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Who Are We Interacting With? Roles Attributed to Artificial Intelligence

Etkileşim Kurduğumuz Kim? Yapay Zekaya Atfedilen Roller

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ABSTRACT

Individuals may experience conflicts specific to their current stage of development. These conflicts shape personality development and influence individuals' interactions with their environment. Artificial intelligence (AI) applications, which have become increasingly widespread, are now an integral part of daily life and represent a significant aspect of young adults' interactions with technology. This study aimed to examine the roles, expectations, and gender perceptions that young adults attribute to AI based on their experiences using these applications. A mixed-methods embedded design was employed. The study included individuals aged 20–35 years and consisted of two groups: 20 participants in the qualitative phase and 115 participants in the quantitative phase. In the qualitative phase, semi-structured interviews were conducted online. In the quantitative phase, data were collected using a short-answer questionnaire developed by the researchers. Qualitative data were analyzed using content analysis, whereas quantitative data were analyzed using descriptive statistics (frequencies and percentages). The findings revealed that participants attributed various gender roles to AI and that these attributions shaped their expectations of AI. The results highlight the need for policies and guidelines to ensure the ethical and responsible use of AI in the fields of education and mental health.

Keywords Artificial intelligence applications, gender attribution, expectations, roles, metaphors

ÖZET

Bireyler, içinde bulunduğu gelişim dönemine özgü çatışmalar yaşayabilmektedir. Bu çatışmalar, bireylerin kişilik gelişimini ve çevresiyle kurduğu etkileşimi biçimlendirmektedir. Günümüzde yaygınlaşan yapay zekâ uygulamaları, genç yetişkinlerin etkileşim kurduğu bir unsur olarak günlük hayatta yer edinmiştir. Bu araştırma, yapay zekâ uygulamalarıyla etkileşimde olan genç yetişkinlerin, yapay zekâ araçlarını kullanım deneyimlerine göre yapay zekâya atfettikleri rol, beklenti ve cinsiyet algılarını incelemek amacıyla yürütülmüştür. Çalışmada, karma yöntem gömülü (embedded) desen kullanılmıştır. Çalışma yaşları 20-35 aralığında olan bireylerle yürütülmüştür. Çalışmada nitel araştırma için 20, nicel araştırma için 115 kişiden oluşan iki çalışma grubu kullanılmıştır. Araştırmanın nitel bölümünde, katılımcılar ile çevrim içi ortamda yarı-yapılandırılmış görüşmeler yapılmıştır. Nicel bölümde ise araştırmacılar tarafından hazırlanan kısa cevaplı anket aracılığı ile veri toplanmıştır. Verilerin analizinde nitel veriler için içerik analizi nicel veriler için yüzde ve frekans kullanılmıştır. Bulgular, katılımcıların yapay zekâya çeşitli cinsiyet rolleri atfettiklerini ve bu atıfların, yapay zekâdan beklentilerini şekillendirdiğini ortaya koymuştur. Çalışmanın sonuçları, yapay zekânın eğitim-öğretim ve ruh sağlığı alanında etik ve kontrollü kullanımına yönelik düzenlemelere ihtiyaç duyulduğunu göstermiştir.

Anahtar Kelimeler Yapay zekâ uygulamaları, atfedilen cinsiyet, beklenti, roller, metafor

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1. Introduction

Erik Erikson, who viewed human development as a lifelong psychosocial process, defined each stage of life in his theory through a specific crisis or developmental conflict. In Erikson's eight-stage model of psychosocial development, young adulthood is characterized by the conflict of intimacy versus isolation (Erikson, 1976). Throughout the lifespan, individuals may experience developmental conflicts specific to each stage. These conflicts not only influence personality development but also shape individuals' interactions with their environment (Erikson, 1976). Young adulthood is characterized not only by self-discovery but also by uncertainty and role confusion (Dündar et al., 2026). Young adults, often referred to as *digital natives*, have grown up in an environment shaped by rapid technological advances (Prensky, 2001). As a result, generative artificial intelligence (AI) models are increasingly becoming more than simple tools; they are emerging as factors that may influence the uncertainties young adults encounter in their personal and social lives.

Although AI systems are generally presented as gender-neutral entities, the literature suggests that individuals' gender-related perceptions of AI influence their interactions with these systems (Craiut & Iancu, 2022). Research indicates that even when technological products lack explicit gender-related cues, people tend to assign them a gender. Consequently, robots are more likely to be perceived as male, whereas virtual assistants are more likely to be perceived as female (Bernotat et al., 2021). In their study on gender bias in AI models, Yenigün Altın and Taşdelen (2025) found that the male gender was predominantly associated with problem-solving, technical competence, and high-status occupations, whereas the female gender was associated with a limited number of professions emphasizing art and aesthetics. Similarly, many positive personality traits have been found to be associated with stereotypically masculine characteristics.

People perceive and use AI in different ways, and these perceptions can influence both the design of AI systems and the nature of human–AI interactions (Nass & Moon, 2000). Consequently, the roles individuals attribute to AI may shape both their interactions with and their expectations of these systems. The roles individuals adopt in their own lives constitute an important component of their identity and influence their behavior, decision-making, and communication with others (Stryker & Burke, 2000). As digitalization and AI-based technologies become increasingly integrated into everyday life, the experience of young adulthood may acquire new contextual characteristics.

As AI tools such as ChatGPT and Google Gemini become increasingly integrated into everyday life, this study aims to examine the roles, expectations, and gender perceptions that users attribute to AI. Understanding these perceptions is important for identifying both existing and emerging contextual characteristics of young adults' developmental experiences in the context of AI use. A review of the literature revealed limited research examining gender perceptions reflected in AI (Ahn et al., 2022; Cui et al., 2026; Dushimimana & Nkurunziza, 2026; Üçler & Şahin, 2025; Yenigün Altın & Taşdelen, 2025). Moreover, no studies were identified that directly examined the roles attributed to AI tools and gender perceptions from the perspective of users' lived experiences. In this context, exploring users' interactions with AI applications and the meanings they attribute to them may provide valuable insights for parents, mental health professionals, and educators. It may also help identify areas requiring further research and inform future practice. Accordingly, this study aims to examine the roles, expectations, and gender perceptions that young adults attribute to AI applications based on their experiences using AI tools.

