

# “The Role of Artificial Intelligence in Improving the Quality of Life of University Students: A Study of Male and Female Students at the College of Arts, King Faisal University, Al-Ahsa”

## Resresearchers :

**Dr. Bdur Swelh Alonazi**

Associate Professor, Department of Social Studies, Sociology, College of Arts, King Faisal University, Al-Ahsa, Saudi Arabia

[bsalonazi@kfu.edu.sa](mailto:bsalonazi@kfu.edu.sa)

**Zahra Ali Al-khouisa**

College of Arts, King Faisal University, Al-Ahsa, Saudi Arabia

[mafhh1514@gmail.com](mailto:mafhh1514@gmail.com)

**Received: 15/08/2026 | Revised: 16/08/2026 | Accepted: 27/08/2026 | Published: 02/09/2026**

university students. The study recommended integrating artificial intelligence applications into the university educational environment to enhance the quality and methods of education, while also developing smart digital entertainment content for university students that balances enjoyment and benefit by launching digital competitions and innovation incubators within universities. The study also recommended focusing on empowering university students economically by employing artificial intelligence technologies, including academic courses and practical workshops that contribute to building their technical and entrepreneurial skills in this field.

**Keywords:** Artificial Intelligence, Quality of Life, University Students, Educational Quality of Life, Recreational Quality of Life, Economic Quality of Life.

## ملخص الدراسة:

هدفت هذه الدراسة الوصفية إلى التعرف على دور الذكاء الاصطناعي في تحسين جودة حياة طلبة الجامعة، من خلال استقصاء إسهامه في الأبعاد التعليمية والترفيهية والاقتصادية

## Abstract:

This descriptive study aimed to identify the role of artificial intelligence in improving the quality of life of university students by exploring the extent to which this technology contributes to enhancing the educational, recreational, and economic aspects of the study sample. The study adopted the social survey method using a simple random sample, with a questionnaire distributed to 375 male and female students from the College of Arts at King Faisal University. The results revealed that artificial intelligence plays an effective role in developing the educational process for university students, which positively reflects on the quality of their educational experience. Moreover, AI applications had a tangible impact on enhancing the recreational experiences of university students. Artificial intelligence has also begun to play a growing role in supporting the economic aspects of university students' lives, by discovering new areas of freelance work through applications, assisting them with financial planning, and acquiring new skills required in the job market. All of these contributions are a clear reflection of the growing impact of artificial intelligence in improving the quality of life for

الاصطناعي بصورة هادفة في البيئة التعليمية الجامعية، وتطوير محتوى ترفيهي رقمي ذكي يوازن بين المتعة والفائدة، وتمكين الطلبة اقتصادياً من خلال مقررات وورش تطبيقية تنمي مهارات الذكاء الاصطناعي وريادة الأعمال، بما يدعم الاستخدام المسؤول لهذه التقنيات ويحسن جودة حياة طلبة الجامعة.

الكلمات المفتاحية: الذكاء الاصطناعي، جودة الحياة، طلبة الجامعة، جودة الحياة التعليمية، جودة الحياة الترفيهية، جودة الحياة الاقتصادية.

لجودة الحياة. واعتمدت الدراسة منهج المسح الاجتماعي، واستخدمت الاستبانة الإلكترونية لجمع البيانات من عينة بلغت (375) طالباً وطالبة من كلية الآداب بجامعة الملك فيصل. وأظهرت النتائج ارتفاع إدراك الطلبة لدور الذكاء الاصطناعي في تحسين جودة حياتهم بمتوسط كلي بلغ (2.58 من 3)، وجاء البعد التعليمي في المرتبة الأولى بمتوسط (2.71)، يليه البعد الاقتصادي بمتوسط (2.52)، ثم البعد الترفيهي بمتوسط (2.51). وأشارت النتائج إلى أن أبرز إسهامات الذكاء الاصطناعي تمثلت في تسهيل فهم المفاهيم الدراسية، وزيادة الوعي بالمهارات المطلوبة في سوق العمل، وتوفير خيارات ترفيهية تسهم في الحد من الشعور بالملل. في المقابل، كان دوره المدرك أقل في التغلب على الشعور بالوحدة أو العزلة وفي إدارة الميزانية الشخصية. وأوصت الدراسة بدمج تطبيقات الذكاء

#### How to Cite This Article

Alonazi, B. S., & Al-khouisa, Z. A. (2026). The role of artificial intelligence in improving the quality of life of university students: A study of male and female students at the College of Arts, King Faisal University, Al-Ahsa. Arab Journal for Scientific Publishing (AJSP), 9(95), (1005-1024).



AJSP | Vol. 9 | Issue 95 | DOI: <https://doi.org/10.36571/ajsp.95>

AJSP ORCID: <https://orcid.org/0009-0005-8048-2082>

## 1. Introduction

Recent years have witnessed a major transformation in technological fields, particularly artificial intelligence (AI), which has become a central pillar of global digital transformation and one of the most influential factors in improving quality of life across different domains. AI contributes to overcoming many challenges facing individuals and societies through diverse and innovative applications.

The Kingdom of Saudi Arabia is a leading adopter of this technology in line with Saudi Vision 2030, which seeks to strengthen the use of AI to improve quality of life and develop different sectors (Al Riyadh Newspaper, 2024). Vision 2030 has established a range of goals and programs, including the Quality of Life Program, one of its ambitious programs aimed at supporting young people and developing their capabilities (Al-Sheikh, 2020, p. 68). AI can also contribute to creating jobs and enhancing the position of Saudi cities among the world's leading cities (Al-Mutairi, 2023, p. 383). The Kingdom specifically targets young people because they constitute a distinctive and highly active group, a source of social change, and a population capable of production and creativity in any society (Al-Taher & Al-Nuwi, 2020, p. 51). Accordingly, this study investigates the role of AI in improving young people's quality of life in light of its capacity to produce positive transformations in individual and social life.

## 2. Statement of the Problem

Artificial intelligence is one of the modern technologies that has produced fundamental transformations in many fields (Al-Ajmi, 2025). Education is among the most important of these fields because it is a key avenue for understanding and applying quality-of-life factors. Al-Khubairi (2020) emphasized that the global educational system faces the challenge of continuous technological development and the information and communication revolution, which has transformed education from rote transmission into interaction and skill development.

Ben Amara (2023) likewise emphasized that AI has revolutionized the entertainment industry by generating new forms of content such as films, music, video games, and reels. Economically, Lashin (2023) showed that AI technology affects production, labor, employment structures, marketing services, and investment.

Young people are among the groups most likely to adopt AI tools for learning, innovation, work, and entertainment. According to Google Workspace & The Harris Poll (2024), 93% of respondents aged 22–27 relied on two or more AI tools weekly, confirming the extensive integration of AI into young people's daily lives because it combines speed, accuracy, and the capacity to process data.

Hassan (2022) found that young people's use of AI applications is positively associated with the gratifications they obtain: the more they use these applications, the more they seek stimulating educational content that addresses their interests, develops their intellectual skills, and strengthens creativity and individualized learning.

Given the multiple roles of AI, the importance of quality of life in general and young people's lives in particular, the importance of Saudi Vision 2030 and its implications for youth quality of life, and the limited number of studies addressing the topic in an integrated manner, the present research seeks to answer the following main question: What is the role of artificial intelligence in improving the quality of life of university students?

