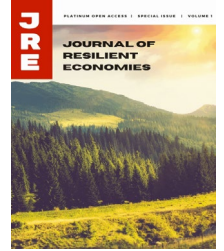




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## AI for Creating Safer School in Indonesia: An Ethical Considerations

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### Abstract

While Indonesia's access to education has improved, its quality remains a concern, particularly in addressing widespread social issues like bullying. Schools need innovative solutions that provide real-time insights and enable timely interventions, and AI offers promising advancements in this area. However, the implementation of AI-based monitoring systems faces challenges, not only due to technological limitations but also significant ethical concerns. This study examines the ethical considerations surrounding the use of AI video analytics in detecting and preventing bullying in schools. By applying the ethical frameworks of Utilitarianism, Deontology, and Virtue Ethics, the research provides a comprehensive evaluation of whether AI can be ethically integrated into school surveillance systems. The findings suggest that while AI video analytics can enhance student safety and well-being by reducing harm, there are significant ethical concerns related to privacy, potential biases, and the risk of undermining the role of teachers. The study concludes that AI systems can be ethically justified if implemented with transparent privacy safeguards, continuous refinement to avoid bias, and careful integration to support teachers. These findings offer practical recommendations for policymakers and educators on the responsible implementation of AI in educational environments.

**Keywords:** AI for Education, Bullying Prevention, AI Ethics, Utilitarianism, Deontology, Virtue Ethics.

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## 1. Introduction

### *Bullying in Indonesia Education*

A robust and resilient education system is a critical foundation for fostering economic resilience, as it equips future generations with the skills and knowledge necessary to thrive in a rapidly changing global economy. Recognizing this, education has long been a central focus for the Indonesian government, with significant investments aimed at enhancing the sector. In recent years, the national budget allocation for education has consistently exceeded IDR 612 trillion, constituting around 20% of the total budget as mandated by the constitution. Over the past decade, efforts to expand free education access have significantly increased enrolment, with the gross enrolment ratio (GER) surpassing 100% for elementary schools and reaching approximately 95% for middle schools, according to the Indonesian Bureau of Statistics.

However, while access to education has improved, the quality of education has not kept pace (Suryadarma & Jones, 2013; Mukminin & Habibi, 2019). The system faces substantial challenges, including overcrowded classrooms, underqualified teachers, and insufficient learning resources. These issues have created environments where students are less engaged, and teachers struggle to manage their classrooms effectively. Additionally, poor management, bureaucratic inefficiencies, and political inconsistencies have impeded efforts to improve educational quality (Rosser et al, 2022). As a result, problems like bullying have become more prevalent, with schools lacking the tools to effectively monitor and address such behaviour.

Bullying has become a major problem in schools, with incidents increasing in recent years. Studies often attribute this increase to family dysfunctions and power imbalances among students, frequently driven by socio-economic disparities (Azeredo et al, 2015). This complex problem not only disrupts the learning environment but also has long-lasting effects on students' well-being and academic performance (Halliday et al, 2021), making it a critical challenge that demands urgent attention.

### *AI and Technologies in Education*

In Indonesia, addressing bullying is particularly challenging due to several factors. Cultural norms and stigmas often lead to underreporting, as students may fear social repercussions or view seeking help as a sign of weakness. Additionally, the difficulty of monitoring and intervening in real-time, especially in larger schools with high teacher-student ratios and limited resources, exacerbates the problem (Warnick, 2007). To effectively tackle bullying, schools need innovative solutions that can monitor behaviors proactively and provide real-time insights, enabling timely interventions and fostering a safer, more supportive educational environment. The recent rapid development of AI offers promising advancements in monitoring systems, allowing schools to detect behavioral patterns and potential bullying incidents in real-time, thus enhancing the effectiveness of their prevention strategies.

However, while AI-based monitoring systems have the potential to transform the way schools manage and prevent bullying, their implementation remains difficult. This difficulty stems not only from technological limitations, but also from significant ethical concerns. These ethical considerations have created hesitancy among schools and policymakers in adopting AI-based solutions for bullying prevention.

This study aims to examine the ethical considerations surrounding the application of AI in detecting and preventing bullying in schools. By exploring the ethical frameworks of Utilitarianism, Deontology, and Virtue Ethics, this research will provide a comprehensive evaluation of whether it is ethically acceptable to integrate AI into educational surveillance systems.

