Vol.6 Iss.1 2025 Communication & Education Review
https://doi.org/10.37420/j.cer.2025.010

Study on the willingness and use of AI tools by young users

Jingyi Yin*
School of English (Internet TV direction), Beijing International Studies University, China
***Corresponding author E-mail: yinjingyi1012@163.com**

Abstract:
In the context of the rapid development of artificial intelligence, young users frequently use AI(Artificial Intelligence) tools for text and image creation, learning assistance, information collection and organization, language processing, emotional support and communication. This study finds that there is a significant positive correlation between the perception of artificial intelligence, the adaptability of new technology, attitude and attention and the willingness of users to use artificial intelligence tools, and analyzes the reasons for this. Also, this paper discusses the differences in young users use of AI tools from three aspects: proficiency, willingness to use, and usage tendency, and examines the influencing factors from educational, economic, technological, and occupational perspectives. Finally, it reflects on the learning willingness and usage phenomena of young users regarding AI tools. This paper studies young users' learning willingness and use of artificial intelligence tools through the form of questionnaire survey, and puts forward the problems and solutions that young users need to pay attention to when using AI tools.

Keywords:
artificial intelligence, young users, learning willingness, usage phenomenon

1 Introduction

As information technology advances rapidly, AI tools have become the core tools for information production in modern society, significantly enhancing their influence. However, in this digital wave, a phenomenon that cannot be overlooked is gradually emerging: there are noticeable differences among young user groups regarding their willingness to learn and use AI tools. This phenomenon is of great importance for the overall progress of society and the comprehensive development of individuals. Such differences may be due to multiple factors that limit their full enjoyment of the convenience brought by AI technology, preventing them from effectively acquiring, filtering, and utilizing information, leading to contrasts with their peers in knowledge acquisition and innovation capabilities.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

2 Literature review

2.1 Summary of the differences in learning willingness and use of AI tools among young users

2.1.1 Performance overview

In the era of intelligent media, despite the rapid development of new media technology, we can observe that many young people, although they frequently use new media, still exhibit significant differences in their knowledge levels and skill mastery of AI tools among them. This phenomenon is reflected in several aspects. Zhang Chi (2023) pointed out that college students willingness to use Generative Artificial Intelligence tools is significantly negatively affected by perceived risks and technical anxiety. Zhang Yanbing (2020) et al. noted that innovative users are more inclined to use AI tools, especially in functional scenarios where highly intelligent AI is more eye-catching. Foreign scholars Bobby L. Asirit, L., & H. Hua, J (2023) indicated that young users primarily use AI for personal purposes rather than academic ones, integrating it into daily life, with intergenerational differences within the group. Foreign scholars Arkhipova, D. & Janssen, M. (2024) pointed out that Generation Z users feel social pressure when using Generative Artificial Intelligence and tend to learn new technologies on digital platforms to cope.

2.1.2 Summary of causes

Regarding the causes, Zhang Chi (2023) pointed out the main factors from the perspectives of perceived risk and technical anxiety. Foreign scholars Arkhipova, D., & Janssen, M. (2024) highlighted that some young users are more inclined to learn new skills through digital platforms to cope with social pressures from the perspectives of social impact and personal attitudes. Fan Miaomiao and Lu Wei (2022) noted that in educational settings, the willingness to use AI tools is influenced by task attributes and complexity.

2.1.3 Impact review

Regarding the effects, Liu Qiping (2024) and others pointed out that this disparity could exacerbate the digital divide, particularly in education and employment. Foreign scholars Arkhipova, D., & Janssen, M. (2024) noted that Generation Z users shape their digital environment through AI tools, which may amplify social pressures and lead to standardized identity formation. Xu Shuting (2024) highlighted that in terms of employment, the development of AI technology significantly impacts youth career planning. The algorithmic divide and filter bubble effect can distort value expression, leading to algorithmic alienation among young people.

In summary, research on the phenomenon primarily focuses on the analysis of multiple factors, including individual perception of risk and technical anxiety, social impact and personal attitudes, algorithmic anxiety, and identity construction and education. It also examines the effects of multiple factors such as education, socio-cultural background, and youth employment. However, few scholars analyzed the differences in new media usage among young people from the perspective of AI tool use.