2. Methodology

2.1. Research Design

A mixed-methods embedded design was employed in this study. In an embedded design, either the qualitative or the quantitative component serves as the primary research approach, while the other provides supportive evidence (Creswell & Plano-Clark, 2018). This study primarily adopted a qualitative phenomenological approach to explore young adults' experiences with AI tools, focusing on their purposes of use, the roles they attribute to AI, their expectations, and their gender perceptions. To enhance the contextual interpretation and generalizability of the findings, the Survey on Gender and Roles Attributed to Artificial Intelligence Applications was incorporated as a quantitative component, resulting in an embedded mixed-methods design (Creswell & Plano-Clark, 2018; Yıldırım & Şimşek, 2021).

The qualitative component constituted the primary research approach. The quantitative data were used to describe the distribution of participants' perceptions regarding the gender, roles, expectations, and metaphors attributed to AI, to support the interpretation of the qualitative findings, and to provide a more comprehensive contextual understanding of the identified themes.

2.2. Study Group

Separate study groups were recruited for the qualitative and quantitative phases of the study.

First Study Group: In the qualitative phase, semi-structured interviews were conducted with 20 young adults (14 women and 6 men) between the ages of 20 and 35 who used AI tools. In qualitative research, sample size is determined by the principle of data saturation rather than by a predetermined number of participants. Data saturation is reached when additional interviews no longer generate new themes or provide meaningful insights into existing categories (Guest et al., 2006; Saunders et al., 2018). In the present study, data collection and analysis were conducted concurrently. Following the twentieth interview, no new themes or subthemes emerged. Therefore, data saturation was considered to have been achieved, and data collection for the qualitative phase was concluded. Participant characteristics for the qualitative phase are presented in Table 1.

Table 1

Qualitative Section Participant Information

Code	Gender	Age	Education Level	Daily AI Usage Time
P1	Female	21	Undergraduate student	5 minutes
P2	Female	21	Undergraduate student	30 minutes
P3	Female	29	Master's student	30 minutes
P4	Male	30	Bachelor's degree	30 minutes
P5	Female	20	High school graduate	1 hour 27 minutes
P6	Female	24	Bachelor's degree	30 minutes
P7	Female	29	Master's student	45 minutes
P8	Female	20	Associate's degree student	30 minutes
P9	Male	35	Bachelor's degree	Not specified
P10	Male	24	Undergraduate student	30 minutes
P11	Male	26	Bachelor's degree	Less than 1 hour
P12	Female	32	Master's student	2–3 hours
P13	Female	25	Bachelor's degree	45 minutes
P14	Female	30	Master's student	1 hour
P15	Male	32	Bachelor's degree	5 hours
P16	Female	29	Master's student	2–3 hours
P17	Female	24	Bachelor's degree	1 hour

P18	Male	34	Master's student	30 minutes
P19	Female	23	Master's student	1 hour
P20	Female	31	Master's student	10 minutes

Second Study Group: In the quantitative phase, 118 individuals completed the Survey on Gender and Roles Attributed to Artificial Intelligence Applications. Three responses were excluded because the participants either did not complete the questionnaire or did not meet the age criterion. Consequently, the quantitative analyses were conducted with data from 115 participants, including 89 women (77%) and 26 men (23%). Participants' ages ranged from 20 to 35 years, with a mean age of 25.87 years. The quantitative sample size was determined in accordance with the objectives of the study and the inclusion criterion of being a young adult who actively uses AI. A total of 115 eligible participants voluntarily participated in the study. Because the quantitative component was intended to complement rather than independently address the primary research questions, this sample size was considered appropriate for an embedded mixed-methods design (Creswell & Plano-Clark, 2018). Participants most frequently reported using Google Gemini, ChatGPT, and Claude, respectively. Their daily AI usage ranged from 3 to 388 minutes (M = 63.07 minutes).

2.3. Data Collection

The study was initiated after obtaining approval from the relevant ethics committee. Qualitative data were collected through online video interviews conducted by the same researcher to ensure consistency. With participants' consent, the interviews were audio-recorded and subsequently transcribed. Quantitative data were collected using the Survey on Gender and Roles Attributed to Artificial Intelligence, developed by the researchers.

2.4. Data Collection Instruments

The study employed three data collection instruments: the Personal Information Form, the Semi-Structured Interview Form, and the Survey on Gender and Roles Attributed to Artificial Intelligence.

Personal Information Form: The Personal Information Form collected demographic information (e.g., age and gender), as well as participants' purposes for using AI, the AI applications they used, and their average daily duration of AI use.

Semi-Structured Interview Form: A semi-structured interview form developed by the researchers was used to explore participants' expectations of AI tools, the roles they attribute to these tools, and their gender perceptions. To develop the interview form, the researchers first reviewed the relevant national and international literature and collected preliminary information from six young adults regarding their experiences with AI applications and their views on the subject. Based on these findings, an initial pool of 12 interview questions was developed. The draft form was then reviewed by two experts in Guidance and Psychological Counseling. Following their feedback, four questions were removed because they were not aligned with the study's objectives, and two new questions were added based on the experts' recommendations. A pilot interview was subsequently conducted to evaluate the clarity and comprehensibility of the questions. As a result, the final interview form consisted of the following 10 questions:

1. For what purposes do you use AI applications?
2. What are your expectations of AI applications?
3. What importance do AI applications have in your life?

4. When interacting with AI tools, what gender do you perceive them to have? Please explain.
5. Based on your intended use, what roles do you assign to AI tools?
6. What gender do you attribute to the roles you assign to AI?
7. What needs do these roles help you meet?
8. AI applications are similar to _____ because _____.
9. In your opinion, what are the potential benefits and risks of AI for humanity?
10. In your opinion, what direction is AI development heading?

Survey on Gender and Roles Attributed to Artificial Intelligence: To complement the qualitative findings, the researchers developed a short-answer survey consisting of four questions adapted from the semi-structured interview form. The survey was designed to collect quantitative data related to the study objectives. The questions included in the survey were as follows:

1. What are your expectations of AI applications?
2. When interacting with AI tools, what gender do you perceive them to have? Please explain.
3. Based on your intended use, what roles do you assign to AI tools?
4. AI applications are similar to _____ because _____.

