



# Impact of artificial intelligence on human loss in decision making, laziness and safety in education

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This study examines the impact of artificial intelligence (AI) on loss of decision-making ability, laziness, and privacy concerns among Pakistani and Chinese university students. Education, like other industries, is using AI technology to solve today's problems. From 2021 to 2025, intellectual property investment will increase to \$253.82 million. This study is based on a qualitative approach to data analysis using PLS-Smart. Primary data was collected from 285 students from various universities in Pakistan and China. A sample is taken from the universe using the purposeful sampling technique. Research shows that artificial intelligence affects people's decision-making process and makes people lazy. It also affects security and privacy. Research results show that 68.9% of people's laziness, 68.6% of personal privacy and security issues, and 27.7% of lost decisions are due to the influence of clever lies against the Pakistani and Chinese communities. It is seen that human laziness is the area most affected by intelligence. However, this study argues that important precautions should be taken before using AI technology in education. Promoting wisdom without solving major human problems is like invoking the devil. To solve this problem, it is recommended to focus on the appropriate transfer, transfer and use of learning skills..

**A** Introduction Artificial Intelligence (AI) is a widely used tool in education. There are many types of AI used in education (Nemorin et al., 2022). Most of these include plagiarism detection, integrity checks (Ade-Ibijola et al., 2022), chatbots for admission and retention (Nakitare and Otiye, 2022), academic management, teacher grading, online forum development, student performance assessment, and Educational research (Nakitare and Otiye, 2022). Today, educational technology companies (EdTech) are using AI interventions to measure social and emotional learning (McStay, 2020). Artificial intelligence, expressive computing, and machine learning have been labeled as "emotional AI" (AI). Artificial intelligence (AI) is shaping our future more than any other invention in the last century. Anyone who does not understand this will soon think that they are standing in a world full of technology, a world that feels like magic (Maini and Sabri, 2017). There is no doubt that technology is important and its role has been demonstrated in recent epidemics. Many researchers consider the importance of education (Sayed et al., 2021). However, this does not mean that it is always useful and does not have ethical problems (Dastin, 2018). For this reason, many researchers focus on its development and use by keeping culture in mind (Justin and Mizuko, 2017). Some argue that the purpose behind intelligence in education may be good, but this may not be enough to prove that it is ethical (Whittaker and Crawford, 2018)

It is important to understand the meaning of "morality" in the context of intelligence and education. It is also important to determine the consequences of the use of artificial intelligence in education and the main concerns and other issues related to artificial intelligence in education. Generally speaking, ethical issues and intellectual concerns are the costs of innovation, issues of consent, misuse of personal data, illegal use and terrorism, freedom and liberty, determination of persons, etc. (Stahl BC., 2021a, 2021b). But technology can also improve information security (Ahmad et al., 2021) and competitive advantage (Sayed and Muhammad, 2015) and improve relationships between consumers (Rasheed et al., 2015). Scientists worry that the transfer of knowledge by 2030 will focus on

improving health and health management while also creating ethical issues, but there is no agreement. There is a clear distinction between the positive effects of life skills and morality (Rainie et al., 2021).

It has been proven by artificial intelligence cultural data that, in addition to the great benefits of artificial intelligence, many challenges also arise as it develops in terms of ethics, behavior, trust and privacy. Academics face many ethical problems when using or applying knowledge. Many researchers are investigating this area further. We divide the application of knowledge in education into three levels. First, the technology itself, its manufacturers, manufacturers, etc. The second is the impact on teachers and the third is the impact on students or students. Chapman, (2022). High expectations for artificial intelligence have increased international attention and interest, resulting in more than 400 policy documents on artificial intelligence. Discussing ethical issues has created an important framework that prepares researchers, managers, policy makers, and teachers for appropriate discussions that will focus on creating positive, safe, and reliable solutions, thereby achieving business success (Landwehr, 2015). But the question is: Is it possible to develop artificial intelligence technology that will not create ethical problems? Perhaps developers or manufacturers are reaping false benefits from AI technology in education. Perhaps their purpose is not to improve and assist education. Such questions come to mind when the impact of intelligence on education is discussed. Even if AI technology develops without concerns about the integrity of developers or manufacturers, there is no guarantee that a negative outlook will emerge. The risk of ethical issues also depends on performance. Better performance may reduce risk, but is it possible for all schools to use more expensive technology? (Schneiderman, 2021). Secondly, many problems may arise when teachers use technology (Topçu and Zuck, 2020). Safety, usage, usage etc. it could be. Third, users have privacy, trust, security and health issues. Strong management standards and policies are needed to solve these problems. However, unfortunately, no framework has been created, no guidelines have been agreed upon, no policies have been created, and no laws have been published to address the ethical issues raised by intelligence in education (Rosé et al., 2018). . Although not all problems directly affect education and training, most of them directly or indirectly affect the learning process. Therefore, it is difficult to determine whether intelligence has a positive effect, a negative effect, or a positive or negative effect on learning. The debate on the ethics of artificial intelligence technology will continue depending on the specific situation and context (Petousi and Sifaki, 2020). This study focuses on three fears regarding intellectual honesty in education:

1. Security and privacy
2. Loss of human decision-making
3. Making humans lazy

Although there are many concerns about intelligence in the field of education, these three issues are among the most common and difficult to deal with today. Moreover, no scientist can expand the scope of his research beyond his own work. .

## Theoretical Discussion

Use of cognitive skills in education. Technology has impacted almost all industries, this will still take time (Leeming, 2021). It plays an important role from communication to communication, from health to education and helps people in some way (Stahl A., 2021a, 2021b). No one can deny its importance and use for life, which gives a solid reason for its existence and development. One of the most important technologies is artificial intelligence (AI) (Ross, 2021). Artificial intelligence has many uses, and education is one of them. Many applications of AI in education include teaching, service learning, consulting, social robots, recognition, testing, analysis, testing and error handling, virtual reality, etc. Questions may be about the process of data analysis, interpretation, sharing, and processing (Holmes et al., 2019) and how to prevent bias and address issues that may impact student rights as structural bias may increase over time. Gender, race, age, income inequality, social inequality, etc. related to. (Tarran, 2018). Like other technologies, there are problems regarding artificial intelligence and its applications in education and training. This article will focus on ethical issues of artificial intelligence in education. Some of the issues related to privacy, access to information, responsibility of right and wrong, and student information (Petousi and Sifaki, 2020). Additionally, the theft and control of information can affect personal privacy, and personal control must be clearly understood (Fjelland, 2020). Additionally, the following ten principles were established (Aiken and Epstein, 2000).