2.3 Research questions

Q1:What are the reasons why young people use AI tools and the current state of its use?

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Q2:What factors hinder or promote the use of AI tools by young people and how do these factors affect the extent to which young people use AI tools?

Q3:Will young people become overly dependent on the use of AI tools?

3 Research methods

3.1 Questionnaire survey method

This paper adopts the questionnaire survey method to try to answer the above questions.

3.1.1 Hypothesis establishment

H1: The more frequently young people use the Internet, the more willing they are to use AI tools.

H2: The more positive the young people are about AI, the more willing they are to use AI tools.

H3:The higher the attention young people pay to AI, the more willing they are to use AI tools.

In order to prove the hypothesis, this study adopted the questionnaire method, sampled the population, and made the questionnaire.

3.1.2 Data collection

This study was designed and distributed on the "Wenjuanxing" platform in August 2024. To investigate young peoples willingness to use AI tools, we collected samples nationwide using a combination of snowball sampling and opportunistic sampling methods. After cleaning the questionnaires, the study gathered a total of 240 valid responses.

3.2 Data description

There are significant differences in the willingness to use AI tools in terms of gender and occupation, but no significant differences are found in terms of age, education and major.

In terms of computer use, the willingness to use AI tools is significantly positively correlated with computer ability and adaptability to new technologies.

In terms of the attitude towards AI development, there is a significant positive correlation between the willingness to use AI and the optimistic attitude towards AI development as well as the attitude towards the social impact of AI.

In terms of the experience of using AI tools, the willingness to use AI tools showed a significant positive correlation with the frequency of currently using AI tools, the perception of AI accuracy, efficacy, and ease of use, and the satisfaction of AI tools.

In terms of social influence, the willingness to use AI is significantly positively correlated with following bloggers in the field of AI, following hot events in the field of AI, media publishing AI-related content, and

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

social media pushing AI-related content.

In terms of interpersonal influence, AI use willingness is significantly positively correlated with the discussion and praise of people around.In addition, AI use willingness is significantly positively correlated with participation in AI training.

4 Analysis and discussion

4.1 Analysis of the influencing factors of young peoples performance in using AI tools

With the global sweep of Generative Artificial Intelligence applications such as ChatGPT launched by Open AI, some young people, as "followers" of new technologies, take the lead in using and experiencing AI tools in their work, life and study. The following will analyze the reasons for the impact of young peoples performance in using AI tools.

4.1.1 Analysis of the relationship between the frequency of Internet use and AI tool usage performance among young people

Based on H1, this study confirms that the willingness to use AI tools is significantly positively correlated with computer skills and adaptability to new technologies; the willingness to use AI tools is also significantly positively correlated with the frequency of using AI tools, perception of AI accuracy, perception of AI effectiveness, and ease of use, and satisfaction with AI tools. Therefore, it can be concluded that the more frequently internet users engage in online activities, the more willing young people are to use AI tools.

4.1.1.1 The frequency of young peoples use of AI tools is positively correlated with their willingness to use them

By analyzing Table 1, it can be concluded that the correlation coefficient between young peoples willingness to use AI tools and their frequency of using AI tools is 0.362, indicating a significant positive correlation. This data suggests that the higher the frequency of using AI tools among young people, the stronger their willingness to use them. The widespread application of AI tools on current social media platforms and the contemporary social pressures are the reasons for young people frequently using AI tools.

First, most Generative Artificial Intelligence is widely used on social media platforms to attract young users to participate. This AI tool not only meets users social needs but also enhances their experience with the ease of use, increasing the frequency of young users using AI tools. For example, on social media platforms like TikTok and Xiaohongshu, AI-generated content is prevalent. Users can generate AI images with one-click generation and share them through meme creation and secondary creation, widely spreading and promoting AI tools, which encourages more young users to engage. As shown in Table 1, the frequency of young users using AI tools has increased, indicating a stronger willingness to use them.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Table 1 Correlation analysis between willingness to use AI tools and experience of using AI tools

