Social Alienation in the Context of Artificial Intelligence Use Among University Students: A Field Study at Abbes Laghrour University

الاغتراب الاجتماعي في ظل استخدامات الذكاء الاصطناعي لدى الطالب الجامعي

دراسة ميدانية على طلبة جامعة عباس لغرور

Zineb Merghad *

Abbes Laghrour University of Khenchela

merghad.zineb@univ-khenchela.dz

Received : 17/11/2025 **Accepted : 28/04/2026** **Published : 02/06/2026**

Abstract: The phenomenon of social alienation within the university environment constitutes one of the most significant growing challenges amidst accelerated digital transformations. These transformations have permeated all areas of social life, leading to an increased reliance on them, particularly on artificial intelligence applications, which have become essential technologies for university students in their daily and academic lives. This study seeks to investigate the impact of using artificial intelligence tools on social alienation among university students. It focuses on indicators of alienation such as isolation, diminished interaction with the social environment, peers, and the university's educational system. This situation necessitates the development of a strategy that ensures a balance between technological development, artificial intelligence technologies, and the social well-being of individuals.

Keywords: Social Alienation-Artificial Intelligence-University Student-Isolation-Social Interaction-Social Withdrawal

الملخص: تشكل ظاهرة الاغتراب الاجتماعي في الوسط الجامعي من أهم الإشكالات المتنامية في ظل التحولات الرقمية المتسارعة وخاصة وإنها تغلغلت داخل كل مجالات الحياة الاجتماعية وتزايد الاعتماد عليها خاصة تطبيقات الذكاء الاصطناعي التي باتت من اهم التقنيات التي يعتمد عليها الطالب الجامعي في حياته اليومية والأكاديمية خاصة. تسعى هذه الدراسة الى الكشف عن أثر استخدام أدوات الذكاء الاصطناعي على الاغتراب الاجتماعي لدى الطالب الجامعي من خلال التركيز على مؤشرات الاغتراب كالعزلة وضعف التفاعل مع المحيط الاجتماعي والأصدقاء وبين المنظومة التعليمية داخل الجامعة مما يستدعي التفكير في استراتيجية تضمن التوازن بين التطور التكنولوجي وتقنيات الذكاء الاصطناعي وبين الصحة الاجتماعية للأفراد.

- **الكلمات المفتاحية:** الاغتراب الاجتماعي؛ الذكاء الاصطناعي؛ الطالب الجامعي؛ العزلة؛ التفاعل الاجتماعي؛ الانسحاب الاجتماعي.

*-Corresponding author

- INTRODUCTION:

The world has recently witnessed a boundless technological revolution, particularly in the fields of digital systems and artificial intelligence, which in turn has brought about a fundamental change in all areas of human life. This transformation has not been limited to the industrial or medical sectors but has extended to the educational and interactional spheres of life and human relationships. This has given rise to new patterns of interaction that have reshaped the concepts of interaction and communication, as well as the human concept of self, especially within the university environment, which is one of the settings most affected by and responsive to this shift, and a primary user of these technologies.

Although these technologies have significantly contributed to facilitating human life in general, and the academic life of the university student in particular, they have also played a major role in creating a rift in society. Among the most prominent of these repercussions is the concept of social alienation, which refers to the individual's detachment from their surroundings and the loss of the ability to form genuine bonds with the community. It also signifies a decline in interactions with members of their society. This is clearly observable among many university students who have become completely reliant on smart media and applications for even the simplest aspects of their academic and real-world interactive lives.

Based on these considerations, this study aims to analyze the relationship between the use of artificial intelligence and the manifestations of social alienation among university students. The goal is to understand the impact of these technologies on the psychological, social, and educational fabric of the university student and to comprehend the changes they have undergone in light of their use of artificial intelligence applications.

Problem Statement:

The rapid development witnessed by the world in the field of artificial intelligence technologies and applications has led to a change in the patterns of

human and social interaction, especially in the university environment. The university is a vital arena for communication and the formation of human relationships, as well as one of the formative institutions upon which society relies for shaping the self, identity, and achieving a sense of belonging. Despite the positive contributions of artificial intelligence to the university student's life in terms of learning and academic opportunities, the excessive use of these technologies may, in contrast, lead to loneliness or isolation, a decline in interactions, or a reluctance to form direct social relationships. Furthermore, complete reliance on these applications may cause individuals to lose their capacity for scientific and social thought, leading them to feel lonely and alienated within their university environment.

In this context, the following question arises:

- To what extent does the use of artificial intelligence contribute to fostering manifestations of social alienation among university students?

Research Questions:

- To what extent do university students rely on artificial intelligence tools in their academic path?
- Is the intensive use of artificial intelligence linked to a reduction in direct social interaction among students?
- To what extent does artificial intelligence contribute to promoting social isolation among students?
- What is the relationship between the increased reliance on artificial intelligence and students' feelings of apathy and social irresponsibility?

