2020) found among undergraduates in Ogun State that Facebook, WhatsApp and Instagram were widely used and that virtual communication had a significant positive association with interpersonal relationships. This suggests that digital technology should not necessarily be viewed as a replacement for meaningful human interaction, since it can also serve as an important instrument for sustaining and strengthening relationships.

Despite these benefits, concerns have emerged regarding the negative consequences of excessive or problematic digital technology use on interpersonal relationships. Excessive engagement with social networking sites can encourage individuals to prioritise online interaction over direct interpersonal contact, potentially weakening the quality of offline relationships. A systematic review by Keles et al. (2021) reported associations between problematic social media use, social anxiety and loneliness among young people, while Yang et al. (2024) found a significant negative association between digital addiction and interpersonal relationships, particularly offline relationships. The issue is therefore not simply whether young adults use digital technology, but how frequently, why and in what manner they use it. Excessive use may contribute to social withdrawal, reduced face-to-face communication, interpersonal dependence and difficulties in maintaining healthy social boundaries.

Digital technology may also influence the emotional and relational dimensions of young adults' relationships. Social networking platforms provide opportunities for self-presentation, social validation, emotional expression and relationship monitoring. Young adults may use digital platforms to display aspects of their lives, seek approval from peers, maintain romantic relationships and observe the activities of friends or partners. However, these practices can also generate jealousy, mistrust, comparison and conflict, particularly in romantic relationships. For example, Arikewuyo et al. (2021) found that the use of multiple social media platforms among romantic partners could facilitate satisfaction and affection but could also encourage jealousy, monitoring, infidelity and distraction. Related scholarship also shows that digital platforms can simultaneously enable connection and introduce relational strain, depending on how they are used (Taylor et al., 2022). These findings indicate that digital technology has become intertwined with how young people construct, experience and evaluate their relationships.

The influence of digital technology on human relationships is particularly worthy of conceptual attention among young adults in Rivers State, Nigeria, where increasing digital connectivity has become part of contemporary social and educational life. Young adults in the State interact through smartphones, social networking platforms, messaging applications and other digital channels for friendship, family communication, romantic

relationships, entertainment, education and social networking. The extent to which these technologies strengthen meaningful interpersonal relationships or contribute to reduced face-to-face interaction, loneliness, misunderstanding, jealousy and relational conflict remains an important social question. Existing Nigerian studies provide useful evidence on virtual communication and social media use, but there remains a need for context-sensitive analysis focused on young adults in Rivers State. The present paper therefore critically examines digital technology and human relationships among young adults in Rivers State, Nigeria, with attention to how contemporary digital practices may shape the quality and nature of interpersonal relationships within the State.

Statement of the Conceptual Problem

The rapid expansion of digital technology has significantly changed the way young adults communicate and establish relationships. Smartphones, social media platforms, instant messaging applications, video calls and other digital communication tools have made it easier for young adults to maintain contact with friends, family members and romantic partners irrespective of physical distance. However, the increasing dependence on digital platforms has also generated concerns about the quality of human relationships. Young adults may spend considerable amounts of time communicating online while having less opportunity for meaningful face-to-face interaction. Issues such as excessive social media use, reduced personal interaction, online distraction, misunderstanding of digital messages, jealousy, monitoring of partners and emotional dependence on online contacts may weaken trust, intimacy and effective interpersonal communication. Thus, although digital technology offers considerable opportunities for strengthening social connections, its excessive or inappropriate use may create conditions that undermine the quality of human relationships.

In Rivers State, the growing involvement of young adults in digital communication raises questions about how these technologies are affecting their relationships with friends, family members, peers and romantic partners. Anecdotal observations suggest that some young adults increasingly prefer chatting, social networking and other forms of online interaction to direct interpersonal engagement, potentially creating emotional distance and weakening the quality of physical relationships. At the same time, digital platforms may enable young adults who live or study away from their families and friends to maintain regular communication and emotional connections. The problem, therefore, is not simply the widespread use of digital technology, but the uncertainty surrounding whether and under what conditions its use strengthens or weakens human relationships among young adults in Rivers State. Existing studies have examined social media use and interpersonal relationships in other settings, but limited context-specific scholarship is available on young adults in Rivers State. This gap justifies a conceptual analysis of the relationship between digital technology and human relationships among young adults in Rivers State, Nigeria.

Aim and Objectives

The aim of the paper is to critically examine digital technology, human relationships and social connection in contemporary society and clarify its implications for education, society and professional practice in Nigeria.

1. To analyse mediated presence and intimacy in relation to the central argument of the paper.
2. To analyse identity and self-presentation in relation to the central argument of the paper.

