An Examination of the Relationship Between Artificial Intelligence Usage Patterns and Loneliness Among Young Adults

The aim of this study was to examine the relationship between artificial intelligence (AI) usage patterns and loneliness levels among young adults. The study was conducted with 141 participants aged 18–24 who actively use AI tools. Participants' purposes for using AI were assessed using Likert-type items, and their levels of loneliness were measured with the UCLA Loneliness Scale. Quantitative data were analyzed using one-way analysis of variance (ANOVA), while responses to open-ended questions were evaluated through thematic analysis. The findings indicated that AI was most frequently used for educational purposes, followed by personal curiosity, understanding personal problems, decision-making, seeking medical information, increasing motivation, reducing anxiety, alleviating feelings of loneliness, and obtaining psychological support. The results showed that participants who reported using AI frequently and/or very frequently for reducing anxiety, decision-making, understanding personal problems, and alleviating loneliness had significantly higher levels of loneliness compared to those who did not use AI for these purposes. In addition, participants who used AI for psychological support and perceived it as somewhat helpful reported significantly higher levels of loneliness than those who did not use AI for this purpose. Qualitative findings revealed four main themes regarding reasons for preferring AI for psychological support: accessibility and speed, economic reasons, perceived usefulness and suitability, and distrust toward experts and psychotherapy. Furthermore, among participants who considered AI tools functional for psychological support, the perceived benefits were grouped under four themes: emotion regulation and immediate soothing effects, increased motivation and action-taking, gaining different perspectives and suggestions, and ease of use and perceived functionality. This study contributes to the limited empirical literature by examining the relationship between AI usage patterns and loneliness in young adults through a mixed-methods approach.

Keywords: *artificial intelligence, loneliness, young adulthood, psychological support*

Introduction

In recent years, the use of artificial intelligence (AI) has become an integral part of individuals' daily lives and has increasingly been preferred across various domains such as education, decision-making, research, and psychological support (De Freitas et al., 2025; Kang et al., 2024; Schäfer et al., 2025). A review of the literature indicates that measurement tools assessing AI usage are limited, and existing studies are predominantly qualitative in nature. Previous research has shown that AI tools are used not only for information acquisition but also for a wide range of purposes, including obtaining emotional support, assisting decision-making, establishing social connections, fostering personal

development, and enabling self-expression (Skjuve et al., 2024; Syed, 2024; Wang et al., 2025; Zhuang, 2025).

It has been reported that users utilize AI to cope with stress and achieve emotional relief, and that AI is perceived as a supportive tool for dealing with the complexities of daily life. These findings suggest that AI can address not only cognitive but also psychosocial needs of individuals (Skjuve et al., 2024; Wang et al., 2025; Zhuang, 2025). One study highlighted that AI applications may enhance individuals' sense of self-efficacy and promote creativity and problem-solving skills (Hang et al., 2024). Similarly, Wang et al. (2025) found that particularly young individuals use AI for emotion regulation, which contributes to maintaining psychological balance. Although the relationship between loneliness and technology remains a debated issue in the literature, there has been a noticeable increase in the use of AI tools as a potential means of coping with loneliness (Grudin & Jacques, 2019).

With the rapid development of AI technologies and the increasing diversification of their usage purposes, identifying the motivations underlying individuals' use of AI tools has become crucial for better understanding the psychosocial needs of contemporary individuals. However, there is a lack of sufficient research in Turkey examining the underlying reasons for using AI for psychological support. In this context, determining AI usage patterns among young adults and examining their relationship with loneliness levels is expected to contribute to the literature by addressing these gaps.

AI-Based Mental Health Applications

In addition to general-purpose AI tools such as ChatGPT, Gemini, and Bing, there has been a rapid increase in the development of applications specifically designed for mental health, focusing on clinical and psychoeducational purposes (Herbener & Damholdt, 2025). Among these applications are Replika, which reached over 10 million users and 30 million downloads in 2023; Character AI, which surpassed 20 million users in the same year; and MyAI, a Snapchat-based social chatbot that facilitated over 20 billion interactions among more than 200 million users in 2024 (Cai, 2023; Maples et al., 2024; Patel, 2024; Snap Inc., 2023, as cited in Herbener, 2025).

