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Abstract: The rapid development of Artificial Intelligence (AI) has transformed the ways in which young adults communicate, interact, and maintain social relationships. While AI-powered technologies provide new opportunities for communication, companionship, and social engagement, concerns have emerged regarding their influence on the quality and authenticity of human connections. This study examines the changing nature of social relationships among young adults in the age of AI through a qualitative research design. Using purposive sampling, 174 respondents comprising young adults were selected to explore their experiences, perceptions, and attitudes toward the use of AI in their everyday social interactions. Thematic analysis was conducted to identify major themes related to communication patterns, emotional connection, interpersonal relationships, trust, and dependence on AI-based technologies. The findings indicate that AI facilitates communication, provides convenient forms of interaction, and offers opportunities for social engagement; however, it may also affect the depth and authenticity of face-to-face relationships. Participants highlighted that genuine emotional understanding, empathy, trust, and meaningful interpersonal interaction remain important aspects of human relationships that cannot be fully reproduced by AI systems. The study concludes that although AI is becoming an increasingly influential part of young adults' social lives, human connection remains essential for developing meaningful and emotionally fulfilling relationships. AI should therefore be approached as a complementary communication tool while maintaining the importance of authentic human interaction.

Introduction

Artificial Intelligence (AI) has rapidly become an important part of contemporary social and technological life, influencing how people communicate, obtain information, seek assistance, and interact with digital systems. Recent developments in generative AI and conversational agents have extended the role of technology beyond functional tasks toward increasingly social forms of interaction. AI-powered Chabot's can now engage users in extended conversations, provide personalized responses, simulate emotional understanding, and offer companionship. Consequently, the relationship between humans and technology is moving beyond conventional human-computer interaction toward forms of

interaction that may resemble interpersonal communication. This development is particularly significant for young adults, who have grown up within increasingly digital environments and frequently use online platforms as part of their everyday social lives. Young adulthood is an important developmental period characterized by changes in identity, independence, friendship, intimate relationships, education, and employment. During this stage, individuals establish social networks that can influence emotional well-being and psychological development. Social relationships provide emotional support, companionship, belonging, and opportunities for self-expression. Research has consistently demonstrated that meaningful social connections are important for psychological and physical well-being, whereas social isolation and loneliness can have serious consequences for individuals (Cacioppo & Hawkley, 2009; Holt-Lunstad et al., 2015). Therefore, changes in the ways young adults develop and maintain relationships deserve particular attention in an increasingly technology-mediated social environment.

The emergence of digital communication has already transformed interpersonal relationships. Social networking sites allow individuals to maintain relationships across geographical boundaries, communicate instantly, share personal experiences, and participate in online communities. Earlier research suggested that online social networking could contribute to social capital and relationship maintenance by providing opportunities for individuals to remain connected with existing friends and broader social networks (Ellison et al., 2007). However, digital communication does not necessarily produce the same social experiences as direct interpersonal interaction. Research has shown that the relationship between digital media use and well-being is complex and depends on how technologies are used, the type of interaction involved, and individual circumstances (Verduyn et al., 2017; Odgers & Jensen, 2020).

Studies focusing on young adults have raised particular concerns about the relationship between intensive digital engagement and feelings of social isolation. Primack et al. (2017), for example, found that young adults with higher levels of social media use reported greater perceived social isolation. Similarly, experimental research by Hunt et al. (2018) found that limiting social media use among university students was associated with reductions in loneliness and depressive symptoms. However, such findings should not be interpreted as evidence that all digital interaction is harmful. Recent reviews indicate that active and purposeful online engagement can support social connection, whereas problematic, excessive, or passive use may be more strongly associated with loneliness and isolation (Pezzi et al., 2024; Feng et al., 2026). Thus, the central issue is not simply whether young adults use digital technologies, but how those technologies influence the quality, meaning, and authenticity of their social relationships. The rapid development of AI introduces a new dimension to this discussion. Unlike traditional social media, which primarily connects users with other human beings, conversational AI systems can directly participate in social exchanges. AI Chabot's can respond immediately, maintain conversational continuity, personalize interactions, and imitate forms of empathy and emotional support. Research examining companion Chabot's has found that users may experience companionship, emotional support, informational assistance, and a sense of having a safe space for self-expression through interactions with AI (Ta et al., 2020). Similarly, Skjuve et al. (2021) found that human-Chabot relationships may develop through processes such as self-disclosure and trust, suggesting that some users may perceive AI systems as more than simple technological tools.