3. To analyse connection, loneliness and displacement in relation to the central argument of the paper.
4. To analyse relational ethics and privacy in relation to the central argument of the paper.
5. To analyse digital wellbeing and intentional use in relation to the central argument of the paper.

Conceptual Clarification and Literature Review

Digital technology has become an important part of the social lives of young adults, particularly through social networking sites, smartphones and internet-enabled communication platforms. Human relationships, including relationships with friends, family members and romantic partners, increasingly involve both online and face-to-face interaction. Taylor et al. (2022) observed that social media has a dual influence on close relationships because the same technologies that facilitate connection can also contribute to disconnection. Social media enables individuals to maintain contact, share experiences, provide emotional support and communicate across geographical boundaries. However, behaviours such as excessive phone use during interpersonal encounters, online surveillance and other forms of inappropriate digital engagement can undermine trust and closeness. Thus, digital technology should not be regarded as inherently beneficial or harmful to human relationships. Its influence depends considerably on the nature, frequency and context of its use.

Social media use is particularly relevant to human relationships among young adults because platforms such as Facebook, Instagram, WhatsApp and X have become important spaces for communication, self-expression and relationship maintenance. Social media allows young adults to remain connected to friends and relatives, participate in social communities and communicate their feelings and experiences. Vaterlaus et al. (2016), in a study of young adults, found that social media could facilitate positive interpersonal interactions while also creating relational challenges. Similarly, Taylor et al. (2022) explained that social media can support relationship satisfaction, intimacy and commitment, but can also create mistrust, jealousy and relational disconnection. Recent evidence continues to indicate that the relationship between social media use and social connectedness is complex rather than uniformly positive or negative.

Instant messaging applications constitute another important dimension of digital technology that may influence human relationships. Applications that permit text messaging, voice notes, photographs, video calls and other forms of immediate communication allow young adults to interact continuously with people who are physically distant. Instant messaging can facilitate frequent communication and emotional disclosure, thereby supporting intimacy and relationship maintenance. Early evidence from Grinter and Eldridge (2003) showed that instant messaging was used extensively by young people as a means of maintaining social connections, while Hu et al. (2004) examined the relationship between instant messaging and friendship intimacy. Ledbetter (2009) likewise showed that communication motives and channel choices are relevant to computer-mediated interpersonal interaction. More recent research has similarly shown that digital communication can be particularly useful for maintaining relationships across geographical distance. Young adults have described online interaction as accessible, controllable and useful for maintaining friendships, although face-to-face interaction is often perceived as more intimate and meaningful.

Despite the communication opportunities created by instant messaging, excessive dependence on digitally mediated interaction may have undesirable consequences for interpersonal relationships. The ease of sending messages and remaining continuously connected can encourage individuals to substitute online communication for physical interaction, potentially reducing the depth of interpersonal engagement. Research on young adults' online and offline friendships indicates that digital interaction may provide comfort, accessibility and opportunities for self-expression, but is sometimes perceived as less meaningful than face-to-face interaction. Similarly, Yang et al. (2024), in a systematic review and meta-analysis, examined the association between digital addiction and interpersonal relationships and identified a documented association between problematic digital use and interpersonal relationship difficulties. Earlier meta-analytic evidence by Su et al. (2021) also reported a significant positive association between internet addiction and problems involving interpersonal communication, friendship formation and interpersonal interaction. These findings suggest that the issue is not merely access to digital communication but the extent to which its use becomes excessive or interferes with healthy interpersonal engagement.

The reviewed literature indicates that social media use and instant messaging applications can simultaneously strengthen and weaken human relationships among young adults. Social media can facilitate connection, social support, relationship maintenance and emotional expression, while excessive use, surveillance, distraction and inappropriate online behaviour may contribute to jealousy, mistrust, social isolation and weakened interpersonal interaction. Instant messaging similarly provides convenient and continuous communication but may not always reproduce the intimacy and meaningfulness associated with face-to-face interaction. Existing studies have generated useful evidence internationally and in parts of Nigeria, including among university students in Ogun State. However, context-specific scholarship addressing the relationship between social media use, instant messaging applications and human relationships among young adults in Rivers State remains limited. This geographical and contextual gap provides justification for the present conceptual paper, which examines how these dimensions of digital technology relate to human relationships among young adults in Rivers State, Nigeria.