A review of studies on AI-based mental health applications indicates that, in a study evaluating Wysa user experiences, users reported positive effects in areas such as engagement and interaction, emotional resilience, and personal development (Chaudhry & Debi, 2024). In a randomized controlled trial conducted by Fang et al. (2025), participants used a chatbot for four weeks, after which significant improvements were observed in emotional well-being and perceived social connectedness. A review study also found that chatbots developed for mental health purposes were effective in reducing symptoms of anxiety and depression, and that users generally developed positive attitudes toward these tools (Limpanopparat et al., 2024).

However, studies also indicate that user experiences with companionship-oriented chatbots are not unidimensional. While some users report reductions in loneliness, others may experience increased tendencies toward social isolation. From this perspective, it has been suggested that adopting a one-dimensional approach in AI-based psychological support applications may lead to ethical concerns (Liu et al., 2024). Overall, AI applications in the field of mental health are still in a developmental stage, with some studies reporting promising results and suggesting that these tools may provide complementary contributions to therapeutic processes (Chaudhry & Debi, 2024; Olawade et al., 2024).

Studies conducted in Turkey on AI usage have shown that individuals use AI tools for various purposes, including information acquisition, completing assignments, preparing for exams, facilitating decision-making processes, and enhancing self-regulation skills (Ahmadi & Tekemen, 2024; Hoşgör & Güngördü, 2025). In a study conducted with students in health-related fields, 64% supported the use of AI in healthcare, while 45% believed that advancements in AI could lead to the disappearance of their professions. In the same study, 83% reported being willing to learn and use AI and emerging technologies, whereas 65% believed that the need for healthcare professionals would decrease as AI becomes more widespread (Seçer, 2024). In another study conducted with pre-service teachers, participants found AI to be functional in supporting learning processes by providing fast and well-organized information and contributing to decision-making, while also expressing concerns that it may limit human interaction (Ersöz, 2025).

Ediboğlu (2023), in a study examining the use of AI in psychotherapy and psychiatry, reported that AI has significant potential in this field but emphasized the need for caution regarding ethical, security, and privacy issues. Additionally, the study suggested that AI can serve as a supportive resource in mental health, while also highlighting the importance of transparent evaluation of whether these tools effectively fulfill their intended functions.

Attitudes of Young Adults Toward AI Use

A review of studies on young adults' attitudes toward AI use indicates that these attitudes may vary depending on factors such as experience, personality traits, technological knowledge, and academic field; however, overall, a predominantly positive attitude has been observed (Çatman et al., 2025; Deng et al., 2025; Katsantonis & Katsantonis, 2024). In addition, it has been shown that AI tools are used not only for academic purposes but also to meet psychosocial needs such as emotional support, coping with stress, and self-expression (McBain et al., 2025; Herbener & Damholdt, 2025; Katsantonis & Katsantonis, 2024).

A qualitative study conducted with young adults found that AI chatbots are perceived as easily accessible and as providing a space for self-expression without fear of judgment, making them a potential alternative for psychosocial support (Bae Brandtzaeg et al., 2021). It has also been reported that young

individuals increasingly turn to online resources and digital tools rather than professional help when seeking psychological support. The main reasons for this tendency include ease of access, anonymity, and the ability to manage the help-seeking process in a more controlled manner (Pretorius et al., 2019).

Finally, it has been found that young individuals who use AI primarily for emotional needs and who prefer more relational and human-like responses from AI tend to have higher levels of loneliness, lower quality of family and peer relationships, and higher levels of anxiety (Kim et al., 2025; Herbener & Damholdt, 2025).

AI Use as a Tool for Coping with Loneliness

Since the beginning of human existence, individuals have needed to fulfill certain needs in order to sustain their lives. In addition to basic needs such as food, sleep, and shelter, humans also require interpersonal interaction, as well as the need to love and be loved, which necessitates forming and maintaining relationships with others (Maslow, 1970; İmamoğlu, 2009).