Hypotheses:

This study proceeds from a main hypothesis:

General Hypothesis:

- The use of artificial intelligence applications contributes to the emergence of manifestations of social alienation among university students.

Sub-hypotheses:

1.Frequent use of artificial intelligence technologies leads to the university student feeling isolated within the university environment.

2.The use of artificial intelligence is associated with a decrease in the university student's motivation for learning and a diminished sense of the value of what they are learning.

3.Immersion in artificial intelligence tools weakens the university student's sense of belonging to the university community.

4.Excessive use of artificial intelligence contributes to promoting patterns of self-alienation and fostering irresponsibility in the university student.

Significance of the Study:

This study seeks to illuminate a contemporary issue and its repercussions on social life by linking applications of artificial intelligence with social alienation and isolation among university students. This is accomplished by identifying the manifestations of alienation that result from the excessive use of these technologies, with a particular focus on the impact of artificial intelligence on the feeling of social alienation, which is regarded as a socio-psychological phenomenon with a direct influence on social relationships and interactions within the university environment. The study also contributes by proposing mechanisms to balance technological progress with the preservation of social bonds among students.

Objectives of the Study:

This study aims to:

- Investigate the relationship between the excessive use of artificial intelligence and the manifestations of social alienation among university students.
- Determine the extent of the impact of artificial intelligence on social interaction and relationships among students within the university environment.

- Assess the extent to which students use and rely on artificial intelligence technologies in their studies.
- Provide recommendations to mitigate the negative consequences resulting from excessive reliance on artificial intelligence at the university.

2.Concepts of the Study:

2.1. Basic Concepts:

2.1.1 The Concept of Alienation:

- Etymologically: The term alienation is one of the most contentious concepts, with its definitions varying according to different perspectives. With the development the world has witnessed, the concept of alienation has become associated with many variables, particularly concerning technology and artificial intelligence.

Alienation corresponds to the term Aliénation in French and Alienation in English, derived from the Latin word Alienatio, which means the transfer of ownership of something to another, or dispossession and removal (Meryemi, 2020, p. 54). The meaning centers on distancing, isolation, and separation from people.

- Terminologically: Hegel defines it as a state of objectification of consciousness that arises when man is separated from his essence or his spiritual self as a result of the objectification of ideas or their separation from him. The spirit realizes its truth only by passing through the moment of death, fragmentation, and alienation; that is, the self does not perceive itself until it separates and becomes alienated, then returns to reunite with itself anew (Hegel, 1977, p. 19). It is a state of powerlessness or helplessness that man experiences when he loses control over his creations, products, and possessions, which are then employed for the benefit of another for their own private interest. Thus, the individual loses the ability to determine their own destiny and to influence the course of historical events, including those that concern them and contribute to the realization of their self and ambitions (Laaqel, 2023, p. 224).

Karl Marx defines it as a condition experienced by the worker under the capitalist system, where they are alienated from the product of their labor, from the

act of production itself, and from others. Here, the human becomes alienated from their true essence and lives in a state of reification and estrangement. For labor does not only produce commodities; it produces itself and the worker as a commodity (Marx, 2007, p. 71).

As for Émile Durkheim, he did not use this term in the same formulation as Karl Marx but introduced the term "anomie" in his book The Division of Labor in Society. It is a state of breakdown lor absence of social norms that affects the individual's loss of a sense of belonging (Durkheim, 2014, p. 241).

Max Weber, on the other hand, gave alienation a broad and comprehensive meaning that characterizes all social relations, while linking alienation with normlessness, which appears in the case of egoistic suicide (Laaqel, 2023, p. 224).

Social alienation is a feeling of a lack of interaction between the individual's self and the selves of others, a deficit of affection and familiarity, a scarcity of empathy and participation, and a weakening of the bonds of affection and social ties with them. The social role affects the concept of self and the individual's movement within the social structure in which they live (Tohamy, 2022, p. 3171).

2.2 The Concept of Artificial Intelligence:

Artificial intelligence is a vast field of computer science, encompassing numerous smart technologies and applications that people use to facilitate their lives, which have brought about a fundamental change in all areas of human life, particularly in the cognitive domain, through sophisticated algorithms.

The term is composed of two words: "intelligence," which denotes the capacity for thought and adaptation to problems, and "artificial," which signifies that it is a human-made, non-natural product. It consists of machines and applications that contribute to facilitating human life.

This term, symbolized by AI, aims to understand the nature of human intelligence by creating computer programs capable of simulating intelligent human

behavior, defined as the lability of a computer program to solve la given problem or make a decision in a particular situation (Fadila & Alioua Abdell-Ghanil, 2024, p. 343).