1. Ensure encouragement of the user.
2. Ensure safe human-machine interaction and collaborative learning
3. Positive character traits are to be ensured.
4. Overloading of information to be avoided
5. Build an encouraging and curious learning environment
6. Ergonomics features to be considered
7. Ensure the system promotes the roles and skills of a teacher and never replaces him
8. Having respect for cultural values
9. Ensure diversity accommodation of students
10. Avoid glorifying the system and weakening the human role and potential for growth and learning.

When the above issues are considered alone, many problems will arise in the use of artificial intelligence in education. Ethical issues arise and exist at every level, from design and planning to implementation and impact. This is not what intelligence technology is designed and built for. Technology is useful in one way and dangerous in another; the question is how both will be affected (Vincent and van, 2022). Training outside the required standards and principles, bias, overconfidence, miscalculation, etc. are other ethical issues. Stephen Hawking once said that the success of artificial intelligence will be the most important thing in human history. Unfortunately, this will be the end unless we learn not to take risks. Safety is one of the key issues related to skills and education (Köbis and Mehner, 2021). Trustworthy Artificial Intelligence (AI) in Education: Prospects and challenges (Petousi and Sifaki, 2020; Owoc et al., 2021). Nowadays, most schools use artificial intelligence in the education process, and this field attracts the attention of researchers and interests. Many researchers agree that artificial intelligence contributes significantly to e-learning and education (Nawaz et al., 2017).

2020; Ahmed and Nashat, 2020). The recent COVID-19 epidemic has proven this claim (Torda, 2020; Çavuş et al., 2021). But artificial intelligence or machine learning also brings many concerns and challenges to learning; the biggest of which is security and privacy. part (Sayantani, 2021). Each tool works in its own way and students and teachers use it accordingly. It creates a learning experience in which voice is used to access information and poses a privacy and security risk (Göçen and Aydemir, 2020). When answering questions about privacy concerns, focus on student safety as this is a primary concern for AI tools and applications. The same will be true for teachers. 2021). Machine learning or machine intelligence is based on existing data. Without data, it means nothing, and the risk of data being misused and leaked for malicious purposes is inevitable (Hübner, 2021).

AI systems collect and use large amounts of data to create predictions and models; Many people are now concerned about the ethics of artificial intelligence and believe that security issues should be taken into account in the development and use of artificial intelligence (Samtani li al., 2021). The Facebook-Cambridge Analytica scandal is a prime example of how data collected through technology plays into privacy concerns. While much has been accomplished, as the National Science Foundation recognizes, much more needs to be done (State of California, 2021). Kurt Markley said schools, colleges and universities are at risk because they keep large amounts of student records, including health-related information, Social Security numbers, payment information and more. To ensure data security and prevent data leakage, schools need to re-evaluate and re-establish their security practices. The problem gets worse when the learning environment is remote or when information technology is used effectively (Chan and Morgan, 2019). People are concerned due to developments in hardware and software (Mengidis et al., 2019). This raises significant concerns regarding the security of many stakeholders and demonstrates the mechanisms that policymakers should adopt to prevent or mitigate threats (ELever and Kifayat, 2020). It is also worth noting that security concerns have increased with the use of mobile phones and content in distance education. One of the problems is that protecting e-learning technology against cyber attacks is not easy or requires little money, especially in education where the education budget is prohibitive (Huls, 2021). Another reason for this huge threat is that the number of talented people in private schools is low, which is another financial problem. Although in some cases the use of technologies such as artificial intelligence and machine learning can reduce security and threats, the problem is that not all teachers are professionals and do not have adequate training or the skills to use the equipment. As the use of artificial intelligence in education increases, the security threat also increases (Taddeo et al., 2019). In cybersecurity, no one can escape the intelligence threat; this is like a double-edged sword (Siau and Wang, 2020). It is an incident where criminals break into the machine and sell the product for other purposes (Venema, 2021). We change our security and privacy (Sutton et al., 2018). The question remains: Do we have privacy protections and when will AI be able to control our privacy? The answer is beyond human knowledge (Kim, 2007).

The interaction between humans and artificial intelligence is increasing day by day. For example, robots, chatbots, etc. in e-learning and education. Many types of artificial intelligence are used. Many people will one day learn about human behavior, but self-awareness, consciousness, etc. Some human behaviors such as will remain a dream. AI still needs data, and using it to learn patterns and make decisions without privacy is a challenge (Mhlanga, 2021). On the other hand, it is clear that artificial intelligence systems are relevant to many human rights issues and can be evaluated on a case-by-case basis. Artificial intelligence has so much impact on human rights because it is not organized or used on a white paper, but is a context for social interaction. Among the many human rights recognized by international law, the right to privacy is also affected (Levin, 2018). Based on the discussion, we offer the following thoughts. Artificial intelligence is a technology that has a major impact on economy 4.0, changing almost all aspects of human life and society (Jones, 2014). The increasing role of artificial intelligence in organizations and individuals is worrying to people like Musk and Stephen Hawking. Those who believe that when AI reaches a high level, humans are likely to lose control (Clark et al., 2018). Surprisingly, the number of studies has increased eight times compared to other sectors. Most companies and countries are investing in the discovery and development of AI technology, intelligence, and education (Oh et al., 2017). However, the main concern of AI use is that it complicates the role of AI in creating value and reduces human control (Noema, 2021). When increased, it automatically limits the thinking ability of the human brain. Therefore, this situation rapidly reduces people's thinking ability. This destroys people's minds and makes them more deceptive. Also, interacting with technology makes us feel that algorithms do not understand (Sarwat, 2018). Another issue is that people are dependent on technology in almost every aspect of life. There is no doubt that it has increased the standard of living and made life easier, but it has affected people's lives and made them impatient and lazy (Krakauer, 2016). The human brain gradually becomes more emotional and less emotional as it delves into all activities such as planning and organizing. High dependence on intelligence can reduce intelligence and create stress when the body or mind evaluates the need (Göçen and

