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TECHNOLOGY DRIVEN SOCIAL CHANGE AND ITS IMPACT ON HUMAN RELATIONSHIPS

Kinza Ishaq
BS, Department of CS Computer Science, The Cosmic Degree College (For Women) ,University of Okara

ABSTRACT

Technology-driven social change has become a major force influencing human relationships, social interaction, communication patterns, and cultural values in modern society. The rapid development of smartphones, social media platforms, internet communication, artificial intelligence, and digital networking applications has transformed the ways individuals establish, maintain, and develop relationships. Traditional communication methods that mainly depended on face-to-face interaction, family gatherings, and physical social activities are increasingly supplemented by digital communication. Modern technology allows individuals to communicate across geographical boundaries, maintain relationships over long distances, exchange information instantly, and develop connections with people from different cultural backgrounds. However, technological development has also introduced challenges related to social isolation, reduced personal interaction, digital dependency, privacy concerns, misunderstandings, and declining communication quality. This research examines the influence of technology-driven social change on human relationships, focusing on family connections, friendships, romantic relationships, social participation, and interpersonal communication. It also investigates how social media and digital communication platforms influence emotional connections, trust, social support, and individual behavior. The study adopts a qualitative descriptive methodology based on secondary sources, including scholarly publications and research reports published in 2023 and 2026. The findings suggest that technology can strengthen human relationships by improving communication and maintaining social connections, but excessive or inappropriate use may negatively influence meaningful personal interaction. The research concludes that responsible technology use and a balanced relationship between digital communication and face-to-face interaction are essential for maintaining healthy human relationships in modern society.

KEYWORDS:*Technology Driven Social Change, Human Relationships, Social Media, Digital Communication, Interpersonal Relationships, Social Interaction, Family Connections, Social Networking, Digital Society, Human Development.*

INTRODUCTION

Technology has become one of the most powerful forces shaping modern society and influencing almost every aspect of human life. Petersen, B., Khalili-Mahani, N., Murphy, C., Sawchuk, K., Phillips, N., Li, K. Z., & Hebblethwaite, S. (2023). Found that, The development of smartphones, computers, internet services, social media platforms, and artificial intelligence has significantly changed how individuals communicate, interact, and establish relationships with others. In traditional societies, human relationships were primarily developed through face-to-face communication, family gatherings, community activities, educational institutions, and workplace interactions. However, modern technological developments have introduced new methods of communication that allow individuals to maintain social connections without being physically present. People can now exchange messages, share photographs, participate in video calls, and communicate through digital platforms within seconds. Montiel Equihua, C., Molenaar, J. J., Areso, I., Biegel, J. A., Blanc, P., Chi, S. N., ... & Cancer Grand Challenge PROTECT team. (2026). Elobrated on, These changes have created new opportunities for social interaction while also transforming established patterns of interpersonal relationships. High, Fox, and McEwan (2024) explain that technology, relationships, and human well-being are closely connected because digital

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communication increasingly influences everyday relational experiences.Social media has become an important part of contemporary communication and has significantly influenced the development of friendships and social relationships. Platforms such as Facebook, Instagram, WhatsApp, TikTok, and other networking applications allow individuals to communicate, share personal experiences, exchange opinions, and remain connected with friends and family members. People can develop relationships with individuals from different countries, cultures, and professional backgrounds without geographical restrictions. Social networking platforms also provide opportunities for individuals to participate in online communities based on shared interests, educational activities, and social concerns. These developments have expanded the meaning of social interaction and created new forms of communication.

