USE OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN TRANSFORMING SCHOOL COUNSELLING SERVICES: PITFALLS/ETHICAL CONCERNS AND FUTURE DIRECTIONS

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Abstract
This paper examined the transformative role of AI technologies in school counselling services. It adopted a conceptual review approach. The concept of Artificial Intelligence, school counselling services, and the various AI technologies currently applicable to counselling practice explored. The paper argued that AI should complement rather than replace professional school counsellors, whose human judgment, empathy, ethical reasoning, and interpersonal skills remain indispensable. It concluded that the future of school counselling lies in the effective collaboration between human expertise and artificial intelligence, thereby promoting more inclusive, accessible, and responsive counselling services in the digital age. The paper therefore suggested the development of comprehensive ethical guidelines, AI literacy programmes for counsellors, improved digital infrastructure, robust data protection frameworks, and continuous professional development to facilitate the responsible adoption of AI in counselling practice.

Keywords: *AI, Counselling Services, Digital Counselling, Transformative, Technologies*

Introduction
Unprecedented technological advancements in the twenty-first century continue to reshape global educational systems. Among these innovations, Artificial Intelligence (AI) has emerged as one of the most transformative technologies, revolutionizing the teaching, learning, communication, information management, and student support services of educational establishments. AI is no longer restricted to computer science or industrial automation. Rather, it has become an integral component of educational practice, influencing teaching methodologies, learning analytics, assessment, administration, and student support services (Luckin, 2018; Holmes et al., 2022; UNESCO, 2023).

School counselling services constitute one of the essential support systems within educational institutions. Through professional guidance and counselling, learners receive assistance in addressing academic, vocational, personal-social, emotional, and psychological challenges that may impede their educational development. School counsellors facilitate students' holistic growth by promoting self-understanding, career exploration, decision-making skills, emotional resilience, interpersonal relationships, and positive mental health (Gysbers & Henderson, 2014; American School Counselor Association [ASCA], 2022). The growing complexity of students' developmental needs, coupled with increasing school enrolment, shortages of professional counsellors, and heightened awareness of mental health concerns, has placed enormous demands on school counselling services worldwide (OECD, 2021; UNESCO, 2023). Traditional face-to-face counselling approaches, although effective, often struggle to meet these increasing demands because of limited human and material resources (Holmes et al., 2022). Consequently, educational institutions are exploring innovative technological solutions capable of improving the accessibility, efficiency, and effectiveness of counselling services (Luckin, 2018).

Artificial Intelligence offers significant opportunities for transforming school counselling through intelligent automation, personalized interventions, predictive analytics, virtual counselling

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assistants, emotional recognition systems, and data-driven decision-making. AI-powered applications are increasingly being used to identify students at risk of academic failure, predict behavioural problems, recommend career pathways, monitor students' emotional well-being, provide immediate counselling responses through chatbots, and support counsellors in evidence-based intervention planning (Siemens & Baker, 2012; Luckin, 2018; OECD, 2021). Generative AI technologies, including ChatGPT, Gemini, Claude, and Microsoft Copilot, have further expanded the possibilities for educational support by assisting students with career exploration, study planning, psychoeducation, and information seeking (Holmes et al., 2022; UNESCO, 2023). Similarly, machine learning algorithms are capable of analyzing large educational datasets to identify patterns associated with student achievement, absenteeism, mental health risks, and dropout tendencies, thereby enabling early intervention by professional counsellors (Romero & Ventura, 2020; Holmes et al., 2022).

Despite these enormous potentials, the adoption of AI in school counselling is accompanied by numerous ethical, legal, technical, and professional challenges. Unlike Human Counsellors, AI systems lack genuine empathy, emotional sensitivity, moral reasoning, and the contextual understanding required for complex counselling situations. Concerns have also been raised regarding algorithmic bias, confidentiality breaches, informed consent, data security, accountability, and excessive dependence on automated counselling systems (Floridi & Cowls, 2019; European Commission, 2021; UNESCO, 2023). These challenges necessitate careful consideration to ensure that AI technologies are implemented responsibly and ethically within educational settings.

The integration of AI into school counselling should therefore be viewed as a complementary innovation rather than a replacement for professional counsellors. Human counsellors possess irreplaceable interpersonal competencies such as empathy, compassion, ethical judgment, and cultural sensitivity, all of which remain central to effective counselling relationships (Rogers, 1957; ASCA, 2022). AI technologies should instead enhance counsellors' efficiency by automating routine administrative tasks, providing decision-support systems, improving data analysis, and facilitating timely interventions (Holmes et al., 2022; UNESCO, 2023).

