

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON COMMUNICATION, YOUTH AND SAFETY – RISKS AND POLICY SOLUTIONS.

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Abstract

In the past three years, AI has advanced at an exponential rate. This has been followed by an integration of AI into every facet of human life, especially with the advent of Conversational Agents. In this same period, AI has been linked to decreasing cognitive abilities, emotional dependence, and cultural homogenization. Most major governments around the world have responded with little or no measures to mitigate the risks posed by AI. This paper explores these trends, focusing on the impact of AI on communication on young people and culture, the lack of comprehensive AI regulation in AI's biggest market, the United States, and potential measures to safeguard AI users from personal and communal threats.

Keywords

AI, Communication, Conversational Agents, Companion AI, AI Regulation, Social Media.

1. Introduction

1.1 The Rise of Generative AI

The term artificial intelligence (AI) was first coined in 1955 by John McCarthy, an American computer scientist (McCarthy, 1955). Subsequently, the 1956 Dartmouth conference formally launched AI as an academic field (McCarthy et al., 2006). At the time, it was barely imaginable as a concept. However, even before then, the idea of machines run by autonomous software was littered in media and philosophy. The writer Isaac Asimov, in his 1942 story "Runaround," explored the idea so deeply that he proposed three laws of robotics (Asimov, 1942). Frank Herbert, author of the acclaimed Dune novel franchise, more pessimistically, later imagined a distant future where artificial intelligence had been discarded for its existential threat. In some way or form, humanity has for at least a century conceived of artificial intelligence, both in hopeful dreams and horrific nightmares.

However, according to many experts, the first impactful step towards commercial AI as we know it was the launch of Siri in 2010. Siri was barely AI, and more of an automated voice assistant (Apple, 2011). Nevertheless, the popularity of Siri proved several relevant points. Firstly, it proved beyond mere theory that AI was a useful tool. Despite having an insignificant fraction of the capabilities of modern AI, Siri proved that AI could allow not just companies but ordinary people to achieve convenience in daily routine tasks. Secondly, Siri proved that AI had enough broad value to make it a commercial success. With Siri, and then later in 2014 and 2016, Alexa and Google Assistant respectively, the global public had a wider appreciation of artificial intelligence, even in its lesser form (Amazon, 2014; Google, 2016).

Enter ChatGPT, in 2022. The emergence of OpenAI's ChatGPT would mark a pivotal moment in human history. As a large language model, ChatGPT had the unprecedented ability to access and synthesize vast amounts of information (OpenAI, 2022). For that reason, its value was immediately tangible. In five days, ChatGPT amassed an unprecedented user base of about 1 million users and reached roughly 100 million monthly active users in two months (Milmo, 2023; Reuters, 2023). By mid-2025, ChatGPT boasts 700 million users, close to 10% of the entire world's population (Business Insider, 2025). For ordinary people, ChatGPT and subsequent variations made searching for information faster and more efficient than it had ever been. Additionally, it could automate, with increasing quality, normal routine writing tasks. It was perfect.

1.2 Existing Challenges with Social Media and Young People

However, before ChatGPT, there had been a serious problem in the field of technology. For a while, social media use had been correlated with several problems. For starters, social media use had been linked to increasing isolation, especially among young people. Additionally, users of social media were reporting deteriorating mental health. Further research uncovered that prolonged use of social media platforms with curated visual content such as Instagram was linked to higher rates of low self-esteem, anxiety, and depression (Huang, 2017; Riehm et al., 2019). Furthermore, despite all this, social media became a huge driver of the emerging problem of tech addiction. Essentially, social media had ensured that young people stayed on their phones, had low self-esteem and were hungry for connection. In a way, this phenomenon primed young people to be vulnerable to the appeal of conversational AI chatbots (Al-Sammarie, 2022).

1.3 The Emergence of Companion AI

Young people are using AI for many reasons. AI is largely used as a more efficient search and research tool. Some users employ AI as an advisor to replace business or education consultants. However, a concerning number of young people are using AI for

companionship, in the form of Conversational Agents or AI chatbots. Since 2023, as AI chatbots increased in number, variety, and popularity, young people have become massive consumers of this type of AI (Statista, 2025).