Aydemir, 2020). It changes our choices and makes us lazy in every aspect of life (Danaher, 2018). Some argue that intelligence makes people more independent and responsible, thus having a significant impact on happiness and success (C. Eric, 2019). The impact will not be limited to specific groups or regions but will also include education. Teachers and students will use artificial intelligence applications while studying/studying or getting their work done. Gradually, dependence on the use of intellectual skills will lead to laziness and problems in the future. The following hypotheses are proposed to determine the analysis:

H2: Artificial intelligence is associated with human laziness

Loss of human judgment. Technology plays an important role in decision making. It helps people use information and knowledge correctly so that they can make appropriate decisions for their organizations and innovations (Ahmad, 2019). People create a lot of data, and to improve data efficiency, companies obtain and use intelligence and prevent people from using data. People believe that they can be profitable and save time by using these tricks in decision making. However, it has overcome human biological processes by reducing intelligence (Jarrahi, 2018). But AI technology has serious consequences, including its limited role in human



decision-making. Artificial intelligence is gradually decreasing and changing the role of humans in decision-making. Human mental abilities such as analysis, critical thinking, and creative problem solving have become critical (Ghosh et al., 2019). So this causes them to lose, so to speak, use it well and lose it. The pace of change in AI technology is evident in the use of AI in decision-making, which has increased from 10% to 80% in five years (Sebastian and Sebastian, 2021).

Integrate into recruitment processes and make decisions about their products.

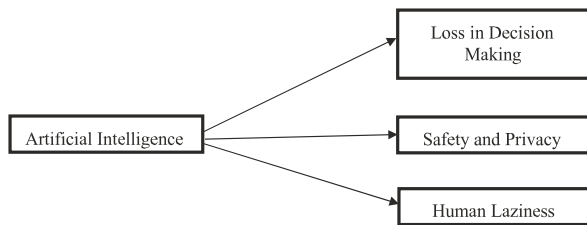


Fig. 1 Proposed model. The impact of artificial intelligence on human loss in decision making, laziness, and safety in education.

Learn more about senior management decisions (Libert, 2017). Organizations are using AI to analyze data and make tough decisions to gain a competitive advantage. Although artificial intelligence helps the decision-making process in many areas, the final say in decision-making is still in the hands of humans. It emphasizes the importance of humans in this process and the necessity of ensuring that people work side by side with artificial intelligence technology (Meissner and Keding, 2021). It is expected that the hybrid model of human-machine integration approach will converge in the future (Subramaniam, 2022). Universities are using artificial intelligence in education and management. Students seeking admission for marks now get personalized help from private lessons, quick answers, 24/7 education, answers to questions and study activities are important roles played by intelligence in learning (Karandish, 2021.) simple but important questions: Will intellectual wisdom choose justice? The answer is that AI is seen as discriminatory and its choices are unfair (Tran, 2021). The second question is: Does intelligence affect people's decision-making process? When smart systems are used, candidates can send their documents directly to designers and receive approval for the entrance exam without the need for manual review. One reason for this is that authorities trust the system; Secondly, it may be the laziness of leaders in terms of job performance. Similarly, when it comes to collecting and analyzing student data, the choice will be made based on the decision of the system, without trust or loyalty due to the work of the authorities. In almost all professions, teachers and other staff lack expertise in making educational or administrative decisions. Their reliance on intelligence tools installed in their organizations has increased. As a result, AI in all educational organizations automates the work and reduces the involvement of employees in making various tasks and decisions. Teachers and other leaders are of no help against intelligence, as the machine does too much work. They lose the ability to complete traditional academic tasks and therefore the ability to make career decisions. Figure 1

## Method

**Study design.** Conceptual research focuses on beliefs and theories regarding the process of knowledge development. This is exactly what scientists do when they research and gather knowledge in a particular field. Positivism focuses on seeing reality as generalizations that create laws. This idea uses existing theory for the development of thinking in this study. Various methods were used for data collection and analysis in this study. Quantitative practice focuses on meaningful numbers and provides a way to measure the situation and its organizations. Additionally, while conducting this research, the authors also examined the validity and reliability of the instrument to ensure data accuracy. Primary method was used as the data collected for this study was primary, i.e. collected directly from the participants. Purposive sampling technique was used to collect primary data in this study. This method is used because its target among research participants is small and the responses reflect the entire population (Davies and Hughes, 2014). Purposive sampling is a method of generating randomness because the authors select participants based on the purpose of the study. The participants of this study are students studying at various universities in Pakistan and China. Consent was obtained from the participants in accordance with ethical rules. They were then asked to provide the answers in the survey. The number of participants in the research was 285.

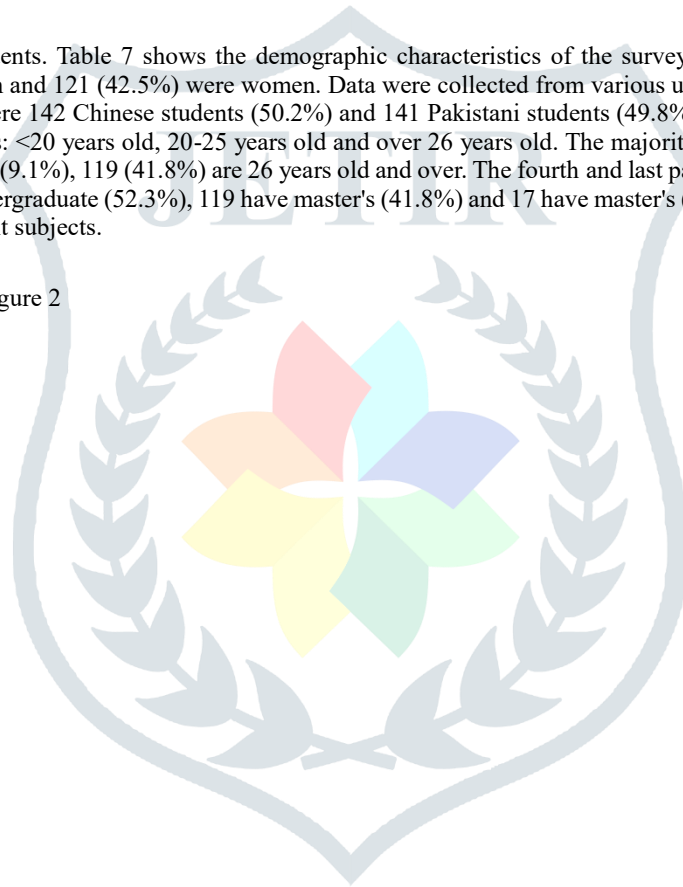
measurement. The test is divided into two parts. The first part of the survey included demographic questions such as gender, age, country and education. The second part of the tool consists of Likert-scale questions regarding latent variables. This research model has four latent variables. All four variables were measured using Likert-type questions. All five measures of latent variables were taken from various previous studies that developed and validated these measures. The measurement of intelligence includes seven items adapted from the study of Suh and Ahn (2022). The measure of loss in decision making consists of five items used in Niese's (2019) study. Security measures and security concerns have five dimensions adopted in Youn's (2009) study. The measurement of human laziness consists of four items used in Dautov's (2020) study. Each was rated on a Likert scale (5 points); 1 indicated the lowest level of agreement and 5 indicated the highest level of agreement. Table 1 shows the details of each structure. CMB is an important problem that scientists are working on for the first time. There are many reasons for this problem. The main reason for this is response bias caused by research participants evaluating all questions equally (Jordan and Troth, 2020). The VIF value of the model is not limited to the diagnosis of multicollinearity but also shows the impartiality of the method (Kock, 2015). If the VIF value of all items in the model is equal or <3.3, the model is considered to have no different models. Table 2 shows that all VIF values were <3.3, indicating that there