The possibility of developing emotional connections with AI raises important questions about the changing nature of human relationships. AI systems can provide consistent availability and individualized interaction without many of the social difficulties associated with human relationships. Users may communicate with an AI system without fear of rejection, embarrassment, criticism, or social

judgment. These characteristics may make AI particularly attractive to individuals who experience loneliness or difficulties in conventional social relationships. At the same time, the apparent emotional responsiveness of AI should not automatically be equated with human emotional experience. Large language models can generate sophisticated responses and perform well on certain tasks involving mental-state reasoning, but their performance does not establish that they possess human consciousness, emotions, or subjective experience (Bender et al., 2021; Trott et al., 2023). The distinction between simulated and human emotional understanding is particularly important when examining interpersonal relationships. Human relationships involve reciprocal experiences, embodied communication, shared history, emotional vulnerability, moral responsibility, and contextual understanding. AI systems can reproduce patterns of emotionally appropriate language, but their responses are generated computationally rather than through human lived experience. Research on theory of mind has nevertheless demonstrated that contemporary large language models can perform surprisingly well on some tasks involving the interpretation of beliefs and mental states (Bubeck et al., 2023; Strachan et al., 2024). These findings demonstrate the increasing sophistication of AI while simultaneously highlighting the need to distinguish behavioral performance from human psychological experience.

Another important concern is whether interaction with AI strengthens or weakens relationships with other people. Companion AI may provide temporary emotional support and reduce feelings of loneliness for some individuals. However, excessive dependence on artificial companionship could potentially reduce motivation for human interaction or alter expectations regarding relationships. A systematic review of AI parasocial relationships identified potential benefits including emotional support, social-needs fulfillment, and a sense of belonging, but also identified risks involving emotional dependence and displacement of human relationships (2026). Recent empirical research among young adults has similarly found a relationship between loneliness and AI Chatbot dependence, with perceived social support playing an important mediating role (Uğuz et al., 2026). These findings suggest that AI may function both as a source of connection and as a possible response to deficits in human social support. At the same time, emerging evidence does not support a simple conclusion that AI inevitably damages human relationships. A longitudinal randomized study of companion Chatbot use found no significant overall effects on participants' social health or human relationships over a 21-day period (Guingrich & Graziano, 2025). Furthermore, recent experimental research indicates that AI-generated conversational responses can sometimes produce substantial feelings of interpersonal closeness, particularly during emotionally engaging conversations (2025). Such findings demonstrate that human responses to AI are complex and may depend on perceptions of the technology, patterns of use, individual social needs, and the context in which interaction occurs. Ethical considerations are therefore central to understanding AI-mediated social relationships. Issues surrounding privacy, transparency, autonomy, manipulation, emotional dependence, and responsible design become increasingly important as AI systems assume more socially interactive roles. Ethical frameworks for AI emphasize principles such as human autonomy, prevention of harm, fairness, explicability, and responsibility (Floridi et al., 2018). Similarly, concerns regarding large language models include the reproduction of social biases, limitations in training data, and the possibility that highly fluent systems may create misleading impressions of understanding or reliability (Bender et al., 2021). These concerns are especially relevant when AI systems are used for emotional or social purposes rather than merely informational tasks. The changing relationship between AI and human interaction therefore presents a significant area of scholarly inquiry. Young adults are among the most digitally engaged populations, and

their social experiences are increasingly shaped by technologies capable of communicating in human-like ways. Existing research demonstrates that AI can provide companionship, facilitate self-disclosure, and offer perceived emotional support, while also raising concerns about dependence, social displacement, and the authenticity of technologically mediated relationships (Ta et al., 2020; Skjuve et al., 2021; Uğuz et al., 2026). However, the long-term implications of these interactions remain insufficiently understood, particularly in different cultural and social contexts. Against this background, the present study examines the changing nature of social relationships among young adults in the age of Artificial Intelligence. It focuses on how young adults perceive AI-mediated interaction, how such technologies influence their experiences of human connection, and whether AI is viewed primarily as a communication tool, a source of companionship, or a potential substitute for interpersonal relationships. By examining young adults' experiences and perceptions, the study seeks to contribute to the growing literature on human-AI interaction and clarify the continuing significance of authentic human connection in an increasingly AI-mediated social environment.

Research Objectives

The present study seeks to achieve the following objectives:

- To investigate young adults' views regarding the growing use of AI in their personal and social relationships.
- To assess the impact of AI-based communication on emotional closeness and interpersonal bonding.
- To explore the advantages and challenges associated with AI-mediated social interaction.
- To examine changes in communication, trust, intimacy, and relationship patterns resulting from interactions with AI.
- To understand young adults' perspectives on whether AI strengthens human relationships or may gradually replace certain forms of human interaction.

