The Impact of Artificial Intelligence (AI) Technology on Students' Social Relations

Septiani Amanda Puteri[1], Yulia Saputri[2], Yarni Kurniati[3]

[123]*UIN Sjech M. Djamil Djambek Bukittinggi , septianiamandaputri26@gmail.com*

Abstract

In an era where artificial intelligence (AI) technology is increasingly penetrating various aspects of life, including education, it is important to understand its impact on students' social relationships. These changes raise questions about how interactions between students and teachers are affected by AI Technology. This research aims to investigate the impact or artificial intelligence on students' social relationships in an educational environment. The focus is on understanding changes in interactions between students, student-teacher interaction, as well as broader implications for social dynamics inside the classroom and outside the classroom. The research method used is a literature review which uses data collections sources that are relevant to this research, which can be in books, megazines and other print media, or can be obtained from photos and videos. The research results show that artificial intelligence technology has a complex impact on students' social relationships. Although it can improve efficiency and learning outcomes, AI technology can also reduce social inequality, and create excessive dependence on technology. Educators and policymakers need to carefully consider the use of AI technology in education to ensure that positive impacts are maximized, while negative impacts are minimized.

Keywords: artificial intelligence, Social relations, Learners

1. Introduction

In the modern era dominated by technological progress, it cannot be denied that artificial intelligence (AI) technology has become one of the most important innovations that influences various aspects of human life. Artificial intelligence is a concept that can be used to develop computers and computing systems to perform tasks that usually require human intelligence. Artificial intelligence is a branch of computer science that studies (in the sense of design) intelligent computer systems, namely systems with the ability to think like humans. Artificial intelligence has been able to overcome data processing challenges that were previously difficult or even impossible for humans to overcome effectively

Artificial intelligence has the potential to revolutionize various sectors and has become a promising tool for improving the teaching and learning process. The education sector has undergone a major transformation with the integration of artificial intelligence. The increasingly rapid development of technology influences the world of education, especially students, to always adapt to existing technological developments, so as not to appear too out of date. The increasingly rapid development of technology has an impact on the development of students' personalities, especially on social relationships between students at school.

Students are the main focus subject in the implementation of education and teaching. As regulated in the Law of the Republic of Indonesia Number 20 of 2003 Article 1 paragraph 4 concerning the national education system, students are members of society who seek to develop their potential through the learning process available at certain paths, levels and types of education, so it is appropriate Students receive appropriate services that can develop their potential so that students do not experience problems in developing their personality, especially in social relationships with other people (RI Law No. 20, 2003). According to Sinolungan (in

Kurnia, 2007 quoted by (Sopandi, 2021)states that the meaning of students is divided into two parts, namely in a narrow sense and a broad sense, in a broad sense, students are everyone who is bound by the lifelong education process, Meanwhile, in the narrow sense, students are every student studying at school. Students are individuals who are involved in social relations where there are relationships between one human being and another human being that can influence each other.

Social relationships are defined as the ways individuals react to the people around them and how these relationships influence them. Meanwhile, according to(Sunarto, 2002), social relations are relationships between people who need each other, where each individual tries to adapt to the social environment, how an individual should be in his group. According to Alisyahbana (Asrori, 2005), social relationships are defined as the ways individuals react to the people around them and how these relationships influence them.

Based on several expert opinions above, it can be concluded that social relationships are the ways individuals react to the people around them and how they influence themselves. Social relationships are formed from the moment humans are born, and develop in line with the progress of human life, responses from the environment make humans learn to interact, the wider the social environment causes individuals to receive more and more influence from outside (Uda, 2023).

Based on research conducted by (Hohenstein et al., 2023) the results show that the use of algorithmic responses changes language and social relationships, more specifically this increases the speed of communication, the use of positive emotional language. In line with research conducted by (Tinghong Lai et al., 2017) the results showed that AIEd had a negative impact on adolescents' social adaptation abilities, and had a significant negative correlation with social adaptation abilities and family support, but there was no significant correlation with school support, but also can influence through family support. This is in line with research conducted by (Abdelrazeq et al., 2016) which found that technology has a significant role in the world of education, especially in the era of industrial revolution 4.0. Through the use of technology, students gain skills and knowledge that are relevant in the future. future, as well as helping to establish broader and more inclusive social relations.