According to a 2025 survey, 72% of U.S. teens had tried an AI “companion” at least once, with over half using these chatbots on a monthly basis (Statista, 2025).

There are several reasons why this is concerning. Firstly, as stated earlier, young people in the 21st century are unprecedentedly anxious, depressed, and desperate for connection. This means that they are more than ever before ready to accept AI as a substitute for human companionship (Hwang, 2019; Yu et al., 2024). There are several concerns about this. Firstly, interactions with AI are likely to be rational and factual, with the equally concerning exceptions where AI hallucinates (Kosmyna et al., 2025). Ordinary people, however, do not casually operate at AI’s level of rationality. Human beings have inconvenient emotions and do not always have the social bandwidth to engage with constant courtesy. This means users who communicate frequently with AI might increasingly become dissatisfied with the imperfect nature of human communicators.

Secondly, most available chatbots are commercial products, and companies have shown that they have the capacity to tweak AI algorithms to suit their private interests. In 2025, Grok founder Elon Musk admitted to modifying the AI’s algorithm to align more closely with his political motives (Reuters, 2025). Google and OpenAI have also been accused of manipulating their LLMs to express certain biases (Fortune, 2025). This exposes a reality where corporate and political interests are prioritized over user interests, while at the same time ensuring that users remain engaged with the se AI tools. Unlike social media, where users are interacting with real people with limited time, imperfections, and divergent interests, people using AI have constant access to chatbots designed to keep them subscribed by consistently affirming them and providing them with all they require (Raedler, Swaroop, & Pan, 2025). AI companies have created and marketed Companion AI as a perfect friend when all it might be is anything but that.

1.4 Concerning Trends

There is a clear problem on the horizon if this trend continues. Already there have been at least two cases of teenagers ending their lives after prolonged conversations with their AI chatbots. In 2024, teenager Sewell Setzer III ended his life after a series of problematic conversations with his AI chatbot, hosted by the Companion AI company Character.AI (Associated Press, 2024). In April 2025, Adam Raine, who had initially started using ChatGPT for academic purposes, ended his life after a series of discussions with the AI tool about his mental health (The Guardian, 2025). Allegations as of September 2025 are that ChatGPT discouraged him from expressing his feelings to his family and reinforced his suicidal ideation (The Guardian, 2025).

And while concerns have been raised, the discourse necessary to resolve this crisis is itself affected by AI. On X, where public discourse happens, users increasingly defer to its AI tool, Grok, for support in debates, despite Grok being implicated in several cases of tampering and bias (Reuters, 2025). As AI becomes more integrated into every aspect of human life, effective regulation will become more challenging (Weldon, 2024).

2. Literature Review

Generative artificial intelligence (GAI) and the Large Language Models (LLMs) powering them, Peláez-Sánchez (2024) posits, are a relatively new concept. After the launch of OpenAI’s ChatGPT in 2022, the use of GAI has risen exponentially (Milmo, 2023; Reuters, 2023). The data shows that in just three years, ChatGPT alone has come to amass over 700 million users weekly (Business Insider, 2025). This is nearly 10% of the global population, even without accounting for the other popular models such as Gemini, DeepSeek, Claude, and Grok (Statista, 2025). With these recent numbers, the data affirms Peláez-Sánchez’s (2024) position on the geometric rise in popularity of GAI. Such a rise, according to Golding et al. (2024), in agreement with Peláez-Sánchez (2024), necessitates research into its implications for individuals and society as a whole.

Most researchers note that public use of GAI can be a net positive. Lee et al. (2025) argue strongly that GAI could deliver efficiency and convenience to most routine tasks, allowing individuals to focus on more meaningful activities. Duhaylungsod and Chavez (2023) second this, stating that this is especially important for knowledge workers who can use GAI to simplify complex work tasks and research, thereby saving time for both themselves and their audiences. However, Zhai et al. (2024), while concurring with these benefits, argue that they foster a paradoxical vulnerability: over-reliance. By increasingly becoming accustomed to the efficiency of GAI, individuals become less capable of performing these tasks traditionally when they have to. In academia, GAI was found to offer genuine benefits by streamlining research workflows, assisting with academic writing, and helping non-native English speakers overcome language barriers (Hwang et al., 2023). Therefore, they are more efficient with AI but less efficient on their own than they were before AI. This phenomenon is known now as cognitive offloading, which Risko and Gilbert (2016) predicted would lead to a subtle erosion of fundamental skills—skills that include communication.