	AI usage willingness	mean	standard deviation
Frequency of use of AI tools	0.362***	3.583	0.894
Perception of AI accuracy	0.191**	3.536	0.893
Perception of AI's efficiency	0.218***	3.757	0.835
Perception of AI usability	0.172**	3.838	0.800
Satisfaction with AI tools	0.239***	3.685	0.879

Secondly, under the rapid social transformation, young people are bearing heavy social pressures. This pressure is not only rooted in the pursuit of academic achievements and career paths but also involves doubts about their own identity and concerns over societal expectations. As a result, young people increasingly rely on artificial intelligence to seek emotional comfort and social connections. For example, Generative Artificial Intelligence technology allows young people to create emotional companions or cloned relationships through AI avatars, such as BabyAlpha companion AI robot dogs and AI pet Moflin. This new form of interactive experience satisfies young peoples curiosity and desire for exploration.

4.1.1.2 The accuracy of AI tool use, the effect of use and the willingness to use are positively correlated

The accuracy and effectiveness of AI tools significantly influence young peoples willingness to use them. Analysis of Table 1 reveals that the correlation coefficients between young peoples willingness to use AI tools and their perception of AI accuracy and efficiency are 0.191 and 0.218, respectively, indicating a strong positive correlation. This data suggests that young people believe higher accuracy and better effect lead to stronger willingness to use AI tools.

First, according to the research, young people have a higher level of trust in AI tools, primarily due to their ability to provide accurate information and personalized recommendations. Analysis of Table 1 data shows that highly accurate AI tools can enhance young peoples willingness to use AI tools. In terms of information accuracy, intelligent assistants and search engines often leverage algorithms and big data technology to quickly provide precise information. For example, in the medical field, AI-assisted diagnostic systems can accurately identify various diseases. The "Med-Go" system at Shanghai East Hospital can rapidly integrate and analyze medical records, significantly improving the efficiency of pathology reports and reducing misdiagnosis rates. Regarding push accuracy, AI demonstrates its capability in collecting and analyzing users personal preferences and historical behaviors to generate user profiles, thus forming personalized recommendations. For instance, in e-commerce, platforms like Amazon, Tmall, and JD use AI-driven recommendation systems to suggest products based on users shopping history and browsing behavior, thereby enhancing the shopping experience and customer satisfaction.

Secondly, the efficiency and intelligence of AI tools have significantly enhanced the productivity of young people in their work and daily life. They can provide users with the information they need in an extremely short time, greatly reducing the time cost of information acquisition, thus improving usage effectiveness. Analysis of Table 1 data shows that the higher the performance of AI tools, the stronger the willingness of

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

young people to use them, which in turn increases their frequency of use. At the same time, useful results and positive feedback mechanisms further enhance young peoples willingness to use AI tools. For example, ChatGPT can improve students learning efficiency and spark their interest in AI in higher education and creative fields, it lowers participation barriers and stimulates artistic inspiration. In business operations, AI tools support decision-making processes. These practical applications encourage young people to adopt AI tools more readily to boost personal and team productivity.

4.1.1.3 The ease of use perception of AI is positively correlated with the willingness to use it

The ease of use of AI tools has become a key factor influencing young peoples willingness to use them. Analysis of Table 1 shows that the correlation coefficient between young peoples intention to use AI tools and their perception of AI ease of use is 0.172, indicating a significant positive correlation. This data suggests that when young people use AI tools, they find them easier to use, which increases their willingness to use these tools. The simple operation of AI tools allows users to quickly master and efficiently utilize them to achieve their goals. Therefore, the widespread penetration of AI tools in various fields such as education, science and technology, and healthcare can be attributed to their high ease of use and user experience. For example, intuitive interface design, clear operation instructions, and intelligent automation features are all factors that contribute to the widespread adoption of AI tools among young people.

4.1.1.4 Young users computer ability, new technology adaptability and willingness to use are positively correlated

Due to frequent internet use, this paper infers that users have stronger “computer skills” and “adaptability to new technologies.” Analysis of Table 2 shows that the correlation coefficients between young peoples willingness to use AI tools and their personal computer skills and adaptability to new technologies are 0.164 and 0.312, respectively, indicating a significant positive correlation. This data suggests that young people with stronger computer skills and adaptability to new technologies have a higher willingness to use AI tools, for the following reasons.