In the age of technology and artificial intelligence, humans have transcended treating technology merely as an automated tool, instead engaging with it as a partner possessing an interactive personality. This reflects the transformations that have emerged in the patterns of social relations within human society, where even human-to-human relationships have been altered, and with them, the mode of interaction. Consequently, the individual has become isolated even while within a human community, leading them to shift their sphere of belonging from the real world to digital spaces (Zineb & Aggoun, 2025, p. 1221).

3.Methodological Procedures

1.Research Methodology:

All robust scientific studies begin with a strategic conceptualization of the research topic, which allows the researcher to adopt a systematic scientific approach to achieve the desired objective. Given the nature of this study, which aims to investigate the relationship between the use of artificial intelligence and the level of social alienation among university students, the descriptive-analytical method was adopted. This method is appropriate for such topics, which require a precise description of the students' reality amidst the vast development of artificial intelligence applications, on the lone hand, land the measurement of the dimensions of social alienation, on the other.

This approach aims to determine the degree of the relationship between the study's two variables: artificial intelligence and social alienation among university students. The method is based on collecting data from respondents and analyzing them statistically. This methodology was chosen for its capacity to generate quantitative indicators that help in understanding the psychological and social dimensions associated with the phenomenon under study, thereby enabling the formulation of precise findings.

2. Research Instrument:

The questionnaire was employed as the primary instrument for data collection from the sample members, as it is an appropriate tool for measuring the social and psychological attitudes and tendencies related to the phenomenon of alienation among university students in the context of artificial intelligence use. The questionnaire was divided into two main parts as follows:

Part One: Includes personal information (Gender, Age, Academic Major, Year of Study).

Part Two: This part aims to ascertain the extent to which artificial intelligence applications contribute to the emergence of manifestations of social alienation among university students. It is divided into two main sections:

Section One: Use of Artificial Intelligence, comprising 08 items.

Section Two: Social Alienation. This section includes 04 primary dimensions as follows:

-The dimension of Social Isolation: Comprising 07 items.

- The dimension of Meaninglessness and Motivation: Comprising 06 items.

- The dimension of Loss of Identity or Self: Comprising 07 items.

- The dimension of Normlessness and Apathy: Comprising 07 items.

The questionnaire items were designed according to a five-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree). It was also submitted to la panel of professors for review to ensure face validity, and la preliminary test was conducted to measure reliability using the Cronbach's alpha coefficient.

3. Study Population and Sample:

In consideration of the nature of the study, the population was selected from university students in the Department of Social Sciences at Abbes Laghrour University, whose academic levels and specializations vary (Sociology, Psychology, Philosophy). Due to the study's focus on users of artificial intelligence and its effects, a sample was

selected using a purposive sampling method based on the following required characteristics:

- They possess mobile phones with artificial intelligence applications installed.
- They actively use artificial intelligence tools such as ChatGPT, Perplexity, Canva, Quill Bot, or other design, writing, or translation tools.
-They rely on these smart applications within their university environment.

A total of 100 questionnaires were distributed, and 76 valid forms were retrieved for statistical analysis. This sample was considered sufficient for the purposes of the study, given the total student population size and the distribution across specializations, which allows for the generalization of the findings to the target population with an acceptable degree of validity and reliability.

4. Characteristics of the Study Sample:

The personal information of the study sample members is summarized in the following table:

Table (01): Description of the Study Sample Members

Variables	Category	Frequency	Percentage
Gender	Male	29	38.2%
	Female	47	61.8%
Age	Less than 20 years	26	34.2%
	20 to 25 years	37	48.7%
	More than 25 years	13	17.1%
Major	Sociology	41	53.9%
	Psychology	23	30.3%
	Philosophy	12	15.8%
Year of Study	First Year	23	30.3%
	Second Year	12	15.8%
	Third Year	16	21.1%
	First Year Master's	7	9.2%
	Second Year Master's	18	23.7%
Do you own a smart device?	Yes	76	100.0%

	No	0	0.0%
Do you use AI applications?	Yes	76	100.0%
	No	0	0.0%
If yes, mention them		(N of Mentions)	(% of Mentions)
	ChatGPT	76	34.5%
	Perplexity	72	32.7%
	QuillBot/Canva	72	32.7%
Source: Prepared by the researcher based on SPSS 23 output.			

The results regarding the characteristics of the study sample indicate that the sample comprised 76 male and female students from various academic majors and university levels. In terms of gender, females constituted the majority at 61.8%, compared to 38.2% for males. As for age groups, the largest proportion was concentrated in the 20 to 25 years category at 48.7%, Concerning the ownership of smart devices, all sample members (100%) reported owning a smart device (phone or computer) and using artificial intelligence applications, which is expected as the sample was purposive. Their usage was distributed among ChatGPT (34.5%), and Perplexity and Quill Bot/Canva (32.7% each). These results reflect a broad awareness and widespread use of artificial intelligence tools among university students, which provides a solid foundation for analyzing the impact of this usage on social alienation within the university environment.