The significance of this study lies in addressing the ethical concerns surrounding the integration of AI into educational surveillance systems, particularly for detecting and preventing bullying. As schools increasingly consider AI as a solution to monitor student behaviour, there is a growing need for a comprehensive understanding of the ethical implications, including issues of privacy, autonomy, and potential bias.

The structure of this paper is designed to systematically address the ethical concerns of integrating AI into educational surveillance systems. It begins with a literature review on AI-based surveillance systems and ethical theories. It then applies the ethical frameworks of Utilitarianism, Deontology, and Virtue Ethics to assess the ethical implications of using AI to prevent bullying in schools. Finally, the paper offers practical recommendations for policymakers and educators, along with future considerations for the responsible implementation of AI in educational settings

## 2. Literature Review

### *AI for Education*

AI is increasingly being utilized across diverse fields, from industrial automation to public domain applications such as education. While AI enhances efficiency and opens up new possibilities, it also raises concerns about job displacement and the need for new skill sets (Y.K. Dwivedi et al., 2021). In education, there is apprehension that AI could displace teachers and lead to a more isolated school environment, potentially reducing human interaction and weakening the teacher-student relationship.

A study by L. Chen et al. (2020) categorizes AI usage in education into three main areas: administration, instruction, and learning. In terms of administration, AI has fostered greater efficiency by automating tasks such as grading assignments and organizing student data (Mikropoulos and A. Natsis, 2011). In the realm of instruction, AI has been integrated with other technologies to develop better teaching tools, offering enhanced instructional strategies (R.C. Sharma et al., 2019). Furthermore, for the learning experience, AI has facilitated the development of intelligent learning systems and adaptive content tailored to individual student needs, improving personalization in education (Pokrivcakova, 2019; Muslihati et al., 2023).

While much of the research on AI in education focuses on its ability to enhance learning and administrative efficiency, less attention has been given to its potential in addressing social issues like bullying. AI has the potential to transform how schools detect and prevent bullying through the use of video analytics. These systems can continuously monitor school environments, identifying patterns of behavior that might indicate bullying, such as body language, aggressive gestures, or social exclusion. According to Cobb-Paro et al. (2021), smart video surveillance systems using AI algorithms in low-power consumption embedded devices effectively detect, count, and track people's movements in a surveillance area, outperforming traditional computer vision algorithms.

Beyond addressing bullying directly, AI also offers opportunities to support teachers in fostering positive learning

environments. People analytics, powered by AI, can be used to evaluate teacher performance in new ways, such as through video analytics that assess classroom engagement and student interaction (Goldberg et al., 2019). By analyzing how engaged students are during lessons, along with other classroom dynamics, schools can gain a deeper understanding of teaching effectiveness and overall classroom well-being.

### ***Ethics Theories on AI***

To ensure the ethical use of AI in this context, it is essential to evaluate its application through various ethical lenses. A structured ethical analysis of AI can help policymakers and educators understand the moral implications of using AI in education. A study by Gal et al. (2022) offers a comparative approach by analyzing AI's use through the lenses of Utilitarianism, Deontology, and Virtue Ethics, helping decision-makers balance the benefits and ethical risks associated with AI.

Utilitarianism, a consequentialist theory, evaluates the ethicality of actions based on their outcomes (Gal et al., 2022). This theory, introduced by Jeremy Bentham in 1843, proposes that actions should be judged according to the amount of pleasure they produce versus the pain they cause. Bentham's utilitarian philosophy emphasizes that the "good" should be prioritized over the "right," with the goal of maximizing overall happiness. This approach attempts to quantify the positive and negative impacts of actions to justify decisions.

A classic illustration of utilitarian thinking is Philippa Foot's trolley dilemma (1967), a thought experiment that challenges whether sacrificing one person to save many is morally acceptable—a decision a utilitarian would justify by the greater overall benefit.

Despite its practicality in certain scenarios, critics have highlighted the theory's oversimplified nature. Quantifying all aspects of an ethical decision is often impossible, and the theory has been criticized as overly simplistic (Williams, 1973; Garcia & Nelson, 1994; Shaw, 2006). Critics argue that it fails to account for the complexity of real-world situations where consequences cannot be easily measured. As a result, while utilitarianism offers valuable insights, it often needs to be complemented by other ethical approaches to provide a more balanced framework for decision-making.

In contrast to consequentialist theories, deontological ethics prioritizes the "right" over the "good." This ethical framework, most notably developed by Immanuel Kant, emphasizes the importance of moral duties and the intentions behind actions (Gal et al., 2022). Kant argued that ethical behavior is not determined by the outcomes of actions but by adherence to moral rules and the exercise of a good will.