Table 2 Correlation analysis between AI tool usage intention and Internet use

	AI usage willingness	mean	standard deviation
computing power	0.164**	0.238	0.427
Adaptability to new technologies	0.312***	3.689	0.817
Internet dependency	-0.109*	2.762	0.718

First, young people who excel in computer skills typically demonstrate a more open and agile attitude towards emerging technologies, as well as adaptability. Thanks to their deep familiarity with digital tools and frequent practice of computer technology, they can quickly get started and master the latest applications of AI technology. This technical proficiency allows them to deeply appreciate the unprecedented convenience brought by AI tools, further motivating their enthusiasm for actively using these tools.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Secondly, studies show that young people with stronger computer skills generally have higher trust in AI technology. Therefore, they are more inclined to believe that AI tools can help them tackle complex tasks, thereby improving the quality of their work. For example, when it comes to data analysis, users with high computer proficiency trust that AI can efficiently process large amounts of data and uncover valuable insights; in the field of creative design, they expect AI to spark new ideas and optimize their work. This trust further motivates them to actively adopt AI tools.

Then, young people with strong adaptability to new technologies tend to have greater trust in these innovations. They are more likely to believe that AI tools can bring significant benefits, which enhances their perception of usefulness. At the same time, because they are usually more proficient in operating new technologies, they find them easier to use, further motivating them to be more willing to adopt and apply AI tools, whether its for intelligent generation of news content, optimization of data analysis, or smart formulation of communication strategies.

4.1.2 Analysis of the relationship between young peoples attitude towards AI and their performance in using AI tools

Based on H2, it is confirmed that the willingness to use AI tools is significantly positively correlated with young peoples optimistic attitude towards AI development and their attitude towards the social impact of AI. Therefore, it can be concluded that the more positive young peoples attitude towards AI, the higher their willingness to use AI tools.

4.1.2.1 Young peoples optimistic attitude towards AI development is positively correlated with their willingness to use AI

According to Table 3, the correlation coefficient between young peoples willingness to use AI tools and their optimistic attitude towards AI development is 0.195, which shows a significant positive correlation. Therefore, it can be known from this data that the more optimistic young people are about the development of AI, the stronger their willingness to use AI tools will be.

Table 3 Correlation analysis between AI tool usage willingness and AI development attitude

	AI usage willingness	mean	standard deviation
Optimism about the development of AI	0.195**	3.809	0.812
Attitude towards the social impact of AI	0.249***	3.860	0.838

An optimistic attitude is a crucial factor in technology acceptance. Studies show that tech optimists generally believe technology can enhance their quality of life and work efficiency, which makes them more willing to try and use new technologies. Given that young people tend to be optimistic about AI, they believe it can improve working methods, boost productivity, and provide convenience for daily life. This optimism makes young people more open to accepting and using AI tools. For example, in education, AI-powered teaching models are widely recognized. Surveys indicate that 94.10% of respondents believe that the “AI + Education” model will become increasingly prevalent in the future.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

4.1.2.2 Young peoples attitudes towards the social impact of AI are positively correlated with their willingness to use it

Through the analysis of Table 3, it can be concluded that the correlation coefficient between young peoples willingness to use AI tools and their attitudes towards the social impact of AI is 0.249, which shows a significant positive correlation. From this data, it can be known that young peoples attitudes towards the social impact of AI play a promoting role, indicating that they have a strong willingness to use AI tools.

The driving role of AI in social development can be manifested through the application of AI technology in multiple fields such as education, employment, and social services, providing young people with more resources and possibilities. For example, in the field of education, AI technology has improved educational quality and efficiency through personalized and intelligent teaching tools. In terms of employment, despite concerns about "AI unemployment", studies show that AI has not exacerbated youth unemployment rates; instead, it has reduced them by replacing retiring employees. Therefore, these positive impacts make young people more willing to use AI tools to enhance their competitiveness and improve their quality of life.