2.5. Data Analysis

Qualitative data obtained from the semi-structured interviews were analyzed using content analysis. Content analysis aims to identify concepts and themes that explain the data by systematically examining participants' responses (Yıldırım & Şimşek, 2021). During the analysis, each researcher independently generated codes and themes for each interview. The coding results were then compared, and six common overarching themes were identified. The themes, associated codes, and representative participant quotations were organized and presented in tabular form. To enhance the trustworthiness of the qualitative analysis, two researchers independently coded the data. Intercoder reliability was calculated using the formula proposed by Miles et al. (2014): Reliability = Number of Agreements / (Number of Agreements + Number of Disagreements). The intercoder reliability coefficient was .94, indicating a high level of agreement. The quantitative data were analyzed by calculating frequency and percentage distributions for each of the following categories: "expectations regarding artificial intelligence applications," "gender and roles attributed to artificial intelligence tools," and "metaphors used for artificial intelligence applications." Each participant's response was assigned to a single category.

3. Results

3.1. Qualitative Findings

To examine the roles, expectations, and gender perceptions that young adults attribute to artificial intelligence (AI) applications based on their experiences using AI tools, qualitative data were analyzed using content analysis. The analysis identified six main themes. The themes, subthemes, and representative codes are presented in Table 2.

Table 2

Themes, Subthemes, Codes

Themes	Subthemes	Codes
1. Expectations of Artificial Intelligence		Quick access to accurate, reliable, and straightforward information; understanding exactly what I want; miraculously creating what's in my mind; responding as if it were a close friend who knows me well; guiding me; offering different perspectives; and providing help and motivation
2. Gender and Role Attributions to Artificial Intelligence		Teacher, assistant, intern, friend, sister, neighbor, blogger, pharmacist, expert, translator, woman, man, gender-neutral
3. Perceived Importance of AI in Daily Life	An Indispensable Tool	The most important thing, feeling of something missing, worrying when they are inaccessible, and the fear of losing convenience
	A Tool That Makes Life Easier But Whose Absence Would Not Be Felt	Things can be done without artificial intelligence; using it makes tasks easier, but it is not indispensable
4. Understanding Artificial Intelligence: The Language of Metaphors	As a Source of İnformation	Teacher, Hezarfen, librarian, dictionary, human intelligence, robot, expert, knowledge repository, scientist, Google, a book that can talk about the information inside it, encyclopedia
	As a Functional Tool	Personal Assistant, skeleton key , a huge machine, a recent graduate intern who's read too many books
	As Social and Emotional Support	Savior, spiritual pet, friend
5. Artificial Intelligence: Its Supportive and Risky Aspects	Supportive Aspects	Useful, scientifically supportive, fosters a desire to acquire knowledge, gets things done quickly, the algorithm recognizes users' preferences
	Risky Aspects	Harmful to nature, people, and the environment; diminishes critical thinking; replaces certain professions; distances people from reality; raises ethical and data privacy concerns; isolates people
	A Double-Edged Sword	A two-sided issue, a double-edged sword; outcomes depend on the user's intent—on one hand, it creates new job opportunities, while on the other, it may eliminate certain professions; it offers great benefits but causes even greater harm when misused
6. Forecasts Regarding Artificial Intelligence Developments	Exciting Developments	More human, empathetic, and respectful of personal boundaries; the belief that higher ethical standards will emerge; the potential to become more professional through feedback; and the emergence of more advanced versions
	Concerning Developments	The likelihood of increasing data breaches and ethical issues; the possibility that, in addition to material goods, ideologies, religions, and values could also become products to be sold; the potential for artificial intelligence to manipulate people; its potential to foster laziness, isolation, and a reduction in mental effort; and creating competition

As shown in Table 2, the content analysis identified six main themes: expectations of artificial intelligence; gender and role attributions to artificial intelligence; the perceived importance of artificial intelligence in daily life; understanding artificial intelligence through metaphors; the supportive and risky aspects of artificial intelligence; and expectations regarding future developments in artificial intelligence. Detailed descriptions of these themes, together with representative participant quotations, are presented below. In the quotations, participant identification numbers are followed by gender and age in parentheses.

1. Expectations of Artificial Intelligence

Within this theme, participants' expectations of AI varied according to their purposes for using AI applications. Participants reported using AI for personal and professional information seeking, education, language learning, entertainment, and content and image generation. Across these contexts, they primarily expected AI to provide accurate, reliable, and clear information quickly. In addition, participants expected AI applications to save time,

understand their intentions and preferences, provide guidance, offer different perspectives, motivate them, and support them in accomplishing their goals. Representative quotations are presented below:

P1 (F, 21): "I expect it to understand exactly what I want and magically create something that's in my head."

P2 (F, 21): "It's not about completely delegating the task to it, but rather having it show me a direction and help me develop ideas. That's why I use it."

P12 (F, 32): "I expect it to get to know me like a close friend, provide me with information, and help me."

P19 (F, 23): "I have high expectations of AI. I expect it to act like a mentor when I'm working on an assignment. I expect it to be a better and more successful student than I am. Basically, I expect everything from it."

2. Gender and Role Attributions to Artificial Intelligence

Participants described AI as fulfilling a variety of roles, most commonly those of a teacher, assistant, intern, and friend. Some participants also described AI as a sister, neighbor, blogger, pharmacist, expert, or translator. Five participants stated that they did not attribute any specific role to AI. Among participants who assigned a gender to AI, four perceived it as male, three as female, and eight as gender-neutral. In addition, five participants reported that the gender they attributed to AI changed depending on the role or context in which they interacted with it. Representative quotations include the following:

P11 (M, 26): "It seems like a man to me. Since I'm a man, I think it behaves like a man."

P14 (F, 30): "I'd never thought about it before, but I immediately see it as a woman."

P1 (F, 21): "When it's helpful, I say it's a woman, but when it messes up or can't do what I want, I definitely say it's a man. When it gives me a good result, I say, 'Okay, this time it's a girl.'"