Against this background, this paper examined the transformative role of Artificial Intelligence technologies in school counselling services. Specifically, it conceptualizes Artificial Intelligence and school counselling services, explores AI technologies applicable to counselling practice, and lays the foundation for discussing the pitfalls and future directions associated with AI-enabled counselling in educational institutions.

Concept of Artificial Intelligence

Artificial Intelligence (AI) refers to the branch of computer science concerned with the design and development of intelligent systems capable of performing tasks that traditionally require human intelligence. These tasks include learning, reasoning, problem-solving, language understanding, perception, decision-making, pattern recognition, and adaptation based on experience (Russell & Norvig, 2021). AI systems employ computational techniques such as machine learning, deep learning, natural language processing, computer vision, and expert systems to analyze complex data and generate intelligent responses (Goodfellow et al., 2016).

UNESCO (2023), asserts that Artificial Intelligence encompasses computer systems designed to perform cognitive functions associated with human intelligence, including learning from data, interpreting language, recognizing patterns, making predictions, and supporting decision-making. Within educational settings, AI technologies are increasingly utilized to personalize instruction, automate administrative processes, monitor learning progress, facilitate adaptive assessment, and provide individualized learner support (Holmes et al., 2022).

Artificial Intelligence may be categorized into three broad forms. Artificial Narrow Intelligence (ANI) performs specific tasks such as language translation, facial recognition, or

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predictive analytics and represents the current stage of AI applications. Artificial General Intelligence (AGI) refers to hypothetical systems capable of performing any intellectual task that humans can accomplish, while Artificial Super Intelligence (ASI) described theoretical AI systems whose intelligence exceeds human cognitive capabilities (Kaplan & Haenlein, 2020; Russell & Norvig, 2021). Presently, educational institutions primarily utilize applications based on Artificial Narrow Intelligence.

Recent developments in Generative Artificial Intelligence have significantly expanded AI applications in education. Large Language Models (LLMs), including ChatGPT, Gemini, Claude, and Microsoft Copilot, can generate human-like text, summarize information, answer questions, create learning materials, and support students' academic and career development (OpenAI, 2023; UNESCO, 2023). These technologies offer considerable opportunities for enhancing counselling services by providing immediate information, facilitating career exploration, delivering psychoeducational resources, and assisting counsellors with documentation and intervention planning (Holmes et al., 2022). Nevertheless, their outputs require careful professional oversight because they may occasionally produce inaccurate, biased, or inappropriate responses (UNESCO, 2023).

From a counselling perspective, Artificial Intelligence should not be viewed merely as an automation technology but as a decision-support tool that complements professional expertise (Holmes et al., 2022). Effective AI implementation requires collaboration between technology developers, counsellors, educational administrators, psychologists, and policymakers to ensure that technological innovations align with ethical standards and students' developmental needs (OECD, 2021; UNESCO, 2023).

School Counselling Services

School counselling services comprise organized professional interventions aimed at promoting students' academic, career, personal-social, and emotional development within educational institutions. Delivered by qualified school counsellors, these services help learners develop self-awareness, make informed educational and career decisions, acquire interpersonal skills, manage emotional challenges, and achieve their full potential (Gysbers & Henderson, 2014; American School Counselor Association [ASCA], 2022).

School counselling is fundamentally developmental, preventive, and remedial. Developmental counselling enhances students' personal growth and life skills. Preventive counselling seeks to avert academic, behavioural, and emotional problems before they escalate, whereas remedial counselling provides appropriate interventions for existing academic, social, emotional, or psychological challenges (Myrick, 2011; Gysbers & Henderson, 2014).

Comprehensive school counselling programmes typically include academic counselling, career counselling, personal-social counselling, and mental health support. These programmes address students' educational planning, career development, emotional well-being, interpersonal relationships, and psychological needs (ASCA, 2022). Professional counsellors also collaborate with teachers, parents, school administrators, psychologists, social workers, and other stakeholders to promote students' holistic development (Stone, 2013).

With the rapid advancement of digital technologies, school counselling services are increasingly integrating Artificial Intelligence (AI) to improve service delivery. AI technologies enhance counselling through intelligent data analysis, personalized career guidance, predictive analytics, virtual support systems, and the early identification of students requiring timely intervention (Holmes et al., 2022; OECD, 2021; UNESCO, 2023). When used ethically and responsibly, AI has the potential to complement the work of professional counsellors by improving the accessibility, efficiency, and effectiveness of school counselling services (Holmes et al., 2022; UNESCO, 2023).