7. Analysis of Study Results:

To analyze the study's results and accurately determine the response trends of the sample members, the questionnaire was constructed based on a five-point Likert scale. Each item in the questionnaire's sections was accompanied by a list of options including: "Strongly Agree," "Agree," "Neutral," "Disagree," and "Strongly Disagree." The interpretation of the mean scores was determined to explain the responses of the sample members according to the specific values assigned to each option, as shown in the following table:

Table (02): The Five-Point Likert Scale

Level	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Score	5	4	3	2	1
Mean Score	4.20 - 5.00	3.40 - 4.19	2.60 - 3.39	1.80 - 2.59	1.00 - 1.79
Source: Prepared by the researcher.					

7.1. Analysis of the Results of the Use of Artificial Intelligence Section:

This section aims to assess the extent to which university students rely on artificial intelligence applications in their university studies, and the impact of this usage on their learning approaches and interaction with the academic environment.

Table (03): Descriptive Statistics for the Use of Artificial Intelligence Section

No.	Item	Mean	Standard Deviation	Response Trend
01	I use artificial intelligence regularly in my university studies.	4.0000	1.09545	Agree
02	I find that artificial intelligence tools help me complete academic tasks quickly.	4.0921	0.95467	Agree
03	I prefer relying on artificial intelligence applications more than on academic discussions with professors and colleagues.	3.8816	1.03237	Agree
04	Artificial intelligence has reduced my need to interact with others in the university environment.	3.8947	1.13817	Agree
05	I use artificial intelligence as an alternative to interacting with traditional learning resources.	4.0789	1.08029	Agree
06	Artificial intelligence has become an essential part of my studies.	4.2368	1.01808	Agree
07	I rely on artificial intelligence as a substitute for my professor or my colleagues.	3.9211	1.40250	Agree
08	I rely on artificial intelligence applications to complete research and solve exercises.	4.3289	1.18195	Agree
Overall Mean	///	4.0543	1.07419	Agree

The results presented in Table (03) indicate that the overall mean score for the use of artificial intelligence section was (4.0543) with a standard deviation of (1.07419), which signifies a high level of agreement among the sample members on the items related to the use of artificial intelligence.

All items received mean scores exceeding 3.5, reflecting a general consensus that artificial intelligence is an effective and preferred tool for completing academic tasks. This is particularly evident in item (08), which recorded the highest mean (4.3289), concerning students' reliance on these applications for completing research and solving exercises. The results also showed that artificial intelligence has become an essential part of the students' educational experience, with item (06) recording a high mean of (4.2368).

On the other hand, some items reveal a tendency to substitute traditional human interaction with interaction with artificial intelligence tools, such as relying on it instead of a professor or colleagues (item 07) or as an alternative to traditional learning resources (item 05). These findings indicate a clear shift in students' learning patterns toward educational models that rely on technology and artificial intelligence.

7.2. Analysis of the Results of the Social Alienation Section:

7.2.1. The Dimension of Social Isolation:

This dimension aims to measure the extent to which the use of artificial intelligence applications impacts the reduction of social interaction among students within the university environment, and the degree to which they feel isolated or detached from their academic social surroundings.

Table (04) : Descriptive Statistics for the Social Isolation Dimension

No.	Item	Mean	Standard Deviation	Response Trend
01	My interaction with colleagues has become less frequent since I started using artificial intelligence applications.	3.7105	1.37420	Agree
02	I do not feel lonely when using artificial	3.8947	1.31229	Agree

	intelligence applications, even in the absence of my friends.			
03	I do not need to engage in group work now that I have mastered artificial intelligence tools.	3.6579	1.38133	Agree
04	I prefer spending time on my mobile phone with artificial intelligence applications over spending time with colleagues.	4.0395	1.20489	Agree
05	I have lost the passion for communicating with others and prefer isolation while using artificial intelligence applications.	3.7105	1.41248	Agree
06	I prefer working individually on assignments or research projects with the presence of artificial intelligence tools.	3.9474	1.22087	Agree
07	I have a feeling of not belonging to the university since I started using artificial intelligence applications.	3.4868	1.44677	Agree
Overall Mean		3.7105	1.37420	Agree

Source: Prepared by the researcher based on SPSS 23 output.

The results in Table (06) indicate that the overall mean score for this dimension was (3.7105) with a standard deviation of (1.37420), reflecting a general agreement on the existence of a moderate to high level of social isolation among the sample members. This is clearly demonstrated through the agreement on various items, where students indicated a decrease in their interaction with colleagues since they began using artificial intelligence applications (mean 3.71), a preference for spending time with applications over spending time with colleagues (mean 4.04), and a preference for individual work over group work in the presence of artificial intelligence tools (mean 3.95).