were almost no problems of bias in the data collected in the preliminary analysis. Reliability and validity verify the robustness of the device and research data for further analysis. Two tools are used in the reliability equation: project reliability and construction reliability. The external loading of each product measures the reliability of that product. Its threshold is 0.706, but in some cases even 0.5 is possible if the unity assumption is not violated (Hair and Alamer, 2022). Cronbach Alpha and composite reliability are the most commonly used tools to measure construct reliability. The threshold is 0.7 (Hair Jr et al., 2021). Table 3 shows that for each structure, all elements had external loadings greater than 0.7. Only one intelligence and one judgment are below 0.7 but within the minimum limit of 0.4, and both AVE values are good. Although Cronbach's alpha and composite reliability values for each construct were  $>0.7$ , test reliability, item reliability and construct reliability were achieved. There are two ways to assess the validity of data; one is convergent validity and the other is discriminant validity. Convergent validity using the AVE value. The threshold for AVE is 0.5 (Hair and Alamer, 2022). In terms of reliability and validity, the AVE value of each construct is  $>0.5$ , indicating that each construct is valid. comparison and cross-loading of items. The starting point of Farnell Licker's method is that the diagonals of the table must be greater than the values of the corresponding rows and columns. Table 4 shows that all diagonals of the square root of AVE are greater than the column and column values. The threshold for HTMT values is 0.85 or less (Joe F. Hair Jr et al., 2020). Table 5 shows that all values are less than 0.85. Table 6 shows that they should have self-loading, which is more effective than cross-loading with other structures. Table 6 shows that the total personal load is greater than the load factor. All three of the above discriminant validity measures showed misclassification of the data.

### Results and Discussion

Demographic profile of respondents. Table 7 shows the demographic characteristics of the survey participants. Of the 285 people surveyed, 164 (75.5%) were men and 121 (42.5%) were women. Data were collected from various universities in China and Pakistan. The results showed that there were 142 Chinese students (50.2%) and 141 Pakistani students (49.8%). Age group shows that students are divided into three age groups:  $<20$  years old, 20-25 years old and over 26 years old. The majority of students are in the 20-25 age group, 140 (49.1%) are under 26 (9.1%), 119 (41.8%) are 26 years old and over. The fourth and last part of the table shows the student's plan. Accordingly, 149 have undergraduate (52.3%), 119 have master's (41.8%) and 17 have master's (6%) degrees. The model explains the relationship between different subjects.

The design model is shown in Figure 2



regression analysis. Table 8 shows all correlations in the model. The first correlation is between cognitive skills and human decision making, with a beta value of 0.277. The beta value shows that for every unit increase in intelligence, human decision-making ability of Pakistani and Chinese college students will decrease by 0.277 units. The t value of this relationship is 5.040, which is greater than the threshold of 1.96, and the p value is 0.000, which is <0.05, indicating that the relationship is significant. The second relationship is between intellectual intelligence and human laziness. The beta value of this relationship is 0.689, indicating that for every unit increase in intelligence, students

**Table 1 Measures.**

Construct	Codes	Items
Artificial intelligence	AI1	It is interesting to use AI.
	AI2	AI could make everything better.
	AI3	AI is very important for developing society
	AI4	AI is necessary for everyone
	AI5	AI produces more good than bad.
	AI6	I think AI makes life more convenient.
	AI7	AI helps me solve problems in real life.
Decision making	DM1	How easy or difficult was the PROCESS of trying to find an answer?
	DM2	I believe there is a good match between my decision and the decision support technology.
	DM3	I believe the decision support technology is not well suited for my decision.
	DM4	I believe there is an excellent fit between my decision and the decision support technology.
	DM5	I believe there is a mismatch between the decision I've made and the decision to support technology
Human laziness	HL1	Seeing what to do but don't want to do it
	HL2	Postponing what should be done until the end
	HL3	I avoid more complex jobs, affairs or assignments
	HL4	Put aside work/homework and do what you like to do first. (For example: play a game first, then do business)
Security and privacy issues	SP1	By using AI, I am experiencing financial loss
	SP2	By using AI, I am Experiencing identity theft
	SP3	I am concerned about how companies collect and use personal information online.
	SP4	I always received junk emails or unwanted mail
	SP5	I am experiencing a feeling that my personal information may be misused

**Table 2 Multicollinearity statistics.**

Constructs	Items	VIF values
Artificial intelligence	A1	2.019
	A2	2.069
	A3	2.113
	A4	1.813
	A5	1.940
	A6	1.641
	A7	2.021
Decision making	DM1	1.394
	DM2	1.126
	DM3	1.751
	DM4	1.701
Human laziness	HL1	2.040
	HL2	2.066
	HL3	2.397
	HL4	2.109
Safety & privacy	SP1	1.514
	SP3	1.729
	SP4	1.612

Above are the individual VIF values of the individual items, along with their constructs.