The use of artificial intelligence (AI) technology in education has changed the way of learning and teaching, the impact of which is clearly visible, namely the impact on students' social relationships. The problem that is the main focus in this research is how intelligence technology (AI) impacts students' social relationships in the educational context. This change is not limited to interactions between fellow students, but also extends to student-teacher interactions as well as broader implications for social dynamics inside and outside the classroom.

The aim of this research is to explore the impact of artificial intelligence (AI) technology on students' social relationships in the educational environment in a more holistic manner. Through this research, it is hoped that changes in interactions between students, student-teacher interactions, as well as broader implications for social dynamics inside and outside the classroom can be understood. Thus, it is hoped that this research can provide in-depth insight into how AI technology influences social relations in the educational context, as well as provide a strong basis for further improvement and development in technology-based education.

2. Method

In this research, the author uses literature review research which is appropriate to the object of this research. Library research is a method that uses data collection sources from libraries, namely in books, magazines and other print media, or can be obtained from photos and videos (Khairiah & Silvianetri, 2022, Yuningsih & Herdi, 2021 as quoted by Sabaruddin et al ., 2022). The data collection method used in this research is a documentation method which collects data from various types of literature into one document which is used to answer this research (Ihsan & Sabarudin, 2023). Collection of similar research results from articles or journals found. This research uses data analysis techniques, namely content analysis techniques.

3. Results and Discussion

(Artificial intelligence (AI) is a field in computer science that aims to develop the capabilities of machines or computers so that they can perform tasks as humans do with equal or even better abilities. According to (Kusumawati, 2008) the main goal of developing AI is to help humans in various activities and jobs with the ability to imitate human thinking, where AI is able to receive and process data to make decisions in completing tasks. Artificial intelligence is simply a device or tool designed to help humans with thinking and reasoning in line with instructions from humans themselves. AI is a form of artificial intelligence that is superior to humans in terms of speed and accuracy, as can be seen from AI's ability to compete with human speed, even surpass it, and AI's accuracy in carrying out programs that is beyond doubt.

Artificial intelligence (AI) is a technology that is increasingly commonly used among the public and students, although there are still many people who don't know how it works, most people state that AI has a positive impact and can be applied in various fields, including in the world of education. However, there are also several concerns regarding the misuse of AI technology, so efforts need to be made to ensure responsible use. The use of AI in the world of education provides several significant benefits, such as personalizing learning, strengthening individual progress, and providing instant feedback. Apart from that, adopting AI in the world of education can increase the efficiency of the learning process and help students develop cognitive and social abilities. However, there are several challenges that need to be overcome, namely ethical concerns, data privacy, and a lack of deep understanding of AI. One of which is that AI has an impact on students' social relationships, both students' social relationships with their friends and students' relationships with teachers at school.

Student social relationships are relationships between two or more individuals, where the behavior of one individual or student influences, changes, or improves the behavior of another individual or student or vice versa. According to explains that social relationships are the ways individuals react to the people around them and how these relationships influence them. In general, students' poor social interactions tend to be seen as lacking interaction with their learning environment and sometimes lacking cooperation with other students, so this usually affects lesson outcomes (Elfira et al., 2022)

The results of research conducted by (Anggreni et al., 2023) show that the internal factors that cause students to be isolated at school are difficulty getting along with their friends, having an unattractive appearance, just staying silent by hiding all their problems, being isolated by their friends, lacking socialize with other friends. Meanwhile, external factors include always doing things alone, not socializing enough and always feeling inferior, isolated and unable to socialize with groups.

The presence of AI with various increasingly sophisticated and creative innovations has had a very significant influence on every human life, both social, business, economic and health. This technology has been determined to be able to connect families who have not communicated with each other for a long time, now this is minimal. . The influence of AI technology makes it possible for someone to communicate and build relationships that have not been in contact for a long time and ultimately unite and become a new good relationship, so the progress of this technology will be a concern for every existing profession because AI has become like a human being who is capable of eradicate any problems, this will be a dangerous threat for every profession (Breyette & Hill, 2015). The adoption of AI in education can increase the efficiency of the learning process and help students and can provide benefits for every AI user. It can be seen that in the current era, many students or learners use AI to work and make money in their teens, and from this AI many people have established relationships. wider social environment, not only in the surrounding community, but every person who sees it on social media will have relationships with many other people outside their community environment. This has shown that advances in AI technology will create significant benefits for wise users (Mumpuni et al., 2022).