Deontological ethics serves as a complement to utilitarianism by emphasizing the importance of the intentions and moral duties behind actions, rather than solely focusing on outcomes (Brady, 1985). It provides a counterbalance to the outcome-based focus of utilitarianism, ensuring that ethical decisions respect fundamental human rights and the dignity of individuals.

While Deontological Ethics offers a more structured ethical analysis compared to utilitarianism, it also has its limitations, requiring Virtue Ethics to provide a more comprehensive approach (Staveren, 2007). Unlike utilitarian and deontological ethics, Virtue Ethics focuses on the virtuous agent rather than on right actions or what one should do in a given situation (Gal et al., 2022)

However, critics of virtue ethics often point out its vagueness regarding the definition and assessment of virtues. Descriptions of virtues can vary significantly across cultures and contexts, and there is no clear method for evaluating whether an individual possesses or demonstrates these virtues consistently (Sreenivasan, 2013).

While the three classical ethical theories—Utilitarianism, Deontology, and Virtue Ethics—complement each other in providing a robust ethical framework, another study from Floridi et al. (2018) introduce AI4People as an enhanced practical and applied set of principles specifically tailored for the responsible adoption of AI. It consist of five ethical principles that provide a clearer path for assessing the opportunities and risks associated with AI technologies in various contexts.

Floridi et al. (2018) propose a set of five ethical principles to guide the responsible adoption of AI by assessing both its opportunities and risks. These principles include beneficence, which focuses on promoting well-being; non-maleficence, aimed at preventing harm; and autonomy, which ensures that human control is preserved over AI systems. Additionally, justice emphasizes the fair distribution of AI's benefits, ensuring that all individuals and groups have equal access to the technology, while explicability stresses the importance of transparency and accountability, making AI systems understandable and their decisions traceable.

By applying both the approach from Gal et al. (2022), which utilizes the three classical ethical theories—Utilitarianism, Deontology, and Virtue Ethics—and the practical framework from Floridi et al. (2018), which addresses key risks and opportunities through principles such as beneficence, non-maleficence, autonomy, justice, and explicability, the ethical evaluation of AI in Indonesia's education system, particularly for addressing bullying, will be thoroughly examined. This combined approach ensures that both theoretical and practical dimensions are covered comprehensively. The next section on Methodology will outline how these frameworks will be applied to assess the ethical considerations of AI in this specific context.

### **3. Methodology**

This paper employs a theoretical framework based on Utilitarianism, Deontology, and Virtue Ethics to analyze AI integration in bullying prevention, drawing from the study by Gal et al. (2022). Each ethical theory provides a unique lens through which to examine the impacts and implications of AI in educational settings, ensuring that the technology is employed in a way that maximizes benefits, respects individual rights, and promotes ethical values.

For the Utilitarian analysis, the study will identify the primary, secondary, and tertiary stakeholders affected by the implementation of AI and evaluate how the technology impacts their overall well-being. The primary stakeholders include teachers and students, both bullying victims and perpetrators, as they are directly affected by AI interventions. Secondary stakeholders consist of school administrators and parents, whose roles are indirectly influenced by AI's ability to manage bullying incidents. Tertiary stakeholders, such as the broader society, neighborhood, and government, are also considered due to the societal impacts of reducing bullying through AI.

In the Deontological analysis, the study will focus on the moral duties of schools in implementing AI for bullying prevention.

This analysis will test the universality of AI adoption—whether it can be applied consistently across various educational settings—and the principle of humanity, ensuring that students are treated as ends in themselves and not merely as means to an end.

The Virtue Ethics analysis will assess how AI integration fosters the development of virtues at both the individual and collective levels for students and teachers, the primary stakeholders. The study will focus on how AI can promote virtues such as responsibility and empathy, and examine the cultivation of practical wisdom in managing bullying incidents effectively within the school environment.

Finally, the study will conclude by integrating these ethical evaluations with an overall assessment of the opportunities and risks associated with AI implementation, as outlined by Floridi et al. (2018). This will provide a balanced ethical perspective on the integration of AI in bullying prevention, ensuring that both theoretical frameworks and practical considerations are accounted for.