### 3. Significance of the Study

#### 3.1 Theoretical Significance

- The study enriches knowledge on AI by highlighting its growing role in improving the quality of life of young people, a fundamental pillar of development.
- The topic is linked to contemporary technological and social transformations, which increases its importance amid accelerating digital innovation.
- The study provides empirical data that may constitute an additional scholarly reference for the Arabic literature on AI, quality of life, and youth development.
- The study intersects with national orientations such as Saudi Vision 2030, which emphasizes technology, quality of life, and youth empowerment, thereby giving the study scientific, methodological, and strategic relevance.

#### 3.2 Applied Significance

- The study may help young people employ AI tools in recreational domains in ways that support psychological and social balance and enhance life satisfaction.
- It clarifies how AI can be used in the professional and academic development of young people by increasing their labor-market competence and supporting self-directed learning.
- It seeks to provide practical, applicable recommendations that young people can use to build personal strategies for improving their quality of life.

### 4. Objectives of the Study

**The main objective is** to identify the role of artificial intelligence in improving the quality of life of university students. The following sub-objectives derive from this objective:

- 1- To identify the role of AI in improving the educational quality of life of university students.
- 2- To identify the role of AI in improving the economic quality of life of university students.
- 3- To identify the role of AI in improving the recreational quality of life of university students.

### 5. Research Questions

**Main question:** What is the role of artificial intelligence in improving the quality of life of university students?

- 1- What is the role of AI in improving the educational quality of life of university students?

2- What is the role of AI in improving the economic quality of life of university students?

3- What is the role of AI in improving the recreational quality of life of university students?

## 6. Study Concepts

### 6.1 Role

Badawi (1993) defines role in the Dictionary of Social Science Terminology as the behavior expected from an individual in a group and the dynamic aspect of the individual's position. Shata (1999) views role as the actual behavior of the person occupying the role.

**Operational Definition:** In this study, role refers to the functions performed by artificial intelligence and its applications in improving the educational, recreational, and economic quality of life of university students at King Faisal University in Al-Hofuf.

### 6.2 Artificial Intelligence

The source manuscript first describes intelligence as mental activity characterized by complexity, abstraction, speed, adaptation, economy of effort, persistence under conditions requiring concentrated mental energy, and resistance to emotional factors (Al-Kifwi, 1998). It also presents intelligence as a cognitive-perceptual organization and a hypothetical construct used to describe mental differences among individuals (Mohamed, 1422 AH). Artificial intelligence refers to methods used in intelligent computer systems that can simulate human intelligence in decision-making and problem solving (Al-Ansari et al., 2023). Al-Obeidi (2015) defines it as a field that seeks to understand human intelligence by developing computer programs that imitate intelligent actions and behavior. It has also been described as a machine or computer program that uses human-like intelligence to complete a specific task through planning, learning, understanding, and problem solving (Southgate et al., 2019, p. 17).

**Operational Definition:** In this study, artificial intelligence refers to intelligent systems and applications used by university students to support data analysis, decision-making, learning, recreation, and economic activities in ways perceived to improve their quality of life.

### 6.3 Quality of Life

Quality of life refers to the level of comfort and general satisfaction individuals experience in their lives and expresses feelings of happiness and personal and social well-being (Salem, 2021).

**Operational Definition:** In this study, quality of life refers to the perceived improvement in the educational, recreational, and economic dimensions of university students' lives at King Faisal University as associated with their use of artificial intelligence technologies.

### 6.4 University Students

For the purposes of this study, the population comprises undergraduate students enrolled at the College of Arts, King Faisal University.

**Operational Definition:** University students are Saudi male and female undergraduate students aged 18–30 who were enrolled in the second semester of the academic year 1445–1446 AH at the College of Arts, King Faisal University, Al-Ahsa.

## 7. Theoretical Framework

A scientific theory is “a set of interrelated terms, definitions, and assumptions that proposes an organized view of a phenomenon in order to present it and predict its manifestations” (Khaled, 2007, p. 80).

## 7.1 Modernization Theory

Modernization Theory seeks to explain the ways in which societies can achieve social progress and economic prosperity (Abdel Aal, 2022). Its importance lies in explaining how the transformation of traditional societies into modern societies through the adoption of technology and scientific developments can improve different aspects of life (Amin, 2023). From this perspective, AI can improve university students' quality of life by contributing to a transition from traditional to modern forms of social organization. Educationally, AI provides interactive and personalized tools that meet students' needs and enhance academic understanding. Economically, it creates opportunities in modern technology and data analysis, thereby improving economic and social quality of life. The theory therefore explains the relationship between the adoption of modern technology, such as AI, and movement toward a more modern and advanced society, while highlighting the effect of these technologies on the quality of life of university students who represent the future of society.

## 7.2 Uses and Gratifications Theory

Uses and Gratifications Theory examines the role of audiences in media use and the satisfaction of their needs. It explains motivations for using media and assumes that individuals use media to obtain outcomes consistent with their expectations; these outcomes satisfy needs and desires and are therefore described as gratifications (Twalbah, 2021). From this perspective, the gratifications produced by media use can be compared with those resulting from university students' use of AI technologies and tools. The theory helps explain how and why students rely on AI in different aspects of their lives. In education, intelligent applications may facilitate access to information, enhance understanding, and reduce the time and effort required for learning. AI may also provide recreational gratifications through streaming recommendations, intelligent games, and personalized entertainment content. Economically, it may provide new opportunities for freelance work, professional skill development, e-commerce income, and greater financial independence, thereby contributing to improved quality of life.

## 8. Previous Studies

### 8.1 Local Studies

**Al-Ghamdi and Bakhit (2023)** used the descriptive-analytical approach and showed the importance of employing AI technologies in the educational environment because of their fundamental and positive effect on teachers, students, and the educational system.

**Al-Marai (2024)** drew an available sample of 400 Saudi young people who followed visual content employing AI technologies and used Media Richness Theory. Fifty percent reported broad knowledge of these technologies, 70.4% demonstrated high awareness of the domains in which they can be used, 50.5% reported interacting with the applications sometimes, and 20% reported extensive interaction. The study also found a statistically significant relationship between the sample's rates of following AI-based visual content and their perceptions of its effects on visual-content quality.

**Hamid (2024)** used descriptive, educational-systems development, experimental, and experimental-design approaches with a sample of 60 students at the College of Education, King Abdulaziz University. Significant differences favored the group using an intelligent educational-support environment, indicating that AI contributed to academic efficiency by improving understanding and practical application, developing critical thinking, and motivating learning.

### 8.2 Arab Studies

**Tayel (2022)**, using inductive and descriptive approaches, found that AI contributed to more employment opportunities, higher productivity and competitiveness, increased wages, and growth in global gross domestic product.

**Ben Amara (2023)** concluded that generative AI is transforming entertainment-content production because it can generate high-quality films, videos, games, and music with less human intervention and can accelerate pre- and post-production while providing effective content-editing and enhancement solutions.

**Hussein (2023)**, in a descriptive-analytical legal study, found that the use of AI technologies raises numerous difficulties requiring examination of the capacity of existing legislation to limit AI risks and the legal and ethical challenges associated with its use. The study emphasized regulation, specialized bodies, legal legislation, and legal culture in ways that benefit the economy and sustainable development.

**Lashin (2023)** concluded that AI produces fundamental economic changes and affects productivity, employment structures, and wages. Investment in AI improves product quality and lowers production costs, while countries investing in it have experienced notable economic growth.

**Mohamed et al. (2025)** used a descriptive approach, a questionnaire administered to 400 university students, and in-depth interviews with AI experts and academics in Egypt and the Arab world. The main motivations for using AI technologies included curiosity, creativity, the need for knowledge, and the search for entertainment and amusement.