P2 (F, 21): "Sometimes I ask AI about personal development, psychology, or astrology. In those cases, I see it as a woman. But when I ask about something more scientific, I perceive it as more authoritative and therefore more like a man."

3. Perceived Importance of AI in Daily Life

The third theme, Perceived Importance of Artificial Intelligence in Daily Life, consisted of two subthemes: An Indispensable Tool and A Helpful Tool That Makes Life Easier but Is Not Indispensable. Most participants considered AI to be a useful tool that simplifies daily life but whose absence would not have a substantial impact. Others, however, viewed AI as indispensable. Representative quotations for each subtheme are presented below.

3.1. An Indispensable Tool

P2 (F, 21): "If I stopped using AI, I think I'd feel like something was missing. It feels as though finding information would become much more complicated. Right now, I can't even imagine how we used to do research or organize information before."

P9 (M, 35): "It's where I earn my living, satisfy my curiosity, and do my work. It's the most important thing."

P13 (F, 25): "When I can't access it, I become a little anxious. More than anything, I'm afraid of losing that convenience."

3.2. A tool that makes life easier but whose absence would not be felt

P4 (M, 30): “Would my life change a lot if it didn’t exist? No. But I’d probably spend much more time researching or looking things up.”

P14 (F, 30): “It doesn’t occupy an extreme or central place in my life. It certainly makes things easier, but it’s not something I couldn’t live without.”

4. Understanding Artificial Intelligence: The Language of Metaphors

This theme emerged from the metaphors participants used to describe AI. It consists of three subthemes: AI as a Source of Information, AI as a Functional Tool, and AI as a Source of Social and Emotional Support. The metaphors associated with each subtheme are presented in Table 3.

Table 3

Understanding Artificial Intelligence: The Language of Metaphors—Subtheme Contents

As a Source of Information	As a Functional Tool	As Social and Emotional Support
Teacher instructor	Personal Assistant	Rescuer
Hezarfen	Skeleton key	Spiritual pet
Librarian	A huge machine	Friend
Dictionary	A recent graduate intern who’s read too many books	
Human intelligence		
Robot		
Expert		
Knowledge repository		
A book that can talk about the information inside it		
Encyclopedia		
Scientist		

Representative quotations include the following:

P3 (F, 29): “Artificial intelligence is like a skeleton key—it might eventually be able to unlock many different doors.”

P20 (F, 31): “Artificial intelligence applications are like an encyclopedia because I can find the information I’m looking for in them.”

5. Artificial Intelligence: Its Supportive and Risky Aspects

This theme emerged from participants' views regarding the benefits and risks of AI applications. It consists of three subthemes: Supportive Aspects, Risks, and A Double-Edged Sword. The first subtheme reflects participants' views on the benefits of AI, the second focuses on perceived risks, and the third highlights the idea that the consequences of AI depend largely on how it is used. Representative quotations for each subtheme are presented below.

5.1. Supportive Aspects

P9 (M, 35): “I think it is extremely beneficial for humanity. At least for now, I see it as highly beneficial because resources are limited, especially access to information. It helps reduce inequalities in access to information and knowledge.”

P14 (F, 30): “I think it’s beneficial because it completes tasks very quickly and provides more efficient ways of doing things.”

5.2. Risky Aspects

P1 (F, 21): “Although it certainly makes life easier, I think its disadvantages currently outweigh its benefits. People are gradually becoming detached from reality, and it is already causing considerable environmental harm.”

P11 (M, 26): “While I think it will increase productivity, it will also erode people's privacy. For that reason, I see it as something that may ultimately cause harm.”

5.3. A Double-Edged Sword

P10 (M, 24): “Artificial intelligence itself is neither good nor bad. Everything depends on the intentions of the person using it. If it is used for good purposes, it produces good outcomes; if it is used for harmful purposes, it produces harmful outcomes.”

P12 (F, 32): “It has many benefits, but if it is misused, the harm it causes could be much greater.”

P15 (M, 32): “It’s a double-edged sword. On the one hand, it will create new jobs, but on the other, it will eliminate some existing ones.”

6. Forecasts Regarding Artificial Intelligence Developments

The final theme concerns participants' expectations regarding future developments in AI. Content analysis showed that participants expressed both optimism and concern about the future of AI. Accordingly, this theme was organized into two subthemes: Promising Developments and Concerning Developments.

6.1. Exciting Developments

P3 (F, 29): “I think AI is moving in a positive direction. It has advanced very rapidly. In the near future, it may become more empathetic, more respectful of personal boundaries, and perhaps even more ethical. I believe there is a strong possibility that it will continue to evolve in this direction.”

P8 (F, 20): “It improves every day. Based on user feedback and discussions on social media, many improvements are being made. I believe it will continue to develop because developers carefully examine feedback, identify problems, and work to solve them.”

6.2. Concerning Developments

P6 (F, 24): “Although it makes life easier, I think it is moving in an unhealthy direction. It's becoming a little frightening. No matter how useful it seems, it also feels increasingly unsettling.”

P7 (F, 29): “There are many conspiracy theories about AI taking over. I don't necessarily think that will happen, but AI is learning so much about people's private information that it could eventually manipulate us. We might begin buying, saying, or doing things simply because AI suggests them. That possibility is frightening.”

P16 (F, 29): “There are serious data privacy concerns, and this information is being used to market products to us. Today the products may be computers or cars, but tomorrow they could be ideologies, religions, or values. For that reason, I think AI should primarily function as a source of information. Once it begins generating interpretations or

demonstrating higher-level reasoning, it becomes vulnerable to manipulation. I don't think that is a positive direction."

3.2. Quantitative Findings

Apply To complement the qualitative findings, quantitative data are presented in Tables 4–7. Table 4 summarizes participants' expectations of AI applications, Table 5 presents the gender attributions assigned to AI applications, Table 6 reports the roles attributed to AI, and Table 7 presents the metaphors participants used to describe AI applications.