#### 4. Analysis

In this section, we analyze the ethical implications of using AI video analytics for bullying prevention in schools through the lenses of Utilitarianism, Deontological Ethics, and Virtue Ethics. Each framework is applied to assess how the AI monitoring system impacts key stakeholders, particularly students and teachers, and whether it aligns with ethical standards. Furthermore, the analysis is complemented by applying the Five Principles of AI for Society, as proposed by Floridi et al. (2018)—beneficence, non-maleficence, autonomy, justice, and explicability—ensuring that AI's role in education is both responsible and ethically sound.

##### *Utilitarian Ethics*

From a Utilitarian perspective, the primary question is whether the integration of AI video analytics improves the overall well-being of students and the broader school environment. The AI system's ability to continuously monitor student behavior and detect signs of bullying offers significant benefits, particularly by identifying incidents early and allowing for timely intervention.

Gal et al. (2022)'s framework recommends identifying relevant stakeholders and evaluating the likely effects of AI on each. The primary stakeholders in this context are students, teachers, and administrators. For students, particularly victims of bullying, the AI system offers protection by catching behaviors that may go unnoticed by teachers. This early detection helps prevent emotional and physical harm, enhancing student well-being. Teachers benefit from the support provided by AI in identifying patterns of bullying, allowing them to focus more on addressing these issues rather than spending excessive time on direct surveillance. Secondary stakeholders, such as administrators and parents, also benefit from the increased safety and improved school environment, which leads to peace of mind for parents and more effective school management for administrators. Finally, tertiary stakeholders, like the broader community, government, and society at large, benefit from reduced bullying-related issues, which contribute to a more harmonious social environment.

Overall, the use of AI video analytics contributes positively to the well-being of all stakeholders by reducing harm and promoting a safer school environment. From a Utilitarian standpoint,

this technology is ethically justified as it maximizes happiness and reduces suffering among the student body.

##### *Deontological Ethics*

In the context of Deontological Ethics, the focus shifts to the moral duties of schools and whether the use of AI aligns with the principles of universality and humanity. Schools are inherently responsible not only for the academic development of students but also for their moral education. Schools are places where students learn ethical behavior, respect, and responsibility—values closely tied to preventing bullying. Implementing AI video analytics for bullying prevention supports this moral duty, as it enhances the school's ability to proactively prevent harmful behavior. By integrating AI, schools can reinforce their commitment to both safeguarding students and instilling a moral environment where bullying is recognized and discouraged.

The principle of universality suggests that if AI were applied consistently across schools, it would establish a standard of care that promotes the safety and well-being of all students, without contradicting the initial purpose of its implementation. Additionally, the principle of humanity requires that students be treated as ends in themselves, not merely as subjects of surveillance. AI systems must be implemented in a way that respects students' dignity and privacy, ensuring they are not reduced to mere data points, but are instead protected in ways that prioritize their autonomy and rights.

In this case, the AI monitoring system is owned by the school and installed in classrooms and public locations such as hallways and playgrounds, meaning it does not infringe upon the personal privacy or property of the students, teachers, or other stakeholders. The focus is on maintaining a safe educational environment, rather than intruding on private spaces. By limiting monitoring to public areas within the school, AI systems can be used ethically to protect students while prioritizing their rights and dignity.

Thus, from a Deontological perspective, the use of AI video analytics in schools is ethically justifiable, as long as the technology respects the inherent dignity of students and is applied in a manner consistent with the school's moral obligations. It is essential that the technology be applied consistently, without discrimination or bias, to fully satisfy the principle of universality. Schools must ensure that AI systems are used equitably across all demographics, avoiding any selective application that might undermine its ethical grounding.

##### *Virtue Ethics*

The Virtue Ethics approach evaluates how AI video analytics can cultivate virtues like responsibility, empathy, and courage among students and teachers. For students, the technology provides a safer environment where victims of bullying can feel empowered to stand up for themselves, knowing that they are being protected. For bullies, AI may act as a deterrent, encouraging them to seek healthier, more constructive ways of expressing themselves rather than resorting to harmful behavior.

For teachers, however, the impact of AI on virtue development is more nuanced. While AI supports teachers in identifying and managing bullying, there is a concern that it could undermine their responsibility to actively engage in the moral and social development of students. If teachers become overly reliant on AI to monitor student behavior, they may reduce their initiative in nurturing values and promoting moral education in the classroom.