**Awad (2024)** used a social survey with a systematic random sample and administered a questionnaire to 100 students from different academic levels at the Higher Institute of Social Work in Port Said. Students' awareness of AI's role in education was high cognitively, affectively, and behaviorally, reflecting awareness of its contribution to developing their educational experience and strengthening the link between AI and university quality of life.

Khalil et al. (2024) used a quasi-experimental approach with a main sample of 40 students and found that a virtual environment based on AI applications was effective in improving cognitive achievement and instructional-design skills.

**Ismail and Tolba (2025)** sought to develop writing fluency skills and improve standards of AI-generated written production among secondary-school students through a program based on generative AI models. Using an experimental approach with 33 third-year secondary students, the study found statistically significant differences at the .01 level in favor of the group using generative AI.

**Mohamed (2025)**, in a descriptive-analytical study, examined the effect of AI applications on educational strategies in traditional learning environments and concluded that AI can be an effective tool for developing traditional educational strategies.

**Al-Ahmadi and Al-Oraifi (2025)** examined the effectiveness of an AI-based application in developing selected social skills using descriptive-analytical and quasi-experimental approaches with 20 participants. The results showed a positive effect of the Color Pop application compared with the conventional method.

### 8.3 Foreign Studies

**Ahmed et al. (2024)** addressed the complexities of public-project management through AI-supported strategies that improve resource allocation, thereby contributing to sustainable economic growth and greater public-sector accountability. The study concluded that AI improves decision-making, streamlines project implementation, and improves communication among stakeholders.

### 8.4 Commentary on Previous Studies and Benefits to the Present Study

The present study shares an educational focus with Al-Ghamdi and Bakhit (2023), Awad (2024), Hamid (2024), Ismail and Tolba (2025), Khalil et al. (2024), and Mohamed (2025); an economic focus with Tayel (2022), Lashin (2023), and Ahmed et al. (2024); and an entertainment focus with Mohamed et al. (2025), Ben Amara (2023), and Al-Ahmadi and Al-Oraifi (2025). It differs from previous studies by linking AI's roles in education, economics, and entertainment to the quality of life of university students. The study benefits from prior research by adding an integrated dimension that combines education, economics, and entertainment and by using studies

on AI in education, economics, media, and entertainment as sources supporting the three quality-of-life dimensions examined here.

## 9. Artificial Intelligence and the Future Quality of Life of University Students

### 9.1 Artificial Intelligence

AI is a branch of computer science concerned with developing computer capabilities to simulate processes of intelligence occurring in the human mind, enabling computers to solve problems and make decisions logically through applications that vary by scientific field (Aziz, 2023). AI is among the most important modern technologies contributing to rapid technological development and increased opportunities for innovation and growth, and it plays an important role in raising quality, expanding capabilities, improving work efficiency, and increasing productivity (SDAIA).

### 9.2 AI and Educational Quality of Life

Improving the quality of education represents an important dimension of quality of life, as education can enhance individuals' knowledge, skills, and capacity to make informed decisions. Previous research has demonstrated that education is associated with subjective well-being and life satisfaction through several direct and indirect pathways, including income, employment, health, and access to social and economic resources (Ross & Van Willigen, 1997; Powdthavee et al., 2015). More recent evidence also indicates a positive overall association between education and subjective well-being, although the strength and mechanisms of this relationship may vary according to educational dimensions and social contexts (Dong et al., 2025). Accordingly, improving students' educational experiences through effective learning environments and supportive technologies may contribute to their broader quality of life.

#### 9.2.1 Adaptive and Personalized Learning

Adaptive learning is the process of generating a unique educational experience for each learner based on personality, interests, and performance in order to improve cognitive achievement, learner satisfaction, and effective learning (Al-Imari, 2024, citing Jad, 2017). Intelligent adaptive learning is computer- or web-based and particularly relies on AI systems to modify the presentation of materials in response to learner performance through learning analytics (Wang et al., 2008). An intelligent adaptive-learning environment includes physical and human factors that enable a learning system to select and adapt electronic content, activities, and assessments automatically according to information collected about the learner before and during learning, previous experience, needs, and preferences (Al-Sayed, 2021, p. 59). This can reduce academic frustration and improve the student experience. Smart education can also help teachers meet the needs of students with preferred learning styles, including visual learners (Al-Sayed, 2021, p. 60).

#### 9.2.2 Predictive Analysis and Academic Decision Support

Universities can use AI to analyze student-performance data and predict the risk of failure, allowing early intervention for students at academic risk (Kalita et al., 2025). This may improve student persistence and university quality of life.

### 9.3 AI and Economic Quality of Life

### 9.3.1 Creating New Job Opportunities

AI has a profound effect on the labor market and economic life and is expected to create new economic opportunities (Al-Amri & Al-Youdawwi, 2024). Advances in AI have generated occupations requiring advanced skills such as data analysis, software development, and intelligent-systems management (Bughin et al., 2018).

### 9.3.2 Supporting Entrepreneurship and Freelance Work

AI-supported freelance work has emerged as an important force in strengthening workforce resilience and economic recovery. AI can create new freelance roles such as prompt engineers and intelligent-content coordinators (Wadhwani & Mirza, 2025). It can also create online freelance opportunities for university students in programming, data analysis, and graphic design, enabling additional income during study and supporting greater financial independence and quality of life.

### 9.4 AI and Recreational Quality of Life

AI has emerged as a powerful force in entertainment, game development, film production, advertising, and creative processes and has become a catalyst for strategic investment in media and entertainment (Leeway, n.d.). Modern technologies have improved recommendation systems and content personalization, helping platforms such as Netflix and Spotify suggest films and music aligned with individual interests, thereby strengthening engagement and connecting users with suitable content (Kalideen & YAĞLI, 2025).

## 10. Field Methodology

### 10.1 Type and Method of Study

This is a descriptive study. Descriptive studies describe facts as they exist in a particular place and time, either comprehensively or selectively (Ben Ghaffa, 2016). The study used the sample social-survey method, defined by Hoinety as an organized attempt to determine, analyze, and interpret the current condition of a social system or group (Hassan, 1998, p. 221). Social surveys are used to achieve a high degree of scientific accuracy in collecting and analyzing social phenomena (Al-Qassem, 2021).

### 10.2 Study Population and Sample

The study population consisted of 12,189 male and female undergraduate students aged 18–30 from different specializations at the College of Arts, King Faisal University, during the academic year 1445–1446 AH. A simple random sample was adopted to promote balanced representation and reduce selection bias. Based on the total population and the statistical tables reported by Al-Duhayan (1420 AH, p. 64), the final sample size was 375 participants.

### 10.3 Data-Collection Instrument

The study used an electronic questionnaire. After reviewing the research literature, the instrument was designed around three main dimensions in addition to demographic data (gender and age). The three dimensions measured AI's role in improving educational, recreational, and economic quality of life.

### 10.4 Validity and Reliability of the Instrument

Validity refers to the extent to which a data-collection instrument actually measures what the study seeks to measure (Kaati, 2020). External/content validity was assessed by presenting the questionnaire to specialists and experts in Sociology and Social Work at King Faisal University, and their observations were incorporated into the final version. Internal-consistency validity was calculated on a pilot sample of 30 King Faisal University students using Pearson correlations between each item and its dimension score and between each dimension and the total questionnaire score, using SPSS.