Furthermore, some students expressed a loss of passion for communicating with others and a feeling of not belonging to the university since they started relying on these applications, although the mean for this item was slightly lower (3.49)

compared to the others. This suggests that the use of artificial intelligence applications may be associated with an increase in manifestations of social isolation and a withdrawal from group interaction in the university environment. This highlights the importance of carefully studying this phenomenon to take measures that mitigate its negative effects on students' social lives.

7.2.2. The Dimension of Meaninglessness and Motivation:

The dimension of meaninglessness and motivation aims to identify the extent of the impact of using artificial intelligence applications on the decline in feelings of motivation and enthusiasm for learning, in addition to the loss of enjoyment and meaning in the educational process among university students.

Table (05): Descriptive Statistics for the Meaninglessness and Motivation Dimension

No.	Item	Mean	Standard Deviation	Response Trend
01	I have lost the sense of enjoyment in learning since I started relying on artificial intelligence.	3.5132	1.39038	Agree
02	Knowledge has become merely ready-made and easily accessible information thanks to artificial intelligence.	4.2237	1.12663	Agree
03	I exert no effort to obtain information thanks to artificial intelligence.	4.3421	1.13787	Agree
04	I feel that studying has become boring and devoid of challenge because of artificial intelligence.	4.1579	1.26547	Agree
05	I have started being absent from lectures because artificial intelligence provides a better substitute.	4.3816	1.05789	Agree
06	I do not feel enthusiastic about participating in classes because artificial intelligence helps me more.	4.1316	1.29966	Agree
Overall Mean		4.1250	1.17035	Agree

Source: Prepared by the researcher based on SPSS 23 output.

The results in Table (05) indicate a high mean score of (4.1250) with a standard deviation of (1.17035), reflecting a clear consensus among the sample members

regarding the negative impact of artificial intelligence use on their learning motivation. Students expressed a loss of enjoyment in learning (mean 3.51) and that knowledge has transformed into ready-made, easily accessible information thanks to artificial intelligence (mean 4.22), which reduces their effort in acquiring information (mean 4.34). They also reported feeling that their studies are boring and lack challenge (mean 4.16), an increase in absenteeism from lectures due to artificial intelligence serving as a substitute (mean 4.38), and a decrease in enthusiasm for class participation (mean 4.13).

These findings clearly reflect that intensive reliance on artificial intelligence applications may lead to a decline in students' intrinsic motivation and reduce their effectiveness and engagement in the traditional educational process. This situation calls for special attention from educational authorities to develop pedagogical strategies that maintain a balance between leveraging technology and promoting students' active participation.

7.2.3. The Dimension of Loss of Identity or Self:

The dimension of loss of identity or self aims to identify the extent of the impact of using artificial intelligence applications on the decline in self-confidence and the capacity for individual expression among university students, and the degree to which they feel a loss of their role and self-identity within the educational process.

Table (06): Descriptive Statistics for the Loss of Identity or Self Dimension

No.	Item	Mean	Standard Deviation	Response Trend
01	I face difficulty in expressing my own ideas without the help of artificial intelligence.	3.6974	1.31676	Agree
02	I doubt my own knowledge and personal abilities because of my reliance on artificial intelligence.	3.3947	1.57547	Neutral
03	My academic achievements do not reflect my personal efforts.	3.7368	1.31015	Agree
04	I have come to rely on artificial intelligence applications in all aspects of my life.	3.7500	1.27671	Agree
05	I have lost the role of the university professor in	3.7632	1.14156	Agree

	my life as a student.			
06	I am unable to initiate discussions or express an opinion without first consulting artificial intelligence.	3.1974	1.54073	Neutral
07	Artificial intelligence has diminished my sense of presence as a student in the educational process.	3.2763	1.46605	Neutral
Overall Mean		3.5451	1.31919	Agree

Source: Prepared by the researcher based on SPSS 23 output.

The results in Table (06) show a mean score of (3.5451) with a standard deviation of (1.31919), reflecting a general agreement on a moderate effect leaning toward consensus among the sample members regarding this dimension. Students expressed difficulty in expressing their own ideas without resorting to artificial intelligence (mean 3.70) and a feeling that their academic achievements do not reflect their personal efforts (mean 3.74). They also indicated their increasing reliance on artificial intelligence applications in various aspects of their lives (mean 3.75), along with a loss of the traditional role of the university professor in their academic lives (mean 3.76). At the same time, opinions were more varied regarding doubting their personal abilities (mean 3.39), the ability to engage in discussion and express opinions without consulting artificial intelligence (mean 3.20), and feeling a loss of their presence as students (mean 3.28), as the impact of these items was less pronounced.