Table 4

Expectations Regarding Artificial Intelligence Applications

Expectations Regarding Artificial Intelligence Applications	f	%
Access to accurate, reliable, and fast information	51	44.3
Education, academic, and technical support	23	20.0
Making work and daily life easier	22	19.1
Guidance, problem-solving, and providing recommendations	10	8.7
Personal support and counseling	5	4.3
No expectations	4	3.5
Total	115	100.0

As shown in Table 4, participants most frequently expected AI applications to provide accurate, reliable, and rapid access to information (n = 51, 44.3%). Other common expectations included educational, academic, and technical support (n = 23, 20.0%) and making work and daily life easier (n = 22, 19.1%).

Table 5

Gender Distribution Attributed to Artificial Intelligence Applications

Gender Attributed to Artificial Intelligence	f	%
Gender-Neutral	54	47.0
Male	29	25.2
Female	19	16.5
Varies by application/situation	7	6.1
Not specified	6	5.2
Total	115	100.0

As shown in Table 5, nearly half of the participants (n = 54, 47.0%) perceived AI as gender-neutral. In contrast, 29 participants (25.2%) perceived AI as male, 19 (16.5%) as female, and 7 (6.1%) reported that the perceived gender varied depending on the application or context. Six participants (5.2%) did not specify a gender.

Table 6

Roles Attributed to Artificial Intelligence

Roles Attributed to Artificial Intelligence	f	%
Educator / Information source / Expert	39	33.9
Assistant / Helper / Facilitator	25	21.7
Consultant / Guide / Mentor	19	16.5
Search engine / Information access tool	16	13.9
Provides social and personal support	12	10.4
No specific role / Undefined	4	3.5
Total	115	100.0

As shown in Table 6, participants most frequently described AI as an educator, source of information, or expert (33.9%). This was followed by assistant/helper/facilitator (21.7%) and consultant/guide/mentor (16.5%). Some participants viewed AI primarily as a search engine or information access tool (13.9%), whereas a smaller proportion perceived it as a source of social and personal support, such as a friend, psychologist, or confidant (10.4%). Only a small number of participants (3.5%) reported that they did not attribute any specific role to AI. Examples of the roles included within each category are presented below:

1. **Educator / Information Source / Expert:** teacher, academic, professor, encyclopedia, knowledge base, expert, scientist
2. **Assistant / Helper / Facilitator:** assistant, secretary, research assistant, editor, planner
3. **Consultant / Guide / Mentor:** consultant, guide, mentor, life coach
4. **Search Engine / Information Access Tool:** Google, Wikipedia, library, search engine, information source
5. **Social and Personal Support:** friend, confidant, psychologist, therapist, parent, listener

Table 7

Metaphors Used for Artificial Intelligence Applications

Metaphor category	f	%
As a source of information	51	44.3
As a functional tool	34	29.6
As social and emotional support	14	12.2
Other metaphors	9	7.8
Not specified	7	6.1
Total	115	100.0

As shown in Table 7, the most frequently reported metaphors described AI as a source of information (44.3%). Within this category, participants most commonly used metaphors related to knowledge and information access, such as an encyclopedia, a library, a teacher, and a knowledge repository. The second most common category described AI as a functional tool (29.6%). Participants used task-oriented metaphors such as assistant, helper, robot, secretary, Swiss knife, and digital brain. A smaller proportion of participants perceived AI as a source of social and emotional support (12.2%), using metaphors such as friend, psychologist, counselor, and compassionate teacher.

4. Discussion

As AI applications such as ChatGPT and Google Gemini become increasingly integrated into everyday life, this study explored the roles, expectations, and gender perceptions that young adults attribute to AI. The qualitative findings revealed six main themes.

The first theme, Expectations of Artificial Intelligence, showed that participants' expectations varied according to their purposes for using AI. Previous research suggests that expectations of AI are generally driven by perceived performance and usefulness, with perceived usefulness being a key determinant of technology acceptance (Venkatesh et al., 2003). In addition, AI systems have been reported to enhance human learning and problem-solving processes (Luckin & Holmes, 2016). Consistent with these findings, both the qualitative and quantitative results of the present study indicate that young adults primarily expect AI to provide rapid access to accurate, reliable, and clear

information while supporting activities such as information seeking, education, language learning, entertainment, and content creation. Similarly, Park et al. (2025) found that nursing students viewed AI as a supportive tool and expected it to provide accurate and reliable information. This finding is consistent with the present study, in which access to accurate, reliable, and rapid information emerged as the most frequently reported expectation in both the qualitative findings and the quantitative results (44.3%).

The second theme, Gender and Role Attributions to Artificial Intelligence, demonstrated that many participants perceived AI as more than a technological tool by assigning it interpersonal and professional roles, including friend, teacher, assistant, expert, intern, and neighbor. The quantitative findings likewise showed that participants most frequently viewed AI as an educator, information source, or expert (33.9%), followed by assistant/helper/facilitator (21.7%) and consultant/guide/mentor (16.5%). A smaller proportion perceived AI primarily as a search engine or information access tool (13.9%) or as a source of social and personal support, such as a friend, psychologist, or confidant (10.4%). These findings are consistent with the classification proposed by Philipsen et al. (2022), who categorized AI roles as professional (e.g., teacher, coworker), personal (e.g., friend, partner, family member), and subordinate (e.g., servant or assistant). The present findings further suggest that young adults not only attribute multiple social roles to AI but also associate these roles with specific gender perceptions.

According to Erikson (1976), the primary developmental task of young adulthood is establishing close, trusting, and mutually intimate relationships. Individuals who experience difficulties in developing such relationships may be more vulnerable to feelings of isolation and loneliness. From this perspective, participants' descriptions of AI as a friend, confidant, or psychologist suggest that they perceive AI as a psychologically safe space where they can ask questions, express emotions, and share personal thoughts without fear of judgment. These findings may indicate that AI serves as a complementary source of support for young adults who experience social anxiety or face barriers to accessing psychological services. Rather than replacing human relationships, AI may function as a resource that supports interpersonal interactions or helps individuals prepare for them.

The findings may also be interpreted within the Turkish cultural context. In Türkiye, where interpersonal relationships are generally characterized by strong family ties and relatively collectivist social values, social support networks and authority figures play an important role in decision-making. The roles attributed to AI by participants appear to reflect culturally meaningful relationship patterns. Given that help-seeking behaviors in Türkiye often occur within family and close social networks, it is understandable that AI may be perceived as an accessible source of support that complements these existing relationships. When interpreted in light of Hofstede's (2001) cultural dimensions framework and Kağıtçıbaşı's (2017) model of relational autonomy, the finding that young adults perceive AI as both a facilitator of autonomous decision-making and a source of social support appears to be compatible with the relational characteristics of Turkish culture.