However, the increasing popularity of social media has also raised questions about the quality of online relationships and whether digital communication can provide the same emotional satisfaction as direct personal interaction.Family relationships have experienced significant changes due to the increasing use of digital technology. Modern family members frequently use messaging applications, video calls, and social networking platforms to maintain communication, particularly when they live in different cities or countries. Parents can communicate with their children through mobile devices, relatives can participate in online family gatherings, and distant family members can share important life experiences through digital platforms. These technological developments help maintain emotional connections despite geographical distance. At the same time, excessive smartphone use during family gatherings and everyday conversations may reduce direct communication between family members. Individuals sometimes focus more attention on digital screens than on people physically present around them. This behavior can influence family communication, emotional closeness, and the quality of personal relationships.Friendships and romantic relationships have also been transformed by technological developments. Digital communication platforms allow people to establish friendships, maintain relationships, exchange emotional support, and communicate regularly regardless of physical distance. Online dating applications and social networking websites have created additional opportunities for individuals to meet new people and develop personal relationships. However, digital communication may sometimes create misunderstandings because written messages do not always communicate emotions, facial expressions, and personal intentions clearly. Similarly, online relationships may involve concerns about trust, identity, privacy, and the authenticity of communication.

Hertlein (2026) discusses how technology has become an important part of romantic relationships and influences the emotional processes through which partners establish and maintain their connections. Therefore, technology can provide opportunities for stronger relationships, but it also requires responsible communication and mutual understanding.Another important aspect of technology-driven social change is its influence on social behavior and human interaction. Individuals increasingly depend on smartphones and internet platforms for information, entertainment, communication, and daily activities. Digital technology has created opportunities for social participation, allowing people to express opinions, discuss social issues, participate in online campaigns, and connect with communities that share similar interests. These developments can strengthen social awareness and provide support to individuals who may feel isolated in their physical surroundings.

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However, excessive use of digital platforms can encourage unhealthy social comparisons and reduce the time available for direct personal interaction. Petersen et al. (2023) identify both positive and negative associations between information and communication technologies, social connectedness, and loneliness. Their review suggests that the influence of technology depends partly on how individuals use digital communication and the support available to them.Although technology provides several advantages, it also creates challenges for emotional relationships and social well-being. Excessive social media engagement, continuous notifications, digital distractions, and dependence on online communication may interfere with meaningful conversations. Individuals may experience loneliness even when they have numerous online contacts because digital connections do not always provide emotional support or genuine personal understanding. Research also suggests that passive social media consumption and problematic digital habits can be associated with increased feelings of loneliness. Roberts, Young, and David (2026) report that passive social media use was associated with higher loneliness over time in their nine-year longitudinal study. These findings demonstrate that the number of online connections does not necessarily represent the quality of human relationships. Therefore, individuals need to develop healthy digital habits and maintain meaningful social interaction beyond online platforms.Technology-driven social change represents an important area of research because human relationships are essential for social stability, emotional development, and individual well-being. Modern society requires a balanced understanding of how technological innovation can improve communication without weakening personal relationships and traditional social values. Families, educational institutions, communities, and individuals all have responsibilities in promoting responsible technology use and healthy communication practices. People should understand the difference between meaningful digital interaction and excessive dependence on online platforms.

RESEARCH OBJECTIVE

1. To examine the impact of technology-driven social change on human relationships, particularly family connections, friendships, romantic relationships, interpersonal communication, and social interaction.

RESEARCH QUESTION

1. How does technology-driven social change influence human relationships, interpersonal communication, emotional connections, and social interaction in modern society?

LITERATURE REVIEW

The relationship between technological development and human relationships has become an important subject in contemporary social research. Researchers increasingly examine how digital communication influences interpersonal interaction, emotional connections, social participation, and individual well-being. Boeckman, M., Bohnert, R., Ahmed, B., Talebi, Z., Ahmed, E., Zahedimaram, P., ... & Huang, K. M. (2026). Elobrated on, Traditional relationships were mainly maintained through physical meetings, direct conversations, and community participation. However, modern communication technologies have introduced