**Table 1. Pearson correlations between each questionnaire item and the total score of its dimension**

| Educational Item | r       | Recreational Item | r       | Economic Item | r       |
|------------------|---------|-------------------|---------|---------------|---------|
| 1                | 0.780** | 1                 | 0.800** | 1             | 0.829** |
| 2                | 0.847** | 2                 | 0.763** | 2             | 0.867** |
| 3                | 0.682** | 3                 | 0.787** | 3             | 0.865** |
| 4                | 0.618** | 4                 | 0.734** | 4             | 0.868** |
| 5                | 0.782** | 5                 | 0.831** | 5             | 0.831** |
| 6                | 0.800** | 6                 | 0.829** | 6             | 0.850** |
| 7                | 0.623** | 7                 | 0.821** | 7             | 0.901** |

Note. \*  $p < .05$ ; \*\*  $p < .01$ . All item-to-dimension correlations were positive and statistically significant at  $p < .01$ , ranging from .618 to .901, supporting internal consistency at the item level.

**Table 2. Pearson correlations between each dimension and the total questionnaire score**

| Dimension                    | Correlation with Total Score |
|------------------------------|------------------------------|
| Educational quality of life  | 0.855**                      |
| Recreational quality of life | 0.948**                      |
| Economic quality of life     | 0.910**                      |

Note. \*  $p < .05$ ; \*\*  $p < .01$ . All dimension-to-total correlations were statistically significant at  $p < .01$  and high, supporting internal consistency of the questionnaire dimensions.

**Table 3. Reliability coefficients of the questionnaire dimensions**

| Dimension                    | Items | Cronbach's Alpha | Split-Half Reliability |
|------------------------------|-------|------------------|------------------------|
| Educational quality of life  | 7     | 0.847            | 0.806                  |
| Recreational quality of life | 7     | 0.898            | 0.922                  |
| Economic quality of life     | 7     | 0.938            | 0.932                  |
| Total questionnaire          | 21    | 0.953            | 0.978                  |

The coefficients reproduced in Table 3 are the values reported in the statistical table of the Arabic source manuscript. They indicate high reliability across the dimensions and the questionnaire as a whole.

Responses were weighted as Agree = 3, Neutral = 2, and Disagree = 1. The category length was calculated as  $(3 - 1) \div 3 = 0.66$ .

**Table 4. Interpretation of mean-score ranges**

| Interpretation | Mean Range |
|----------------|------------|
| Agree          | 2.34–3.00  |
| Neutral        | 1.67–2.33  |
| Disagree       | 1.00–1.66  |

### 10.5 Study Boundaries

- Human boundary: Saudi male and female undergraduate students aged 18–30 enrolled in the second semester of 1445–1446 AH at the College of Arts, King Faisal University.
- Spatial boundary: College of Arts, King Faisal University, Al-Ahsa.
- Temporal boundary: second semester of the academic year 1445–1446 AH.

### 10.6 Statistical Procedures

- SPSS was used to analyze the questionnaire.
- Frequencies and percentages were used to describe sample characteristics.
- Arithmetic means were used to determine the level of responses and rank questionnaire items; when means were equal, the lower standard deviation determined the ranking.
- Standard deviations were used to assess dispersion in responses.
- Pearson correlation coefficients were used to assess questionnaire validity.
- Cronbach's alpha and Spearman–Brown split-half coefficients were used to assess reliability.

## 11. Field Study Results

### 11.1 Sample Characteristics

**Table 5. Distribution of participants by gender**

| Gender | n   | %      |
|--------|-----|--------|
| Male   | 83  | 22.13  |
| Female | 292 | 77.87  |
| Total  | 375 | 100.00 |

Female students represented 77.87% of the sample and male students 22.13%. The source manuscript notes that these proportions are reasonably close to the population distribution, in which female students constitute 71.3% and male students 28.7%.

**Table 6. Distribution of participants by age**

| Age         | n   | %      |
|-------------|-----|--------|
| 18–21       | 207 | 55.20  |
| 22–25       | 149 | 39.73  |
| 26 or older | 19  | 5.07   |
| Total       | 375 | 100.00 |

More than half of the sample was aged 18–21 (55.20%), followed by 22–25 (39.73%), while 5.07% were aged 26 or older.

### 11.2 First Research Question: Educational Quality of Life

**Table 7. Responses concerning AI's role in improving educational quality of life**

| Item                                                                                                | Agree n | Agree % | Neutral n | Neutral % | Disagree n | Disagree % | Mean | SD   | Rank | Interpretation |
|-----------------------------------------------------------------------------------------------------|---------|---------|-----------|-----------|------------|------------|------|------|------|----------------|
| AI provides me with educational tools that facilitate understanding difficult concepts.             | 333     | 88.80   | 32        | 8.53      | 10         | 2.67       | 2.86 | 0.42 | 1    | Agree          |
| AI helped me understand course material in a way suited to my learning style (video, text, images). | 298     | 79.47   | 59        | 15.73     | 18         | 4.80       | 2.75 | 0.53 | 2    | Agree          |
| My use of AI contributed to improving my academic achievement.                                      | 291     | 77.60   | 70        | 18.67     | 14         | 3.73       | 2.74 | 0.52 | 3    | Agree          |
| AI applications helped me develop academic skills (scientific                                       | 283     | 75.47   | 63        | 16.80     | 29         | 7.73       | 2.68 | 0.61 | 4    | Agree          |

| Item                                                                                   | Agree n | Agree % | Neutral n | Neutral % | Disagree n | Disagree % | Mean | SD   | Rank | Interpretation |
|----------------------------------------------------------------------------------------|---------|---------|-----------|-----------|------------|------------|------|------|------|----------------|
| writing, analysis, summarizing information).                                           |         |         |           |           |            |            |      |      |      |                |
| AI is an effective alternative for study assistance compared with traditional methods. | 273     | 72.80   | 81        | 21.60     | 21         | 5.60       | 2.67 | 0.58 | 5    | Agree          |
| AI contributed to my ability to engage in self-directed learning.                      | 281     | 74.94   | 62        | 16.53     | 32         | 8.53       | 2.66 | 0.63 | 6    | Agree          |
| My use of AI increased my sense of competence and achievement in the academic field.   | 258     | 68.80   | 83        | 22.13     | 34         | 9.07       | 2.60 | 0.65 | 7    | Agree          |

The educational dimension had an overall mean of 2.71 out of 3.00 ( $SD = 0.38$ ), corresponding to “Agree.” Item means ranged from 2.60 to 2.86. Standard deviations ranged from 0.42 to 0.65; the lowest dispersion concerned AI tools that facilitate understanding difficult concepts, whereas the greatest dispersion concerned the sense of academic competence and achievement.

### 11.3 Second Research Question: Recreational Quality of Life

**Table 8. Responses concerning AI’s role in improving recreational quality of life**

| Item                                                                                      | Agree n | Agree % | Neutral n | Neutral % | Disagree n | Disagree % | Mean | SD   | Rank | Interpretation |
|-------------------------------------------------------------------------------------------|---------|---------|-----------|-----------|------------|------------|------|------|------|----------------|
| The recreational options provided by AI helped reduce my feelings of boredom.             | 277     | 73.87   | 61        | 16.26     | 37         | 9.87       | 2.64 | 0.65 | 1    | Agree          |
| AI improved my recreational experience by providing content consistent with my interests. | 269     | 71.73   | 70        | 18.67     | 36         | 9.60       | 2.62 | 0.65 | 2    | Agree          |
| AI tools motivated me to try new                                                          | 257     | 68.53   | 66        | 17.60     | 52         | 13.87      | 2.55 | 0.73 | 3    | Agree          |

| Item                                                                                             | Agree n | Agree % | Neutral n | Neutral % | Disagree n | Disagree % | Mean | SD   | Rank | Interpretation |
|--------------------------------------------------------------------------------------------------|---------|---------|-----------|-----------|------------|------------|------|------|------|----------------|
| hobbies or learn new recreational skills.                                                        |         |         |           |           |            |            |      |      |      |                |
| AI enhanced my experience with recreational content.                                             | 260     | 69.34   | 59        | 15.73     | 56         | 14.93      | 2.54 | 0.74 | 4    | Agree          |
| I use AI in entertainment applications such as streaming platforms, music, and electronic games. | 251     | 66.93   | 69        | 18.40     | 55         | 14.67      | 2.52 | 0.74 | 5    | Agree          |
| AI helped me improve my social relationships (through improving communication skills).           | 216     | 57.60   | 79        | 21.07     | 80         | 21.33      | 2.36 | 0.81 | 6    | Agree          |
| AI helped me overcome feelings of loneliness or isolation.                                       | 215     | 57.33   | 64        | 17.07     | 96         | 25.60      | 2.32 | 0.85 | 7    | Neutral        |