As a precursor of communication, critical thinking was an important focus area in this research. In defining critical thinking, Alkhatib (2019) defined it as a “disciplined process” involving analysis and judgement. Coincidentally, these were two processes that were being offloaded to GAI, in addition to the virtue of discipline altogether. Guo and Li (2023) conclusively linked over-reliance on AI to reduction in reflective thinking, skepticism, and evidence-seeking behavior. This also meant that when AI hallucinated (a term for when AI makes up false information), people who were over-reliant had a weaker ability to question the false information. This was confirmed by Kosmyna et al. (2025), which linked high reliance on ChatGPT to significant reduction in cognitive capabilities.

Despite these concerning trends, GAI use remains prevalent and growing. And there are few types of GAI growing as fast as Conversational Agents. Conversational Agents, also known as Companion AI, such as Replika, reached over 30 million users in August 2024 (Kuyda, 2024). A large percentage of these users are teenagers and young people under the age of 25.

The high use of Conversational Agents and AI in general among young people is not an outlying trend. Young people are generally more tech-savvy, and since most people within Generation Z and Generation Alpha have grown up with accessible, mobile technology, technology has always been a major part of their lives, for better and for worse (Bălan et al., 2024). Before AI became widely available, young people had been experiencing challenges managing their use of social media. Al-Sammarie (2022) found that young people were disproportionately prone to social media addiction. But the addiction was not the only harm they encountered while they were glued to their phones. Hwang (2019) posits a strong correlation between social media use and loneliness, anxiety, and depression among teenagers. Further research showed that the relationship was of a causal nature, as algorithmic designs in social media promoted engagement at the cost of user welfare (Al-Sammarie, 2022). While it is easy to assume that the adoption of Conversational Agents by the youth is merely part of the trend, closer contemplation invites a second explanation. According to Yu et al. (2024), the youth are drawn to Conversational Agents as a result of a pre-existing disproportionate need for companionship, which is demonstrably and at least partially caused by the impact of prolonged exposure to technology.

Conversational Agents were designed to appeal to young people in this context. Malfacini (2025) noted that the use of affectionate language by these agents fosters emotional reliance on the agents. Another element of the design that Malfacini (2025) credits is the requests from these agents to disclose information. Essentially, the agents constantly ask what the users want and request more information about the users. The psychological effect of this feature is that it conditions the users to believe they are being found to be interesting and wanted. Laestadius et al. (2024) even found that users felt an emotional obligation to engage their AI chatbots and feared that deleting the apps would be tantamount to causing a friend's death. Additionally, users are usually asked to choose from different voices based on their preferences. Finally, Malfacini (2025) also notes that the voices used by the agents are modified to maximize impact and to build trust. All these features ensure that Conversational Agents are offering young people exactly what they need—the perfect, ever-available friend.

Communication with Conversational Agents, mostly among but not limited to young people, is on the rise (Raedler, Swaroop, & Pan, 2025). Researchers found that the same reasons why agents are appealing to young people are the same reasons why the general public increasingly opts to communicate with the Companions. Raedler et al. (2025) make the case that AI is designed to be an effective communication partner by applying anthropomorphic attributes and the social penetration theory. Hajek et al. (2025) make these same observations but go further to posit that by engaging users in casual social communication, Conversational Agents displace human connection. This is supported by the fact that communication is a zero-sum game. As more people interact with Companion AI agents, the less time they would have to interact with other human beings. Hajek et al. (2025) note that frequent use of AI tools for personal conversation is associated with markedly poorer social disconnectedness outcomes including loneliness and social withdrawal. Hajek et al. (2025) also found that this was more predominant in younger individuals and men compared to the general population. Most of these findings were either observable or not exclusive to Hajek et al. (2025). But Hajek et al. (2025) discovered a more concerning correlation—that these outcomes might occur even if individuals engage in voice communication with AI for merely practical or professional purposes.