4.1.3 Analysis of the relationship between young peoples attention to AI and their performance in using AI tools

Based on H3, in this study, it was confirmed that the willingness to use AI tools is significantly positively correlated with young peoples attention to AI bloggers, interest in AI-related hot events, media coverage of AI content, social media promotion of AI content, as well as the usage frequency, discussion level, and positive reviews from those around them. This indicates that the higher the attention young people pay to AI, the greater their willingness to use AI tools.

4.1.3.1 Young peoples attention to AI bloggers, hot events and willingness to use are positively correlated

Through the analysis of Table 4, it can be concluded that the correlation coefficient between young peoples willingness to use AI tools and their attention to AI bloggers and hot events is 0.241 and 0.242 respectively, which shows a significant positive correlation. From this data, it can be known that the more attention young people pay to bloggers and hot events in the AI field, the stronger their willingness to use AI tools.

Table 4 Correlation analysis between AI tool usage willingness and social impact

	AI usage willingness	mean	standard deviation
Follow AI bloggers	0.241***	3.111	1.259
Follow hot events in the AI field	0.242***	3.519	1.145
The media concerned released AI related content	0.294***	3.392	1.177
Social media pushes AI related content	0.285***	3.528	1.075

Data shows that 69.7% of the surveyed young people expressed interest in artificial intelligence, indicating that AI is one of the current hot topics among young people. Young people generally possess curiosity and a spirit of adventure, which drives them to try new technologies and explore their potential applications. Therefore, when young people discover successful use cases of AI tools across different fields on social media plat-

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

forms, they are more inclined to experiment with these AI tools to achieve personal goals or solve practical problems, thus increasing their willingness to use AI tools. For example, when short video bloggers use video AI tools like Jingying or Keling AI to complete their videos, young people tend to use such AI tools to accomplish specific tasks. Moreover, online opinion leaders in niche fields often have a greater impact on users willingness to use AI tools.

4.1.3.2 The media releases AI-related content and the social media pushes AI-related content that young people pay attention to are positively correlated with their willingness to use AI

By analyzing Table 4, it can be concluded that the correlation coefficients between young peoples willingness to use AI tools and the media they follow publishing AI-related content and social media pushing AI-related content are 0.294 and 0.285, respectively, indicating a significant positive correlation. This data suggests that the more AI-related content published by the media they follow and pushed by social media, the stronger their willingness to use AI tools.

First, the widespread application of AI technology in media and social media platforms allows young people to access a large amount of AI-related content. On one hand, this exposure includes personalized recommendations generated by big data algorithms. On the other hand, it encompasses applications of AI in content creation and news broadcasting. For example, AI-generated news broadcasts by human-like anchors and the use of AIGC on social media. This enables young people to more frequently encounter the practical effects and application scenarios of AI technology, thereby increasing their interest and willingness to use AI tools.

Secondly, the use of AI tools on social media platforms is gradually increasing. For example, platforms like Xiaohongshu recommend AI content based on user profiles and big data algorithms, tailored to users interests and behavioral patterns. This personalized recommendation not only increases users exposure to AI content but also enhances their understanding and acceptance of AI technology.

4.1.3.3 The usage degree, discussion degree and positive evaluation degree of the surrounding people are positively correlated with the willingness to use

Young people are often influenced by those around them, and their willingness to use AI tools increases when they see people around them using and benefiting from them. This group social interaction further promotes the popularity of AI tools.

First, through the analysis of Table 5, it can be seen that the correlation coefficients between young peoples willingness to use AI tools and their peers usage, discussion, and positive reviews are 0.182,0.251, and 0.206, respectively, indicating a significant positive correlation. This data suggests that the higher the usage, discussion, and positive reviews of AI tools among peers, the stronger the young peoples willingness to use AI tools. Therefore, social influence can significantly impact an individuals acceptance of new technology. When young people see their friends, family, or peers using and sharing the benefits of AI tools, they are driven by this social influence, which increases their own willingness to use these tools.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Table 5 Correlation analysis between AI tool usage willingness and interpersonal influence

	AI usage willingness	mean	standard deviation
Used by people around	0.182**	3.855	0.875
People around him were discussing it	0.251***	3.506	0.989
Good reviews from people around	0.206**	3.557	0.847

Secondly, in social culture, young people generally tend to follow trends and group behaviors. Therefore, when they see everyone around them using a certain AI tool, they may feel a sense of belonging and identity, making them more willing to accept and use new technologies. Take the AI beauty camera as an example; when many young people share photos that have been beautified by AI on social media platforms like TikTok and WeChat, others, to avoid being marginalized, also start using this feature. By leveraging the same technology, they can integrate into social circles, enhancing interaction and resonance with their peers. This sense of belonging and identity has led to the rapid popularity of AI beauty cameras among young people.