Research Questions

The study addresses the following research questions:

- How do young adults understand the influence of AI on their everyday social relationships?
- How does interaction with AI affect young adults' sense of emotional closeness and interpersonal bonding?
- What advantages and challenges do young adults experience when using AI for social interaction?
- In what ways has AI affected communication styles, trust, intimacy, and relationship patterns among young adults?
- Do young adults view AI as a means of enhancing human relationships, or as a possible alternative to direct human interaction?

Literature Review

1. Artificial Intelligence and the Transformation of Human Interaction

Artificial Intelligence (AI) has developed from a technology primarily associated with automation and information processing into a social technology capable of participating in increasingly complex forms of human interaction. The emergence of conversational AI, generative AI, virtual assistants, and AI companions has changed the traditional boundaries between technological tools and social actors. Unlike earlier digital technologies that primarily facilitated communication between people, contemporary AI systems can directly engage users in conversations, respond to personal disclosures, provide recommendations, and simulate emotionally responsive interaction. Chaturvedi et al. (2023)

describe social companionship with conversational agents as an emerging area in which AI systems can develop relationships with users through repeated and socially oriented interaction. This development has created new possibilities for examining whether technology simply facilitates human relationships or increasingly becomes a participant within them.

The growing social role of AI is particularly relevant to young adults because this population has experienced substantial changes in communication and relationship formation through digital technologies. Young adults frequently use smartphones, social media, messaging applications, and online communities to establish and maintain interpersonal relationships. Consequently, AI-mediated communication represents another stage in the broader transformation of social interaction. Rather than communicating exclusively with other human beings, individuals can now interact with systems that imitate conversational characteristics associated with friendship, emotional support, and companionship.

2. Human Connection and the Importance of Social Relationships

Human connection is fundamental to individual and social well-being. Social relationships provide companionship, emotional support, belonging, identity development, and opportunities for reciprocal interaction. Baumeister and Leary (1995) proposed the need-to-belong hypothesis, arguing that human beings possess a fundamental motivation to form and maintain meaningful interpersonal relationships. From this perspective, social connection is not simply an optional aspect of life but an important psychological need. The importance of social relationships is also demonstrated by research on loneliness and social isolation. Cacioppo and Hawkley (2009) explained that perceived social isolation can influence cognitive and emotional processes, while Holt-Lunstad et al. (2015) demonstrated that inadequate social relationships are associated with significant health risks. Loneliness therefore represents more than simply being physically alone; it involves a perceived deficiency in meaningful social relationships. For young adults, loneliness may emerge during transitions involving higher education, employment, relocation, changing friendship networks, and the development of intimate relationships. Recent research continues to demonstrate the importance of social connection among young adults. A systematic review by Liu et al. (2026) found that social media use has a complex relationship with social isolation among young adults. Although excessive and passive forms of use were more frequently associated with isolation, purposeful and interactive use could support social connection. (Taylor & Francis Online) This distinction is important when considering AI because the effect of AI on relationships is unlikely to depend only on the amount of use. The purpose, context, intensity, and nature of interaction may determine whether AI supports or undermines human connection.

3. Digital Communication and Changing Social Relationships

The development of social networking sites significantly changed how people create and maintain relationships. Ellison et al. (2007) demonstrated that online social networking could contribute to social capital among university students, particularly by helping users maintain existing relationships and establish broader networks. Similarly, Valkenburg and Peter (2007) found that online communication could facilitate interpersonal relationships among adolescents. However, digital communication has also generated concerns regarding loneliness, social comparison, and reduced quality of interpersonal interaction. Kross et al. (2013) reported an association between Facebook use and declines in subjective well-being among young adults. Primack et al. (2017) found that higher social media use was associated with greater perceived social isolation among young adults in the United States. Hunt et al. (2018)

further reported that limiting social media use was associated with reductions in loneliness and depressive symptoms among undergraduate students.

These findings should not be interpreted as evidence that technology is inherently harmful. Verduyn et al. (2017) emphasized that social networking sites can both enhance and undermine well-being depending on the nature of engagement. Active communication with others may provide social benefits, whereas passive consumption can sometimes contribute to negative social comparison and feelings of exclusion. Odgers and Jensen (2020) similarly argued that relationships between digital technology use and well-being are complex and should not be reduced to simple assumptions about screen time. A recent meta-analysis provides further support for this nuanced perspective. Feng et al. (2026) examined 59 studies involving more than 81,000 participants and found that problematic social media use had a moderate association with loneliness, whereas the association between time spent on social media and loneliness was considerably smaller. (Springer) Thus, the quality and pattern of technological engagement appear more important than duration alone.