The impact of technological developments on the lives and social interactions of students in Indonesia. Advances in information and communication technology (ICT) have changed the way students interact, communicate and live their daily lives. In an era where technology increasingly dominates every aspect of life, it is important to understand how these changes affect the social dynamics of students in Indonesia. The research results show that the use of technology in Indonesia has brought major changes in the way people communicate and interact. The use of social media, instant messaging applications and other online platforms has connected people from various social, cultural and geographic backgrounds. This has facilitated communication across regions and social groups, as well as opened up opportunities for wider cultural exchange. However, apart from the positive impacts, this research also revealed several challenges. First, there is the potential for social isolation due to excessive use of technology. Too much time spent in cyberspace can reduce direct social interactions in daily life. Second, privacy issues have become a serious concern, with potential breaches of personal data privacy by large technology companies. Third, unequal access to technology is still a problem that needs to be overcome in various regions of Indonesia (Dewi & Satyawan, 2023). This is in line with the impact of the development of AI technology, one of which is that it can also eliminate social interaction, because the existence of technology makes a person or society too focused on electronic devices, thereby losing social interaction in everyday life. However, regardless of the negative impacts obtained, this still depends on how the user utilizes technology, because positive or negative impacts depend on how the user utilizes a technology (Mashiahah & Arifin, 2023). In other words, it can be said that the use of AI technology can affect students' social relationships because the presence of AI makes students not want to interact with friends at school or with teachers because they are preoccupied with the technology they use.

Based on the explanation above, it is explained that excessive use of technology will lead to the potential for self-isolation and a lack of social interaction that takes place in everyday life. This means that students who use AI technology excessively will have an impact on their daily social interactions in life because students will prefer to isolate or distance themselves from their surrounding environment, because they are too engrossed in the technologies they use, causing students to turn away. from the real world to the virtual world, where later students will lose social relationships with the people around them, sometimes even students who often isolate

themselves will not be recognized by their friends in the class and will further worsen relationships between students. the.

AI has a significant impact on the social relationships of students at school, based on research results showing that the application of AI technology is conducive to individual development. For example, children who interact with robots show high creativity and encourage the development of their social abilities, and a machine that improves the expression abilities of teenagers with autism spectrum disorders. However, several studies show that the application of artificial intelligence technology is detrimental to individual development. For example, frequent use of smart electronic devices has a negative impact on adolescents' interpersonal relationships and social adaptability (Lai et al., 2024)

The impact of using AI depends on how affected an individual is by AI technology, students as students must be wise in using AI technology, because if students are not wise in using AI it will have a negative impact on students, one of which will have an impact on social relations. Students who distance themselves from social contact with other people will experience problems in their lives, such as being pushed away by their friends, not being liked by their friends, which will result in them not having friends.

4. Conclusion

The use of artificial intelligence (AI) technology in education has a significant impact on the social relationships of students at school. The research results show that artificial intelligence technology has a complex impact on students' social relationships. Although it can improve efficiency and learning outcomes, AI technology can also reduce social interaction, increase social inequality, and create excessive dependence on technology. Educators and policymakers need to carefully consider the use of AI technology in education to ensure that positive impacts are maximized, while negative impacts are minimized. The application of AI technology is conducive to individual development, for example children who interact with robots show high creativity and encourage the development of their social abilities, but there are other impacts of the development of AI technology showing that the existence of AI technology can eliminate social interaction, because with the technology makes a person or society too focused on electronic devices, thereby losing social interaction in everyday life.

However, apart from the impact that shows bad behavior, this depends on how the user uses the technology, because the impact of AI technology can show both positive and negative things depending on how the user uses the technology. In other words yesIt can be said that the use of AI technology can affect students' social relationships because the presence of AI makes students not want to interact with friends at school..

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