The recreational dimension had an overall mean of 2.51 (SD = 0.56), corresponding to “Agree.” Six items were rated “Agree,” whereas the item concerning overcoming loneliness or isolation was rated “Neutral” (M = 2.32). Standard deviations ranged from 0.65 to 0.85.

#### 11.4 Third Research Question: Economic Quality of Life

**Table 9. Responses concerning AI’s role in improving economic quality of life**

| Item                                                              | Agree n | Agree % | Neutral n | Neutral % | Disagree n | Disagree % | Mean | SD   | Rank | Interpretation |
|-------------------------------------------------------------------|---------|---------|-----------|-----------|------------|------------|------|------|------|----------------|
| AI made me more aware of the skills required in the labor market. | 268     | 71.47   | 71        | 18.93     | 36         | 9.60       | 2.62 | 0.66 | 1    | Agree          |
| AI helped me discover new fields of online freelance work.        | 258     | 68.80   | 71        | 18.93     | 46         | 12.27      | 2.57 | 0.70 | 2    | Agree          |
| AI helped me plan future economic projects.                       | 259     | 69.07   | 65        | 17.33     | 51         | 13.60      | 2.55 | 0.72 | 3    | Agree          |

| Item                                                                                   | Agree n | Agree % | Neutral n | Neutral % | Disagree n | Disagree % | Mean | SD   | Rank | Interpretation |
|----------------------------------------------------------------------------------------|---------|---------|-----------|-----------|------------|------------|------|------|------|----------------|
| AI provided me with skills that can help improve income (e.g., design or programming). | 256     | 68.27   | 63        | 16.80     | 56         | 14.93      | 2.53 | 0.74 | 4    | Agree          |
| AI helped me develop ideas for entrepreneurial projects.                               | 236     | 62.93   | 91        | 24.27     | 48         | 12.80      | 2.50 | 0.71 | 5    | Agree          |
| AI helped me search for training or work opportunities suited to my specialization.    | 244     | 65.07   | 76        | 20.26     | 55         | 14.67      | 2.50 | 0.74 | 6    | Agree          |
| AI helped me manage my personal budget.                                                | 212     | 56.54   | 83        | 22.13     | 80         | 21.33      | 2.35 | 0.81 | 7    | Agree          |

The economic dimension had an overall mean of 2.52 ( $SD = 0.58$ ), corresponding to “Agree.” Item means ranged from 2.35 to 2.62. The strongest item concerned awareness of labor-market skills, whereas the lowest concerned personal-budget management.

### 11.5 Main Research Question

**Table 10. Means, standard deviations, ranking, and overall role of AI in improving university students’ quality of life**

| Dimension                    | Mean | SD   | Rank | Interpretation |
|------------------------------|------|------|------|----------------|
| Educational quality of life  | 2.71 | 0.38 | 1    | Agree          |
| Recreational quality of life | 2.51 | 0.56 | 3    | Agree          |
| Economic quality of life     | 2.52 | 0.58 | 2    | Agree          |
| Overall role of AI           | 2.58 | 0.44 | —    | Agree          |

The overall mean for AI’s role in improving university students’ quality of life was 2.58 ( $SD = 0.44$ ), indicating overall agreement. Educational quality of life ranked first ( $M = 2.71$ ), economic quality of life second ( $M = 2.52$ ), and recreational quality of life third ( $M = 2.51$ ).

Interpretive note: Because the study is descriptive and based on self-reported questionnaire responses, the discussion refers to students’ perceived role of AI and perceived benefits rather than establishing causal effects. The findings therefore indicate associations in participants’ perceptions and reported experiences, not experimentally demonstrated effects of AI.

## 12. Discussion of the Results

### 12.1 Demographic Characteristics

The age group 18–21 represented the largest share of the sample (55.2%), while the group aged 26 or older represented the smallest share. This pattern is consistent with the typical age structure of undergraduate enrollment. Female students constituted 77.87% of the sample and male students 22.13%. Because the gender distribution is uneven, the findings should be interpreted as reflecting the perceptions of the participating sample and should not be generalized to all university students without caution.

### 12.2 Educational Quality of Life

1. “AI provides me with educational tools that facilitate understanding difficult concepts” recorded the highest mean ( $M = 2.86$ ; 88.8% agreement). This is expected given university students’ exposure to modern technologies and their use of AI educational applications to overcome difficult concepts and reduce academic frustration. The result is consistent with Hamid (2024), which found that AI increased academic efficiency by improving understanding and critical thinking. It also aligns with Modernization Theory, which links the adoption of modern educational tools to greater educational efficiency, and with Uses and Gratifications Theory because students use these tools to satisfy their need for better understanding.

2. “AI helped me understand course material in a way suited to my learning style” recorded  $M = 2.75$  and 79.47% agreement. The majority reported that educational technologies enabled learning in forms more compatible with individual needs, creating space for personalized learning that recognizes learner differences. This is consistent with Al-Imari’s (2024) discussion of intelligent adaptive learning as a unique experience based on learner personality, interests, and performance. It also reflects cognitive gratification and the modernization of university learning toward student-centered, technology-supported approaches.

3. “My use of AI contributed to improving my academic achievement” recorded  $M = 2.74$  and 77.6% agreement. AI tools may provide continuous support that improves performance, grades, and confidence in academic tasks. The result is consistent with Al-Ghamdi and Bakhit’s finding that AI can provide effective educational experiences that improve educational quality and student skills. Modernization Theory interprets the integration of advanced technology as contributing to higher educational performance, while Uses and Gratifications Theory interprets students’ use as satisfying achievement needs.

4. “AI applications helped me develop academic skills” recorded  $M = 2.68$  and 75.47% agreement. More than three quarters of the sample confirmed the role of applications in developing research and academic skills. This is consistent with Ismail and Tolba’s finding that generative AI strengthened writing fluency and standards of written production. The result also reflects modernization through skill development and gratification through academic self-development.

5. “AI is an effective alternative for study assistance compared with traditional methods” recorded  $M = 2.67$  and 72.8% agreement. Students may value AI for its flexibility, speed, and continuous availability rather than waiting for help from a professor or peer. This is consistent with Modernization Theory’s emphasis on movement toward technological solutions and with Mohamed (2025), which described AI as an effective tool for developing traditional educational strategies.

6. “AI contributed to my ability to engage in self-directed learning” recorded  $M = 2.66$  and 74.94% agreement. Approximately three quarters agreed that AI supported independent learning, such as learning a new language or programming skill. Uses and Gratifications Theory interprets this as satisfying the desire for independent learning, while Modernization Theory views technology-enabled self-learning as an indicator of an increasingly advanced educational environment.