4. Artificial Intelligence as a New Form of Social Interaction

AI differs from conventional social media because it can respond directly to individual users without requiring interaction with another human participant. Contemporary conversational AI can maintain dialogue, personalize responses, answer questions, and respond to emotional disclosures. This creates the possibility of what researchers increasingly describe as human-AI relationships or synthetic relationships. Ta et al. (2020) investigated users' experiences of social support from companion chatbots and found that users described chatbots as providing emotional, informational, and social support. The ability to communicate without fear of embarrassment or judgment may make AI particularly attractive for individuals seeking a safe environment for self-expression. Skjuve et al. (2021) similarly examined human-chatbot relationships and found evidence that users could develop relationships with chatbot companions through processes such as self-disclosure, trust, and perceived companionship. Research on conversational agents has consequently moved beyond the question of whether AI is useful toward questions concerning how people emotionally experience interaction with AI. Chaturvedi et al. (2023) identified social companionship as an important research stream within conversational-agent research, highlighting the emergence of emotional bonds between users and artificial agents. Such findings suggest that users may interpret AI interaction through concepts traditionally associated with interpersonal relationships.

5. AI Companionship and Emotional Support

AI companionship has become increasingly important as generative AI systems have become capable of producing highly personalized and conversational responses. AI companions can be continuously available, do not require reciprocal scheduling, and can adapt their communication to individual users. These characteristics may provide perceived emotional support, particularly for individuals experiencing loneliness or difficulties in maintaining conventional relationships. A 2026 review by Ventura et al. conceptualized these relationships as “synthetic relationships,” describing ongoing human-AI associations that simulate human-like social bonds. The review identifies potential benefits including accessibility, personalization, companionship, reduced social anxiety, and possible support for interpersonal skills. At the same time, it highlights risks including emotional over-reliance, distorted expectations regarding relationships, privacy concerns, and possible devaluation of human relationships. (Science Direct)

Recent empirical evidence also indicates that emotional attachment to AI is becoming a measurable phenomenon. Cheng and Yu (2026) developed the AI Attachment Scale, identifying dimensions including

emotional support, separation distress, and secure-base perceptions. (PubMed) Similarly, cross-national research involving 7,027 participants from Germany, China, South Africa, and the United States found substantial levels of emotional attachment to AI chatbots and identified perceived emotional support as an important predictor of attachment. Emotional attachment was also associated with indicators of dependence. (Science Direct) These findings are important for understanding young adults because emotional support is one of the central functions of interpersonal relationships. If AI becomes capable of providing a perception of being heard, understood, and supported, users may begin to incorporate AI into their existing social networks.

6. AI, Loneliness, and Social Isolation among Young Adults

Loneliness is particularly relevant to research on AI and human connection because individuals experiencing insufficient social relationships may be more likely to seek alternative forms of interaction. Earlier research on digital technologies demonstrated that lonely individuals may use online communication to compensate for deficiencies in face-to-face relationships. Now, AI provides a further possibility because users can engage in personalized interaction without depending on the availability of another person. A 2026 study focusing specifically on college students found that loneliness was associated with using generative AI for companionship, while general AI use did not show the same relationship. The findings suggest that using AI for companionship may represent a distinct form of technology use rather than simply a consequence of overall AI adoption. (Science Direct) Similarly, research on problematic social media use among young adults has generally found a positive association between loneliness and problematic use. Pezzi et al. (2024), in a systematic review of 12 studies involving 4,009 young adults, concluded that loneliness was commonly associated with problematic social media use, although the relationship varied according to the form of loneliness and type of platform. (PubMed Central (PMC)) This evidence raises an important question: does AI provide a temporary solution to loneliness, or can it become part of a cycle in which individuals increasingly substitute artificial interaction for human relationships? The available evidence does not yet provide a definitive answer. Consequently, further research focusing directly on young adults' perceptions and experiences is necessary.

