

DOI: 10.5281/zenodo.19713735

THE ROLE OF ARTIFICIAL INTELLIGENCE IN ACHIEVING PSYCHOLOGICAL WELL-BEING AND QUALITY OF LIFE AMONG UNIVERSITY STUDENTS

Rehab Tharwat Abd El Ghani Abo Bakr^{1*}, Walid Atef ElSayad², Maher Ahmed Hassan³,
Amira Mohammed Ahmed⁴, Amr Fikry Mohamed Salem⁵, Mostafa Mohamed Ahmed
Elfeky⁶

¹Assistant Professor of Instructional Technology College of Arts, Imam Abdulrahman Bin Faisal University,
Dammam, Saudi Arabia, Rabdelghni@iau.edu.sa

²Applied College, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia. waelsayad@iau.edu.sa

³College of Education, Imam Abdulrahman Bin Faisal University, Dammam, Saudi Arabia,
mamohamed@iau.edu.sa

⁴Assistant Professor of Media, College of Arts, Imam Abdulrahman Bin Faisal University, Dammam, Saudi
Arabia, amahmd@iau.edu.sa

⁵Associate Professor, Deanship of student Affairs, Imam Abdulrahman Bin Faisal University, Dammam,
Saudi Arabia, afsalem@iau.edu.sa

⁶Professor of Sociology and Social Work, College of Arts, Imam Abdulrahman Bin Faisal University,
Dammam, Saudi Arabia, mmelfeky@iau.edu.sa

Received: 23/03/2026

Accepted: 09/04/2026

Corresponding Author: Rehab Tharwat Abd El Ghani Abo Bakr
(Rabdelghni@iau.edu.sa)

ABSTRACT

The current study aimed at identifying the reality of using artificial intelligence (AI) and its applications, psychological well-being, and quality of university life among students at Imam Abdulrahman bin Faisal University, and the relationship between them. The study was based on the descriptive survey method. A questionnaire was designed to measure the use of artificial intelligence (AI) and its applications, psychological well-being, and quality of university life. It was administered to a stratified random sample of (411) students at Imam Abdulrahman bin Faisal University. The study found out a medium to high level of use of artificial intelligence (AI) and its various applications, psychological well-being and its various dimensions, and quality of university life and its various dimensions among university students. In addition, a direct relationship was found out between the use of artificial intelligence (AI) applications in its total score and both psychological well-being and quality of university life with their various dimensions. The results indicated no statistically significant differences in psychological well-being and the total score of quality of university life based on gender and college type. There were differences in the use of artificial intelligence (AI) applications attributed to the gender variable in favor of females, while there were no differences in the use of artificial intelligence (AI) applications attributed to the type of college variable. The current study recommended the need to raise awareness of using artificial intelligence (AI) applications and focusing on them in university students' academic lives, which would enhance their psychological well-being and the quality of their university life.

KEYWORDS: Artificial Intelligence, Psychological Well-Being, Quality of Life.

1. INTRODUCTION

The current era has witnessed a radical transformation in various aspects of our lives, driven by the rapid advancement of artificial intelligence technologies. This impact is no longer limited to industries but has extended to encompass aspects of daily life for individuals, including university students. Because of easy access to diverse artificial intelligence (AI) applications, university students are increasingly using them in multiple academic and personal areas, from time management and studying to obtaining information and completing tasks. University education is an important stage that prepares trained and qualified academic cadres to lead community institutions.

In light of the information and technological revolution, witnessed by contemporary societies, interest in university education is not an intellectual luxury, but rather an absolute necessity. University students represent an important segment of any society, as their quality is affected by the entire system's quality. Therefore, attention must be paid to all aspects of their family, social, public health, and mental health, as their quality of life plays a major role in the educational system quality (Abdul Zahra & Al-Jumaan, 2016). University life, especially when students enroll in the first year, is described by several characteristics, the most important of which are: psychological and emotional instability, and the individual has a tendency to explore the university environment in order to strive to achieve compatibility with it. Therefore, the student must possess certain skills that enable him to adapt and adjust to university life, which is an indicator of the basis of their success (Besette & Burton, 2014).

Wang et al. (2010) stated that quality of life expresses satisfaction with five areas: personal growth, work, family life, social relationships, and sense of security. The concept of "quality of life" (QoL) encompasses all aspects of people's standard of living; including: economic, social, or health-related factors, as well as their perceptions of their lives. Despite the increasing application of artificial intelligence (AI) and machine learning (ML) technologies in processing and modeling diverse datasets related to these fields, there remains a significant challenge in addressing the various issues in quality-of-life research and in fully harnessing these technologies to improve quality of life research outcomes. Despite technological advances, current research endeavors often ignore the complexity and multifaceted nature of AI (Jannani et al., 2024).