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AI Technologies in School Counselling Services

Artificial Intelligence (AI) technologies in school counselling comprise intelligent digital tools and systems designed to enhance the efficiency, accessibility, personalization, and effectiveness of counselling services. Rather than replacing professional counsellors, these technologies support counselling practice by facilitating data analysis, decision-making, student monitoring, and timely interventions (Holmes et al., 2022; UNESCO, 2023).

Some of the major AI technologies applicable to school counselling include:

1. ***Natural Language Processing (NLP)***: Natural Language Processing enables computers to understand, interpret, and generate human language. It powers AI chatbots and virtual counselling assistants that provide psychoeducational information, respond to routine student enquiries, and facilitate initial counselling interactions. These systems offer immediate support while referring complex or sensitive cases to professional counsellors (Abd-Alrazaq et al., 2020; Holmes et al., 2022; Jurafsky & Martin, 2023).
2. ***Machine Learning (ML):*** Machine learning algorithms analyze large volumes of educational and behavioural data to identify patterns related to students' academic performance, attendance, behavioural concerns, and psychological well-being. Such predictive capabilities enable counsellors to identify students at risk of academic failure, school dropout, chronic absenteeism, or mental health challenges, thereby supporting timely and proactive interventions (Goodfellow et al., 2016; Romero & Ventura, 2020; Siemens & Baker, 2012).
3. ***Predictive Analytics:*** Predictive analytics combines statistical techniques with AI algorithms to forecast educational and behavioural outcomes using historical and real-time data. In school counselling, it supports early warning systems, identifies vulnerable learners, and guides targeted interventions aimed at improving students' academic success, well-being, and school retention (Siemens & Long, 2011; Ifenthaler & Yau, 2020; OECD, 2021).
4. ***Generative Artificial Intelligence (Generative AI)****:* Generative AI systems, such as ChatGPT and other large language models, support school counselling by providing psychoeducational resources, career information, counselling materials, and personalized guidance. They also assist counsellors in preparing reports, summarizing case information, and facilitating career exploration. However, their outputs require professional oversight to ensure accuracy, ethical compliance, and contextual appropriateness (Holmes et al., 2022; OpenAI, 2023; UNESCO, 2023).
5. ***Intelligent Decision-Support Systems (IDSS)***: These systems integrate multiple sources of student data, including academic records, behavioural observations, attendance reports, and assessment results, to assist counsellors in identifying students' needs, planning interventions, and monitoring progress. They enhance evidence-based decision-making while preserving the professional judgment of counsellors (Power, 2002; Marakas, 2003; Holmes et al., 2022).
6. ***AI-Powered Career Guidance Systems:*** These systems analyze students' interests, aptitudes, personality traits, academic performance, and labour market trends to recommend appropriate educational pathways and career options. By providing personalized career information and guidance, they support informed career decision-making and enhance the effectiveness of career counselling (Luckin, 2018; OECD, 2021; Holmes et al., 2022).

Theoretical Perspective

This paper is anchored on the Technology Acceptance Model (TAM), Person-Centred Theory, and Diffusion of Innovation Theory, which collectively provide a framework for understanding the adoption, implementation, and ethical application of Artificial Intelligence (AI) in school counselling. The Technology Acceptance Model explains that the successful adoption of AI depends largely on counsellors' perceptions of its usefulness and ease of use, supported by adequate training and institutional support (Davis, 1989; Venkatesh & Davis, 2000). Person-Centred Theory emphasizes that although AI can enhance counselling through data-driven insights

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and personalized support, it cannot replace the empathy, genuineness, ethical judgment, and unconditional positive regard that characterize effective counselling relationships (Rogers, 1957; Rogers, 1961; UNESCO, 2023). Diffusion of Innovation Theory further explains that the successful integration of AI depends on its perceived relative advantage, compatibility with counselling practice, ease of use, trialability, and observable benefits, as well as institutional support and continuous professional development (Rogers, 2003; OECD, 2021; Holmes et al., 2022;). Collectively, these theories underscore that AI should serve as a complementary tool that enhances professional counselling practice while preserving the human-centred values essential to effective school counselling.