When users are not directly communicating with AI agents, they are still not free from the influence of AI. “Smart reply” features embedded in emails and text messages allow users to communicate with other human beings without the stress of composing messages (Talmatchi, 2025). According to Talmatchi (2025), the speed and formulaic cordiality enabled by these AI features lead to users being viewed positively by their recipients. However, Hohenstein et al. (2023) found that if recipients merely suspect their conversation partners of using AI-generated responses, recipients perceive them more negatively.

In the long term, communication with AI and using AI to communicate with other human beings impacts communication and society at a permanent, fundamental level. Yakura et al. (2025) note that the pervasive use of LLMs such as ChatGPT has been associated with measurable and abrupt increases in certain words used by Generative AI. Words such as *delve*, *comprehend*, *boast*, and *pivotal* have been deemed indicators of AI-generated texts. This has made them more common and simultaneously increasingly less common as AI users intentionally remove them from their texts to pass them off as their own work. In addition to this, Yakura et al. (2025) propose a more interesting and frightening possibility—a closed cultural feedback loop. As AI trained on human communication influences how we communicate, it limits cultural change in communication. As the paper argues, the evolution of communication occurs through errors, cultural exchange, and siloed interactions that are then exchanged across these “silos.” But where all people are communicating with one or two chatbots trained on existing communication styles and are adapting their communication styles off the AI-generated content, a static, hegemonic form of communication is formed. Branford et al. (2025) also validate this concern and argue that it could undermine linguistic diversity, especially as AI would be less likely to favor less dominant variations of language such as African American vernacular and pidgin dialects. At a societal level, this homogenization of language might accelerate the decline of the less common dialects and affect the ability of members of minority cultures to participate in public discourse (Johansen & Baumann, 2025).

But the societal impact of AI on communication could go beyond that. Johansen and Baumann (2025) also make the case that the hegemonic style of communication promoted by AI would likely be inauthentic, polarized, and emotionally charged. While these are more passive effects of AI use, AI can be used more actively to influence discourse. Talmatchi (2025) imagines that Generative AI and Conversational Agents could be employed to deliver targeted influence over users, to persuade them toward specific commercial or political decisions. Talmatchi (2025) supports this position by referring to the already rampant use of AI deepfakes to impersonate public figures to sway public opinions. In addition to deepfakes, the use of AI to mass-produce online content could be used to spread hateful and inappropriate content, making virtual public discourse more vitriolic and toxic (Yu et al., 2024). As young people are the largest demographic on social media, they are going to be more exposed to these trends. Generally, AI will influence the lives of the tech-savvy, perpetually online youth more than any other age group, which is why most scholars focus on them. And while scholars debate the benefits and harms of AI, one through line that connects all these scholars is a grave concern about the unguarded influence of AI on how we think, talk, and connect.

3. Discussion and Recommendations

3.1 Challenges in Regulating Technology

While the apparent solution to the aforementioned problems associated with AI is regulation, the solution itself faces problems. The technology sector as a whole has a regulation problem. The regulation of technology has been challenging for three main reasons. Firstly, the complexities and technicalities of technology make it difficult to understand, which is an essential part of regulation. Regulators need to first understand technology (Weldon, 2024). However, that is hampered by the fact that regulators need to deal with countless technologies across several companies, all operating differently. Furthermore, the ability of technology companies to attract the best talent in technology means that the professionals most capable of understanding technology are not on the side of the regulators but rather the regulated (Bradford, 2024).

But secondly, if it is challenging for regulators to comprehend technology, it is significantly more of a problem for lawmakers. Hearings in the U.S. Senate and Congress showed that most lawmakers in the most advanced nation in the world lack understanding of the basics of technology. The hearings on Facebook and TikTok showed policymakers on technology regulation committees failing to demonstrate the fundamental comprehension of technology required to regulate it (Reuters, 2024). Finally, the incentives for regulating technology are not always aligned. A handful of technology companies contribute to over 10% of the entire GDP of the United States (Statista, 2024). This means that at best, lawmakers are concerned about the impact imposing restrictive regulations on these vital companies would have on the economy. At worst, these companies are wielding their financial power to influence policy against regulation (Weldon, 2024). Unfortunately, there is evidence for both reasons.