Loneliness, on the other hand, refers to a state characterized by a lack of social connection or the absence of meaningful social relationships (Farina et al., 1991, p. 351). When considered as a reflection of the discrepancy between the quantity and quality of an individual's existing social relationships and those they desire, loneliness emerges not only as a physical condition but also as a subjective evaluation of insufficient social bonds (Perlman & Peplau, 1982).

Loneliness can have profound effects on individuals' psychological and social functioning, leading to negative outcomes such as stress, anxiety, low self-esteem, impaired self-concept, decreased life satisfaction, and depression (Cacioppo & Hawkley, 2009; Heinrich & Gullone, 2006). In addition, loneliness has been associated with weakened coping abilities due to a lack of social support and inadequate social relationships, which may reinforce a cycle that results in social withdrawal (Qualter et al., 2015).

Although loneliness is a universal experience, it is perceived and experienced differently across cultural and contextual settings. In individualistic societies, loneliness tends to be associated with feelings of personal failure and inadequacy, whereas in collectivist cultures, it is more closely linked to social exclusion and a lack of belonging (Lykes & Kemmelmeier, 2014). These differences also influence individuals' social behaviors, help-seeking tendencies, and coping strategies in response to loneliness. Studies conducted in Turkey have shown that loneliness levels are increasing particularly among young adults and urban populations, with factors such as digitalization, social media use, and individualization trends contributing to this phenomenon (Güner et al., 2022; Kurt & Bayrakçı, 2021; Yalçın, 2023). Recent research further suggests that loneliness is not merely an individual experience but has become a key variable shaping the quality of social relationships and psychosocial adjustment processes in an increasingly digitalized world (Matthews et al., 2017).

Recent studies indicate that the relationship between AI use and loneliness is complex and multidimensional. Some research suggests that interactions with AI-based chatbots and digital assistants can enhance perceived social support, reduce subjective feelings of loneliness, and increase a sense of connectedness (Chaudhry & Debi, 2024; Fang et al., 2025). In contrast, other studies argue that when interactions with AI replace real human relationships, they may lead to increased social isolation and deepen feelings of loneliness (Croes & Antheunis, 2021; Liu et al., 2024). A meta-analysis found that physically embodied interactions with AI tend to reduce loneliness, whereas non-physical interactions may increase it (Dong et al., 2025). These findings suggest that the impact of AI tools on loneliness varies depending on context, purpose of use, and individual characteristics.

The literature increasingly indicates that AI use is associated with individuals' cognitive, social, and emotional experiences (Kim et al., 2025; Skjuve et al., 2024; Syed, 2024; Volpato et al., 2025; Wang et al., 2025; Zhuang, 2025). However, research examining which psychosocial variables are associated with different AI usage purposes, and particularly how these relate to subjective social experiences such as loneliness, remains limited (Kim et al., 2025; Lai et al., 2025). In the context of young adulthood, where AI technologies are widely used, examining AI usage patterns and their associated psychosocial variables is important for understanding loneliness as a key mental health indicator and for informing the development of intervention and support strategies. As AI is increasingly used as a tool to address individuals' social and emotional needs, understanding its role in loneliness and identifying its potential risks and protective effects has become essential. Accordingly, the aim of this study is to examine the relationship between AI usage patterns and loneliness levels among young adults.

Method

Participants

Prior to data collection, a set of inclusion and exclusion criteria was established to define the study sample. Accordingly, individuals with a history of serious neurological or psychiatric conditions, those outside the 18–24 age range, those with a diagnosed psychiatric disorder, those using psychiatric medication, and those who did not use AI tools were excluded from the study.

A total of 233 individuals initially participated in the study. Based on the inclusion and exclusion criteria, 92 participants were excluded due to psychiatric medication use, a psychiatric diagnosis, being outside the 18–24 age range, or not using AI tools. Consequently, the final sample consisted of 141 participants, and all analyses were conducted using this sample.

Of the participants, 99 (70.2%) were female and 42 (29.8%) were male. The sample predominantly consisted of undergraduate students (78.7%), individuals living with their families (77.3%), single individuals (71.6%), and those who had

not previously received psychotherapy (82.3%). Detailed information regarding the sample is presented in Table 1.