Applications of Artificial Intelligence in School Counselling Services

Artificial Intelligence (AI) is increasingly transforming school counselling by enhancing the accessibility, efficiency, personalization, and effectiveness of counselling services. AI technologies support professional counsellors in assessing students' needs, analyzing educational data, providing timely guidance, and implementing evidence-based interventions across various domains of school counselling (OECD, 2021; Holmes et al., 2022; UNESCO, 2023).

1. ***AI-Driven Career Guidance:*** Artificial Intelligence has significantly enhanced career guidance by enabling the provision of personalized career counselling services. AI-powered career guidance systems analyze students' interests, abilities, personality traits, academic performance, values, and career aspirations to generate individualized recommendations on educational pathways and occupational opportunities (Luckin, 2018; Holmes et al., 2022). By integrating labour market information with emerging career trends, these systems enable students to explore suitable career options, understand admission requirements, identify scholarship opportunities, and make informed educational and vocational decisions. Consequently, AI contributes to improved career awareness, career planning, and decision-making among students (OECD, 2021; UNESCO, 2023).
2. ***AI-Supported Academic Advising:*** Artificial Intelligence enhances academic advising by analyzing students' academic records, assessment results, attendance patterns, and learning behaviours to identify learners who require academic support. Intelligent systems can detect early indicators of poor academic performance, absenteeism, or learning difficulties, thereby enabling counsellors to implement timely and appropriate interventions (Siemens & Long, 2011; Ifenthaler & Yau, 2020). Furthermore, AI recommends suitable study strategies, learning resources, and educational pathways that align with students' individual learning needs, thereby improving academic achievement and educational planning (Holmes et al., 2022).
3. ***AI-Assisted Mental Health Screening:*** Artificial Intelligence facilitates the early identification of students experiencing emotional, behavioural, or psychological difficulties. Through the analysis of data obtained from screening instruments, behavioural records, attendance reports, and other educational indicators, AI systems can identify students who may be at risk of stress, anxiety, depression, or related mental health conditions (Inkster et al., 2018; Abd-Alrazaq et al., 2020). This enables school counsellors to conduct timely assessments, implement appropriate counselling interventions, and refer students to mental health professionals when necessary while maintaining professional ethics and clinical judgment (American School Counselor Association [ASCA], 2022; UNESCO, 2023).
4. ***Chatbots and Virtual Counselling:*** Artificial Intelligence-powered chatbots and virtual counselling platforms provide students with immediate access to psycho-educational information, emotional support, and responses to routine counselling enquiries. These platforms offer guidance on stress management, study skills, career planning, and personal development while facilitating preliminary counselling interactions (Fitzpatrick et al.,

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2017; Abd-Alrazaq et al., 2020). They also improve access to counselling services beyond normal school hours and encourage students to seek professional assistance whenever necessary (Holmes et al., 2022).

5. ***Predictive Analytics:*** Predictive analytics applies Artificial Intelligence algorithms to analyze historical and real-time educational data in order to identify students who may be at risk of academic failure, school dropout, behavioural challenges, or poor school adjustment. The early identification of these risk indicators enables counsellors to implement preventive and targeted interventions that improve students' academic success, psychological well-being, and school retention (Siemens & Baker, 2012; Ifenthaler & Yau, 2020; Romero & Ventura, 2020).
6. ***Personalized Counselling Interventions:*** Artificial Intelligence supports personalized counselling by analyzing students' academic, career, behavioural, and psychosocial profiles. Based on these analyses, AI systems recommend individualized counselling strategies, career development plans, educational resources, and intervention programmes that address each learner's unique needs. Such individualized support enhances the effectiveness of counselling services and promotes students' holistic development (Luckin, 2018; Holmes et al., 2022; UNESCO, 2023).
7. **Benefits of Artificial Intelligence in School Counselling:** The integration of Artificial Intelligence into school counselling has significantly improved the quality, accessibility, efficiency, and effectiveness of counselling services. By supporting evidence-based decision-making, automating routine administrative responsibilities, and facilitating personalized interventions, AI complements the work of professional counsellors and promotes students' academic, career, personal-social, and emotional development (OECD, 2021; Holmes et al., 2022; UNESCO, 2023).
8. ***Enhanced Accessibility to Counselling Services:*** Artificial Intelligence improves access to counselling services by addressing challenges associated with limited counsellor-to-student ratios, time constraints, and geographical barriers. AI-powered platforms, virtual assistants, and chatbots provide students with timely access to psychoeducational resources, career information, and basic counselling support, thereby extending the availability of counselling services beyond conventional office hours (Abd-Alrazaq et al., 2020; Holmes et al., 2022).
9. ***Early Identification of Students at Risk:*** Artificial Intelligence systems analyze students' academic records, attendance patterns, behavioural reports, and other educational data to identify learners who may be at risk of academic failure, school dropout, emotional distress, or behavioural problems. This facilitates timely intervention and contributes to improved academic performance, emotional well-being, and overall student success (Siemens & Baker, 2012; Romero & Ventura, 2020).
10. ***Personalized Counselling Services:*** Artificial Intelligence facilitates individualized counselling by analyzing students' interests, abilities, academic performance, personality traits, and career aspirations. Based on these analyses, AI systems provide tailored recommendations for educational planning, career development, learning support, and psychosocial interventions, thereby enhancing the relevance and effectiveness of counselling services (Luckin, 2018; Holmes et al., 2022).
11. ***Improved Career Guidance:*** Artificial Intelligence-powered career guidance systems generate personalized career recommendations by integrating students' profiles with labour market information, occupational trends, and educational opportunities. This enables students to make informed educational and vocational decisions while increasing awareness of emerging career opportunities and future employment prospects (OECD, 2021; Holmes et al., 2022).