From the perspective of Virtue Ethics, while AI video analytics promotes a safer environment and supports the cultivation of virtues like courage and responsibility among students, its role in the moral development of teachers is more complex. If teachers rely too heavily on AI to detect and manage bullying, they risk diminishing their own involvement in fostering moral virtues such as empathy and practical wisdom in students. For AI to be ethically sound in this context, it must act as a tool that enhances, rather than replaces, the teacher's role in moral education. Teachers should remain at the forefront of nurturing ethical behavior and guiding students in developing virtues, using AI as a complementary resource that supports, rather than undermines, the cultivation of moral character in the classroom.

### *AI for Society*

While AI offers a promising tool in the fight against bullying, it is crucial to recognize that it cannot function in isolation. AI's role should be one of support, complementing the human elements that are essential in addressing the deeper social roots of bullying. These roots are tied to interactions and norms cultivated within schools, homes, and society at large—areas where teachers play a critical role. However, as Floridi et al. (2018) caution, the opportunities presented by AI must be balanced against the risks, particularly when it is overused or misused.

From the principle of beneficence, AI video analytics offers the opportunity to promote student well-being by creating safer environments where bullying is identified early. This enables students to focus on self-realization and academic growth while allowing teachers to concentrate more on education rather than monitoring. However, a risk arises when over-reliance on AI begins to devalue human skills, particularly the crucial empathetic and moral guidance teachers provide. If AI replaces too much of the teacher's role, the social and moral development that teachers facilitate could be diminished.

In terms of non-maleficence, AI enhances human agency by providing faster interventions, preventing harm, and ensuring a safer school environment. The technology allows school administrators to address bullying incidents before they escalate, effectively reducing potential harm. Nevertheless, there is a concern that excessive reliance on AI could remove human responsibility, leading to a reduction in accountability for moral education and behavior management among teachers. When AI takes on too much responsibility, teachers might disengage from their role in fostering moral and ethical values in students.

The principle of autonomy highlights how AI, when implemented ethically, can increase societal capabilities by streamlining school management and reducing the workload on teachers, allowing them to focus on higher-level decision-making. AI acts as a tool to assist rather than replace human control. However, if AI is overused, it may reduce human control, making teachers passive participants in managing student behavior and undermining their authority and influence in the classroom.

From the perspective of justice, AI can be applied consistently across schools, ensuring that bullying prevention measures are distributed fairly and equitably. This promotes societal cohesion by creating a safer, more inclusive environment for all students. Yet, there is a risk that the misuse of AI could erode students' self-determination, particularly if the system is biased or lacks transparency, potentially leading to unfair outcomes that disproportionately impact certain groups of students.

Finally, the principle of explicability emphasizes the need for transparency and accountability in AI systems. When AI is used to monitor student behavior, it must operate in a way that is understandable and transparent to all stakeholders—students, parents, and educators. This ensures that actions taken by the system are based on clear, explainable data, fostering trust in the AI system. However, if the AI's decision-making processes are opaque or poorly understood, it could lead to misinterpretations or a lack of accountability, ultimately undermining its effectiveness and ethical grounding.

## **5. Discussion**

From the ethical analysis, it is evident that AI video analytics for preventing bullying in schools can be ethically justified, provided that several key concerns are addressed. First, privacy concerns must be carefully managed. AI systems should not infringe upon the personal privacy of students and staff, and potential biases in AI algorithms must be proactively avoided to ensure fair treatment of all students. Additionally, it is crucial that the role of teachers in fostering moral and social development is not diminished by the introduction of AI systems. Instead, AI should act as a support system, complementing the efforts of educators rather than replacing them.

Through a Utilitarian lens, the use of AI video analytics is already ethically justified, as it enhances the well-being of students, teachers, and administrators by providing a safer school environment. However, to ensure that AI is also ethically sound from a Deontological perspective, student privacy must be prioritized at the planning stage. This involves transparent communication regarding how the AI algorithms work, where video recordings are captured, and obtaining informed consent from parents and guardians (Birnhack et al., 2018). Clear guidelines must be established to ensure that all stakeholders understand the scope and limitations of the system.

Once consent is secured, it is essential to leverage existing recordings and footage from classrooms and school premises to develop high-quality AI models. The data collected must be comprehensive and representative to ensure that the AI models remain unbiased and effective across various scenarios (Ferrara, 2023). Continuous refinement of the algorithms is necessary to improve accuracy without introducing issues like overfitting, which could lead to biased outcomes.

Furthermore, AI's role should be to support, not replace, the human elements that are vital in addressing the deeper social roots of bullying (Hope, 2009). Teachers play a crucial role in fostering empathy, respect, and responsibility among students, and AI systems should enhance, rather than diminish, this role. Especially, as workplace bullying among teachers can be another issue in school environments (Catherine Scheeler et al., 2022).