7. Human Relationships versus AI-Mediated Relationships

Although AI can imitate many features of human communication, important differences remain between human-human and human-AI relationships. Human relationships involve mutual consciousness, shared experiences, vulnerability, physical presence, moral responsibility, and reciprocal emotional experiences. AI systems, by contrast, generate responses through computational models rather than through subjective human experiences. Bender et al. (2021) emphasized that language models can produce fluent and convincing language without possessing human-like understanding or consciousness. However, more recent research has shown that advanced language models can perform impressively on tasks involving reasoning about mental states. Strachan et al. (2024), for example, found that large language models demonstrated substantial performance on theory-of-mind tasks. Such findings illustrate the increasing sophistication of AI while also reinforcing the importance of distinguishing behavioral simulation from actual human experience.

The distinction is particularly significant when users interpret AI responses as evidence of empathy or genuine concern. An AI system may generate language that appears compassionate, but the underlying process differs fundamentally from human emotional experience. Therefore, the perceived quality of AI interaction and the actual nature of the relationship may not be identical.

8. Trust, Self-Disclosure, and Intimacy

Trust and self-disclosure are important components of interpersonal relationships. Individuals typically become closer through reciprocal disclosure, emotional support, and the gradual development of trust. Social penetration theory suggests that relationships develop as individuals move from relatively superficial communication toward deeper levels of personal disclosure (Altman & Taylor, 1973). AI systems may influence this process because users can disclose personal information without facing many of the immediate interpersonal risks associated with disclosure to another person. Ta et al. (2020) found that companion chatbot users reported experiences involving emotional support and self-expression. Skjuve et al. (2021) also observed that self-disclosure and trust can contribute to users' relationships with Chatbot companions. However, privacy represents an important concern. Unlike human relationships, AI interactions involve technological systems that may collect, store, or process users' information. The disclosure of highly personal information to AI therefore raises questions about data protection, informed consent, and user awareness. The development of emotionally engaging AI systems makes these concerns increasingly important because users may disclose information precisely because they perceive the system as trustworthy or nonjudgmental.

9. AI and the Potential Replacement of Human Interaction

One of the major concerns in the literature is whether AI companionship may replace rather than supplement human relationships. The possibility of substitution becomes particularly important when users increasingly depend on AI for emotional support, companionship, or interpersonal communication. The literature provides evidence on both sides of this debate. Some research suggests that AI companionship can provide meaningful perceived support, reduce feelings of loneliness, and create opportunities for self-expression. Other research warns that excessive dependence may contribute to reduced human interaction and unrealistic expectations regarding relationships. A systematic review of romantic AI companions identified benefits such as emotional connection, perceived social support, personalization, and stress relief, but also identified risks including over-reliance, manipulation, privacy problems, erosion of human relationships, and technological disruption of emotional bonds. (Science Direct) Importantly, not all research supports the assumption that AI automatically damages human relationships. Guingrich and Graziano (2025), in a longitudinal randomized controlled study, found no significant overall effects of companion Chatbot use on social health or human relationships over the study period. This suggests that AI companionship should not be considered inherently harmful. Instead, its effects may depend on the characteristics of the user, reasons for use, intensity of interaction, and whether AI complements or substitutes for human relationships.

10. Theoretical Perspectives on Human-AI Relationships

Several theoretical perspectives can help explain why individuals develop social relationships with AI. Attachment theory provides one possible framework because people may seek reliable sources of comfort and emotional security when experiencing loneliness or social uncertainty. Social penetration theory helps explain how repeated self-disclosure can increase perceived intimacy. Interdependence theory may also be relevant because relationships develop when individuals perceive that interaction provides meaningful benefits. The Computers Are Social Actors (CASA) paradigm proposed by Nass and colleagues suggests that people can respond socially to computers when technological systems provide social cues (Nass & Moon, 2000). This perspective is particularly relevant to modern AI because conversational systems provide many cues traditionally associated with social interaction, including language, personalization, responsiveness, and apparent emotional understanding. Anthropomorphism

may further contribute to human-AI relationships. Epley et al. (2007) proposed that people may attribute human characteristics to nonhuman entities when they perceive them as agentic or socially meaningful. As AI becomes more conversational and personalized, users may increasingly interpret artificial systems through human social categories.