7. “My use of AI increased my sense of competence and achievement in the academic field” recorded  $M = 2.60$  and 68.8% agreement. Although it ranked last within the educational dimension, a substantial majority reported greater competence and achievement, potentially because of AI’s speed, effectiveness, and immediate feedback.

The result is consistent with Khalil et al. (2024), which found an AI-based virtual environment effective in improving cognitive achievement, skills performance, and achievement motivation.

### 12.3 Recreational Quality of Life

1. “The recreational options provided by AI helped reduce my feelings of boredom” recorded  $M = 2.64$  and 73.87% agreement. Intelligent entertainment applications such as streaming platforms, interactive games, and augmented-reality applications provide renewed and engaging content suited to immediate gratification and user preferences. This is consistent with Uses and Gratifications Theory and with Modernization Theory, in which interactive technology increasingly replaces traditional activities as a major form of entertainment.
2. “AI improved my recreational experience by providing content consistent with my interests” recorded  $M = 2.62$  and 71.73% agreement. This confirms the effectiveness of recommendation algorithms in understanding preferences and proposing suitable content. The result agrees with Kalideen and YAĞLI (2025) regarding improved recommendation systems and content personalization on platforms such as Netflix and Spotify. It also reflects personalized gratification and the modernization of cultural and recreational consumption.
3. “AI tools motivated me to try new hobbies or learn new recreational skills” recorded  $M = 2.55$  and 68.53% agreement. Intelligent technology may motivate young people to explore activities, hobbies, and entertaining courses based on their interests, broadening knowledge and refining talent. This reflects developmental gratification and the openness to diverse modern experiences emphasized by Modernization Theory.
4. “AI enhanced my experience with recreational content” recorded  $M = 2.54$  and 69.34% agreement. Intelligent recommendations and more realistic and challenging games can improve the entertainment experience. This is consistent with Leeway (n.d.), which describes AI as a major force in entertainment, games, films, and advertising. Uses and Gratifications Theory interprets this as stronger entertainment gratification, while Modernization Theory treats advanced digital entertainment as part of a modern lifestyle.
5. “I use AI in entertainment applications such as streaming platforms, music, and electronic games” recorded  $M = 2.52$  and 66.93% agreement. The result indicates widespread integration of AI-supported entertainment into young people’s everyday lives. The source manuscript relates this to Google Workspace & The Harris Poll (2024) and interprets it through Modernization Theory as a generational shift in technology use and through Uses and Gratifications Theory as the adaptation of new media to satisfy entertainment and communication needs.
6. “AI helped me improve my social relationships” recorded  $M = 2.36$  and 57.6% agreement, indicating more varied views. Some students may use AI to improve language and communication skills, organize social activities, or generate discussion ideas, whereas others view social relationships as primarily dependent on personal skills. The source manuscript links this result to Al-Ahmadi and Al-Oraifi (2025), which reported positive effects on social skills, while also noting that the social effect of AI is relative and depends on individual experience and technological integration.
7. “AI helped me overcome feelings of loneliness or isolation” recorded the lowest mean ( $M = 2.32$ ; 57.33% agreement) and was classified as Neutral. The result suggests that AI’s role in addressing loneliness is limited or uncertain for many students because loneliness is a deep social and psychological experience that entertainment or interactive technologies may not fully address. Modernization Theory recognizes changing lifestyles in which technology fills part of social time, whereas Uses and Gratifications Theory highlights the limitations of artificial means in satisfying social needs compared with direct human communication.

### 12.4 Economic Quality of Life

1. “AI made me more aware of the skills required in the labor market” recorded the highest economic mean ( $M = 2.62$ ; 71.47% agreement). AI can expose students to emerging professional skills such as programming, data analysis, and critical thinking. This is consistent with Bughin et al. (2018), which identified advanced skills associated with AI-driven jobs. Modernization Theory interprets this as a shift in workforce characteristics toward

higher-level skills suited to a knowledge economy, while Uses and Gratifications Theory interprets it as satisfying information needs related to future careers.

2. “AI helped me discover new fields of online freelance work” recorded  $M = 2.57$  and 68.8% agreement. In an era of expanding freelance platforms, students may discover opportunities to invest skills such as translation, design, and programming in remote projects. This is consistent with Wadhwani and Mirza (2025), who described AI-supported gig work as contributing to workforce resilience and new freelance roles. Modernization Theory frames freelance work as part of the digital economy, while Uses and Gratifications Theory frames it as satisfying needs for additional income and financial independence.

3. “AI helped me plan future economic projects” recorded  $M = 2.55$  and 69.07% agreement. AI can provide market information, consumer-trend analysis, organizational tools, and project-planning support. The result is consistent with Ahmed et al. (2024), which found that AI can simplify project implementation and improve stakeholder communication. It also aligns with Modernization Theory’s association between technology adoption, entrepreneurship, and innovation and with Uses and Gratifications Theory’s focus on satisfying economic self-actualization needs.

4. “AI provided me with skills that can help improve income” recorded  $M = 2.53$  and 68.27% agreement. Students may acquire technical and creative skills through online and AI-supported learning, including graphic design, programming, video editing, and other capabilities that can be translated into freelance or future professional work. Modernization Theory links technological development with investment in human capital, while Uses and Gratifications Theory interprets this as satisfying developmental and occupational-security needs.

5. “AI helped me develop ideas for entrepreneurial projects” recorded  $M = 2.50$  and 62.93% agreement. AI can function as an additional brainstorming resource through startup examples, algorithmically generated project ideas, and conversational systems such as ChatGPT. From a Uses and Gratifications perspective, students may use AI as a creative assistant to satisfy self-actualization and entrepreneurial ambition.

6. “AI helped me search for training or work opportunities suited to my specialization” recorded  $M = 2.50$  and 65.07% agreement. Electronic recruitment and training platforms use algorithms to match profiles with suitable opportunities. The source manuscript cites platforms such as LinkedIn and Saudi employment services as examples. Modernization Theory interprets this as a structural shift from traditional job-search methods to digital matching systems, while Uses and Gratifications Theory interprets it as satisfying needs for occupational security and career realization.

7. “AI helped me manage my personal budget” recorded the lowest economic mean ( $M = 2.35$ ; 56.54% agreement). More than 43% either disagreed or were neutral regarding AI’s contribution to personal financial management. The source manuscript suggests several possible explanations: personal-finance applications may be less common among university students, many students may still depend financially on their families, traditional methods may be sufficient for some, and some may be reluctant to provide financial details to AI applications. The result indicates that financial-management behavior may modernize more slowly than education, entertainment, communication, and employment-related practices.

| 12.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Integrative | Theoretical | Interpretation |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------------|
| Across the three dimensions, the educational dimension was clearly the strongest ( $M = 2.71$ ), whereas the economic ( $M = 2.52$ ) and recreational ( $M = 2.51$ ) dimensions were nearly identical. The 0.01 difference between the latter two dimensions is descriptively minimal and should not be overinterpreted. From a Modernization Theory perspective, the stronger educational result suggests that AI is most visibly incorporated where institutional routines, academic tasks, and digital learning practices already provide a structured context for technological adoption. Uses and Gratifications Theory complements this interpretation by suggesting that students repeatedly use AI where it provides immediate and recognizable gratifications, particularly understanding difficult concepts, adapting learning materials, and supporting academic tasks. By contrast, the neutral assessment of AI in overcoming loneliness ( $M = 2.32$ ) indicates a boundary to technological gratification: AI may support information, entertainment, and task-oriented needs more readily than it substitutes for direct human relationships. Taken together, the two theoretical perspectives suggest that the perceived contribution of |             |             |                |

AI to quality of life depends not simply on access to technology, but on the fit between the technology, the institutional context, and the type of need students seek to satisfy.