Theoretical and Philosophical Foundations

The Uses and Gratifications Theory (UGT) was formally developed by Elihu Katz, Jay G. Blumler and Michael Gurevitch in 1973 to explain why people actively select and use particular media to satisfy specific social and psychological needs. The theory shifted attention from the question of what media does to people to what people do with media. Its core assumption is that media audiences are active rather than passive recipients, and that individuals deliberately choose media based on needs such as social interaction, entertainment, information, personal identity and relationship maintenance. The theory further assumes that media use is goal-directed, that individuals select media to obtain desired gratifications, that social and psychological circumstances influence media choices, and that media competes with other sources of need satisfaction. It also distinguishes between gratifications sought and gratifications obtained, meaning that users approach a medium with certain expectations and subsequently evaluate whether those expectations have been satisfied (Katz et al., 1973; Ruggiero, 2000). However, the theory has been criticised for being too individualistic and for assuming that people are always rational,

active and conscious of their motives for media use. Critics also argue that it relies heavily on self-reported motives, has sometimes lacked clear conceptual definitions, and does not adequately account for unconscious, habitual or socially constrained media use (Blumler, 1979; Swanson, 1977).

The Uses and Gratifications Theory is relevant to the present paper because social media use and instant messaging applications are forms of digital technology that young adults actively select for particular interpersonal purposes. Young adults may use social media to maintain friendships, obtain social support, express themselves, develop new relationships and remain connected with family and peers. Similarly, instant messaging applications may be selected because they provide immediate communication, companionship, emotional expression and relationship maintenance. The theory therefore provides a useful framework for explaining why young adults use these digital technologies and how such use may relate to their human relationships. Contemporary scholarship has specifically recognised the continuing relevance of Uses and Gratifications Theory to internet-based and social media communication because digital technologies provide users with greater interactivity, choice and control over communication. The theory is particularly appropriate to this paper because it permits analysis of social media and instant messaging not merely as technologies that act on young adults, but as communication tools that users intentionally employ to satisfy interpersonal needs. It consequently provides a theoretical basis for examining the relationship between digital technology and human relationships among young adults in Rivers State, Nigeria.

Conceptual Method

This paper adopts a conceptual, analytical and literature-based approach. It critically examines and synthesises the scholarly arguments, theoretical perspectives and policy-relevant ideas contained in the source literature. The analysis proceeds through conceptual clarification, comparison of competing perspectives, interpretation of their assumptions, and thematic synthesis of their educational and social implications. The central ideas are treated as concepts and normative problems rather than as variables to be statistically tested. No primary data, respondents, questionnaires, sampling procedures or inferential statistical tests are used in the paper; the conclusions are derived from reasoned engagement with the literature and the Nigerian context.

Thematic Analysis and Central Arguments **Mediated presence and intimacy**

Digital technologies allow relationships to be sustained across distance and time, but they also change what it means to be present. Messaging, video calls and social platforms can support intimacy, yet constant connectivity may create fragmented attention. The central issue is not whether digital communication is inherently better or worse than face-to-face interaction, but how different forms of presence shape relational quality.

In analytical terms, mediated presence and intimacy also requires attention to implementation. A sound position must specify who bears responsibility, what institutional conditions are necessary, how conflicting interests should be handled, and how the principle can be translated into ordinary educational or social practice. This prevents the concept from remaining a purely aspirational statement and makes it possible to evaluate whether policies and professional actions are consistent with the values they claim to advance.

Identity and self-presentation

Online interaction enables deliberate self-presentation through profiles, images, posts and curated narratives. This can support exploration and community formation, but it can also create pressure to perform identity for an audience. Healthy relationships require room for authenticity, vulnerability and context beyond public metrics of visibility.

In analytical terms, identity and self-presentation also requires attention to implementation. A sound position must specify who bears responsibility, what institutional conditions are necessary, how conflicting interests should be handled, and how the principle can be translated into ordinary educational or social practice. This prevents the concept from remaining a purely aspirational statement and makes it possible to evaluate whether policies and professional actions are consistent with the values they claim to advance.

Connection, loneliness and displacement

Digital communication can reduce isolation for some users while intensifying loneliness for others. Outcomes depend on purpose, intensity, relationship quality and whether online interaction supplements or displaces meaningful offline engagement. Conceptual analysis should therefore avoid simple technological determinism.

In analytical terms, connection, loneliness and displacement also requires attention to implementation. A sound position must specify who bears responsibility, what institutional conditions are necessary, how conflicting interests should be handled, and how the principle can be translated into ordinary educational or social practice. This prevents the concept from remaining a purely aspirational statement and makes it possible to evaluate whether policies and professional actions are consistent with the values they claim to advance.

Relational ethics and privacy

Digital relationships involve ethical questions about consent, forwarding private material, surveillance, location sharing, screenshots and persistent records. Young adults need relational norms that recognise privacy, respect and responsibility in environments where information can be copied and redistributed instantly.