**Table 3 Reliability and validity.**

Constructs	Items	Loadings	Cronbach alpha	Composite reliability	AVE
Artificial intelligence	A1	0.772	0.873	0.902	0.569
	A2	0.782			
	A3	0.792			
	A4	0.746			
	A5	0.777			
	A6	0.646			
	A7	0.757			
Decision making	DM1	0.802	0.715	0.818	0.540
	DM2	0.454			
	DM3	0.855			
	DM4	0.762			
Safety & privacy	SP1	0.818	0.776	0.870	0.691
	SP3	0.838			
	SP4	0.837			
Human laziness	HL1	0.842	0.872	0.912	0.722
	HL2	0.839			
	HL3	0.870			
	HL4	0.848			

Items DM5, SP2, and SP5 were removed from the model due to low outer loading values.

in Pakistani and Chinese universities will become 0.689 units lazier. The t value of this relationship is 23.257, which is greater than the threshold of 1.96, and the p value is less than the threshold of 0.05, which means that the quality of the relationship is also very important. The third and final relationship ranges from artificial intelligence to security and privacy issues between university students in Pakistan and China. The beta of this relationship is 0.686, meaning that for every unit increase in intelligence, security and privacy concerns increase by 0.686. The t value of this relationship is 17.105, which is greater than the threshold of 1.96, and the p value is 0.000, which is less than the threshold of 0.05.

shows that this relationship is also very important. Table 8 also shows that the results support all three hypotheses. Once the reliability and validity of the measurement model have been verified, the next step should be to evaluate the suitability of the Model. For security models, it includes SmartPLS, SRMR, Chi-square, NFI, etc. For example, many indicators are available, but most researchers recommend using SRMR in PLS-SEM to evaluate safety models. Values <0.08 are generally considered reasonable when applying PLS-SEM (Hu and Bentler, 1998). However, the model fit shows that the SRMR value is 0.06, which is less than the threshold of 0.08, indicating that the security model is good. Table 9 shows the predictive power of the model because we know that the model includes all variables. The model then provides three predicted values for each variable. The threshold used to estimate the power model is greater than zero. However, the Q2 values are 0.02, 0.15, and 0.35, respectively. variable model has low, medium or high prediction accuracy for the endogenous model (Hair et al., 2013). Human laziness has the highest correlation with a Q2 value of 0.338, indicating a moderate effect. Safety and security issues have the second largest predictive correlation with a second quartile value of 0.314, again showing a moderate effect. The last and smallest predictive correlation in the decision, the Q2 value of 0.033, indicates poorer performance. The larger the value of Q2,

The variable or model has the most predictive power.

Key Performance Matrix Analysis (IPMA). Table 10 shows the importance and performance of each variable as well as the dependent variable. We found that AI is 68.78% the same across the three variables of human laziness, decision-making, safety, and security. Although intelligence is important, people's laziness is 68.9%, loss of judgment is 25.1%, and safety and security is 74.6%. This message indicates that security and privacy are the highest priority and improving their performance is recommended to meet the priority. In figures 3 to 5

Table 4 Fornell Larcker criteria.

	Artificial intelligence	Decision making	Human laziness	Safety & privacy
Artificial intelligence	0.755			
Decision making	0.277	0.735		
Human laziness	0.689	0.288	0.85	
Safety & privacy	0.686	0.241	0.492	0.831

The diagonal values are the square root of the AVEs.

Table 5 HTMT values.

	Artificial intelligence	Decision making	Human laziness
Decision making	0.311		
Human laziness	0.787	0.338	
Safety & privacy	0.831	0.309	0.596

Table 6 Cross-loadings.

	Artificial intelligence	Decision making	Human laziness	Safety & privacy
A1	0.772	0.263	0.533	0.532
A2	0.782	0.202	0.565	0.474
A3	0.792	0.254	0.613	0.487
A4	0.746	0.212	0.505	0.506
A5	0.777	0.278	0.496	0.601
A6	0.646	0.082	0.43	0.475
A7	0.757	0.141	0.482	0.545
DM1	0.247	0.802	0.224	0.18
DM2	0.082	0.454	0.093	0.08
DM3	0.263	0.855	0.289	0.23
DM4	0.144	0.762	0.176	0.179
HL1	0.586	0.189	0.842	0.398
HL2	0.566	0.301	0.839	0.411
HL3	0.581	0.297	0.870	0.425
HL4	0.606	0.196	0.848	0.438
SP1	0.582	0.132	0.383	0.818
SP3	0.53	0.268	0.377	0.838
SP4	0.594	0.207	0.463	0.837

All the bold numbers are self-loading while non-bold numbers are the cross-loadings of each construct.

Table 7 Demographic distribution of respondents.

	No.	Percentage
Gender		
Male	164	57.5
Female	121	42.5
Total	285	100
Country		
China	142	49.8
Pakistan	143	50.2
Total	285	100
Age group		
<20 years	26	9.1
20-25 years	140	49.1
26 years and above	119	41.8
Total	285	100
Program of study		
Undergraduate	149	52.3
Graduate	119	41.8
Post-Graduate	17	6.0
Total	285	100

The above is the demographic distribution of the data collected by students from different Pakistan and China universities.

Show all three differences: Importance compared to AI performance. Multiple group analysis is a technique used in structural equation modeling to compare the effects of two categorical variables on the relationship model. The first category is gender, which includes male and female subgroups or types. Table 10 shows the gender comparison for all three relationships. Records show there were 164 men and 121 women. All three correlations had a p value  $> 0.05$ , indicating that gender had no significant relationship. Table 10 shows country comparisons for all three relationships in the model. The P value for all three relationships is  $> 0.05$ , indicating that country has no effect on all three relationships. According to records, there are 143 Pakistanis and 142 Chinese according to their place of residence.

talking to each other. Artificial intelligence has become an important part of our lives and its impact affects every aspect of Our daily life... Like every development in technology, it has its benefits and problems. This study explores the relationship between artificial