The integration of artificial intelligence (AI) systems into education has sparked controversy over

their impact on college students' psychological well-being. Given that mental health is essential to their development and academic success, it is essential to assess how interactions with technology impact their psychological well-being. Previous reviews indicate that while some artificial intelligence (AI) systems provide personalized support that benefits learning and mental health, others may generate stress and anxiety due to information overload and lack of meaningful human interaction (Velastegui et al., 2023).

The increasing prevalence of artificial intelligence (AI) applications among students raises important questions about their impact on various aspects of their lives. Even while these technologies have a lot of potential to improve academic performance and save time and effort, it remains essential to explore the complex relationship between students' use of these applications and their quality of life and psychological well-being. Does reliance on artificial intelligence (AI) contribute to alleviating academic stress and enhancing a sense of accomplishment and satisfaction, or it could lead to potentially negative effects such as feelings of isolation or overdependence. This study seeks to explore this question.

Artificial intelligence (AI) applications have become an integral part of young people's lives today. These technologies can contribute to enhancing individual psychological well-being and mental health, and improving the quality of life for university students. These tools and technologies can be effectively and safely utilized and employed. It can help students achieve their full potential and build a better future for themselves and their community by freeing up time to work on areas that require human creativity. For example, AI-powered e-learning platforms can provide students with new and diverse learning opportunities, enabling them to acquire new skills and develop their abilities. In addition, they can help them complete routine tasks faster and more efficiently, freeing up time and effort for other activities that contribute to improving their quality of life, such as exercise, hobbies, and socializing.

Moreover, AI-powered chatbots can provide initial psychological support to students by providing a safe space to express feelings and alleviate stress and anxiety. These applications can direct students to specialized psychological support sources when needed. Thus, this is the current study's concept.

Hence, the study problem emerged: to identify how students' use of various artificial intelligence

applications affects their psychological health and quality of university life. The current study aims at exploring the relationship between the various uses of artificial intelligence, psychological well-being, and quality of life among students at Imam Abdulrahman bin Faisal University. To achieve this aim, the study main question will be answered: What is the relationship between the use of artificial intelligence applications and psychological well-being and quality of life among students at Imam Abdulrahman bin Faisal University? The current study may benefit decision-makers at various Saudi universities, faculty members, and university students.

In recent years, the world has witnessed a major technological renaissance and development in the field of artificial intelligence (AI) and its applications. Currently, no field is devoid of the use of artificial intelligence (AI) technologies. In the field of education, AI-powered tools enable access to learning for all students. Furthermore, artificial intelligence (AI) can be used to identify strengths and weaknesses in existing education systems.

Machine learning and data mining tools are used in artificial intelligence (AI) to analyze educational data. Artificial intelligence (AI) can help higher education students improve their academic research by analyzing large amounts of data related to their research topic. There are many other uses for university students to complete their work. Students can also employ these technologies to perform a variety of tasks, including automatic reading of texts for speech recognition, text refinement and automatic text generation, information extraction and retrieval, question understanding and answering, and automated translation and summarization. The impact of artificial intelligence on student learning is a critical research topic due to its potential to transform education and enhance its outcomes.

Understanding the implications, benefits, and challenges associated with integrating artificial intelligence (AI) into student life is crucial for educators, policymakers, and researchers to make informed decisions and shape future educational practices (Raja et al., 2024). The widespread use of these applications has had an impact on the quality of life and psychological well-being of university students. Quality of life is not limited to physical or material health but also includes a sense of psychological comfort and the ability to achieve a balance between work and personal life.

The dimensions of quality of life refer to the various areas that influence a person's well-being and enjoyment of life. These dimensions can vary in

importance depending on the individual and the environment in which they live, but in general, they include the following main dimensions. The health dimension: this includes physical and mental health. Good health is considered a fundamental factor that significantly impacts quality of life, as individuals enjoy a life free of physical or mental illness and can easily carry out daily activities. The social dimension which is related to social relationships and communication with others. This dimension includes family, friends, and society in general. Supportive and stimulating social relationships contribute significantly to enhancing quality of life through the individual's sense of belonging and support. The economic dimension: it is about economic conditions, such as income level, financial security, and the ability to meet basic life needs such as housing and food. A good economic situation provides individuals with a greater ability to enjoy a comfortable life. The psychological and emotional dimension which is related to an individual's internal feelings, such as feelings of happiness, satisfaction, and emotional balance. This dimension is important because it affects how an individual deals with life's challenges and the extent to which they enjoy them. The environmental dimension: includes external factors that affect quality of life, such as the residential environment, clean air, environmental security, and public facilities, a safe and healthy environment that helps promote comfort and well-being. The cultural and educational dimension includes opportunities for education, culture, and personal development. Education is considered an important factor that enhances quality of life by enabling individuals to realize their potential and develop their skills. The recreational and activities dimension relates to recreational opportunities and activities that individuals can participate in, such as hobbies, sports, and travel. These activities provide psychological comfort and enhance feelings of well-being. These dimensions demonstrate how quality of life is not limited to just one aspect, but rather the result of the interaction of several factors that affect the overall human experience (Habita & Hamza, 2020).