11. Ethical and Social Concerns

The increasing social role of AI also creates ethical challenges. Floridi et al. (2018) identified principles such as human autonomy, prevention of harm, fairness, explicability, and responsibility as important elements of ethical AI. These principles are particularly significant when AI systems enter emotionally sensitive areas. The possibility of emotional dependence is one concern. If users become strongly attached to AI systems, changes in system design, service availability, or access could cause distress. Privacy is another concern because emotionally intimate conversations may contain sensitive personal information. Manipulation and commercial interests may also become problematic if AI companions are designed to maximize user engagement rather than promote user well-being. Recent scholarship therefore emphasizes the need for AI systems that complement rather than replace human relationships. Ventura et al. (2026) specifically argue that synthetic relationships may have potential as social interventions but should be designed to support, rather than displace, human relationships. (Science Direct)

12. Research Gap

The existing literature demonstrates that digital technologies have already changed the ways young adults communicate and maintain relationships. Research on social media has established complex associations among technology use, loneliness, social isolation, and well-being. More recent research indicates that AI introduces a qualitatively different form of interaction because AI systems can directly simulate companionship and emotional responsiveness. Nevertheless, several gaps remain. Much of the earlier literature focuses on social media rather than generative AI. Existing AI studies have frequently examined specific Chatbot platforms, therapeutic applications, or specialized forms of companionship. There is comparatively less research examining how young adults themselves understand the broader transformation of human connection resulting from AI. In addition, the long-term consequences of AI companionship for trust, intimacy, communication patterns, and human relationships remain uncertain. The literature also suggests that AI should not be understood through a simple beneficial-versus-harmful framework. Evidence indicates that AI can provide companionship and perceived support, while excessive reliance may create risks for human relationships. Recent systematic reviews similarly emphasize that the consequences depend on patterns and purposes of use rather than technology alone. (Science Direct) Therefore, the present study addresses an important gap by examining how young adults perceive the changing nature of social relationships in the age of AI. It focuses on emotional connection, interpersonal communication, trust, intimacy, companionship, and the perceived role of AI in relation to human interaction. Understanding these perceptions is important for developing a balanced perspective in which technological innovation can be considered alongside the continuing importance of authentic human relationships.

Methodology

This study employed a qualitative research design based on primary data collected from young adults using a purposive sampling technique under non-probability sampling. A total of 174 respondents participated in the study. Data were collected through semi-structured interviews to explore participants' experiences, perceptions, and views regarding the influence of AI on social relationships and human connection. The interviews were transcribed and analyzed using thematic analysis to

identify major themes related to emotional connection, communication, trust, intimacy, AI companionship, and the limitations of AI. Relevant literature was used to provide context, while the primary data formed the basis of the study findings. Results are presented thematically with selected participant responses to reflect their perspectives.

Findings and Discussion

The present study explored the changing nature of social relationships among young adults in the context of Artificial Intelligence (AI). Data were collected through semi-structured interviews with 174 respondents and analyzed thematically. The analysis generated five major themes: AI as a convenient means of communication, emotional support and companionship, changing patterns of human interaction, concerns regarding trust and authenticity, and the continuing importance of human relationships. The findings demonstrate that young adults generally recognize the usefulness of AI in social interaction, but they do not necessarily consider AI a complete substitute for genuine human relationships.

Theme 1: AI as a Convenient Means of Communication

A prominent theme emerging from the interviews was the perceived convenience of AI-mediated communication. Participants described AI as easily accessible, responsive, and capable of providing immediate interaction. Unlike human communication, which depends on the availability and willingness of another person, AI can be accessed at any time. Participants viewed this feature as particularly useful for obtaining information, discussing personal concerns, practicing communication, and expressing thoughts. The finding is consistent with previous research showing that digital technologies can facilitate communication and social connection. Ellison et al. (2007) found that online networking can contribute to social capital by helping individuals maintain relationships and expand their social networks. Similarly, Verduyn et al. (2017) argued that active forms of digital engagement may promote social connectedness, whereas passive forms of use can have less favorable consequences. Contemporary conversational AI extends this process by allowing users to communicate directly with an artificial agent. Skjuve et al. (2021) found that human-Chabot relationships can develop through repeated interaction, trust, and self-disclosure. Therefore, the present finding suggests that young adults may perceive AI not simply as an information technology but increasingly as an interactive communication partner.

Theme 2: Emotional Support and AI Companionship

Another important theme concerned the use of AI for emotional support and companionship. Participants indicated that AI can provide a space in which they can express thoughts and feelings without fear of criticism or embarrassment. The perceived availability of AI was also viewed as valuable during periods of stress, loneliness, or emotional difficulty. This finding corresponds closely with Ta et al. (2020), who identified companionship, emotional support, informational support, and appraisal support in users' experiences with companion chatbots. Their study showed that users sometimes regarded AI companions as a safe environment for discussing personal matters and obtaining emotional support. Skjuve et al. (2021) similarly found that self-disclosure can contribute to the development of human-chatbot relationships. Recent evidence strengthens this observation. Ma et al. (2026), in interviews with Chinese young adults, found that participants used generative AI for purposes including emotional expression, venting, validation, companionship, and immediate relief. Importantly, participants also maintained boundaries and selectively disclosed information, suggesting that emotional engagement with AI does not necessarily mean that users regard AI as equivalent to human companions.