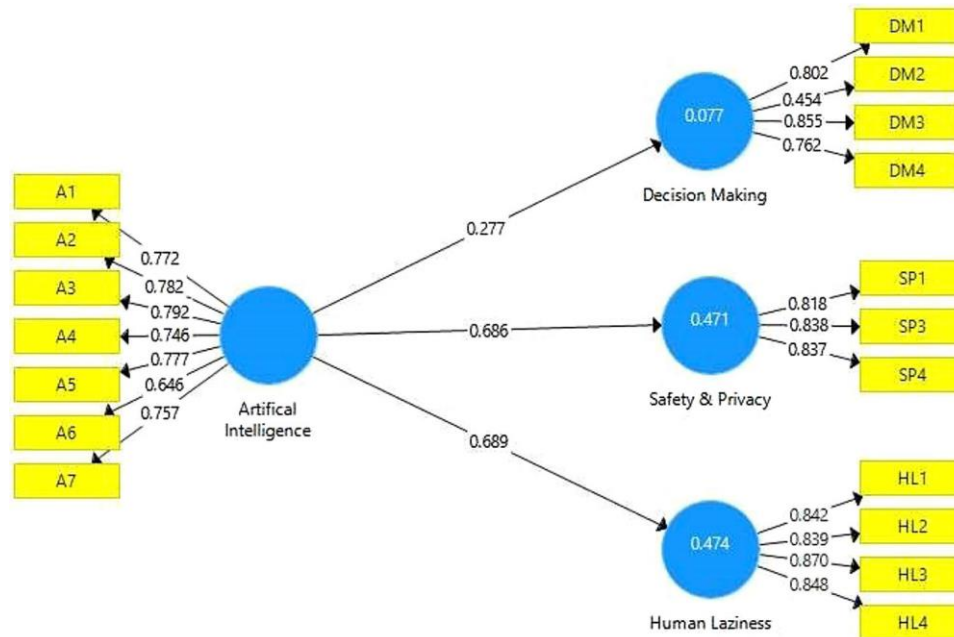


Fig. 2 Results model for the Impact of artificial intelligence on human loss in decision-making, laziness, and safety in education.

intelligence and human decision-making, laziness, security and privacy concerns. The results in Tables 11 and 12 show that AI has a positive impact on all these variables. The results of this study also show that the use of artificial intelligence technology creates security and privacy issues for users. Previous studies have shown similar results (Bartoletti, 2019; Saura et al., 2022; Bartneck et al., 2021). The use of artificial intelligence technology in educational institutions also creates security and privacy problems for students, teachers and institutions. In today's information age, security and privacy are important issues regarding the use of smart technology in educational institutions (Kamenskih, 2022). Effective use of artificial intelligence technology requires certain skills. Poor understanding of usage can lead to security and privacy issues (Vazhayil and Shetty, 2019). In many cases, education companies do not have AI technology experts to manage this, again making them vulnerable to security and privacy issues. Even if a company has good intelligence and experienced AI leaders in its users, no one can deny that security or privacy management can be broken due to errors, leading to security and privacy issues. In addition, interaction between knowledgeable and skilled individuals in educational institutions can lead to the theft or disclosure of personal and educational information (Kamenskih, 2022). Artificial intelligence is based on algorithms and uses big data to make recommendations (Araujo et al., 2020). Any mistake in the algorithm can lead to serious problems and, unlike humans, it will repeat the same mistakes when making its own decisions. It also poses a threat to the security and privacy of school and student information. Students also face the same problem. They are easily victimized because they are not properly trained in the use of intelligence (Asaro, 2019). As the number of users increases, the distribution capacity and distance increases, thus increasing concerns about security and privacy (Lv and Singh, 2020). The consequences depend on the nature of the attack and the information published or used by the attacker (Vassileva, 2008), adding elements of laziness to those who rely more on wisdom.

However, researchers have not conducted this much work before, but many researchers in the literature have confirmed the results of this study (Farrow, 2022; Bartoletti, 2019). Artificial intelligence in education can make people lazy. Artificial Intelligence works in a repetitive manner and does not allow people to remember, use thinking skills, or use knowledge (Nikita, 2023). It makes people lazy by causing bad behaviors that do not use the person's potential. Teachers and students using artificial intelligence technology will gradually lose interest in studying on their own. This is another important aspect of cognitive skills in education (Crispin Andrews). Teachers and students become lazy and lose their judgment as most tasks are supported or replaced by technology (BARON, 2023). Posner and Fei-Fei (2020) argue that it is time to change the impact of intelligence on education. The research results also confirm the statement that one of the main reasons why people lose their decision-making power is artificial intelligence. Many scientists Additionally, in the past, it has been shown that cognitive impairment is the main reason why people gradually lose their decision-making power (Pomerol, 1997; Duan et al., 2019; Çukurova et al., 2019). Artificial Intelligence automates repetitive tasks and does not allow people to remember, use thinking skills, or utilize knowledge, resulting in loss of decision making (Nikita, 2023). An online learning environment may be a good choice (VanLangen, 2021), but the physical environment of the classroom is the preferred learning



model (Dib and Adamo, 2014). In a real setting, there is much interaction between teachers and students that develops students' character and citizenship; for example, students can learn from other students, ask questions to the teacher, and even experience learning. There are many insights they can learn and adopt beyond the curriculum (Quinlan et al., 2014). They can learn to use their abilities to make choices, etc. This affects students' learning, behavior, public responsibility, and decision-making power (i.e., the use of their knowledge). AI technology reduces people's ability to make decisions on their own (Hassani and Unger, 2020).

**Table 8 Regression analysis.**

Relationships	$\beta$	Mean	STDEV	t values	P-values	Remarks
Artificial intelligence → Decision making	0.277	0.287	0.055	5.040	0.000	Supported
Artificial intelligence → Human laziness	0.689	0.690	0.030	23.257	0.000	Supported
Artificial intelligence → Safety & privacy	0.686	0.684	0.040	17.105	0.000	Supported

All three relationships in this table are based on the hypothesis of this study and all are statistically significant.

**Table 9 IPMA analysis.**

	Importance	Performances
<i>Decision making</i>		
Artificial intelligence	0.251	68.78
<i>Human laziness</i>		
Artificial intelligence	0.689	68.78
<i>Safety and security</i>		
Artificial intelligence	0.746	68.78

**Table 11 Model fitness.**

	Saturated model	Estimated model
SRMR	0.065	0.068
d_ULS	0.73	0.793
d_G	0.281	0.286
Chi-Square	468.35	473.968
NFI	0.811	0.809

**Table 10 Multi-group (analysis of gender)<sup>a</sup>.**

	$\beta$ -diff (male-female)	p-value new (male vs. female)
Artificial intelligence → Decision making	-0.019	0.875
Artificial intelligence → Human laziness	0.077	0.194
Artificial intelligence → Safety & privacy	0.032	0.670

**Multi group analysis (country wise)<sup>b</sup>**

	$\beta$ -diff (China- Pakistan)	p-Value new (China vs. Pakistan)
Artificial intelligence → Decision making	0.133	0.188
Artificial intelligence → Human laziness	-0.017	0.776
Artificial intelligence → Safety & privacy	-0.034	0.656

<sup>a</sup>Among 285 respondents 164 were males and 121 were females.  
<sup>b</sup>Among 285 respondents 142 were Chinese and 143 were Pakistani.