The concept of well-being is a relatively new concept in psychology. It has been the focus of positive psychology for the past decades. Diener (2000), one of the most prominent researchers on the subject of well-being, stated that psychologists' knowledge of the term well-being is still preliminary, and from 1938 to 2002, there were (138) global studies on well-being. In the Arabic language, there is a difference in its translation. Some consider it

synonymous with happiness, and it was translated as "Better Existence" or "Good Living". Others consider it as synonymous with mental health or psychological well-being, while others see it as synonymous with quality of life. In addition to the term "better existence," researchers use several other concepts, including personal happiness, good condition, self-enjoyment, good life, psychological well-being, and others (Maamaria, 2012).

Jad al-Rab (2013) defined psychological well-being as an individual's enjoyment of good psychological health, the ability to pursue goals, and establish connections with others. Yassin et al. (2014) defined it as: a person's feeling of happiness and satisfaction with life regarding its behavioral, religious, health, and social aspects, with the individual demonstrating effectiveness. The way psychological well-being is expressed varies among individuals. It is a mood state that appears in the brain and is responsible for creating mood and feelings. It is composed of a number of functions, characteristics, and means that interact with each other, including mental, psychological, and administrative capabilities, physical structure, genetic and organic characteristics, and historical life events (Abu Warda, 2020).

Psychological well-being, as explained by Ryff, consists of six elements: self-autonomy, environmental mastery, personality development, positive relationships with others, life goals, and self-acceptance. However, she re-presented her theory after clarifying the difference between those with high psychological well-being and those with low psychological well-being in terms of self-autonomy, environmental compatibility, personality development, positive relationships with others, life goals, and self-acceptance, as explained by (Al-Suwailem, 2019).

Some previous studies demonstrated that the relationship between the study variables. Silva et al. (2018) indicated the importance of the impact of communication technology on the dimensions of quality of life and social relationships. Therefore, the results reinforce the importance of policies aimed at electronic integration of the elderly as a means of enhancing their quality of life. Al-Gharib study (2024) also indicated the role of artificial intelligence (AI) in improving the quality of work life. The results showed a significant correlation between artificial intelligence (AI) and its dimensions and improving the quality of work life.

While a study by Alalwany & Yonan (2023) revealed that the integration of artificial intelligence (AI) significantly improved student performance

metrics, including exam grades, assignments, Artificial intelligence (AI) tools facilitate personalized learning experiences and immediate educational adjustments, promoting a comprehensive and adaptive learning environment. A study concluded that artificial intelligence (AI) fields play a statistically significant role in improving the quality of student services at the University of Jordan (Al-Masry, 2022). A study by Al-Attas et al (2021) concluded that there is no correlation between the quality of university life and motivation to learn and the level of ambition.

The results of a study carried out by Al-Assimi and Mukhaimer (2019) showed that the level of quality of university life among Umm Al-Qura University students was average, and that the level of academic self-efficacy among Umm Al-Qura University students was high. In addition, it indicated the possibility of predicting the quality of university life through academic self-efficacy among Umm Al-Qura University students. Another study indicated that there are statistically significant differences attributed to the academic average in psychological well-being, and there are significant differences attributed to the variable of the academic stage and type of study, which directly affects the level of achievement and academic success (Liu et al., 2019). Meanwhile, a study by Al-Dosari and Al-Youssef (2024). It showed that there is a strong correlation with a positive trend between psychological well-being and the trend towards using artificial intelligence.

2. STUDY METHODOLOGY

2.1. Study Method

The descriptive survey method was used due to its suitability for the current study.

2.2. Study Sample:

The study sample consisted of (407) students from Imam Abdulrahman bin Faisal University in Dammam, Kingdom of Saudi Arabia, divided into (84) males, representing 20.6%, and (323) females, representing approximately 79.4%. Participants consisted of (263) students in theoretical colleges and (144) students in practical colleges.