4.2 The performance of the difference in the use of AI tools among young people

There are differences in the use of different young groups. The following will specifically analyze the specific manifestations of the differences in the use of AI tools among young people.

First, there is a noticeable difference in the proficiency of young people in using AI tools. The disparity in proficiency is reflected in the extent to which young individuals have mastered these skills. Some young professionals, such as those in education and research, and software engineers, can skillfully use AI tools and delve into their functionalities to accurately and efficiently accomplish tasks. In contrast, other young people, like frontline service workers and manual laborers, may only be at the basic operational level, with limited understanding of complex AI features and little interest in exploring further. For some international versions of AI tools with complex operation processes, such as Midjourney and Photoshop, the difference in proficiency among young people is particularly evident.

Secondly, there is a noticeable difference in the willingness to use AI tools among young people. Most young individuals have a positive attitude towards AI tools and are willing to try them out and delve into learning the complex processes involved. They generally consider AI tools efficient and practical, even willing to pay for training. A minority of young people, however, hold a negative view of AI tools; they are unwilling to learn or use them. They find AI tools too complex to master or are concerned that AI will replace human jobs, leading to widespread unemployment and issues such as AI dependency.

Then, there are significant differences in the usage tendencies of young people with AI tools. This difference is reflected in their preferences for the functions of these tools. For example, users who drive, have visual impairments, or find manual operation inconvenient in different environments tend to use natural language processing types of AI tools such as chatbots and voice assistants more often; users engaged in visual work or medical professions prefer image processing types of AI tools like image editing and medical imaging analysis; users involved in content creation or academic research tend to use generative AI tools more frequently.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

4.3 Analysis of factors affecting the difference in the use performance of AI tools for young people

There are differences in the use performance of young people. The specific influencing factors that form this difference are as follows:

From the perspective of educational level, young people with higher education often have a greater proficiency in using AI tools compared to their peers. First, individuals with higher education backgrounds tend to use AI tools more frequently for both academic and personal purposes. Studies show that groups with higher education, particularly those with masters degrees or above, exhibit significantly increased reliance on AI tools. This is because higher education provides a more comprehensive knowledge system and a better academic learning environment, making it easier for them to accept and utilize AI tools to enhance the efficiency of their lives and work. For example, when it comes to international versions of AI tools like Midjourney, highly educated individuals can overcome language barriers. Second, young people with higher education typically possess better digital media literacy and stronger technical confidence. Research has found that highly educated individuals show higher comfort, trust, and ease in using AI tools. Therefore, this confidence among young people with high educational levels leads them to increase their usage of AI tools, resulting in higher proficiency.

From an economic perspective, there are significant differences in the proficiency of young people from different socioeconomic backgrounds in using AI tools. On one hand, young people with better economic conditions typically have stronger digital media literacy. They are more likely to be exposed to the internet and new technologies earlier than their peers from poorer economic backgrounds, showing higher acceptance and adaptability to new technologies. This background makes it easier for them to understand and use AI tools, leading to greater proficiency in using these tools compared to their peers from poorer economic backgrounds. On the other hand, young people with better economic conditions usually have more resources and time to explore and try out new technologies. For example, they have higher budgets for purchasing, subscribing to, or using the latest AI products. As a result, young people from poorer economic backgrounds may opt out of using paid AI tool technologies. Additionally, research shows that young people with better economic conditions have more time to learn and master new technologies, thus using these AI tools more frequently and achieving higher proficiency.