These results suggest that the frequent use of artificial intelligence applications may contribute to weakening the university student's self-identity. This affects their confidence in their personal abilities and diminishes their actual role within the educational environment, which necessitates the adoption of pedagogical and psychological measures to enhance student autonomy and develop their personal skills amidst the increasing reliance on technology.

7.2.4. The Dimension of Normlessness and Apathy:

The dimension of normlessness and apathy aims to identify the extent to which the ethical values and behaviors of university students are affected as a result of

relying on artificial intelligence applications, particularly concerning attitudes toward academic dishonesty, adherence to scholarly standards, and personal responsibility in completing academic tasks.

Table (07): Descriptive Statistics for the Normlessness and Apathy Dimension

No.	Item	Mean	Standard Deviation	Response Trend
01	I see no difference between cheating and using artificial intelligence.	3.9342	1.18136	Agree
02	I do not apply scholarly standards due to the availability of artificial intelligence.	4.0526	1.14187	Agree
03	I use artificial intelligence to find shortcuts to complete everything that is asked of me.	3.4079	1.22396	Agree
04	I am aware that using artificial intelligence without guidance constitutes a breach of academic integrity.	3.8158	1.07964	Agree
05	I am concerned with completing tasks, not with how they are done, because artificial intelligence takes care of it.	3.9211	1.41198	Agree
06	I do not object to artificial intelligence completing my assignments without my actual participation.	4.1447	1.28275	Agree
07	I feel satisfied when I get good grades without any effort on my part.	4.3026	1.21128	Strongly Agree
Overall Mean		3.9398	1.17207	Agree

Source: Prepared by the researcher based on SPSS 23 output.

The results in Table (07) show that the mean score for the responses was (3.9398) with a standard deviation of (1.17207), indicating a general agreement among the sample members on a notable effect in this dimension. Students expressed their agreement with several items, such as seeing no difference between cheating and using artificial intelligence (mean 3.93), not adhering to scholarly standards due to the availability of artificial intelligence (mean 4.05), and their satisfaction with obtaining good grades without personal effort (mean 4.30). Furthermore, some showed an

apathetic attitude toward the method of task completion, while still acknowledging that using artificial intelligence without guidance constitutes a breach of academic integrity (mean 3.81).

These findings suggest that the increased use of artificial intelligence applications may lead to an erosion of ethical standards and scholarly principles among students, thereby fostering dishonest behaviors such as cheating and negligence in adhering to academic standards. This calls for the implementation of pedagogical and awareness-raising measures to promote the values of academic integrity and individual responsibility in the educational process.

8. Testing the Study's Hypotheses:

8.1. The First Main Hypothesis:

-H1: There is la statistically significant effect of the use of artificial intelligence applications on the emergence of manifestations of social alienation among university students at a significance level of ($\alpha \leq 0.05$).

- H0: There is no statistically significant effect of the use of artificial intelligence applications on the emergence of manifestations of social alienation among university students at a significance level of ($\alpha \leq 0.05$).

To test this hypothesis, a simple linear regression analysis was used to verify the existence of a statistically significant effect for the purpose of rejection or acceptance, according to the following criterial:

- The null hypothesis is accepted if: the calculated test statistic is Less than the critical value at the 0l. l05 significance level, or if the significance level (Sig.) is greater than 0.05.

- The alternative hypothesis is accepted if: the calculated test statistic is greater than the critical value at the l0l. l05 significance level, lor if the significance level (Sig.) is less than 0.05.

The results are shown in the following table:

Table (08): Results of Simple Linear Regression Analysis for the First Main Hypothesis

Overall Significance (ANOVA)		
F-value	1277.678	
Sig.	.000b	
Partial Significance (Regression Coefficients)		
Model		(Constant)
B		-0.644
t		-4.954
Sig.		.000
Explanatory Power		
R	.972a	
R-Square	.945	
a. Predictors: (Constant), Use of Artificial Intelligence Applications		
b. Dependent Variable : Social Alienation		

Source: Prepared by the researcher based on SPSS 23 output.

In testing the first main hypothesis, which states that there is a statistically significant effect of the use of artificial intelligence applications on the emergence of manifestations of social alienations among university students, the results of the simple linear regression analysis showed strong evidence confirming this hypothesis. The calculated F-value was 1277.678, with a significance level (Sig.) of 0.000, which is less than the specified significance level (0.05). This indicates that the model as a whole is statistically significant.

Furthermore, the regression coefficients for the use of artificial intelligence applications and social alienation showed a calculated t-value of 35.745 with a significance level (Sig.) of 0.000, which indicates a strong and positive effect of the use of these applications on the emergence of manifestations of social alienation.

Moreover, the model's explanatory power (R^2) reached a very high value of 94.5%, meaning that the use of artificial intelligence applications explains a substantial portion of the variance in the manifestations of social alienation among students.