2.3 Study Instruments

To achieve the study aims, an instrument was designed consisting of three parts: the first part: a questionnaire to measure the reality of using artificial intelligence (AI) applications, consisting of (12) statements, the second part: a questionnaire to measure the well-being of university students,

consisting of (26) statements, and the third part: a questionnaire to measure the quality of university life for students, consisting of (17) statements.

2.4 Validity and Reliability:

The validity of the questionnaire was calculated by submitting it to a group of (7) jury members with diverse specializations. They recommended modifying some of the wording, which was subsequently modified, and agreement exceeded 85%. After administering the questionnaire to a pilot sample of university students consisting of (35 male and female students), the internal consistency of the questionnaire was calculated between the statements and sub-dimensions, and it was as follows: The degree of correlation of the statements of the first dimension with its total score ranged between (0.76 - 0.86), and the degree of correlation of the statements of the second dimension with its total score ranged between (0.79 - 0.82), and all of them are high and significant consistency coefficients at (0.01) significance level, which means the validity of the questionnaire results. The reliability of the questionnaire was calculated using Cronbach's alpha coefficient, and the reliability coefficient of the questionnaire for the first pivot was (0.87), the second pivot was (0.91), and the third pivot was (0.90), which are highly significant reliability coefficients at (0.01) significance level, which means the reliability of the questionnaire results.

3. RESULTS

1. To answer the types of artificial intelligence (AI) applications prevalent among university students, the following artificial intelligence (AI) applications were listed in order:

Proofreading and linguistic review reached (32.2%) of the total usage, followed by various e-learning applications at (19.2%), followed by various other applications used by university students at (14.7%), followed by translation and rephrasing applications at (11.8%), time management, task organization, and priority applications at (10.3%), followed by enhanced social media applications with a usage rate of (4.4%), followed by mental health and behavior modification applications with an equal usage rate of (2.9%) each, followed by photo, video, and audio editing applications with a usage rate of (1.5%).

2. As for the students' responses to the pivot of employing artificial intelligence (AI) applications, by calculating the arithmetic mean and standard deviation for the pivot of employing artificial intelligence (AI)

applications, the responses were as follows:

The use of artificial intelligence (AI) applications for translation and rephrasing came in first rank, with a mean score of (4.56) and a standard deviation of (0.62). The use of artificial intelligence (AI) applications for various e-learning applications came in second rank, with a mean score of (4.4) and a standard deviation of (0.72). The use of artificial intelligence (AI) applications for review and linguistic proofreading came in third rank, with a mean score of (4.37) and a standard deviation of (0.72). The use of artificial intelligence (AI) applications for enhancing self-learning and professional development came in fourth rank, with a mean score of (4.25) and a standard deviation of (0.92). The use of artificial intelligence (AI) applications for testing new technologies came in fifth rank, with a mean score of (4.16) and a standard deviation of (0.82). The use of artificial intelligence (AI) applications for "providing practical solutions to problems I face in my life came" in sixth rank, with a mean score of (4.16) and a standard deviation of (0.99). The use of artificial intelligence (AI) applications for keeping up with technological developments came in seventh rank, with a mean score of (4.14) and a standard deviation of (0.89). The eighth rank was for the use of artificial intelligence (AI) applications for time management, task organization, and priorities, with a mean score of (4.05) and a standard deviation of (1.07). In the ninth rank was the use of artificial intelligence (AI) applications for entertainment and amusement, with a mean score of (4.04) and a standard deviation of (1.04). In the tenth rank was the use of artificial intelligence (AI) applications for editing images, videos, and audio clips, with a mean score of (3.91) and a standard deviation of (1.2). The eleventh rank went to the use of artificial intelligence (AI) applications for communicating with colleagues and professors, with a mean score of (3.91) and a standard deviation of (1.2). The last rank went to the use of artificial intelligence (AI) applications for alleviating stress and anxiety, with a mean score of (3.58) and a standard deviation of (1.11).

To discuss and interpret the above results regarding the use of artificial intelligence (AI) applications for translation and rephrasing, the second rank was for the use of artificial intelligence (AI) applications for various e-learning applications, followed in third rank by the use of artificial intelligence (AI) applications for linguistic review and proofreading. The last three ranks were for the use of artificial intelligence (AI) applications for editing images, videos, and audio clips. The next

rank was for the use of artificial intelligence (AI) for communicating with colleagues and professors, and the last rank was occupied by the use of artificial intelligence (AI) applications for alleviating stress and anxiety. This result is consistent with the findings of the study by Alalwany & Yonan (2023), which confirmed that students have a medium-to-high degree of use of artificial intelligence (AI) and its applications in their daily and educational lives, which indicates their awareness of artificial intelligence (AI) concepts and applications. A study by Al-Masry (2022) indicated a high understanding of artificial intelligence (AI) applications among university students. This result shows that students are aware of the use of artificial intelligence (AI) and its various applications in their university life,

3. Students' responses to the psychological well-being pivot and its various dimensions. The dimensions were in order as follows:

Table 1: The Arithmetic Mean and Standard Deviation of the Dimensions of the Psychological Well-Being Pivot and its Total Score.