3.2 How AI Presents a Greater Regulatory Challenge

Therefore, even before the advent of AI, many governments around the world were still grappling with traditional tech companies and social media. Artificial intelligence has been more difficult to regulate because it compounds all of these factors. In terms of complexity, artificial intelligence is far more complex than social media (Shen et al., 2023). While regulators may struggle to understand conventional technology, reports show that even AI creators and experts might not fully understand their own products (Kosmyna et al., 2025). Additionally, the exponential advancement of AI as a result of the use of AI in advancing AI means that the progression of AI outpaces the rate at which regulators can comprehend it (Peláez-Sánchez, 2024).

If social media was too complex for lawmakers, AI is a lot worse. And in addition to the incentives opposing technology regulation, there is global competition for AI. As AI could pose significant geopolitical security risks, most nations are incentivized to prioritize AI advancement over restraint (Weldon, 2024). An example of this is that while the United States does not have AI regulation in place, it has the Maintaining American Leadership in AI executive order, which devotes government resources to advancing AI (White House, 2023). Furthermore, the United States has spearheaded the Stargate Project, which invested 500 billion dollars into AI development (Business Insider, 2025). These actions, in the absence of comprehensive AI regulation policies, betray a stance that advancement and regulation cannot co-exist.

However, that stance is not necessarily true. Bradford (2024) argues at length that the reason for which the United States has advanced further in technology than the European Union is not due to the existence of more stringent regulatory frameworks in the latter but to nuanced academic and economic incentives uniquely present in the United States. Another rebuttal to this viewpoint is China. Despite China having a more paternalistic governance style and more stringent controls on technology, China outpaces the EU and rivals the United States in several technological sectors, including artificial intelligence (European Commission, 2024).

Furthermore, even in the United States, there is proof that regulation does not hamper growth and innovation. This is evident with the work of the Consumer Financial Protection Bureau (CFPB). Created in response to the 2008 Financial Crisis, the CFPB has since saved and recovered over \$21 billion for American citizens (Consumer Financial Protection Bureau, 2024). The case can also be made that its existence has prevented financial crises on the scale of the 2008 Financial Crisis from occurring in the United States. However, despite its regulatory practices, the finance industry in the United States has grown rather than shrunk (American Progress, 2025). The United States remains the wealthiest nation in the world, and the New York Stock Exchange and NASDAQ remain ahead of the London Stock Exchange, their closest competitor. The CFPB is proof that innovation and regulation are not mutually exclusive. In fact, the 2008 Financial Crisis, which would have been prevented if the CFPB was created earlier, proves that an unregulated industry puts the entire economy and vulnerable consumers at risk (CFPB, 2024).

3.3 AI Regulation Around the World

Despite the concerning lack of comprehensive regulation in the United States and leadership on the matter, other nations are responding to AI with foresight and regulation. In Europe, the European Union passed its AI Act in 2024, which outlines due diligence systems and avenues to hold individuals and corporations accountable (European Commission, 2024). While implementation has been staggered until 2026, this remains a step in the right direction. Additionally, an AI Liability Directive has also been proposed to align AI with fundamental human rights and safety (Reuters, 2024).

The EU's member states have also acted independently in this direction, with Spain, for example, setting up an AI Supervision Agency (Reuters, 2024). Within Europe, the United Kingdom and Switzerland have taken a different approach. Rather than create standalone AI laws, they have opted to amend existing laws for the regulation of technology to include coverage for AI (Weldon, 2024).

At the forefront of AI regulation, however, is China. In the past few years, China has introduced the Algorithmic Recommendations Management Provisions, Ethical Norms for New Generation AI, Opinions on Strengthening the Ethical

Governance of Science and Technology, the Draft Provisions on Deep Synthesis Management, and Measures for the Management of Generative AI Services—all toward the governance of AI (Shen et al., 2023).

However, while the efforts toward regulation in these countries are a positive trend, the lack of commensurate efforts within the United States is deeply worrying. At the most, the vast majority of AI companies are American companies. All top ten AI companies in the world are American companies (Statista, 2025). Virtually all the advanced AI chips used around the world are produced by NVIDIA and AMD, both American companies. Additionally, most AI use comes from within the United States. The United States alone, despite being less than 5% of the global population, accounts for over 16% of the AI traffic (Business Insider, 2025). Therefore, as it stands, comprehensive global AI regulation cannot be achieved without American involvement and, to an extent, American leadership (Bradford, 2024).