### 13. Summary of Findings

The study investigated the role of AI in improving the educational, recreational, and economic quality of life of university students and interpreted these effects through Modernization Theory and Uses and Gratifications Theory. Methodologically, the study used a descriptive social-survey design and an electronic questionnaire. Educationally, AI facilitated access to information, supported understanding through personalized and interactive tools, improved academic achievement and research skills, and provided additional support beyond traditional lectures. Recreationally, AI enriched leisure through intelligent content recommendations, games, and personalized entertainment, reducing boredom and supporting more individualized experiences. Economically, AI increased awareness of labor-market skills, supported freelance-work discovery and entrepreneurial thinking, and helped some students identify training and employment opportunities. Economic use remained relatively less mature than educational use, but the findings indicate growing awareness of the importance of intelligent technologies in building students' professional and financial futures.

### 14. Recommendations

#### 14.1 Educational Institutions

Integrate AI applications into the university educational environment by incorporating AI-supported learning technologies into university curricula and establishing technical-support centers and innovation laboratories to help students use intelligent applications such as adaptive-learning systems and virtual academic advisors. This recommendation is directed to the Ministry of Education, university administrations, and curriculum-development bodies.

#### 14.2 Recreational Institutions

Develop intelligent digital recreational content directed at university students that balances entertainment and benefit through digital competitions and university business or innovation incubators targeting students in technical and media specializations to design AI-supported educational-entertainment applications. This recommendation is directed to digital-entertainment developers and bodies supervising media and culture within universities and society.

#### 14.3 Economic Institutions

Economically empower university students through AI by integrating academic courses and applied workshops on AI skills and applications. This recommendation is directed to university administrations, entrepreneurship centers, and youth-support bodies such as the Ministry of Communications and Information Technology and youth-capacity development programs.

### 15. Limitations and Future Research

The findings should be interpreted within the boundaries of the study. First, the participants were drawn from the College of Arts at King Faisal University, which limits generalization to students in other colleges, universities, or disciplinary contexts. Second, the sample included a substantially higher proportion of female than male students. Third, the study relied on self-reported perceptions collected through a cross-sectional questionnaire; consequently, the results do not establish that AI caused improvements in quality of life. Fourth, the study examined educational, economic, and recreational dimensions but did not test differences in these dimensions by gender or age. Future research may employ multi-university samples, more balanced demographic representation, longitudinal or mixed-method designs, and inferential analyses of group differences. Qualitative interviews may also clarify why AI appears less influential in areas such as loneliness and personal-budget management.

## 16. Conclusion

The study concludes that participating university students perceived artificial intelligence as having a positive, multidimensional role in their quality of life. The strongest perceived contribution was educational, while the economic and recreational dimensions were positive and very close in magnitude. AI was particularly valued for facilitating understanding, supporting learning, increasing awareness of labor-market skills, and personalizing recreational content. At the same time, the comparatively weaker results for overcoming loneliness and managing personal budgets demonstrate that perceived benefits are not uniform across life domains. The study therefore contributes an integrated social perspective on how university students perceive AI across education, economic preparation, and recreation, while emphasizing that these descriptive findings should not be interpreted as causal evidence. Purposeful institutional integration, responsible-use guidance, and further research across more diverse student populations are recommended.

## References

- Abdel Aal, Mohamed Shaabaan. (2022). The Theory of Modernization Between Theoretical Reality and Field Application, Faculty of Arts Magazine - Beni Suf University, (63).
- Al Riyadh Newspaper. (2024). Employing Artificial Intelligence for the Future. <https://2u.pw/VQnCu>
- Al-Ahmadi, Raghad Omar Jaber, and Al-Oraifi, Rabab. (2025). The Effectiveness of Using an Artificial Intelligence-Based Application in Developing Some Social Skills in Early Childhood, Journal of the Faculty of Education, 14(5,2), 226-196.
- Al-Ajmi, Areeb bint Bati Qhais. (2025). The impact of artificial intelligence on work systems and the position of the Saudi regulator: An analytical study. The International Journal for the Publication of Research and Studies, 6.
- Al-Amri, Saleh Mahdi; Al-Youdaw, Hassan Jamal. (2024). Analyzing the Impact of Artificial Intelligence on the Future of the Labor Market in the Global Economy, Al-Ghary Journal of Economic and Administrative Sciences, 20 (Special Issue), 43-62.
- Al-Ansari, Ali; Al-Harshani, Anwar Fahd; and Awad, Sara Ali. (2023). The Role of School Administration in Enhancing Artificial Intelligence Culture among General Education Students in Kuwait. Journal of the Faculty of Education - Ain Shams University, No. 47 (Part 3).
- Al-Asaf, Saleh bin Hamad. (2003). Introduction to Research in Behavioral Sciences, Al-Obaikan Library, 1st Edition, Riyadh.
- Al-Duhayan, Saud. (1420H). Sample Selection Guide, Series of Methodological Research; 1, 1st Edition, Cairo: Egyptian Culture.
- Al-Ghamdi, R. K. M., & Bakhit, S. A. A. (2023). Improving the quality of education in the Kingdom of Saudi Arabia using artificial intelligence applications. Arabic Studies in Education and Psychology, (148), 86–101.
- Al-Imari, Al-Saddeeq Al-Sadiqi. (2024). Educational Opportunities and the Issue of Inequality in the Western School, Educational Notebooks Magazine, (13). <https://2u.pw/Cw9VG>
- Al-Khubairi, Sabriya Muhammad. (March 2020). The level of secondary school teachers in Al-Kharj Province in employing artificial intelligence skills in education. Arab Studies in Education and Psychology. (ASEP), (119).
- Al-Kifwi, Abu al-Baq'a' Ayoub. (1998). The Colleges (A Dictionary of Terminology and Linguistic Differences), Beirut.
- Al-Marai, Abdullah bin Ali. (2024, October). "Saudi youth's awareness of artificial intelligence technologies and their impact on achieving the quality of visual content through media: A field study." Journal of Media Research, 72(2).
- Al-Mutairi, Badriya Saud. (2023). The extent of the impact of the General Entertainment Authority's programs on enhancing the quality of life of Saudi community members from their perspective. Journal of Educational Sciences and Human Studies, (30).
- Al-Obeidi, Raafat Aasim. (2015). The Role of Artificial Intelligence in Achieving Green Production: An Exploratory Study of Manager Performance in a Sample of Operating Industrial Companies. Kirkuk University Journal for Administrative and Economic Sciences, 5(1), 12- 37.
- Al-Qassem, Mayada. (2021). Research Methodologies and Their Applications in Sociology: A Sociological Analytical Study. Arab Journal of Scientific Publishing, (31).
- Al-Sayed, Mustafa Yosri. (2021). Competencies of Adaptive (Smart) Teaching Teachers, Journal of the International Association for E-Learning: 1(2), 59-60.
- Al-Sheikh, Nouf Ibrahim. (2020). Quality of life among university female students: A study on a sample of students from King Saud University and Al-Faisal University in Riyadh, Journal of Social Sciences. . <https://doi.org/10.34120/0080-048-004-003>