No.	Dimensions	Mean	SD	Rank
1	Positive Relationships	4.0644	0.71002	2
2	Autonomy	3.7977	0.57536	5
3	Self-Acceptance	4.0403	0.62489	3
4	Personal Growth	4.3661	0.71157	1
5	Professional Growth	3.9037	0.66434	4
Total Score for Psychological Well-Being		4.0344	0.53309	

The previous table shows that all dimensions have medium and high significance. Personal growth came in first rank with a mean score of (4.37) and a standard deviation of (0.71), followed by positive relationships in second rank with a mean score of (4.06) and a standard deviation of (0.71), followed by self-acceptance in third rank with a mean score of (4.04) and a standard deviation of (0.62), followed by professional growth in fourth rank with a mean score of (3.9) and a standard deviation of (0.66), and finally autonomy in fifth rank with a mean score of (4.04) and a standard deviation of (0.62), and the total score for psychological well-being was with a mean of (4.03) and a standard deviation of (0.53).

To discuss and interpret this result, the researchers pointed out that the results indicated that there is a medium to high attitude in psychological well-being in its various dimensions, respectively (personal growth, positive relationships, self-

acceptance, professional growth, and autonomy) and its total score among university students. Regarding these results, it can be indicated that they were consistent with reality, as this age group (university students) has psychological well-being that is compatible with the work, tasks, and assignments they are going through. The previous result is consistent with what was concluded by the studies by: Wigtil & Henriques (2015), Kharnob (2016), Hadi (2019). All of those studies indicated the presence of a medium to high level of psychological well-being and its various dimensions among university students, and the study of Al-Dosari and Al-Youssef (2024), as the results showed a high level of psychological well-being for university students. A study by Liu et al. (2019) indicated that the level of psychological well-being for university students affected some variables, the most important of which are: the level of achievement and their academic success. The study of Manoukh (2020) found out that the level of psychological well-being of undergraduate students affected the emotional intelligence of university students.

4. Students' responses to the quality of university life pivot and its various dimensions. The dimensions were in order as follows:

Table 2: The Arithmetic Mean and Standard Deviation of the Dimensions of the University Life Quality Pivot and its Total Score.

No.	Dimensions	Mean	SD	Rank
1	Quality of Academic Life	3.97	0.93053	2
2	Quality of Psychological Life	3.63	0.90751	4
3	Quality of Social Life	3.92	0.78327	3
4	Quality of University Environment	4.01	0.77827	1
Total Score of University Life Quality		3.88	0.70049	

It is clear from the previous table that all dimensions have medium and high significance. The quality of the university environment was in the first rank with a mean score of (4.01) and a standard deviation of (0.78), followed in the second rank by the quality of academic life with a mean score of (3.97) and a standard deviation of (0.93), and in the third rank by the quality of social life with a mean score of (3.92) and a standard deviation of (0.78), and finally in the fourth rank by the quality of psychological life with a mean score of (3.63) and a standard deviation

of (0.91), and the total score for the quality of psychological academic life was with a mean score of (3.88) and a standard deviation of (0.7).

To discuss and interpret this result, the researchers pointed out that the results indicated a medium to high attitude in the quality of university life in its various dimensions, respectively (quality of university environment, quality of academic life, quality of social life, and finally quality of psychological life) and its total score among university students. Regarding these results, it is found out that they were consistent and in line with reality, as this age group (university students) has a good quality of university life, which indicates the services they enjoy at the university. This result is consistent with the findings of Saini et al. (2020), which demonstrated how the time university students spend on social media affects their quality of life (QOL). Silva et al. (2018), which indicated the importance of the Internet on the dimensions of quality of life among the elderly, and Campisi et al. (2015), which reinforced students' use of social networks with friends as a strong indicator of quality of life.

5. The relationship between the use of artificial intelligence (AI) applications and psychological well-being:

Table 3: Correlation Coefficient between the Use of Artificial Intelligence (AI) Applications and Psychological Well-Being and its Dimensions.