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additional methods of maintaining relationships through social networking platforms, messaging applications, and online communities. High, Fox, and McEwan (2024) examine the connections between technology, relationships, and well-being and highlight the importance of understanding how technological developments influence personal relationships. Their research provides a useful foundation for studying both the opportunities and challenges associated with technology-mediated communication. The literature indicates that technology should not be considered entirely beneficial or harmful because its effects depend on individual behavior, communication patterns, and the quality of social relationships.Social media and digital communication platforms have significantly changed the development and maintenance of friendships. Individuals can communicate with friends through instant messaging, video calls, photographs, and online discussions. Sun, Z., Zhang, J., Zhang, J., Zhang, C., Han, J., Sun, Z., ... & Zhang, Q. (2026). Found that,These platforms make it easier to maintain relationships when individuals move to different geographical locations or experience changes in their social environments. Petersen et al. (2023), in their scoping review of information and communication technologies, loneliness, and social connectedness, examined 54 articles and identified several ways in which technology can support social interaction. Their review highlights the potential of communication technologies to encourage conversations, improve social connectedness, and provide opportunities for reducing loneliness. The research also emphasizes that technological benefits may depend on digital skills, confidence, personal circumstances, and the design of communication platforms. This literature suggests that digital technology can strengthen friendships when it supports meaningful communication and genuine social participation.

Family relationships represent another important area within the literature on technology-driven social change. Digital communication tools allow family members to maintain regular contact even when they live far away from one another. Video calls, messaging applications, and social networking platforms help relatives share personal experiences, discuss family matters, and provide emotional support. Feng, H. P., Lien, Y. J., Cian, S. Y., Wang, W. Y., Li, Y. T., Chen, C. H., & Wu, Y. Y. (2026).explained, These communication methods are particularly useful for families whose members live in different countries or cities because they reduce geographical barriers. Nevertheless, excessive use of digital devices may also interfere with direct family interaction. When individuals continuously focus on smartphones during family conversations, they may reduce the attention and emotional involvement given to other family members. High et al. (2024) emphasize the importance of examining the relationship between technological communication and personal well-being. Their discussion supports the need to consider both the advantages of digital family communication and its possible limitations.Romantic relationships have also become increasingly influenced by digital communication and technological innovation. Social networking websites, online dating applications, messaging services, and video communication tools provide opportunities for individuals to establish new relationships and maintain existing partnerships. These technologies allow partners to exchange messages, share personal experiences, and remain emotionally connected despite physical distance. However, digital communication may also create problems involving trust, jealousy, privacy, misunderstandings, and excessive monitoring of online activities.

Hertlein (2026), in research on digital co-regulation and dysregulation in romantic relationships, explains how technology can influence emotional processes within intimate

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relationships. The research highlights that digital communication is not simply a neutral method of exchanging information; it can become part of how partners manage emotions and respond to relationship difficulties. This literature demonstrates the importance of communication quality, mutual respect, and healthy digital boundaries.Loneliness and social isolation are frequently discussed in research concerning the influence of digital technology on human relationships. Although social media provides opportunities to communicate with large numbers of people, the quantity of online interaction does not necessarily guarantee emotional closeness or meaningful social support. Passive browsing, excessive screen time, and problematic social media habits may contribute to unhealthy social comparisons and feelings of disconnection. Roberts, Young, and David (2026) investigated the relationship between passive and active social media use and loneliness through a nine-year longitudinal study involving Dutch adults. Their findings supported the possibility that passive social media use can contribute to increased loneliness over time. This research suggests that the purpose and nature of online engagement are important when evaluating the influence of technology on human relationships. Meaningful communication and active social participation may offer different experiences from simply viewing online content.Recent research also emphasizes that the influence of social media on human relationships differs according to the people with whom individuals communicate and the quality of their online interactions. Communication with close friends may strengthen existing emotional connections, whereas problematic social media use and relationships limited entirely to online environments may be associated with greater loneliness. A 2026 study, How, When, and With Whom: A Study on the Moderating Aspects of the Association Between Social Media Use and Loneliness Among School-Aged Children, examines these differences among young people. Its findings indicate that communication with close friends is associated with lower loneliness, while problematic use and online-only interactions are associated with higher loneliness. This literature suggests that meaningful relationships depend more on the quality and purpose of communication than on the simple frequency of social media use. It also demonstrates the importance of developing healthy digital habits among younger generations.