Table 1. *Demographic Characteristics of Participants*

	N (141)	Frequency	%
Gender	Female	99	70.2
	Male	42	29.8
Employment Status	Student	130	92.2
	Employed	9	6.4
	Unemployed	2	1.4
Education Level	High school	2	1.4
	Associate degree	26	18.4
	Bachelor's degree	111	78.7
	Master's degree	2	1.4
Marital Status	Single	101	71.6
	In a relationship	38	27.0
	Engaged	1	0.7
	Married	1	0.7
Living Arrangement	With family	109	77.3
	With roommates	17	12.1
	Alone	14	9.9
	With partner	1	0.7
Therapy Experience	Yes, currently attending	2	1.4
	Yes, not currently attending	23	16.3
	No	116	82.3

Measures

A Demographic Information Form was developed to obtain participants' demographic characteristics and to collect information on their patterns of AI tool use. The form included questions on age, gender, education level, relationship status, employment status, whether they had previously received psychological or psychiatric treatment, and whether they were currently using psychiatric medication.

Demographic Information Form

The form used to collect information about participants' sociodemographic characteristics was developed by the researchers. It includes questions regarding age, gender, education level, employment and relationship status, whether participants had previously received psychological support, whether they had been diagnosed with a psychiatric condition, and whether they were using psychiatric medication.

AI Usage Form

The AI Usage Form, developed by the researchers, includes questions regarding participants' use of AI tools (e.g., ChatGPT, Gemini, Microsoft, Bing), their frequency of use, and their purposes for using these tools. The form also includes open-ended questions assessing experiences related to using AI for psychological or emotional support, perceived benefits of these tools, and whether participants would prefer AI tools or a mental health professional when experiencing a psychological problem.

UCLA Loneliness Scale

The UCLA Loneliness Scale, developed by Russell et al. (1978) and adapted into Turkish by Demir (1989), was used to assess individuals' subjective levels of loneliness. The scale consists of 20 items and a single dimension, and it is rated on a 4-point Likert scale ranging from 1 (never) to 4 (often). Higher scores indicate higher levels of loneliness. In the Turkish adaptation study, the internal consistency coefficient of the scale was reported as .96 (Demir, 1989).

Data Collection Procedure

The data were collected through an online survey. Participants were informed about the purpose of the study via an informed consent form, and participation was voluntary.

Statistical Analysis

The data were analyzed using the Jamovi statistical software. Following descriptive statistics, the internal consistency of the scales was evaluated using Cronbach's α coefficient. Prior to analysis, the normality assumption was assessed using Q–Q plots, the Kolmogorov–Smirnov test, and skewness–kurtosis values. For the total loneliness score, skewness was found to be 0.599 and kurtosis −0.323. George and Mallery (2010, p. 115) state that skewness and kurtosis values within the range of ±2 are acceptable for psychometric data. Since these values fell within acceptable limits, the normality assumption was considered satisfied. A one-way ANOVA was used to test group differences. Short responses obtained from open-ended questions were analyzed using thematic analysis.

Results

Descriptive Statistics

The hierarchical ordering of AI usage purposes was measured using Likert-type items rated between 1 and 5, with higher scores indicating more frequent use for the given purpose. The analysis showed that AI was most frequently used for educational purposes (3.50). This was followed by personal curiosity (3.23), understanding personal problems (2.44), decision making (2.42), medical assistance (2.23), increasing motivation (1.88), reducing anxiety (1.85), reducing feelings of loneliness (1.77) and psychological support (1.50), respectively. The results of the analysis are presented in Table 2.