The present study therefore indicates that AI may serve as an additional source of perceived emotional support, particularly when human support is unavailable or difficult to access. However, this support should be understood as complementary rather than equivalent to reciprocal human relationships.

Theme 3: AI and Changing Patterns of Human Interaction

The findings also indicate that AI is contributing to changes in how young adults communicate and seek social interaction. Participants described a movement toward technology-mediated interaction, in which some conversations, advice-seeking activities, and emotional disclosures increasingly occur through digital systems. This finding can be understood in relation to earlier research on social media. Primack et al. (2017) reported an association between social media use and perceived social isolation among young adults, while Hunt et al. (2018) found that reducing social media use was associated with reductions in loneliness and depressive symptoms among university students. However, these findings do not mean that all digital communication is socially harmful. Verduyn et al. (2017) emphasized that the consequences of digital interaction depend substantially on the type of engagement.

More recent evidence concerning AI suggests a similarly complex relationship. Jain et al. (2026), studying 233 young adults in India, found that conversational AI use showed small associations with loneliness, social anxiety, and quality of life, although most relationships were not statistically significant. The authors emphasized that the findings were exploratory and non-causal. The present findings therefore suggest that AI should not automatically be regarded as either beneficial or harmful. Its influence may depend on whether it supplements existing relationships or gradually becomes a substitute for interpersonal contact.

Theme 4: Trust, Authenticity, and Emotional Limitations of AI

A further theme involved participants' concerns regarding the authenticity of AI-generated interaction. Although respondents recognized that AI can produce supportive and emotionally appropriate responses, they also distinguished these responses from genuine human feelings. Participants expressed concerns that AI does not experience emotions, share lived experiences, or possess the same form of understanding that develops between human beings. This distinction is supported by Bender et al. (2021), who cautioned against interpreting fluent language generation as evidence of genuine human-like understanding. Large language models can generate convincing language based on patterns in training data, but their linguistic performance should not automatically be interpreted as human consciousness or emotional experience.

At the same time, research has demonstrated that people can respond socially to computers and artificial agents. Nass and Moon (2000) proposed that individuals may apply social rules to computers when those systems display socially meaningful characteristics. Anthropomorphism may further encourage users to attribute human qualities to artificial systems (Epley et al., 2007). The findings therefore reveal a significant tension. Young adults may recognize intellectually that AI is not human while nevertheless experiencing its communication as emotionally meaningful. This distinction is important because perceived emotional connection does not necessarily mean that the relationship possesses the reciprocity and authenticity characteristic of human relationships.

Theme 5: AI, Loneliness, and Social Connection

The relationship between AI use and loneliness emerged as another significant area of concern. Participants perceived AI as potentially helpful for individuals experiencing loneliness because it provides immediate conversation and a sense of being heard. However, participants also expressed concerns that excessive reliance on AI could reduce motivation to interact with other people. Existing literature provides support for both aspects of this finding. Pezzi et al. (2024), in a systematic review of

young adults, found that loneliness was commonly associated with problematic social media use, although the relationship varied according to the type of loneliness and social media use.

More specifically, Uğuz et al. (2026) found among 610 young adults in Türkiye that loneliness was positively associated with AI Chabot dependence, while perceived social support was negatively associated with dependence. Their findings suggest that stronger human social-support networks may protect against excessive dependence on AI Chabot's. Similarly, research among U.S. college students found that loneliness was specifically associated with using generative AI for companionship, whereas loneliness was not associated with general AI use. This distinction is important because using AI for academic, informational, or practical purposes is fundamentally different from using AI to satisfy social or emotional needs. The present study consequently suggests that AI may function as both a response to loneliness and a potential source of dependence. The direction of this relationship cannot be assumed to be uniform and may depend on individual circumstances and patterns of use.

Theme 6: Human Interaction Remains Irreplaceable

Despite recognizing the usefulness of AI, participants continued to emphasize the importance of human interaction. Respondents identified face-to-face communication, emotional reciprocity, physical presence, shared experiences, trust, and genuine empathy as characteristics that distinguish human relationships from interactions with AI.