**Table 12 Predictive relevance of the model.**

	SSO	SSE	Q <sup>2</sup> (=1 - SSE/SSO)
Artificial intelligence	1995	1995	
Decision making	1140	1101.942	0.033
Human laziness	1140	754.728	0.338
Safety & privacy	855	586.125	0.314

The Q<sup>2</sup> values show the prediction power of the model.

admission, grading, curriculum setting, and record-keeping, to

AI technology has undoubtedly transformed or at least affected many fields (IEEE, 2019; Al-Ansi and Al-Ansi, 2023). Its applications have been developed for the benefit of humankind (Justin and Mizuko, 2017). As technology assists employees in many ways, they must be aware of the pros and cons of the technology and must know its applications in a particular field (Nadir et al., 2012). Technology and humans are closely connection; one person's success often depends on others; Therefore, it is necessary to ensure that the technology benefits human health (Ho et al., 2022). Many researchers have discussed users' understanding of technology (Vazhayil and Shetty, 2019), and many have touched on legal and regulatory issues (Khan et al. et al., 2014). Therefore, the adoption or use of technology should be chosen carefully (Ahmad and Shahid, 2015). Once dreamed of in movies, artificial intelligence now rules parts of technology such as healthcare, transportation, space and business. As artificial intelligence enters education, its impact will be greater (Hübner, 2021). Artificial intelligence has strengthened its role in education, especially during the COVID-19 pandemic, and has challenged traditional teaching methods by providing schools, teachers and students with many opportunities to continue the learning process (Åtrbo, 2020; Al-Ansi, 2022). ; Akram et al., 2021). Artificial intelligence applications/technologies such as chatbots, virtual reality, self-learning, social robots, and teaching aids in the learning environment.

In today's society, there are more problems for schools and students (Xie et al., 2021). This phenomenon raises many questions about the ethics of technology, its use, and its impact on universities, teachers, and students. privacy issues, business automation and decision making are discussed. He says AI will help improve efficiency rather than being a government solution. It is worth noting that the report does not acknowledge the role of intelligence; Good problem. Other research shows that intelligence-based decision-making and human decision-making need to be combined to make better decisions. In other words, the decisions made by artificial intelligence need to be evaluated and controlled, and people will choose the best decision among the decisions suggested by the intelligence (Shrestha et al., 2019). The role of intelligence in today's technological world cannot be ignored. It helps people with difficult tasks, provides solutions to many difficult problems, helps with decision making, etc. However, on the other hand, it brings with it problems

and solution needs, people, work, etc. is to change (Duan et al., 2019). There are widespread concerns about risk, conflict between the ethics and effectiveness of AI decision-making, and general views that vary depending on individual characteristics (Araujo et al. 2020). There may be many reasons for this contradictory finding, but culture is thought to be an important factor (Elliott, 2019). Researchers suggest that people with better leadership have not yet realized the problem of intelligence, so this limitation in leadership is still a problem for intelligence to influence their behavior (Di Vaio et al., 2020; Mantelero, 2018). Another is that the word privacy has many meanings in different cultures (Ho et al., 2022). In some cultures, people consider minimal intrusion into one's personal life to be a serious privacy concern, and in some cultures, people even ignore such situations (Mantello et al., 2021). Results Zhang et al. (2022),

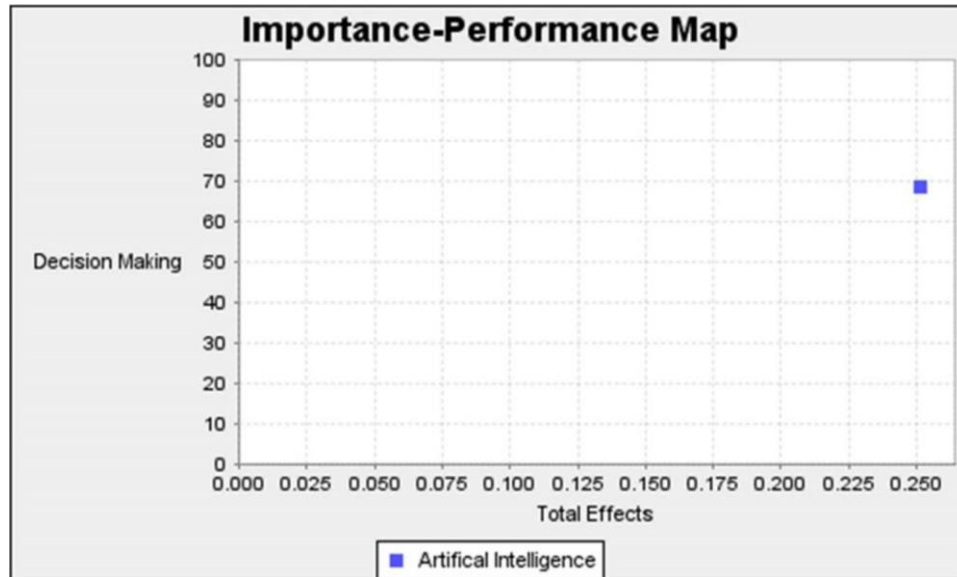
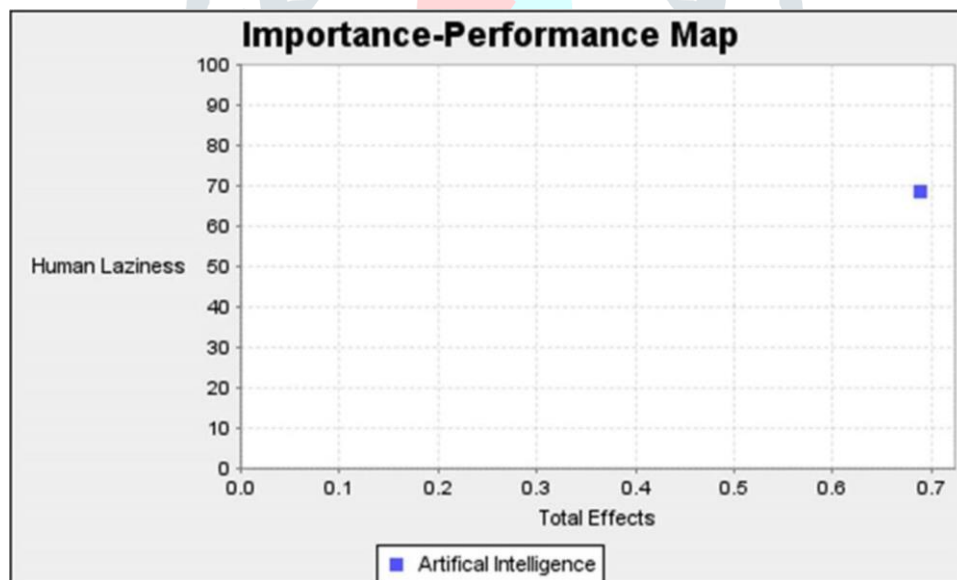