Table 2. *Descriptive Statistics for Purposes of AI Use*

Purpose of Use	$\bar{x}$	**SD**
Education	3.50	1.05
Personal curiosity	3.23	1.09
Understanding personal problems	2.44	1.24
Decision-making	2.42	1.13
Medical assistance	2.23	1.10
Increasing motivation	1.88	1.12
Reducing anxiety	1.85	0.992
Reducing feelings of loneliness	1.77	0.915
Psychological support	1.50	1.07

Comparison of Loneliness Levels by AI Usage Purposes

Table 3. *Comparison of Loneliness Levels by AI Purpose of Use*

	Usage Purpose	Frequency of Use	N	$\bar{x}$	ss	F	*p*
Level of Loneliness	Reducing Anxiety	Never	65	33.0	10.04	3.60	.008
		Occasionally	45	34.0	8.79		
		Moderately	21	36.8	11.78		
		Frequently	7	46.6	11.16		
		Very frequently	3	28.0	6.93		
	Decision-Making	Never	35	30.7	9.54	4.00	.004
		Occasionally	45	33.9	10.26		
		Moderately	33	35.3	9.33		
		Frequently	23	40.8	11.22		
		Very frequently	5	30.2	3.63		
	Understanding Personal Problems	Never	43	31.2	9.88	3.18	.015
		Occasionally	30	33.0	7.02		
		Moderately	41	35.7	11.01		
		Frequently	17	38.1	10.75		
			10	41.2	12.49		

		Very frequently					
	Reducing Feelings of Loneliness	Never	92	32.9	10.04	6.49	<.001
		Occasionally	28	34.9	8.79		
		Moderately	8	34.5	11.78		
		Frequently	5	50.8	11.16		
		Very frequently	3	51.0	6.93		
	Psychological Support	None	92	33.0	10.07	3.91	.010
		Not helpful	13	33.6	7.91		
		Somewhat helpful	24	40.8	11.31		
		Helpful	12	33.3	8.62		

Loneliness levels were examined across AI usage purposes using a one-way analysis of variance (ANOVA). The results indicated that loneliness levels differed significantly according to the use of AI for reducing anxiety ($F(4,136) = 3.60$, $p = .008$), decision-making ($F(4,136) = 4.00$, $p = .004$), understanding personal problems ($F(4,136) = 3.18$, $p = .015$), reducing feelings of loneliness ($F(4,136) = 6.49$, $p < .001$), and psychological support ($F(4,136) = 3.91$, $p = .010$).

Post-hoc analyses showed that individuals who frequently used AI for reducing anxiety had higher loneliness levels compared to those who used it occasionally ($p = .019$) and those who never used it ($p = .007$). Similarly, individuals who frequently used AI for decision-making had higher loneliness levels than those who did not use it for this purpose ($p = .002$). Individuals who used AI very frequently to understand personal problems also had higher loneliness levels compared to those who never used it ($p = .039$).

Individuals who frequently and very frequently used AI to reduce feelings of loneliness had significantly higher loneliness levels compared to those who never used it ($p < .001$; $p = .014$). Additionally, significant differences were found between occasional and frequent users ($p = .007$), as well as between moderate and frequent users ($p = .028$). Finally, individuals who reported that AI was somewhat helpful for psychological support had higher loneliness levels compared to those who did not use AI for this purpose ($p = .005$). The findings are presented in Table 3.

Qualitative Findings on the Use of AI for Psychological Support

In the study, participants were first asked whether they would prefer artificial intelligence (AI) or a human expert when seeking psychological support. Subsequently, 29 participants (20.56%) who indicated that they would prefer AI were asked to explain their reasons for this preference. The responses were analyzed using thematic analysis, and four main themes were identified by the researchers. The frequencies and percentages of these themes are presented in Table 4.

Table 4. *Themes Related to Reasons for Preferring AI for Psychological Support*

Theme	n	%
Accessibility and speed	15	50
Economic reasons	7	29.16
Perceived usefulness and suitability	4	16.66
Distrust toward experts and therapy	3	12.50

Note. Since participant responses could be coded into more than one theme, total frequencies may exceed the number of participants

Accessibility and Speed

A substantial proportion of participants (50%) stated that they preferred AI for psychological support due to its ease of access and rapid feedback. The following excerpt illustrates a participant's preference for AI because of its immediate availability during moments of distress:

> *"When I feel upset about something in the moment, I ask ChatGPT because it is easier to access."*

Similarly, another participant emphasized the value of receiving instant assistance:

> *"Since my problems are usually minor and I tend to be a bit indecisive, I get help in that moment."*