Accordingly, the null hypothesis (H0) is rejected, and the alternative hypothesis (H1) is accepted. There is a statistically significant effect of the use of artificial intelligence applications on the emergence of manifestations of social alienation at a significance level of 0.05, which confirms the close relationship between the two variables within the study sample.

8.1.1. Testing the First Sub-hypothesis

- **H1**: There is la statistically significant effect of the use of artificial intelligence applications on the emergence of la student's feeling of isolation within the university environment at a significance level of ($\alpha \leq 0.05$).

- **H0**: There is no statistically significant effect of the use of artificial intelligence applications on the emergence of a student's feeling of isolation within the university environment at a significance level of ($\alpha \leq 0.05$).

The results are shown in the following table (09):

Overall Significance	F-value	1078.889
	Sig	.000b
Partial Significance (Regression Coefficients)		Constant
	B	-.973
	T	-6.504
	Sig	.000
Explanatory Power	R	.967a
	R^2	.936

Source: Prepared by the researcher based on SPSS 23 output.

Table (09) indicates that the calculated F-value was (1078.889) with an associated significance level of (Sig = 0.000), which demonstrates a strong statistical significance for the model as a whole. Furthermore, the correlation coefficient R was (0.967), indicating a strong positive relationship between the use of Artificial Intelligence applications and students' feelings of isolation within the university environment. The coefficient of determination R^2 was (0.936), which means that the use of Artificial Intelligence applications explains approximately 93.6% of the variance

in students' feelings of isolation, while the remaining percentage is attributed to other factors outside the model. Accordingly, the null hypothesis H0 is rejected and the alternative hypothesis H1 is accepted, which affirms the existence of a statistically significant effect of using Artificial Intelligence on the emergence of feelings of isolation among university students at a significance level of ($\alpha \leq 0.05$).

2.1.8. Testing the Second Sub-hypothesis:

Hypothesis H1: There is a statistically significant effect of using Artificial Intelligence applications on the emergence of reduced learning motivation and a diminished sense of the value of learning among university students at a significance level of ($\alpha \leq 0.05$).

Hypothesis H0: There is no statistically significant effect of using Artificial Intelligence applications on the emergence of reduced learning motivation and a diminished sense of the value of learning among university students at a significance level of ($\alpha \leq 0.05$).

The results are presented in the following table:

Table (10): Results of the Simple Regression Analysis of the Impact of Using Artificial Intelligence Applications on the Emergence of Reduced Learning Motivation and a Diminished Sense of the Value of Learning among University Students

Overall Significance	F-value	1405.864
	Sig.	.000b
Partial Significance (Regression Coefficients)		Constant
	B	-.180
	t	-1.519
	Sig.	.000
Explanatory Power	R	.975a
	R^2	.950

Source: Prepared by the researcher based on SPSS 23 output.

Table (10) shows that the calculated F-value was (1405.864) with a significance level of (Sig = 0.000), which indicates that the model as a whole is of strong statistical significance. The correlation coefficient R was (0.975), reflecting a strong positive relationship between the use of Artificial Intelligence applications and the decrease in university students' learning motivation and their diminished sense of the value of

what they learn. The coefficient of determination R^2 was (0.950), which means that the use of Artificial Intelligence applications explains approximately 95% of the variance in this dimension, while the remaining percentage is attributed to other factors not included in the model. Accordingly, the null hypothesis H0 is rejected and the alternative hypothesis H1 is accepted, which affirms the existence of a statistically significant effect of using Artificial Intelligence on the emergence of reduced motivation and a diminished sense of the value of learning at a significance level of ($\alpha \leq 0.05$).

3.1.8. Testing the Third Sub-hypothesis:

Hypothesis H1: There is la statistically significant effect of using Artificial Intelligence applications on the decrease in students' sense of belonging to the university community at la significance level of ($l\alpha \leq 0.05$).

Hypothesis H0: There is no statistically significant effect of using Artificial Intelligence applications on the decrease in students' sense of belonging to the university community at la significance level of ($\alpha \leq 0.05$).

The results are presented in the following table:

Table (11): Results of the Simple Regression Analysis of the Impact of Using Artificial Intelligence Applications on the Decrease in Students' Sense of Belonging to the University Community

Overall Significance	F-value	462.635
	Sig	.000b
Partial Significance (Regression Coefficients)		Constant
	B	-1.078
	T	-4.850
	Sig	.000
Explanatory Power	R	.928a
	R^2	.862

Source: Prepared by the researcher based on SPSS 23 output.