In the qualitative findings of this study, the majority of participants perceived AI applications as robots or machines and did not attribute a specific gender to them. Consistent with this finding, the quantitative results showed that participants most frequently perceived AI applications as gender-neutral (47.0%). However, both qualitative and quantitative findings also indicated that some participants attributed a male or female gender to AI, or perceived its gender as varying depending on the application or context. According to the survey results, 29 participants (25.2%)

perceived AI as male, 19 (16.5%) as female, and 7 (6.1%) reported that their perception of AI's gender varied depending on the application or situation.

Previous research suggests that factors such as the amount of information shared with AI, the gender roles attributed to AI, users' ages, and the ethnic characteristics of avatars may influence human–AI communication (Ahn et al., 2022). Consistent with this perspective, the qualitative findings of the present study suggest that participants' gender perceptions of AI were influenced by the social meanings associated with the roles assigned to AI. For example, a participant who perceived their teacher as male tended to perceive AI as male when interacting with it in a teacher role, whereas a participant who had a female psychologist tended to perceive AI as female when using it for psychological support.

When the qualitative and quantitative findings are considered together, the results suggest that young adults do not demonstrate a clear overall preference regarding the gender they attribute to AI applications; rather, most participants perceive AI as gender-neutral or machine-like. Nevertheless, some participant statements indicate that existing gender stereotypes may be reflected in perceptions of AI technologies in the Turkish context. Specifically, scientific, technical, and authority-related functions appeared to be associated more frequently with men, whereas emotional support, assistance, and caregiving functions were associated more frequently with women. These findings suggest that gender roles may be transferred to AI applications, potentially contributing to the reproduction of existing gender biases.

The third theme was identified as "Perceived Importance of Artificial Intelligence in Daily Life." This theme consisted of two subthemes: "An Indispensable Tool" and "A Helpful Tool That Makes Life Easier but Is Not Indispensable." Although AI is not considered an essential component of every area of life, previous research in education highlights that AI has become an increasingly important technology by enabling personalized learning and supporting decision-making processes while reducing teachers' workload (Bulut et al., 2024; Chen et al., 2020; Uzun et al., 2021). The findings of the present study are consistent with this perspective. While some participants described AI applications as indispensable, particularly for information acquisition, education, and professional tasks, others emphasized that AI makes daily life easier but that they would not experience a significant sense of loss if these tools were unavailable.

The fourth theme, "Understanding Artificial Intelligence: The Language of Metaphors," was characterized by three subthemes: "AI as a Source of Information," "AI as a Functional Tool," and "AI as a Source of Social and Emotional Support." In the first subtheme, participants used metaphors such as "teacher," "talking book," and "librarian" to describe AI's information-providing function. In the second subtheme, metaphors such as "wrench," "personal assistant," "robot," and "giant machine" reflected AI's functional and task-oriented characteristics. Quantitative findings similarly showed that 44.3% of participants (n = 51) described AI through metaphors representing it as a source of information, whereas 29.6% (n = 34) described it as a functional tool. Previous studies examining perceptions of AI have also identified similar metaphors, including assistant, helper, friend, library, book, teacher, and robot (Ağmaz & Ergüleç, 2024; Eriçok et al., 2024; Jin et al., 2025; Vatansever, 2025).

The subtheme "AI as a Source of Social and Emotional Support" included metaphors such as "friend" and "pet." Among the 115 participants who completed the Survey on Gender and Roles Attributed to Artificial Intelligence, 12.2% (n = 14) described AI as a source of social and emotional support through metaphors such as "friend," "psychologist," "counselor," and "compassionate teacher." The development of AI technologies has transformed how

individuals perceive and interact with these systems. Although AI was initially developed primarily as a tool for assisting human tasks, contemporary AI applications are increasingly being associated with social roles, including companionship (Kim et al., 2021). While the metaphors identified in the present study were largely positive, Coen Collins (2026) offers a contrasting perspective by using the metaphor of Frankenstein's monster to describe AI, emphasizing that the "monster" is not inherently evil but rather reflects the consequences of human decisions and actions in creating such technologies.

Recent studies indicate that young adults actively use AI, particularly in academic learning, career planning, decision-making, and self-evaluation processes (Brandtzaeg et al., 2025 ; Lunetti et al., 2025). Within this context, participants' descriptions of AI through metaphors such as "teacher," "guide," "knowledge bank," "advisor," and "library" may reflect not only perceptions of AI as an information source but also young adults' search for guidance and support during periods of uncertainty. The role of AI as a cognitive support system in shaping professional and personal decisions—an important aspect of identity development—may represent one strategy through which young adults manage uncertainty.

The fifth theme is "Artificial Intelligence: Supportive and Risky Aspects." This theme consists of three subthemes. Statements emphasizing the ways in which AI facilitates access to information, saves time, supports education and teaching processes, and contributes to equal opportunities in accessing information were categorized under the subtheme of supportive aspects. Similarly, Eriçok et al. (2024) found that teacher candidates perceived AI as a supportive tool that enables rapid and convenient access to information and provides guidance during learning and teaching processes.

Statements concerning ethical and security issues, economic and existential risks, potential reductions in cognitive and social skills, social isolation, possible job displacement, and environmental concerns were categorized under the subtheme of risky aspects. In their study, prospective teachers emphasized that insufficient awareness regarding the use of AI in education may lead to ethical challenges and various risks (Eriçok et al., 2024). The third subtheme, "A Double-Edged Sword," emerged from participants' views that the benefits and risks of AI depend largely on how and for what purposes it is used. Participants emphasized that the same characteristics of AI may create both advantages and disadvantages depending on users' intentions and practices. Consistent with this perspective, the complex and multidimensional nature of AI creates both opportunities and challenges (Sun & Ye, 2023).