Economic Reasons

Approximately 29.16% of participants reported that they preferred AI for psychological support due to financial considerations. One participant expressed this as follows:

> *"Because artificial intelligence is free."*

Another participant similarly highlighted the cost-related advantage:

> *"It is faster and cost-free."*

Perceived Usefulness and Suitability

About 16.66% of participants evaluated AI as a useful and suitable option for psychological support. One participant noted feeling more comfortable with AI:

> *"Artificial intelligence, because I feel more comfortably listened to without being judged."*

Another participant suggested that using AI seemed more reasonable:

> *"AI seems more logical; I don't want to deal with people."*

Distrust Toward Experts and Psychotherapy

A smaller proportion of participants (12.5%) expressed their preference for AI in terms of distrust toward professionals and psychotherapy. One participant stated:

> *"I have met many people studying psychology, and I think topics as deep and meaningful as psychology should be handled by very competent professionals. In a country like Turkey, I don't think psychology is given sufficient importance."*

Another participant expressed a lack of trust in psychologists trained in Turkey:

> *"I don't think a psychologist, especially one trained in Turkey, has the capacity to solve or interpret what I cannot solve myself."*

Qualitative Findings on the Perceived Functionality of Artificial Intelligence for Psychological Support

Participants were also asked how functional they found the use of AI for psychological support. Those who reported that AI was helpful were asked to explain their reasons. Among 49 participants who indicated that AI was useful, 32 (22.69%) provided open-ended responses. These responses were analyzed using thematic analysis, resulting in four main themes**.**The frequencies and percentages of these themes are presented in Table 5.

Table 5. *Themes Related to Reasons Why AI is Perceived as Functional for Psychological Support*

Theme	n	%
Emotion regulation and immediate soothing effect	13	40.62
Increased motivation and activation	8	25
Gaining different perspectives and suggestions	7	21.87
Ease of use and perceived functionality	5	15.65

Note. Since participant responses could be coded into more than one theme, total frequencies may exceed the number of participants

Emotion Regulation and Immediate Soothing Effect

A large proportion of participants (40.62%) stated that AI provided an immediate calming effect during moments of emotional intensity. One participant described their experience as follows:

> *"I was going to attend an event voluntarily. I was very excited. I asked ChatGPT for tips to calm down."*

Another participant noted that, although not highly effective, AI could still be used at times:

> *"Even if it is not extremely efficient, it can provide suggestions that make us feel relieved, so it can be used."*

Similarly, another participant expressed:

> *"Sometimes when I get anxious, it can show that the situation is not that serious."*

Increased Motivation and Action-Taking

Approximately 25% of participants mentioned that AI helped increase motivation and facilitated taking action. One participant stated:

> *"It is especially helpful in situations that require courage, and it can listen when you feel that no one will understand you."*

Another participant emphasized its usefulness in planning and getting started:

> *"It is helpful for creating plans. I use it to prepare programs for starting exercise or studying regularly, and it works well."*

Gaining Different Perspectives and Receiving Suggestions

About 21.87% of participants indicated that AI was useful for gaining new perspectives and receiving suggestions. Some participants stated:

"It provides a different perspective."
"I think it offers an objective point of view."

Others emphasized its role in providing guidance:

"I use it to get help."
"It helps with basic issues."
"To understand and give advice."

Ease of Use and Perceived Functionality

Finally, 15.65% of participants perceived AI as functional in terms of ease of use for psychological support. One participant highlighted the advantage of quick responses:

"Fast responses provide both practical and emotional ease."

Another participant commented on the nature of AI's responses:

"Its answers seem logical."

Conclusion and Discussion

The present study aimed to examine the relationship between artificial intelligence (AI) usage patterns and loneliness levels among young adults aged 18–24. The findings indicated that participants most frequently used AI tools for educational purposes. This was followed by personal curiosity, decision-making, seeking medical information, increasing motivation, reducing anxiety, alleviating feelings of loneliness, and obtaining psychological support. This finding is consistent with previous research showing that young users tend to use AI tools to support learning processes, brainstorm, and acquire information (Common Sense Media et al., 2024; Klarin et al., 2024). Similarly, the literature suggests that AI tools are used by students as resources for problem-solving, idea generation, and supporting learning processes (Habib, 2024). It is also likely that the sample consisting predominantly of university students influenced this finding. However, some studies indicate that AI tools are used not only for cognitive purposes but also for psychosocial purposes such as increasing motivation and providing emotional support (Mohamed et al., 2024; Yang et al., 2024).