Fig. 3 Importance-performance map—human loss in decision making and artificial intelligence.



Aiken and Epstein (2000) and Bhbosale et al. (2020) focused on ethical issues of artificial intelligence in education. These studies show that the use of artificial intelligence in education is responsible for the laziness of students and teachers. In short, as in other fields, researchers are divided on the focus on intellectual skills in education. But they agree on the positive role intelligence can play in education. AI in education can lead to laziness, indecision, security or privacy issues. However, all these problems can be reduced if artificial intelligence is properly implemented, controlled and used in education.

Clutter. This research has important implications for technology developers, technology organizations, and policymakers. This study highlights the importance of resolving ethical issues during the development and implementation of artificial intelligence technology. It also provides guidance to the government and legislators on the problems caused by artificial intelligence and its use in all organizations, especially in education. Artificial intelligence could revolutionize education, but it also has some disadvantages. This

means we need to be aware of the potential impacts of AI on laziness, indecisiveness, privacy and security, and design AI systems with minimal intervention.

Implications for management: Those interested in the development and use of AI technology in education should identify the advantages and disadvantages of AI in this field and balance these benefits with the challenge of laziness, decision-making, privacy or security, while protecting people's creativity and thoughts. Artificial intelligence systems should be transparent and fair in all matters. Schools should use smart technology to assist rather than replace teachers in their daily work. Because AI systems can process so much data and make predictions, there is a risk that people will rely too much on AI when making decisions. This reduces the resources of

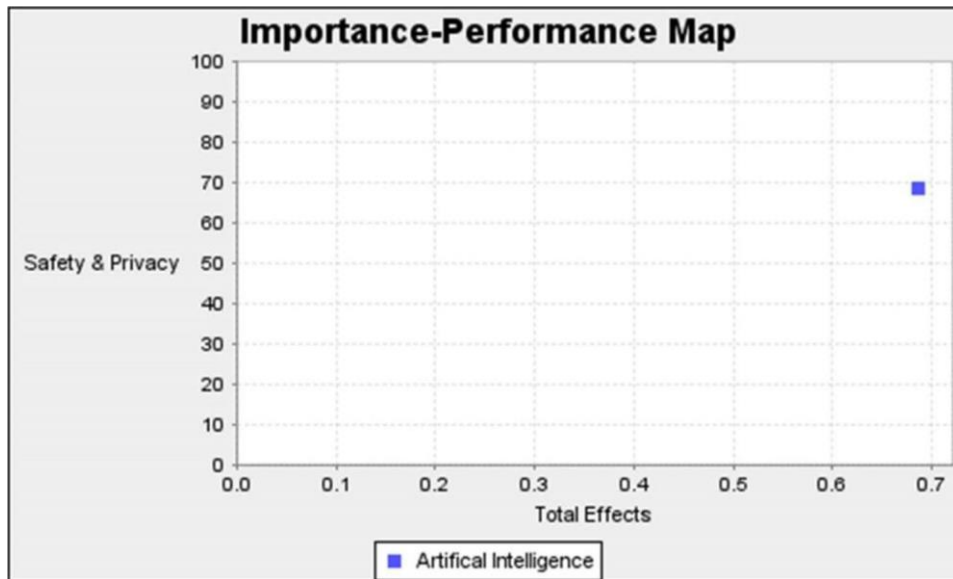


Fig. 5 Importance-performance map—safety and privacy and artificial intelligence.

students and teachers to think and innovate, thus lowering the standard of education. Teachers need to be aware of how AI affects decision-making and balance the benefits of AI with human thinking and creativity. Artificial intelligence could impact school safety. Artificial intelligence systems can monitor student behavior, detect potential dangers, and identify situations where children need extra help. There are concerns that AI could be used to unfairly target certain groups of students or impact student privacy. Therefore, teachers should be aware of AI ethics and create AI processes that are important for users' safety, privacy, and learning in the organization. Another obstacle to learning is that artificial intelligence makes people lazy. Teachers and students will become dependent on AI systems and less interested in exploring or learning new skills or technologies. This may lead to a decrease in academic quality and incomplete personal development. Therefore, teachers need to be aware of the positive effects of intellectual skills on student motivation and create a learning environment that supports their participation in learning. Although he was academically rewarded and helped with many academic and administrative projects, his poor judgment, laziness, and concern for safety were remarkable. It supports decision making, helps teachers and students multitask, and supports processes. The increasing adoption of artificial intelligence in education is increasing, while the loss of human decision-making ability makes users lazy about technology and automation and increases security and privacy concerns. Ensuring that artificial intelligence does not create ethical issues in education should be a top priority for designers. In practice, this is not possible, but at least at this level it can reduce ethical concerns (both personal and social). , Privacy and security.

Reliance on artificial intelligence technology in decision-making should be reduced to a level that preserves human knowledge. Teachers and students must be trained before using AI technology. Research may explore other topics related to AI in education that have not yet been examined. Definition and calculation of statistical data. Data analysis program. Discussion and distribution. Similar studies can be done in other regions and countries. This study is limited to three ethical issues related to artificial intelligence: loss of judgment, human laziness, and privacy and security. Many ethical issues need to be examined. Other research methods may work to facilitate this.

Data Availability

Data generated and/or analyzed during the current study are referred to as supplementary data and are also available from the author upon reasonable request.

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## Author Contributions

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