The sixth and final main theme is "Forecasts Regarding Artificial Intelligence Developments" This theme consists of two subthemes: "Exciting Developments" and "Concerning Developments." Participants suggested that AI may provide faster and higher-quality information in the future; however, they also expressed concerns that technological developments could become difficult to control. Future advancements in AI are expected to contribute to progress in various domains, including education, environmental sustainability, healthcare, and transportation, potentially improving quality of life by 2050 (Imamguluyev, 2024). At the same time, issues related to data privacy, ethical responsibility, legal uncertainty, and algorithmic bias are expected to remain major challenges as AI becomes increasingly widespread (Imamguluyev, 2024; Ooi et al., 2023).

5. Conclusions and Recommendations

The qualitative findings of this study demonstrate that young adults attribute various roles and gender characteristics to AI applications and that these attributions may influence their expectations of AI. One of the major contributions of this study is that it examines perceptions of AI applications beyond their functional use or general attitudes by exploring the genders, roles, expectations, and metaphors young adults associate with AI. The findings provide insight into how young adults interpret AI applications and relate them to social meanings and identities. Furthermore, interpreting these findings through Erikson's (1976) developmental conflict of "intimacy versus isolation" and within the cultural context of Türkiye suggests that human–AI interaction is not merely a technological process but a multidimensional phenomenon involving developmental, cultural, and gender-related dimensions. In this respect, the study contributes to the literature by illustrating how young adults integrate AI applications into their lives as perceived social actors.

The findings may provide valuable implications for professionals in education and mental health who incorporate AI tools into their practices. Training programs and seminars may be developed to increase users' awareness of the gender stereotypes and role expectations associated with AI applications and to promote critical AI literacy in schools and educational institutions. In addition, global and local regulations are needed to support the ethical, responsible, and controlled use of AI tools in education and mental health contexts. Coen Collins (2026) argues that AI is not inherently creative or objective but instead reflects the human-generated data, economic structures, and cultural biases that shape it. Since AI systems are not independent forms of intelligence but are developed through data generated by humans (Manasi et al., 2022), designers should consider strategies to reduce the risk of reinforcing existing biases, particularly regarding gender roles.

Although young adults benefit from rapid access to diverse resources through AI applications, longitudinal research is needed to examine whether extensive AI use may influence cognitive and emotional skills over time. To support the development of these skills, young adults may be encouraged to maintain opportunities for face-to-face communication in home, educational, and social environments. Educational institutions may also strengthen social interaction through courses and activities designed to promote interpersonal skills. In line with the aims of this study, future research may investigate AI perceptions among different populations using diverse methodological approaches.

This study has several limitations. First, the distribution of male and female participants was not balanced. Second, the study included participants only from Türkiye, which may limit the transferability of the findings to other cultural contexts. Additional limitations include differences in participants' previous experiences with AI applications, variations in the types of AI applications used and frequency of use, reliance on self-reported data, the cross-sectional nature of the study, and the rapidly changing characteristics of AI technologies.

Declaration of Conflicts of Interest

The authors declare that they have no conflict of interest with any institution or individual in connection with this study.

Declaration of Generative AI Use

Generative AI was used in a limited capacity during the writing process. Specifically, ChatGPT was utilized for grammar checking and improving sentence clarity. All scientific content, analyses, and conclusions were independently developed by the author(s). The authors assume full responsibility for any ethical or academic implications arising from the use of generative AI tools.

Ethical Statement

This study involved the collection of data from human participants through a survey. In addition, semi-structured interviews were conducted with young adults who use artificial intelligence (AI) applications. Particular emphasis was placed on protecting participants' privacy, and online informed consent was obtained from all participants prior to their participation in the study. All procedures were conducted in accordance with relevant ethical guidelines and the principles of the Declaration of Helsinki (1964). Ethical approval for the study was obtained from the Non-Interventional Clinical Research Ethics Committee (GOKA) of Burdur Mehmet Akif Ersoy University (Date: 11 March 2026; Decision No. GO 2026/2842)

Author Contributions

All the authors have contributed equally.

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References

Ağmaz, R. F., & Ergüleç, F. (2024). Perceptions of teacher candidates on artificial intelligence in education: A metaphorical analysis. *Journal of the Ereğli Faculty of Education*, *Necmettin Erbakan University, 6*(2), 589–605. https://doi.org/10.51119/ereegf.2024.97

Ahn, J., Kim, J., & Sung, Y. (2022). The effect of gender stereotypes on artificial intelligence recommendations. *Journal of Business Research*, *141,* 50–59. https://doi.org/10.1016/j.jbusres.2021.12.007

Bernotat, J., Eyssel, F., & Sachse, J. (2021). The (fe)male robot: How robot body shape impacts first impressions and trust towards robots. *International Journal of Social Robotics, 13*(4). https://doi.org/10.1007/s12369-019-00562-7

Brandtzaeg, P. B., Følstad, A., & Skjuve, M. (2025). Emerging AI individualism: How young people integrate social AI into everyday life. *Communication and Change, 1*(1), 11. https://doi.org/10.1007/s44382-025-00011-2

Bulut, M. A., Davarcı, M., Bozdoğan, N. K., & Sarpkaya, Y. (2024). Impacts of artificial intelligence on education. *National Education Journal, 4*(3), 976–986. https://doi.org/10.5281/zenodo.10909352

Chen, L., Chen, P., & Lin, Z. (2020). Artificial intelligence in education: *A review. IEEE Access, 8,* 75264–75278. https://doi.org/10.1109/ACCESS.2020.2988510

Coen Collins, A. (2026). Garbage in, garbage out? How the monster of AI art reflects human fault, bias, and capitalism in contemporary culture. *AI & SOCIETY, 41*(5), 4655–4689. https://doi.org/10.1007/s00146-025-02799-5

Craiut, M.-V., & Iancu, I. R. (2022). Is technology gender neutral? A systematic literature review on gender stereotypes attached to artificial intelligence. *Human Technology, 18*(3), 297–315. https://doi.org/10.14254/1795-6889.2022.18-3.6

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

Cui, M., Chen, X., Sun, P., Ma, K., Xu, X., & Yan, L. (2026). The impact of loneliness on university students' attitudes toward generative AI: The mediating role of meaning in life and the moderating roles of academic engagement and gender. *Current Psychology, 45*(2), 116. https://doi.org/10.1007/s12144-025-08646-6