Analyses conducted to examine differences in loneliness levels across AI usage purposes showed that individuals who frequently used AI to reduce anxiety had significantly higher levels of loneliness compared to those who used it occasionally or not at all. Similarly, individuals who frequently used AI for decision-making reported higher loneliness levels compared to non-users. In addition, individuals who utilized AI frequently or very frequently for understanding personal problems and alleviating loneliness reported significantly higher levels of loneliness compared to those who did not use AI for these purposes. Furthermore, participants who used AI for psychological support and perceived it as somewhat helpful had significantly higher loneliness levels than those who did not use AI for this purpose. These findings are based on cross-sectional data, and no causal conclusions were drawn.

The findings suggest that individuals with higher levels of loneliness may turn to AI tools as a way of coping with this condition or seeking support. Consistent with this interpretation, prior research has shown that individuals with higher levels of loneliness are more likely to engage with online environments (Amichai-Hamburger & Ben-Artzi, 2003; Nowland et al., 2018). In particular, individuals experiencing social anxiety and loneliness tend to prefer digital environments over face-to-face communication (Davis, 2001; Weidman et al., 2012). Similarly, AI tools are reported to be preferred as emotion regulation tools because they provide advantages such as non-judgmental interaction, a sense of control, and accessibility (Brandtzaeg et al., 2021). However, the literature also suggests that this tendency may not reduce loneliness but may instead reinforce it, indicating a cyclical relationship between loneliness and high levels of internet use (Yao & Zhong, 2014; Nowland et al., 2018). The development of AI chatbots has renewed attention to these dynamics, particularly due to their anthropomorphic characteristics and their ability to simulate being understood (Zhuang et al., 2025).

The literature indicates that chatbots provide various forms of support to young adults, including information, feedback, practical suggestions, and emotional support. Participants in previous studies have emphasized that these tools are easily accessible and provide a space where they can express themselves without fear of judgment (Bae Brandtzaeg et al., 2021). In a study by Herbener and Damholdt (2025), participants reported using chatbots to talk about distressing issues, discuss everyday problems, and receive support related to personal development and mental health. However, some users also reported discontinuing their use due to a lack of meaningful engagement over time (Herbener & Damholdt, 2025). In a cross-sectional study conducted in the United States, 13.1% of young individuals reported using AI tools for mental health advice, with this rate increasing to 22% among adults aged 18 and above. While 65.5% of users reported using AI at least once a month, 92.7% found the advice helpful (McBain et al., 2025). Wang and Xu (2026) found that AI use among university students predicted academic stress, with loneliness contributing to this relationship. Similarly, another study reported that loneliness had a significant effect on chatbot use (Zhou & Hu, 2026).

Whether AI tools can serve as a solution to the global issue of loneliness remains a debated topic in the literature. One study suggests that while AI may help alleviate loneliness, it cannot fully meet individuals' psychological and physical needs for closeness, according to findings from cognitive neuroscience (Montag et al., 2025). Similarly, Weidman et al. (2012) found that although individuals with social anxiety may express themselves more easily online, this does not lead to better psychosocial outcomes and may instead result in lower quality of life. These findings suggest that although digital interactions may provide short-term relief, they may not fully replace real social connections in the long term.

When participants were asked whether they would prefer AI tools or a human expert for psychological support, 29 participants (20.56%) indicated a preference for AI. The reasons for this preference were analyzed using thematic analysis. The findings showed that participants' reasons clustered into four themes: accessibility and speed (50%), economic reasons (29.16%), perceived usefulness and suitability (16.66%), and distrust toward experts and psychotherapy (12.50%). Similarly, participants were asked whether they found AI tools functional for psychological support. Among those who reported that AI was functional, the reasons were grouped into four themes: emotion regulation and immediate soothing effects (40.62%), increased motivation and action-taking (25%), gaining different perspectives and receiving suggestions (21.87%), and ease of use and perceived functionality (15.65%).