	Empl oying Artifi cial Intelli gence (AI) Appli cations	Positi ve Relati onshi ps	Aut ono my	Self- Acce ptan ce	Per son al Gro wth	Profe ssion al Gro wth	To tal Sc ore
Empl oying Artifi cial Intelli gence (AI) Appli cations	1	0.242* *	0.32 2**	0.229 **	0.33 9**	0.318 **	0.3 58* *

The previous table shows that there are positive relationships between the two pivots of Artificial Intelligence (AI) applications and uses, with their total score, and the psychological well-being pivot, with its total score and its various dimensions, respectively (personal growth, autonomy, professional growth, positive relationships, and self-

acceptance). All of these relationships were significant at (0.05) level. This result is consistent with the study of Al-Dosari and Al-Youssef (2024). It showed that there is a strong correlation with a positive trend between psychological well-being and the trend towards using artificial intelligence. It is also consistent with what Montero (2024) indicated, that students can be empowered and their psychological health and well-being can be improved through the use of Artificial Intelligence (AI) applications.

6. The relationship between the use of artificial intelligence (AI) applications and the quality of university life:

Table 4: Correlation Coefficient between the Use of Artificial Intelligence (AI) Applications and the Quality of University Life.

	Empl oying Artifi cial Intelli gence (AI) Appli cations	Quali ty of Acad emic Life	Quality of Psychol ogical Life	Qua lity of Soci al Life	Quality of Univer sity Enviro nment	Tot al Sco re
Empl oying Artifi cial Intelli gence (AI) Appli cations	1	0.300 **	0.185**	0.20 6**	0.235**	0.2 82* *

The previous table shows that there are positive relationships between the two pivots of artificial intelligence (AI) applications and uses, with its total score, and the pivot of university life quality, with its total score and various dimensions, and all of them were significant at (0.05) level.

The previous table shows a positive relationship between the two pivots of artificial intelligence (AI) applications and uses, with their total score, and the pivot of university quality of life, with its total score and various dimensions, respectively (quality of academic life, quality of university environment, quality of social life, and quality of psychological life). All of these were significant at (0.05) level. This result is consistent with a study by Silva et al. (2018), which indicated the mediating role played by the Internet for older individuals, and that electronic integration of older adults is a means of enhancing their quality of life. Moreover, the study found out that enhancing quality of life indicators differed among social media users in favor of higher usage. It can be concluded that the university's provision of a

good university environment, capabilities, and services that help its students excel, is positively correlated with students' use of artificial intelligence (AI) and provides them with a high quality of university life.

7. To answer the third question: Are there

statistically significant differences between the mean scores of students on the pivots of employing artificial intelligence (AI) applications, psychological well-being, and quality of university life according to the variables (gender and college type)?

Table 5: Significance of Differences between Students' Responses to the Pivots of Employing Artificial Intelligence (AI) Applications, Psychological Well-Being, and Quality of University Life according to the Gender Variable.

Variable	Gender	N	Mean	SD	t	DF	Sig
Employing Artificial Intelligence (AI) Applications	Male	84	3.9762	.46507	-2.28	405	0.023
	Female	323	4.1380	.60623			
Psychological Well-Being	Male	84	3.9814	.44510	-1.02	405	0.307
	Female	323	4.0482	.55346			
Quality of University Life	Male	84	3.9187	.62995	0.521	405	0.603
	Female	323	3.8740	.71832			

It is clear from the previous table that there are no differences in the total score of psychological well-being and the total score of university life quality attributed to the gender variable (males, females). It is observed the presence of differences between the uses of artificial intelligence (AI) applications attributed to the gender variable in favor of females at (0.05) significance level.

This shows that there are no differences due to the gender variable in the variables of psychological well-being and quality of university life. This is consistent with the study of Wigtil & Henriques (2015): there are no statistically significant differences between males and females in psychological well-being. The study of Kharnob (2016) indicated the results showed that there are no statistically significant differences between the mean scores of males and females in psychological well-being. The study of Manoukh (2020) indicated a set of results,

the most important of which is that there are no statistically significant differences between males and females in psychological well-being. It differed from the study of Hadi (2019), and the study indicated a set of results, the most important of which are: there are significant differences in emotional creativity between males and females, and that there are statistically significant differences between males and females in psychological well-being.

A study by Campisi et al. (2015) highlighted identifying the mechanism of the impact of individuals' participation on the quality of life that is not attributed to the gender variable as an indicator of the quality of life with a higher quality, while differences were found in artificial intelligence (AI) and its uses that are attributed to females and this is consistent with the study. This differs from Al-Qahtani study (2024), which indicated that there were no differences in artificial intelligence (AI) attributable to the gender variable.

Table 6: Significance of Differences between Students' Responses to the Pivots of Employing Artificial Intelligence (AI) Applications, Psychological Well-Being, and Quality of University Life according to the College Type Variable.