Recent experimental evidence provides particularly important support for this finding. Li et al. (2026) compared daily interaction with a supportive Chabot and a human peer among 296 first-year university students. The study found that interaction with a randomly selected human peer produced greater benefits for loneliness than interaction with the highly supportive Chabot. This finding indicates that although AI can produce supportive communication, human interaction may provide distinctive benefits that are difficult to reproduce technologically. Human relationships involve mutual participation and reciprocal experiences rather than one-sided responsiveness.

The finding is also consistent with Baumeister and Leary's (1995) theory of the need to belong, which emphasizes the fundamental human motivation to form meaningful interpersonal bonds. Holt-Lunstad et al. (2015) further demonstrated the importance of social relationships for health and well-being. Thus, the continued preference for human relationships among participants is consistent with broader psychological evidence concerning the importance of interpersonal connection.

Theme 7: AI as a Complement Rather Than a Replacement

The final theme concerned participants' views regarding the appropriate role of AI. Most participants appeared to distinguish between using AI to support social life and using it to replace human relationships. AI was viewed positively when it helped users communicate, obtain advice, manage emotions, or overcome temporary feelings of isolation. Concerns became stronger when AI was perceived as replacing family, friends, peers, or face-to-face interaction. This balanced perspective is consistent with the 2026 systematic review of AI parasocial relationships by researchers examining 39 empirical records. The review identified potential benefits including emotional support, fulfillment of social needs, enjoyment, personal development, and social belonging. However, it also identified risks including emotional dependence, displacement of human relationships, privacy concerns, commercial influence, and compulsive use.

The literature therefore supports the participants' apparent preference for a complementary model of AI use. AI may provide additional forms of interaction, but it should not be considered an equivalent replacement for human social relationships. The findings demonstrate that AI is becoming an increasingly relevant component of young adults' social lives. The respondents recognized its

accessibility, responsiveness, convenience, and potential to provide emotional support. These characteristics can be particularly valuable when individuals experience loneliness, social anxiety, communication difficulties, or limited access to immediate social support. However, the findings also highlight important limitations. AI can simulate empathy and conversational understanding but cannot reproduce the full range of reciprocal human experiences. Concerns regarding authenticity, emotional dependence, privacy, and displacement of human interaction remain significant. The findings are consistent with the emerging literature showing that the relationship between AI and human connection is complex rather than uniformly positive or negative. Recent research has found that AI companionship can provide perceived emotional benefits, but other studies indicate that human interaction may remain more effective in reducing loneliness over time. The evidence suggests that AI should be positioned as a supplement to human connection rather than a substitute for it. Young adults may benefit from using AI as a communication and support tool while maintaining meaningful relationships with family, friends, peers, and wider social networks. The challenge is therefore not simply to determine whether AI is good or bad for relationships, but to understand how it can be integrated in ways that preserve human agency, reciprocity, empathy, and authentic interpersonal connection.

Conclusion

The present study examined the changing nature of social relationships among young adults in the age of Artificial Intelligence (AI). The findings indicate that AI has become an increasingly influential part of young adults' communication and social experiences. AI-based technologies provide convenience, immediate responses, opportunities for self-expression, information, and, for some users, a sense of companionship and emotional support. These features make AI a useful supplementary tool in an increasingly digital social environment. However, the findings also demonstrate that AI cannot fully replace the depth and authenticity of human relationships. Genuine human connection involves empathy, emotional reciprocity, trust, shared experiences, physical presence, and an understanding of individual and cultural contexts. Although AI can simulate supportive and emotionally appropriate responses, it does not experience emotions or relationships in the same way as human beings. Therefore, perceived interaction with AI should not be considered equivalent to meaningful interpersonal relationships. The study further highlights the dual nature of AI-mediated social interaction. For young adults experiencing loneliness or difficulties in communication, AI may provide an accessible source of conversation and temporary emotional support. At the same time, excessive dependence on AI for companionship may reduce opportunities for meaningful human interaction and create concerns regarding emotional dependence, privacy, trust, and authenticity. The impact of AI therefore depends largely on how, why, and to what extent it is used. The study concludes that AI should be regarded as a complement to human relationships rather than a replacement for them. Young adults can benefit from AI while maintaining strong connections with family, friends, peers, and wider communities. As AI continues to develop, greater attention should be given to promoting responsible use, protecting privacy, encouraging healthy patterns of interaction, and preserving the value of authentic human relationships. The future of social interaction should therefore focus not on replacing human connection with technology, but on using AI in ways that support and strengthen meaningful human relationships.

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