The overall literature indicates that technology-driven social change has created a complex relationship between digital communication and human development. Technological platforms provide opportunities for social support, friendship development, family communication, and participation in wider communities. At the same time, excessive dependence on digital devices can create challenges involving loneliness, emotional distance, privacy, and reduced face-to-face interaction. Petersen et al. (2023) emphasize the potential of communication technologies to support social connectedness, while later research highlights the importance of understanding problematic and passive patterns of use. These perspectives suggest that the effects of technology are influenced by individual behavior, social circumstances, communication quality, and the availability of meaningful offline relationships. Therefore, the literature supports a balanced approach in which digital technology complements rather than replaces direct human interaction.

METHODOLOGY

This research adopts a qualitative descriptive methodology to examine technology-driven social change and its impact on human relationships. The qualitative approach is suitable

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because the study focuses on understanding social experiences, communication patterns, emotional connections, and changes in interpersonal behavior. Rather than concentrating on numerical measurements or experimental testing, the research explores how technological developments influence different forms of human interaction. Particular attention is given to family relationships, friendships, romantic partnerships, social networking, and community participation. The methodology also considers the positive and negative dimensions of digital communication to develop a balanced understanding of its influence on modern society. This approach provides an opportunity to examine technology as both a communication resource and an important factor in contemporary social development.The study uses secondary data collected from scholarly journal articles, academic publications, research reviews, and relevant institutional research published in 2023 and 2026. The selected literature focuses on technology-mediated relationships, social media engagement, loneliness, interpersonal communication, emotional well-being, and social connectedness. Research published in established academic journals was considered to identify important theoretical perspectives and documented findings. Particular attention was given to studies examining the relationship between online communication and the quality of personal relationships. The selection of sources was guided by their relevance to the research objectives, academic credibility, publication period, and contribution to understanding technology-driven social change.Data collection involved reviewing the selected publications and identifying recurring themes related to technological influence on human relationships. The main areas of investigation included digital communication, family interaction, friendship development, romantic relationships, social isolation, emotional support, and responsible technology use. Information from the selected sources was organized into thematic categories to identify similarities, differences, and important findings.

RESEARCH DESIGN

The research design is descriptive and qualitative, focusing on the influence of technological developments on interpersonal relationships in modern society. The study is organized around major dimensions of social interaction, including communication patterns, family relationships, friendships, romantic partnerships, and community participation. These dimensions provide a structured framework for understanding how digital technologies influence traditional and contemporary forms of human connection. The design also considers differences between online and face-to-face communication to examine how technological developments have changed the nature of personal relationships. By examining these areas together, the research develops a broader understanding of technology-drivensocial transformation.The first dimension of the research design examines digital communication and its influence on interpersonal relationships. This dimension includes social media platforms, messaging applications, video calls, online communities, and other internet-based communication services. The study investigates how these technologies help individuals maintain contact, exchange information, develop friendships, and communicate across geographical boundaries. It also considers the limitations of digital communication, particularly when online messages replace direct conversations or create misunderstandings. This dimension helps explain how modern communication technologies influence the frequency, accessibility, and quality of social interaction.The second dimension focuses on family relationships, friendships, romantic partnerships, and emotional connections. The research examines how individuals use digital platforms to maintain relationships, share

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experiences, provide support, and establish new social connections. It also considers the possible effects of excessive technology use on trust, emotional closeness, personal attention, and communication quality.