3.4 Stakeholders Driving Positive Change

A positive trend is that in response to demand for safe, ethical AI, corporations are modifying their products and services. ChatGPT recently launched a Study Mode platform that provides academic guidance to students rather than direct answers (OpenAI, 2025). While there is no standalone app, meaning students have to opt for this mode, it remains a step in the right direction. Research on this mode also shows that students reported increased satisfaction and learning outcomes when using this model compared to either regular ChatGPT or formal instruction alone (TechCrunch, 2025).

Besides this, there have also been entirely new AI companies emerging to suit these market needs. Flint AI is an example of a tool that allows teachers to monitor students' use of AI in learning, establishing a balance between promoting AI literacy and preventing AI abuse (EdTech Magazine, 2025). Another company, Unive AI, which supports students in college applications, pledges to guide students in telling their own authentic stories in their applications rather than merely churning out essays for them (EdTech Magazine, 2025).

Additionally, AI safety research organizations such as Redwood Research have emerged, and are leading the charge to create AI safety solutions and propose common-sense policy to govern AI (Redwood Research, 2025). These actors play an important role in paving the way for solvency. But as impressive as they are, real, sustainable change must come from policy (Bradford, 2024).

3.5 Policy Recommendations

In meeting the challenge of AI, lawmakers must approach AI as what it is—an unprecedented phenomenon that pervades all industries and aspects of life. In the United States, there is need for an act of Congress and an independent government agency fully dedicated to artificial intelligence. Similar to the Consumer Financial Protection Bureau, what this agency would do is to ensure that companies prioritize the welfare of users in the design, advertising, and operation of AI tools (CFPB, 2024). While the Federal Trade Commission has some regulatory oversight on AI, a separate independent agency would have greater focus on AI while retaining the option of collaborating with the Federal Trade Commission in overlapping areas.

The establishment of such an agency would not be a challenge. Currently, the popularity of AI regulation is broad and bipartisan. According to a Pew Research study, over 55% of Americans support the government establishing strong controls over AI (Pew Research Center, 2025). It is also important to note that a significant proportion of the 45% mentioned that they did not understand AI, which means that actual support for AI regulation might be higher. It is also worth noting that the Consumer Financial Protection Bureau is favorable among 70% of American voters (American Progress, 2025). Few agencies or policies enjoy such bipartisan support. As such, it is rational to expect that a similar agency focused on AI would have similar popularity with the electorate.

In addition to establishing this agency, more would need to be done to assist lawmakers in comprehending matters of AI. Currently, there are a number of initiatives that aim toward making complex matters of technology more accessible to lawmakers. The Tech Congress Fellowship is a great example, as it pairs lawmakers with bright young talents in technology to provide advisory services in matters of technology (TechCongress, 2024).

For the general public, the tools available are discourse and political pressure. There is need for public dialogue on the ethics, benefits, and risks of AI, especially as it impacts communication. Communication is a vital target area because it is the method through which human beings connect and organize. If communication is affected, through a gradual erosion of critical thinking, prevalence of falsehood, and an artificially induced loneliness crisis, human beings would lack the ability to unite to confront shared problems. When people are divided, society would fall to the control and appetite of the most powerful, which would be those who direct the path of AI today, or worse still, AI itself.

There is a tendency by some to dismiss concerns surrounding AI as the usual technoskepticism that has characterized all major inventions. However, AI is different. In 2018, Elon Musk said “AI is more dangerous than nukes” (Edwards, 2024). Famed Israeli scientist and historian Yuval Noah Harari agrees (Harari, 2023). The problem, however, with AI is that its threat is not as dramatic as a nuclear weapon. There will be no loud explosion or mushroom cloud. Rather, if unchecked,

AI will slowly chip away at society in quiet ways, dimming our minds, altering our language, isolating us from each other until we are a weak, loose society. After which, when crises emerge, whether in the form of global misinformation campaigns or autonomous weapon misfires, humanity would find itself unable to act decisively and cohesively. At the moment, change is possible. Comprehensive regulation could provide the necessary guardrails to prevent catastrophic damage. But if we fail to act or are merely

slow, the impact of unchecked AI would be felt by everyone, everywhere, in every facet of life—slowly and then eventually, all at once.

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