- Al-Taher, Al-Nuwi; and Al-Nuwi, Amina. (2020). The importance of time management and stress and their impact on the quality of life among university students. In the proceedings of the first national symposium: Quality of life and sustainable development in Algeria - hopes and challenges.
- Amin, Jonieh. (2023). The Theory of Transition from Traditional Society (Modernization). Lecture Series on Principles of Media and Communication Theories for Third Year Students - Media - Second Semester.
- Awad, Dina Al-Shirbini. (2024). A proposed program for community organization methods to enhance university students awareness of the role of artificial intelligence in improving education quality. Journal of Social Work Studies, 66(Part Three).
- Badawi, Ahmed Zaki. (1993). Dictionary of Social Science Terminology - Lebanon Library - Beirut.
- Ben Amara, Sumaya. (November 2023). An ontology of generative AI-based entertainment: A theoretical overview of the future development of the film industry and video services. In the proceedings of the International Symposium on New Media and Audiovisual Transformations in the World. <https://www.researchgate.net/publication/376170014>
- Ben Ghaffa, Sherifa. (2016). Printed Scale of Methodology and Research Techniques. Dr. Mohammed Ben Dahman University Setif, Faculty of Humanities and Social Sciences.
- Hamid, Muhammad Abdul-Maqsoud. (2024). The impact of intelligent educational support through an interactive website based on artificial intelligence on developing the academic performance of graduate students, Journal of the College of Education, 40(8).
- Hashim, Abdul Moneim. (1992). Towards a Developed Curriculum for Social Work in the Field of Youth, Fifth Scientific Conference, Faculty of Social Work, Cairo University, Fayoum Branch.
- Hassan, Abdul Basit Mohammed. (1998). Foundations of Social Research. 12th edition. Wahba Library. Cairo.
- Hassan, Eman Mohamed Ahmed. (2022, October/December). The Uses of Educational Media Students for Artificial Intelligence Applications and Achieved Fulfillments: A Field Study. The Egyptian Journal of Media Research, 81 (Part 3).
- Hussein, Nazmi Khalid. (2023). The role of artificial intelligence in achieving sustainable development: A legal analytical study. Ramah Journal of Research and Studies, (89), 191-232. <http://search.mandumah.com/Record/1439692>
- Ismail, Abdul Rahim Fathi; and Tolba, Amani Hamed Marghani. (February 2025). A program using generative artificial intelligence models to develop writing flow skills and improve standards of artificially generated writing among high school students, College of Education Educational Journal 2(130).
- Kaati, Qais Jaber. (2020). Validity and Reliability Procedures. University of Baghdad, College of Media.
- Khaled, Hamid. (2007). Research Methodology in Social and Human Sciences, 1st Edition, Bridges for Publishing and Distribution, Algeria.
- Khalil, Hanan Hassan; Muktar, Ihab Ahmed Mohammed; and Al-Senaidi, Said Salem Khamis. (2024). The effectiveness of a virtual environment based on artificial intelligence applications in developing instructional design skills and achievement motivation among student teachers at the College of Education, Journal of Education College, 40(12).
- Lashin, Reem Abdul Moneim Ahmed Ismail. (2023). The Impact of Artificial Intelligence on Economic Development: An Analytical Study Applied to the Industrial Sector. Journal of Legal and Economic Studies, 13(86), 1-34. <http://dx.doi.org/10.21608/mjle.2023.340142>
- Mohamed, Abu Al-Faraj Abdul Rahman. (1422 AH). The Provision for the Journey in the Science of Interpretation.
- Mohamed, Ali Mohamed. (1980). Youth and Society, Egyptian Book Authority, Cairo.
- Mohamed, Azhar Rashid. (2025). The impact of artificial intelligence applications on enhancing educational strategies in traditional learning environments: A descriptive study, Journal of Basic Sciences, (25), 439- 463.
- Mohamed, Shaimaa Shaaban; Ismail, Mahmoud Hassan, and Hassan, Hassan Farraj. (2025). The use of artificial intelligence technologies in social media and the impressions achieved among adolescents, Journal of Childhood Studies, 28(1), 111–115. <https://doi.org/10.21608/JSC.2025.426624>
- Powdthavee, N., Lekfuangfu, W. N., & Wooden, M. (2015). What's the good of education on our overall quality of life? A simultaneous equation model of education and life satisfaction for Australia. Journal of Behavioral and Experimental Economics, 54, 10–21. <https://doi.org/10.1016/j.socec.2014.11.002>
- Ross, C. E., & Van Willigen, M. (1997). Education and the subjective quality of life. Journal of Health and Social Behavior, 38(3), 275–297. <https://doi.org/10.2307/2955371>
- Salem, Mohamed. (2021). Quality of Life Definition and Concept. The Arab Network for Excellence and Sustainability. <https://share.google/zO7IEVCPKuKlvRhTX>
- Shata, Said Ali. (1999). Role Theory and the Social Perspective, Sociology, Al-Ishraq Printing - Alexandria - 1st Edition.
- Twalbah, Ahmad. (2021). Youth Use of Music Broadcasting in the Kingdom of Bahrain and the Realizations Achieved From It. Journal of Media Research, Al-Azhar University - College of Media, Issue 57 (Part One).

- Tayel, Iman Muhammad Khairi. (December 2022). Artificial intelligence and its effects on the labor market, Journal of Legal and Economic Studies, 8(4), 713-749. <https://doi.org/10.21608/jdl.2022.272407>
- The Saudi Data and Artificial Intelligence Authority (SDAIA). <https://2u.pw/DMVmq>
- Ahmed, M. S., Jannat, S. F., & Tanim, S. H. (2024). Artificial intelligence in public project management: Boosting economic outcomes through technological innovation. International Journal of Applied Engineering & Technology, 6(4), 47–63.
- Bughin, J.; Hazan, E.; Lund, S.; Dahlström, P.; Wiesinger, A., & Subramaniam, A. (2018, May 23). Skill shift: Automation and the future of the workforce. McKinsey Global Institute. <https://2u.pw/WTMTE>
- Dong, X., Xing, Z., Song, H., & Hu, D. (2025). The impact of education on subjective well-being: A meta-analysis based on 59 empirical studies. Frontiers in Psychology, 16, 1651896. <https://doi.org/10.3389/fpsyg.2025.1651896>
- Google Workspace & The Harris Poll. (2024, December 13). Poll uncovers how new and aspiring leaders deepen their impact with AI. <https://2u.pw/hsWyz>
- Kalideen, M. R., & Yağlı, C. (2025). Machine learning-based recommendation systems: Issues, challenges, and solutions. Journal of Information and Communication Technology, 2(Special Issue), 6–12.
- Kalita, E., Alfarwan, A. M., El Aouifi, H., Kukkar, A., Hussain, S., Ali, T., & Gaftandzhieva, S. (2025). Predicting student academic performance using Bi-LSTM: A deep learning framework with SHAP-based interpretability and statistical validation. Frontiers in Education, 10, 1581247. <https://doi.org/10.3389/educ.2025.1581247>
- Leeway, Hertz. (n.d.). AI in media and entertainment: Use cases, benefits and solution. <https://www.leewayhertz.com/ai-in-media-and-entertainment/>
- Southgate, E.; Blackmore, K.; Pieschl, S.; Grimes, S.; McGuire, J. & Smithers, K. (2019). Artificial Intelligence and Emerging Technologies in Schools: A research report, Newcastle:University of Newcastle, Australia
- Wadhwani, K., & Mirza, I. (2025). AI-powered gig education: Transforming workforce resilience and economic recovery in the digital age. GAP Bodhi Taru: A Global Journal of Humanities, 8(Special Issue on Artificial Intelligence in Interdisciplinary Studies), 101–114.
- Wang, T.-I., Wang, K.-T., & Huang, Y.-M. (2008). Using a style-based ant colony system for adaptive learning. Expert Systems with Applications, 34(4), 2449–2464. <https://doi.org/10.1016/j.eswa.2007.04.014>