From a technical perspective, if there are more convenient channels for acquiring knowledge, young people may reduce their use of AI tools. With the widespread use of the internet and social media, young people have more diverse ways to obtain information. For example, knowledge-based social media platforms like Zhihu and Xiaohongshu provide young people with rich options for acquiring knowledge through user-generated content and social interaction. This new method of information acquisition not only meets young peoples rapid demand for information but also enhances the dissemination effect of knowledge through social interaction. Although AI tools excel in document processing, data analysis, and image generation, they rely heavily on technology, making their application threshold higher. Moreover, AI tools have limitations in information generation and verification of authenticity. For instance, OpenAI has pointed out that ChatGPT exhibits “AI illusion”, which casts doubt on the authenticity of information obtained through AI tools. Therefore, when there are more convenient new media channels, young people may prefer to use these alternative tools to ac-

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

quire knowledge, thereby reducing their reliance on AI tools.

From a professional perspective, occupational factors influence the willingness to use AI tools. According to this study, a chi-square test yielded $p<0.01$ (i.e., the p-value is less than the significance level), indicating that there are significant differences in the willingness to use AI tools across different occupations. Due to variations in needs and capabilities when engaging with and using AI technologies, young people from different professions also exhibit varying levels of willingness to use AI tools. For instance, highly specialized groups such as senior technicians, engineers, and designers are more likely to access cutting-edge social technologies, making them more willing to use these AI tools to accomplish their tasks. However, occupational factors also affect young peoples willingness to use AI tools through the risk of occupational substitution. The rapid development of artificial intelligence technology could lead to certain professions being replaced, which may influence young peoples acceptance of AI tools. For example, research suggests that approximately 59.7% of Chinese job positions will be impacted by AI in the future, and this uncertainty may make young people more cautious about using AI tools, thereby reducing their willingness to use them.

4.4 Reflections on the willingness and use of AI tools by young users

First, young peoples learning of AI tools can only remain at the level of simple functional use and will not involve in-depth study. By analyzing Table 1, we can see that young users are more likely to choose an AI tool when it is easy to operate. At the same time, since some young people enhance their computer skills to cope with work, as shown in Table 2, they may be more inclined to use AI tools for tasks rather than delve into understanding their internal mechanisms.

Secondly, young people may develop a dependency on AI tools under certain influencing factors. From a societal perspective, analyzing the relationship between young peoples willingness to use AI tools and their attitudes toward the social impact of AI as shown in Table 3 reveals that young people believe the widespread adoption of AI tools has facilitated new forms of social interaction. For instance, generative AI tools have not only transformed content creation but also enhanced young peoples social behaviors and emotional expression. Therefore, this could lead young people to rely more heavily on AI tools to meet their social or emotional needs.

5 Summary and Prospect

5.1 Summary

The study examined the willingness of young users to learn and use AI tools, revealing the relationship between them. The research finds that the willingness of young people to use AI tools is significantly positively correlated with their internet usage frequency, computer skills, and adaptability to new technologies. The accuracy, efficiency, ease of use, and user satisfaction of AI tools are also key factors. Young peoples optimistic attitude toward AI development and positive views on its social impact further enhance their willingness to use AI tools. Additionally, interpersonal relationships are a critical factor influencing young peoples intention to use AI tools.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

5.2 Problems and measures

At the same time, young people have encountered some issues with the use of AI tools. Information cocoons, over-reliance on technology, mental degradation, psychological stress caused by algorithmic dominance and bias, concerns about AI unemployment, and academic integrity issues. As McLuhan proposed, "extension is cut off," while AI tools make life more convenient for humans, they may also rob us of our ability to learn.

Therefore, in response to potential issues young users may encounter while using AI tools, this paper proposes the following measures. Strengthen education and guidance for young people to enhance their technical literacy and ethical awareness; establish an AI regulatory mechanism to protect user rights; build a multi-stakeholder collaborative supervision system; and reconsider the relationship between humans and intelligence, striving for coexistence. The relationship between humans and intelligent technology should not be limited to mechanical integration but should evolve into one where they influence each other, cohabit, and progress together.