Variable	College Type	N	Mean	SD	t	DF	Sig
Employing Artificial Intelligence (AI) Applications	Theoretical Colleges	263	4.0992	.64584	-0.255	405	0.79
	Practical Colleges	144	4.1146	.44826			
Psychological Well-Being	Theoretical Colleges	263	4.0572	.49121	1.167	405	0.244
	Practical Colleges	144	3.9928	.60170			
Quality of University Life	Theoretical Colleges	263	3.8527	.72572	-1.19	405	0.235
	Practical Colleges	144	3.9391	.65062			

It is clear from the above table that there are no differences in the use of artificial intelligence (AI)

applications, psychological well-being in its total score, and the quality of university life in its total score attributed to the variable of college type (theoretical, practical). This is consistent with the study of Alalwany & Yonan (2023), Al-Masry (2022), Al-Attas et al. (2021), and the study of Al-Assimi and Mukhaimer (2019) regarding the lack of differences in the three study variables: the use of artificial intelligence (AI), psychological well-being, and the quality of university life among university students, whether they are students of theoretical or practical colleges. This result can be illustrated by the fact that the use of artificial intelligence (AI) tools, which the results showed in the first question, is largely equal

between practical and theoretical colleges, indicating that society and the university environment encourage university students to keep pace with the tools of the era and interact with them including the various uses of artificial intelligence (AI), whether within the university or community environment. This is consistent with the Kingdom's Vision 2030 to create a vibrant society and an ambitious nation that seeks to providing an educated society and a highly advanced digital environment, which is reflected in the presence of psychological health and well-being among its members, especially university students, who are the backbone of this nation. Also, it provides them with a great quality of university life.

REFERENCES

- 10.1007/978-3-031-49544-1_1
 10.12816/0021924
 10.21608/JSRE.2019.56535
 10.21608/mfes.2024.403707
- Abdul Zahra, S. & Al-Jumaan, H. (2016). The quality of life of Basra University Students from their perspective. *Basra Research Journal*, 41(3), 266-284. <https://www.iasj.net/iasj?func=fulltext&aId=128480>
- Abu Warda, S. (2020). Psychological well-being and its relationship to emotional intelligence in kindergarten children. *Journal of Childhood and Education*, 12(14), 155-212, <https://doi.org/10.21608/fthj.2020.173901>
- Alalwany, W. & Yonan, J. (2023). Role of Artificial Intelligence (AI) in Improving Educational Quality and Networking for Students and Faculty. *Babylonian Journal of Networking*, 66-76, <https://doi.org/10.58496/BJN/2023/008>
- Al-Assimi, F. & Mukhaimer, H. (2019). Quality of university life and its relationship to academic self-efficacy among Umm Al-Qura University Students. *Arab Studies in Education and Psychology*, (114), 301-348,
- Al-Attas, H., Jamal Al-Layl, J. & Mukhaimer, H. (2021). The quality of university life and its relationship to learning motivation and level of aspiration among Umm Al-Qura University students. *Educational Journal of the Faculty of Education*, (91), 2717-2772, [HTTPS://DOI.ORG/10.21608/EDUSOHAG.2021.194554](https://doi.org/10.21608/EDUSOHAG.2021.194554)
- Al-Dosari, A. & Al-Youssef, K. (2024). Psychological well-being and its relationship to the attitudes toward the use of artificial intelligence among faculty members at the College of Education at Umm Al-Qura University. *Journal of the Islamic University for Educational and Social Sciences*, 19, 213-260,
- Al-Gharib, A. (2024). The role of artificial intelligence in improving the quality of work life: an applied study on employees of Telecom Egypt. *Scientific Journal of Financial and Commercial Studies and Research*, 5(2), 311-348,
- Al-Masry, N. (2022). The role of artificial intelligence technologies in improving the quality of services provided to University of Jordan Students from their perspective. *Journal of the Faculty of Education (Assiut)*, 38(9), 265-290,
- Al-Qahtani, A. (2024). Factors influencing the use of generative artificial intelligence applications in learning in light of the unified theory of technology acceptance from the perspective of students at Prince Sattam Bin Abdulaziz University. *Scientific Journal of the Faculty of Education*, 40(10), 77-130,
- Al-Suwailem, S. (2019). Psychological well-being among a sample of female students at the Northern Border University in light of some demographic variables. *Journal of Scientific Research in Education*, 9 (20), 503-533.
- Besette, D. & Burton, S. (2014). Academic career development for non-traditional higher education environments. *Journal of Applied Learning Technology*, 4(4), 10-30, https://www.academia.edu/9742604/Academic_Career_Development_for_Non_traditional_Higher_Education_Environments
- Campisi, J., Folan, D., Diehl, G., Kable, T., & Rademeyer, C. (2015). Social media users have different experiences, motivations, and quality of life. *Psychiatry Research*, 228(3), 774-780,