The proportions observed in this study were lower than those reported in a limited number of similar studies. In a study conducted by Rousmaniere et al. (2025) in the United States, AI tools were identified as an informal source of psychological support. Among individuals with mental health concerns who used AI, 49% used it for psychological support, 73% for managing anxiety, 63% for personal advice, and 60% for depression-related support. Additionally, 63% reported that AI improved their mental health, 87% found the recommendations helpful, and 39% considered AI to be as useful as or more useful than human therapists (36%). Accessibility (90%) and low cost (70%) were identified as primary reasons for these evaluations. At the same time, one-third of participants were uncertain about its benefits, and 9% reported encountering harmful or inappropriate response (Rousmaniere et al., 2025).

In another study, a chatbot developed for mental health treatment was found to significantly reduce symptoms in participants with major depression, anxiety disorders, and clinically significant eating disorders (Heinz et al., 2025). In a randomized controlled trial conducted with women diagnosed with anxiety disorders in an active war zone, symptom reduction was 45–50% in the traditional therapy group, compared to 30–35% in the chatbot group. These findings suggest that chatbots may serve as supportive tools in contexts where access to therapists is limited, although their effectiveness remains lower than that of traditional therapy (Spytska, 2025).

Despite evidence suggesting that AI tools are preferred by some users and that certain AI-based interventions may have positive effects on symptoms, there are also risks and criticisms in this area. An evaluation by the American

Psychological Association (2025) emphasized the need for caution in the use of AI tools in mental health contexts. It highlighted that some chatbots may provide misleading or potentially harmful suggestions. Although these tools are accessible and low-cost, they cannot replace licensed mental health professionals and should be used only as supportive and limited tools. A study conducted at Stanford HAI found that such systems may fail to adequately assess high-risk situations and may sometimes reinforce harmful thoughts by providing overly affirming responses (Abramson, 2025). Supporting these concerns, another study presented 60 different simulated adolescent scenarios to AI tools and found that 32% of responses actively supported harmful suggestions. Four out of ten AI tools supported half or more of the harmful ideas presented, and none consistently rejected all harmful suggestions (Clark, 2025).

The qualitative findings also support each other in that 50% of participants who preferred AI for psychological support cited accessibility and speed, while 40.62% of those who found AI functional emphasized its role in emotion regulation and immediate soothing. These findings may be interpreted as indicating that young adults aged 18–24 may have lower tolerance for negative emotions. In this context, AI tools may function as a form of avoidance. As with other avoidance behaviors, while this may provide short-term relief, it may also contribute to reduced tolerance for negative emotions in the long term. However, further research, particularly longitudinal studies, is needed to allow for more comprehensive interpretations of these qualitative findings.

When considered as a whole, the findings suggest that individuals with higher levels of loneliness tend to turn to AI tools in search of social support. In this context, while AI tools may partially replace face-to-face interaction and help-seeking behaviors in the short term, they are unlikely to play an effective role in resolving underlying issues in the long term. Thus, although AI tools may serve as accessible sources of support, they cannot fully replace human interaction (Montag et al., 2025).

In conclusion, this study examined different purposes of AI use separately and analyzed their relationship with loneliness levels. The findings are important in showing that psychosocial uses of AI are systematically associated with loneliness levels. In this respect, the study highlights that AI use should be considered not only in cognitive terms but also in its psychosocial dimensions, contributing to the limited empirical literature in this field.

The study also has several limitations. First, due to its cross-sectional design, causal inferences cannot be made. Second, the reliance on self-report data introduces the risk of participant bias. Finally, the study was conducted within a specific age group, which limits the generalizability of the findings. Future research should employ longitudinal and experimental designs to better clarify the direction of the relationship between AI use and loneliness. Additionally, examining different patterns of AI use and their relationships with psychosocial variables may provide valuable contributions to the literature. Investigating the role of individual differences, such as personality traits and levels of social anxiety, may also represent an important area for future research.

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