5.3 Research Prospects

Looking ahead, AI tools will play a significant role in more areas, driving the digital transformation and intelligent upgrading of society. Young users, as the primary audience and drivers of new technologies, their willingness to learn and usage behavior will directly impact the popularization and application effectiveness of AI technology. Therefore, it is crucial to continuously monitor and study young users learning intentions and usage phenomena regarding AI tools. At the same time, we can also pay attention to the latest trends in AI technology development, exploring the impact of new technologies on young users behaviors and attitudes. Through these studies, we can better understand and address the challenges and opportunities brought by AI technology, promoting continuous social progress and the comprehensive development of individuals.

References

[1].Zhang Chi. (2023). A Study on College Students Willingness to Use Generative AI Tools-Based on the Technology Acceptance Model. Science Communication (23),131-135. (in Chinese)

[2].Zhang Yanbing, Fang Xue & Lu Wei. (2020). Study on the influence of artificial intelligence voice assistant intelligence degree on consumers willingness to use it. Shanghai Management Science (04),11-15.(in Chinese)

[3].Bobby L. Asirit,L., & H. Hua,J. (2023). Converging perspectives: Assessing AI readiness and utilization in Philippine Higher Education. Polaris Global Journal of Scholarly Research and Trends, 2(3), 1-50.

[4].Arkhipova,D.,& Janssen,M. (2024). Ai recommendations impact on individual and social practices of generation Z on social media: A comparative analysis between Estonia,Italy,and the Netherlands. Semiotica (261),61–86.

[5].Fan Miaomiao & Lu Wei (2022). The influence of online teaching (human vs AI) on students willingness to use it. Shanghai Management Science (05),110-115.(in Chinese)

[6].Liu Qiping, Zhang Zeqing & Yang Ping. (2024). Study on the willingness of users to use generative AI tools in higher education. Journal of Hubei Second Normal University (08),85-93.(in Chinese)

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

[7].Xu Shuting. (2024). Changes, Challenges and Countermeasures of Youth Work in the Era of Algorithm-Based on the Perspective of New Functionalism. Journal of Fujian Education Institute (01),48-51.(in Chinese)
[8].Jia Mengzhen, Weng Manlin & Ma Yuku. (2024). Autonomous generative intimacy: Interaction experiences between youth and AI companions. Youth Exploration (01),55-67.(in Chinese)
[9].Gedrimiene,E.,Celik,I.,Makitalo,K.,& Muukkonen,H. (2023). Transparency and trustworthiness in user intentions to follow career recommendations from a learning analytics tool. Journal of Learning Analytics.
[10].Kobiella,C.,Flores Lopez,Y. S.,Waltenberger,F.,Draxler,F.,& Schmidt,A. (2024). “if the machine is as good as me,then what use am I? ” - how the use of Chatgpt changes young professionals perception of productivity and accomplishment. Proceedings of the CHI Conference on Human Factors in Computing Systems,1-16.
[11].Flavian, C., Perez-Rueda, A., Belanche, D.,& Casalo,L. V. (2021). Intention to use Analytical Artificial Intelligence (AI) in services - the effect of technology readiness and awareness. Journal of Service Management, 33(2), 293-320.
[12].Wang Pinzhi, Wu Xinyu, Bao Yunli et al. (2023). 47.7% of the respondents believe that they need to improve their data analysis and processing skills. China Youth Daily. (in Chinese)
[13].Li Siqi. (2020). Current public understanding and expectations of "AI + education". National Governance (13),4-10.(in Chinese)
[14].Liu Jindong, Xu Wenjun & Wang Jiahui. (2024). The Impact of Artificial Intelligence on Youth Employment - Evidence from the Use of Industrial Robots in OECD Countries. China Population Science (03),3-17.(in Chinese)
[15].Report group of this journal. (2024). Create a better growth environment for young scientific and technological talents. Beijing Observation (08),26-27.(in Chinese)
[16].Biswas,M.,& Murray,J. (2024). How education and tech savvy perception shape AI interactions. 2024 33rd IEEE International Conference on Robot and Human Interactive Communication (ROMAN),985-990.
[17].Gong Yao & Peng Xizhe. (2020). The occupational substitution effect of artificial intelligence technology application. Population and Economy (03),86-105.(in Chinese)

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)