Dündar, A. H., Atmaca, M., & Güçlü Umur, A. N. (2026). Mental health in emerging adulthood: The role of identity confusion and mentalization. *Uluslararası Psiko-Sosyal Eğitim Araştırmaları Dergisi, 6*(10), 198–216. https://doi.org/10.5281/zenodo.21175139

Dushimimana, F., & Nkurunziza, A. (2026). Artificial intelligence and intimacy development in university students: A gender-based systematic review and meta-analysis. *International Journal of Psychology Research, 8*(2), 15–25. https://doi.org/10.33545/26648903.2026.v8.i2a.141

Eriçok, B., Karataş, F., & Yüce, E. (2024). Metaphor perceptions of pre-service teachers regarding artificial intelligence (AI). *Kocaeli University Journal of Education, 7*(2), 607–630. https://doi.org/10.33400/kuje.1511500

Erikson, E. H. (1976). Reflections on Dr. Borg's life cycle. *Daedalus*, *105*(2), 1–28.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods, 18*(1), 59–82. https://doi.org/10.1177/1525822X05279903

Hofstede, G. (2001). Culture's recent consequences: Using dimension scores in theory and research. *International Journal of Cross Cultural Management, 1*(1), 11–17. https://doi.org/10.1177/147059580111002

Imamguluyev, R. (2024). Artificial intelligence 2050: Predictions, challenges, and innovations. *International Journal of Research Publication and Reviews*, *5*(9), 2933–2941. https://doi.org/10.55248/gengpi.5.0924.2663

Jin, F., Sun, L., Pan, Y., & Lin, C.-H. (2025). High heels, compass, spider-man, or drug? Metaphor analysis of generative artificial intelligence in academic writing. *Computers & Education, 228*, 105248. https://doi.org/10.1016/j.compedu.2025.105248

Kağıtçıbaşı, Ç. (2017). *Family, self, and human development across cultures: Theory and applications*. Routledge.

Kim, J., Merrill, K., Jr., & Collins, C. (2021). AI as a friend or assistant: The mediating role of perceived usefulness in social AI vs. functional AI. *Telematics and Informatics, 64*, 101694. https://doi.org/10.1016/j.tele.2021.101694

Luckin, R., & Holmes, W. (2016). *Intelligence unleashed: An argument for AI in education*. Pearson.

Lunetti, C., Favini, A., & Trotta, E. (2025). Can artificial intelligence enhance European emerging adults' psychological adjustment? A scoping review. *Behavioral Sciences, 15*(11), 1483. https://doi.org/10.3390/bs15111483

Manasi, A., Panchanadeswaran, S., Sours, E., & Lee, S. (2022). Mirroring the bias: Gender and artificial intelligence. *Gender, Technology and Development*, *26*(3), 295–305. https://doi.org/10.1080/09718524.2022.2128254

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.

Nass, C., & Moon, Y. (2000). Machines and mindlessness: Social responses to computers. *Journal of Social Issues, 56*(1), 81–103. https://doi.org/10.1111/0022-4537.00153

Ooi, K.-B., Tan, G. W.-H., Al-Emran, M., Al-Sharafi, M. A., Capatina, A., Chakraborty, A., Dwivedi, Y. K., Huang, T.-L., Kar, A. K., Lee, V.-H., Loh, X.-M., Micu, A., Mikalef, P., Mogaji, E., Pandey, N., Raman, R., Rana, N. P., Sarker, P., Sharma, A., … Wong, L.-W. (2023). The potential of generative artificial intelligence across disciplines: Perspectives and future directions. *Journal of Computer Information Systems*, *65*(1), 76–107. https://doi.org/10.1080/08874417.2023.2261010

Park, Y., Chang, S. J., & Kim, E. (2025). Artificial intelligence in critical care nursing: A scoping review. *Australian Critical Care: Official Journal of the Confederation of Australian Critical Care Nurses, 38*(4), 101225. https://doi.org/10.1016/j.aucc.2025.101225

Philipsen, R., Brauner, P., Biermann, H., & Ziefle, M. (2022). I am what I am – roles for artificial intelligence from the users' perspective. *Artificial Intelligence and Social Computing, 28*, 108–118. https://doi.org/10.54941/ahfe1001453

Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the Horizon, 9*, 1–6. https://doi.org/10.1108/10748120110424816

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Quality & Quantity, 52*(4), 1893–1907. https://doi.org/10.1007/s11135-017-0574-8

Stryker, S., & Burke, P. J. (2000). The past, present, and future of an identity theory. *Social Psychology Quarterly, 63*(4), 284–297. https://doi.org/10.2307/2695840

Sun, F., & Ye, R. (2023). Moral considerations of artificial intelligence. *Science & Education, 32*(1), 1–17. https://doi.org/10.1007/s11191-021-00282-3

Üçler, N., & Şahin, Z. B. (2025). Reproduction of gender inequality in artificial intelligence applications: Hidden biases in coding and data sets. *Communication Studies in the New Century, 3*(12), 1–13. https://doi.org/10.66009/yyicd.2026.11

Uzun, Y., Tümtürk, A., & Öztürk, H. (2021). Today and used in the future artificial intelligence. *1st International Conference on Applied Engineering and Natural Sciences (ICAENS), Konya, Turkey.*

Vatansever, A. N., Çoban, S., Çoban, E. Y., & Şen, K. (2025). A literature review on artificial ıntelligence and ıts applications in education. *International Primary Education Research Journal, 9*(2), 216–229. https://doi.org/10.38089/iperj.2025.219

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view1. *MIS Quarterly*, *27*(3), 425–478. https://doi.org/10.2307/30036540

Yenigün Altın, Ş. Y., & Taşdelen, H. (2025). Gender biases in artificial intelligence models: A quantitative study on ChatGPT and Copilot. *Journal of the Faculty of Communication, Akdeniz University*, (49), 310–331. https://doi.org/10.31123/akil.1629516

Yıldırım, A., & Şimşek, H. (2021). *Qualitative research methods in the social sciences*. Seçkin Yayıncılık.