In analytical terms, relational ethics and privacy also requires attention to implementation. A sound position must specify who bears responsibility, what institutional conditions are necessary, how conflicting interests should be handled, and how the principle can be translated into ordinary educational or social practice. This prevents the concept from remaining a purely aspirational statement and makes it possible to evaluate whether policies and professional actions are consistent with the values they claim to advance.

Digital wellbeing and intentional use

A constructive response is not rejection of technology but intentional use. Individuals and institutions can promote boundaries around attention, sleep, conflict and device-free interaction. Digital wellbeing becomes a relational concept when people consider not only how technology affects them personally but how their patterns of use affect others.

In analytical terms, digital wellbeing and intentional use also requires attention to implementation. A sound position must specify who bears responsibility, what institutional conditions are necessary, how conflicting interests should be handled, and how the principle can be translated into ordinary educational or social practice. This prevents the concept

from remaining a purely aspirational statement and makes it possible to evaluate whether policies and professional actions are consistent with the values they claim to advance.

Critical Synthesis of the Source Literature

The source literature supports a qualified rather than technologically deterministic interpretation of digital relationships. Evidence on close relationships shows that the same platforms can support connection while also enabling distraction, surveillance, jealousy and disconnection (Arikewuyo et al., 2021; Taylor et al., 2022). Research on digital communication likewise indicates that mediated interaction can sustain intimacy and contact across distance, yet problematic or excessive use may be associated with interpersonal difficulties (Habito et al., 2022; Yang et al., 2024). Nigerian evidence adds an important contextual dimension by showing that virtual communication can contribute positively to interpersonal relationships when it is used to maintain contact and social support (Lasode et al., 2020). Taken together, these studies suggest that relational outcomes depend less on the mere presence of technology than on users' motives, patterns of use, interpersonal norms and the extent to which online interaction complements rather than displaces meaningful offline engagement.

Nigerian Context and Practical Implications

In Nigeria, the implications of digital technology, human relationships and social connection in contemporary society must be interpreted against institutional diversity, uneven resources, cultural and religious plurality, strong family and community influences, rapidly changing technology and persistent concerns about educational quality and public trust. A viable approach should therefore avoid importing a single model without adaptation. National and state policy can provide broad principles, but implementation must allow schools, universities, professional bodies and communities to respond to local conditions while remaining accountable to common standards of dignity, fairness, competence and responsibility.

For practice, the central requirement is alignment. Curriculum or policy statements should be supported by teacher or professional preparation, leadership behaviour, assessment and accountability systems, adequate resources, and channels for reflective feedback. Where formal messages and institutional behaviour contradict one another, the practical behaviour of the institution is likely to shape outcomes more strongly than the written policy.

Critical Issues, Limitations and Counterarguments

A conceptual position on digital technology, human relationships and social connection in contemporary society must acknowledge several cautions. First, the effects of digital communication vary across individuals, relationship types and social settings, so broad claims should not be treated as universally applicable. Second, legitimate relational values may conflict in practice—for example privacy and openness, constant accessibility and personal boundaries, individual autonomy and partner or family expectations, and technological convenience and the need for undivided interpersonal presence. Third, unequal access to reliable devices, connectivity and digital literacy can shape who benefits from digitally mediated relationships and who is excluded. Finally, conceptual analysis cannot by itself establish causal effects for young adults in Rivers State. These limitations

support a balanced interpretation that makes assumptions explicit and distinguishes reasoned conceptual conclusions from claims that would require direct empirical testing.

CONCLUSION

The paper concludes that digital technology has become deeply embedded in the formation and maintenance of human relationships among young adults. The literature reviewed shows that social media and instant messaging can support communication, emotional expression, social support and relationship maintenance, while excessive, intrusive or poorly regulated use can also contribute to distraction, mistrust, jealousy, social displacement and weakened face-to-face engagement. The central implication is therefore not that digital technology is inherently beneficial or harmful, but that relational outcomes depend on purpose, intensity, context and the norms governing its use. For young adults in Rivers State and comparable Nigerian settings, a context-sensitive approach that combines intentional digital use, respect for privacy and interpersonal boundaries, and continued investment in meaningful offline relationships offers a stronger basis for sustaining social connection.

RECOMMENDATIONS

1. Young adults should be encouraged to use social media responsibly and purposefully by prioritising meaningful communication, relationship maintenance and social support rather than excessive entertainment, online comparison or behaviours that may generate conflict and mistrust.
2. Parents, educational institutions and youth-focused organisations should promote healthy use of instant messaging applications by encouraging young adults to balance digital communication with face-to-face interaction, respect interpersonal boundaries and use messaging platforms to strengthen rather than replace meaningful human relationships.

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