To avoid diminishing the role of teachers, further analysis to incorporate People Analytics into the same AI video analytics platform should be addressed. By using AI tools for teacher performance evaluations, schools can ensure a more fair, transparent, and comprehensive assessment process. Traditional performance metrics, such as task completion or exam results, often fail to capture the full picture of a teacher's impact in the classroom. People Analytics offers an opportunity to assess teachers more holistically, using video analytics to measure classroom interactions and student engagement levels, which provides a more accurate understanding

of teaching effectiveness. This is especially important in early education, where the focus should be on nurturing learning habits and fostering a passion for learning, rather than purely academic outcomes.

Moreover, People Analytics can help mitigate bullying among educators, particularly in cases where senior teachers may impose undue administrative burdens on junior staff. By reducing the reliance on extensive documentation and focusing on objective performance criteria, People Analytics helps prevent the exploitation of junior teachers, promoting a fairer and more equitable working environment.

## 6. Conclusion and Recommendation

This study aimed to examine the ethical considerations surrounding the application of AI in detecting and preventing bullying in schools. By exploring the ethical frameworks of Utilitarianism, Deontology, and Virtue Ethics, this research provided a comprehensive evaluation of whether it is ethically acceptable to integrate AI into educational surveillance systems. The study concluded that AI video analytics for preventing bullying in schools can be ethically justified, provided that several key considerations are addressed.

From a Utilitarian perspective, the use of AI video analytics is ethically justified as it enhances the overall well-being of students, teachers, and administrators by creating a safer school environment and reducing harm. This positive impact on all stakeholders, particularly in terms of safety and harm reduction, supports the ethical use of AI in this context. From a Deontological perspective, AI video analytics can be ethically implemented as long as it respects the dignity and rights of students. The technology must be used in a way that aligns with the school's moral obligations to protect its students and ensure their well-being. Lastly, from the viewpoint of Virtue Ethics, while AI video analytics contributes to the cultivation of virtues such as courage and responsibility in students, there is a concern that its overuse may diminish the moral development role of teachers. Relying too heavily on AI could undermine teachers' active engagement in fostering essential virtues such as empathy and practical wisdom.

For AI video analytics to be implemented ethically, certain steps must be taken. Privacy concerns should be addressed at the planning stage by ensuring transparent communication regarding how the AI algorithms work, where video recordings are captured, and obtaining informed consent from parents and guardians. Clear guidelines should be established to ensure that all stakeholders fully understand the system's scope and limitations. Bias avoidance is another critical factor, as AI models must be comprehensive and representative to ensure fairness. Continuous refinement of the algorithms is necessary to avoid biased outcomes and improve the effectiveness of the system across diverse scenarios.

To avoid diminishing the role of teachers, schools should integrate People Analytics into the AI platform for a more transparent and comprehensive evaluation of teacher performance. This ensures that AI enhances—rather than replaces—the important role teachers play in fostering a positive learning environment. By assessing classroom engagement and interactions holistically, AI can support the development of a nurturing, safe, and effective environment for students and educators alike.

In summary, combining AI video analytics for bullying prevention and People Analytics for teacher evaluations creates a

more efficient, fair, and supportive educational system. This not only improves student safety and well-being but also allows teachers to focus on their primary mission—educating and inspiring the next generation—without the burden of excessive administrative tasks. AI, as a complementary tool, helps schools foster an environment where both students and teachers thrive, enhancing the overall educational experience.

## 7. Limitations and Future Research

This study focuses on the theoretical framework of AI in bullying prevention, lacking practical data or real-world case studies. While this limits the empirical insights, the theoretical analysis provides a valuable foundation for future research. Additionally, the ethical considerations are explored from a general organizational behaviour perspective, which may not fully account for the specific dynamics of educational settings. However, this broader approach enriches the discussion and encourages further practical exploration.

To build on this study, further analysis is needed on how People Analytics can be integrated into teacher performance evaluations to address workplace bullying within schools. Understanding how AI and People Analytics can be applied to support teachers and improve school environments is crucial to ensuring that AI enhances, rather than undermines, human roles in education.

Future research should aim to broaden the analysis of bullying factors, impacts, and mitigation strategies. While significant research exists in fields such as education, psychology, and medicine, a more comprehensive examination from the technological and organizational perspectives could enrich current understanding and offer more practical recommendations for AI integration in education.

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