Table (11) indicates that the calculated F-value was (462.635) with a significance level of (Sig = 0.000), which demonstrates a strong statistical significance

for the model as a whole. The correlation coefficient R was (0.928), indicating a strong positive relationship between the use of Artificial Intelligence applications and the decrease in students' sense of belonging to the university community. The coefficient of determination R^2 is (0.862), which means that the use of Artificial Intelligence applications explains approximately 86.2% of the variance in this dimension, while the remainder is attributed to other factors not included in the model. Accordingly, the null hypothesis H0 is rejected and the alternative hypothesis H1 is accepted, which affirms the existence of a statistically significant effect of using Artificial Intelligence on the decrease in students' sense of belonging to the university community at a significance level of ($\alpha \leq 0.05$).

4.1.8. Testing the Fourth Sub-hypothesis:

Hypothesis H1: There is a statistically significant effect of using Artificial Intelligence applications on the emergence of patterns of self-alienation and the promotion of irresponsibility among university students at la significance level of (α l≤ ll0. l05). l Hypothesis lH0l: There is no statistically significant effect of using Artificial Intelligence applications on the emergence of patterns of self-alienation and the promotion of irresponsibility among university students at a significance level of ($\alpha \leq$ 0.05).

The results are presented in the following table:

Table (12): Results of the Simple Regression Analysis of the Impact of Using Artificial Intelligence Applications on the Emergence of Patterns of Self-Alienation and the Promotion of Irresponsibility among University Students

Overall Significance	F-value	1109.207
	Sig	.000b
Partial Significance (Regression Coefficients)		Constant
	B	-.343
	T	-2.581
	Sig.	.012
Explanatory Power	R	.968a
	R^2	.937

Table (12) shows that the calculated F-value was (1109.207) with a significance level of (Sig = 0.000), which indicates that the model as a whole is of strong statistical significance. The correlation coefficient R was (0.968), indicating a strong positive relationship between the use of Artificial Intelligence applications and the emergence of patterns of self-alienation and the promotion of irresponsibility among university students. The coefficient of determination R^2 is (0.937), meaning that the use of Artificial Intelligence explains approximately 93.7% of the variance in this dimension, while the remaining percentage is attributed to other factors outside the model. Accordingly, the null hypothesis H0 is rejected and the alternative hypothesis H1 is accepted, which affirms the existence of a statistically significant effect of using Artificial Intelligence applications on the emergence of self-alienation and irresponsibility at a significance level of ($\alpha \leq 0.05$).

Based on the results of the hypothesis tests, it is evident that the use of Artificial Intelligence applications has a strong, statistically significant effect on the emergence of manifestations of social alienation among university students. The results have shown a clear impact on several dimensions, including feelings of isolation within the university environment, reduced learning motivation and a diminished sense of the value of what is learned, a decline in belonging to the university community, in addition to the promotion of patterns of self-alienation and irresponsibility. These findings highlight that Artificial Intelligence explains a large proportion of the variance in the manifestations of social alienation, thereby underscoring the necessity of conducting in-depth studies on its behavioral and social effects on students to implement appropriate measures that mitigate its negative impacts.

- CONCLUSION:

The growing adoption of Artificial Intelligence in academic life, while opening vast opportunities for students, particularly in the realm of scientific research, has conversely played a role in widening the interactional gap among them. This has given

rise to several social and psychological problems, foremost among which is the sense of social alienation.

The findings of this study serve as a significant warning regarding the potential of technology and Artificial Intelligence to transform the university environment from a social, interactive space into a virtual, digital realm. This is particularly salient as the provisions of Artificial Intelligence cannot substitute for the feelings of belonging and genuine interaction among members of the community, both within and outside the university.

Therefore, it is imperative to devise approaches that ensure a balance between digital advancement and the interaction and cohesion of the community within the university, in order to mitigate the manifestations of alienation and isolation.

References:

- Abdel Fattah, M. (2013), Social psychology, Dar Zahraa Al-Sharq, Cairo.

-Al-Otaibi, T. B. M. (2018), Alienation: An authentic philosophical and scientific study, Dar Al-Kitab Al-Jami'i for Publishing and Distribution, Saudi Arabia.

- Al-Serjani, M. A. (2011), Contemporary psychological and social problems, Al-Maktab Al-Jami'i Al-Hadith, Alexandria.

- Durkheim, E. (2014), The division of labor in society, Free Press, New York.

- Garfi, F., & Alioua, A. (2024), Artificial intelligence and its ethical implications for contemporary man, Rufuf Journal.

- Hegel, G. W. F. (1977), Phenomenology of spirit, Oxford University Press, Oxford.

- Khalifa, A. M. (2003), Studies in the psychology of alienation, Dar Ghareeb for Printing, Publishing, and Distribution, Egypt.

- Mariami, S. (2020), A reading in the concept of alienation, Journal of Saoura for Human and Social Studies.

- Marx, K. (2007), Economic and philosophic manuscripts of 1844, Dover Publications, Mineola.

- Zineb, M., & Aggoun, A. (2025), The sociology of Artificial Intelligence: Transformations in the human–technology relationship, PSYCHOLOGY