- <https://doi.org/10.1016/j.psychres.2015.04.042>
- Habitah, N. & Hamza, A. (2020). Quality of life: a study of the concept, dimensions, and measurement. *Afak Journal of Science*, 5(4), 142-150.
- Hadi, I. (2019). Emotional creativity and its relationship to psychological well-being among faculty of basic education teachers. *Journal of Humanities and Social Sciences Studies*, 43(2), 593-610, <https://archives.ju.edu.jo/index.php/hum/article/view/105047>
- <https://asjp.cerist.dz/en/article/126780>
- <https://asjp.cerist.dz/en/article/22318>
- <https://doi.org/10.1093/heapro/daq039>
- <https://doi.org/10.21608/cfdj.2024.267028.1902>
- <https://doi.org/10.21608/MFES.2022.271572>
- <https://doi.org/10.21608/saep.2019.54134>
- <https://doi.org/10.25130/jtuh.27.10.2020.17>
- <https://doi.org/10.3390/ijerph16162864>
- <https://doi.org/10.36046/2162-000-019-016>
- <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10510439>
- Jad al-Rab, A. (2013). Psychological Well-being Scale. Anglo-Egyptian Library.
- Jannani, A.; Sael, N. & Benabbou, F. (2024). Artificial Intelligence for Quality of Life Study: A Systematic , Literature Review, in *IEEE Access*, 12, 62059-62088,
- Kharnob, F. (2016). Psychological Well-being and its relationship to emotional intelligence and optimism: a field study among a sample of students at the faculty of education at Damascus University. *Journal of the Association of Arab Universities for Education and Psychology*, 14(1), 217-242, https://digitalcommons.aaru.edu.jo/cgi/viewcontent.cgi?article=1163&context=aaru_jep
- Liu, X., Ping, S., & Gao, W. (2019). Changes in undergraduate students' psychological well-being as they experience university life. *International Journal of Environmental Research and Public Health*, 16(16), 2864.
- Maamaria, B. (2012). Positive Psychology - A New Direction for the Study of Human Strengths and Virtues. Dar Al-Khaldounia,
- Manoukh, S. (2020). Emotional intelligence and its relationship to psychological well-being among university students. *Tikrit Journal of Education and Humanities*, 27(10), 394-416,
- Montero, A(2024). Leveraging AI to Support Student Mental Health and Well-Being, <https://www.higheredtoday.org/2024/10/16/ai-student-mental-health/>
- Raja, S.; Jebadurai, D. ; Ivan, L.; Mykola, R.; Ruslan, K.& Nadiia, P. (2024). Impact of artificial intelligence in students' learning life. In *AI in Business: Opportunities and Limitations*, 2, 3-17.
- Saini, N., Sangwan, G., Verma, M., Kohli, A., Kaur, M., & Lakshmi, P. V. M. (2020). Effect of social networking sites on the quality of life of college students: A cross-sectional study from a city in North India. *Scientific World Journal*, <https://doi.org/10.1155/2020/8576023>
- Silva, P., Delerue Matos, A., & Martinez-Pecino, R. (2018). Confidant network and quality of life of individuals aged 50+: The positive role of internet use. *Cyberpsychology, Behavior, and Social Networking*, 21(11), 694-702. <https://doi.org/10.1089/cyber.2018.0170>
- Velastegui, D.; Pérez, M.& Garcés, L. (2023). Impact of artificial intelligence on learning behaviors and psychological well-being of college students. *Salud, Cienciay Tecnologia-Serie de Conferencias*, 2, 343-342, DOI: <https://doi.org/10.56294/sctconf2023582>
- Wang, C; Cui, Z.; Cui, H. ;Wei, C.; Harada, K.; Minamoto, K.; ueda, K.; Ingle,K. Zhang, C. &Ueda , A. (2010). Quality of life associated with perceived stigma and discrimination among the floating population in Shanghai, China: A qualitative study. *Health Promotion International Advance Access*, Published by Oxford University Press. 25(4), 394-402.
- Wigtil, C. & Henriques, G. (2015). The relationship between intelligence and psychological well-being in incoming college students. *Psych Well-Being* , 5 (4) ,1-19, DOI 10.1186/s13612-015-0029
- Yassin, H., Shaheen, H. & Sarmini, I. (2014). Friendship and psychological well-being among a sample of university students. *Journal of the College of Education*, 25(97), 351-379.