DATA ANALYSIS

The qualitative analysis of the selected literature indicates that digital technology has significantly transformed communication patterns and social relationships. Social media platforms, messaging applications, and video communication services have made it easier for individuals to maintain contact with friends, relatives, and colleagues. These technologies reduce geographical barriers and provide opportunities for continuous communication. Petersen et al. (2023) identify the potential of information and communication technologies to improve social connectedness and encourage conversations. The analysis suggests that digital communication can strengthen existing relationships when individuals use technological platforms to exchange meaningful information and provide emotional support. However, the quality of communication remains an important factor in determining whether technology contributes positively to human relationships.Another important aspect identified through the analysis is the relationship between excessive digital technology use and social isolation. Although individuals may have hundreds of online contacts, they may still experience loneliness when their digital interactions do not provide meaningful emotional connections. Passive social media use, continuous screen engagement, and reduced face-to-face communication may negatively influence interpersonal relationships. Roberts, Young, and David (2026) provide evidence of an association between passive social media use and increased loneliness over time. Similarly, research on romantic relationships highlights the importance of emotional communication and healthy digital boundaries. The analysis therefore indicates that technology should support personal relationships rather than become a substitute for genuine human interaction.The analysis further identifies that the impact of technology differs across individuals and social environments. Digital platforms can strengthen family relationships, maintain friendships, support long-distance communication, and encourage participation in online communities. However, excessive use may create misunderstandings, privacy concerns, emotional distance, and unhealthy communication habits. Research published in 2026 also emphasizes the importance of distinguishing between communication with close friends and problematic or online-only interactions.

FINDINGS

The research finds that technology-driven social change has significantly influenced how individuals establish, develop, and maintain human relationships. Digital communication platforms provide opportunities for people to remain connected despite geographical distance and differences in social environments. Social media, messaging applications, and video calls have made communication faster, more convenient, and more accessible. These technologies also support family connections, friendship development, and participation in online communities. The findings indicate that digital communication can strengthen existing relationships by providing additional opportunities for sharing experiences, exchanging information, and offering emotional support.The study also finds that excessive dependence on digital technology can create challenges for interpersonal communication and emotional well-being. Continuous smartphone use, passive social media engagement, and reduced face-

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to-face interaction may weaken meaningful personal connections. Individuals may experience loneliness and emotional distance despite maintaining large online social networks. The findings further indicate that digital communication can sometimes create misunderstandings, trust issues, privacy concerns, and difficulties in personal relationships. Therefore, the quality of digital interaction is more important than simply measuring the number of online contacts or the time spent using social media.Another important finding is that the influence of technology depends on individual behavior, social circumstances, and the purpose of digital communication. Using technology to maintain family connections, communicate with close friends, and provide social support can contribute positively to relationships. In contrast, problematic digital habits and excessive dependence on online interactions may reduce opportunities for direct communication. The research emphasizes the importance of responsible technology use, digital awareness, emotional understanding, and healthy communication boundaries.

CONCLUSION

Technology-driven social change has become an important influence on human relationships and modern social development. The rapid growth of smartphones, social media, internet communication, and digital networking platforms has transformed traditional communication practices and created new opportunities for interpersonal interaction. Individuals can now maintain relationships across geographical boundaries, develop friendships, exchange experiences, and participate in online communities. These technological developments have improved communication accessibility and created additional ways for families, friends, and romantic partners to remain connected. The research concludes that digital technology plays a valuable role in supporting social relationships when it is used appropriately and meaningfully.Despite its benefits, technology-driven social change also presents challenges that can influence emotional connections and personal relationships. Excessive screen time, passive social media engagement, digital dependency, and reduced face-to-face interaction may contribute to loneliness and social isolation. Digital communication can also create misunderstandings and concerns about trust, privacy, and personal boundaries. Therefore, individuals should develop responsible technology habits and recognize the importance of direct human communication. Families and communities should encourage meaningful conversations, shared activities, and emotional support rather than allowing digital devices to dominate everyday social interactions. A balanced approach can help reduce the negative consequences of excessive technology use.Paragraph 3: In conclusion, the future of human relationships will increasingly be influenced by the interaction between technological innovation and changing social behavior. Technology should be considered a supporting tool that improves communication, strengthens social connections, and creates opportunities for human development. However, it cannot completely replace emotional understanding, personal attention, trust, and physical interaction. Individuals, families, educational institutions, and communities must promote healthy digital communication and preserve meaningful social relationships.

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