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12. ***Improved Administrative Efficiency:*** Artificial Intelligence enhances administrative efficiency by automating routine counselling activities, including appointment scheduling, documentation, record management, report preparation, and information retrieval. Consequently, school counsellors can devote more time to direct counselling, student support, and intervention planning, thereby improving the overall quality of counselling services (Power, 2002; Holmes et al., 2022).
13. **Data-Driven Decision-Making:** Artificial Intelligence enables counsellors to make informed, evidence-based decisions by analyzing large volumes of academic, behavioural, and psychosocial data. The insights generated support intervention planning, programme evaluation, student referrals, and continuous monitoring of counselling outcomes (Siemens & Long, 2011; Ifenthaler & Yau, 2020).
14. ***Continuous Monitoring of Student Progress:*** Artificial Intelligence technologies facilitate continuous monitoring of students' academic performance, attendance, behavioural patterns, and overall development. Such ongoing assessment enables counsellors to evaluate the effectiveness of interventions, identify emerging concerns, and provide timely support whenever necessary (Holmes et al., 2022; Romero & Ventura, 2020).
15. ***Professional Support for School Counsellors:*** Artificial Intelligence serves as an important professional support tool by assisting counsellors in preparing reports, organizing student records, retrieving counselling resources, and generating relevant information for counselling practice. These capabilities improve professional productivity, strengthen evidence-informed practice, and contribute to more efficient and effective counselling service delivery (Holmes et al., 2022; UNESCO, 2023).

Benefits of Artificial Intelligence in School Counselling

The integration of Artificial Intelligence (AI) into school counselling services has significantly enhanced the quality, accessibility, efficiency, and effectiveness of counselling practice. By supporting data-driven decision-making, automating routine tasks, and enabling personalized interventions, AI complements the work of professional counsellors and improves students' academic, career, personal-social, and emotional development (Luckin, 2018; OECD, 2021; Holmes et al., 2022; UNESCO, 2023).

1. ***Enhanced Accessibility to Counselling Services:*** AI improves access to counselling services by overcoming barriers such as limited counsellor-to-student ratios, time constraints, and geographical distance. AI-powered platforms, virtual assistants, and chatbots provide students with timely access to psycho-educational resources, career information, and basic counselling support, thereby extending the availability of counselling services beyond conventional office hours.
2. ***Early Identification of Students at Risk:*** AI systems analyze students' academic records, attendance patterns, behavioural reports, and other relevant data to identify those who may be at risk of academic failure, school dropout, emotional distress, or behavioural problems. This enables school counsellors to implement early and preventive interventions that improve students' academic success and overall well-being.
3. ***Personalized Counselling Services:*** AI facilitates individualized counselling by analyzing students' interests, abilities, academic performance, personality traits, and career aspirations. Based on these analyses, AI systems provide tailored recommendations for educational planning, career development, learning support, and psychosocial interventions, thereby enhancing the relevance and effectiveness of counselling services.
4. ***Improved Career Guidance:*** AI-powered career guidance systems provide personalized career recommendations by integrating students' profiles with current labour market trends, occupational information, and educational opportunities. This enables students to make

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informed educational and vocational decisions while increasing their awareness of emerging careers and future employment opportunities.

5. ***Improved Administrative Efficiency:*** AI enhances administrative efficiency by automating routine counselling tasks such as appointment scheduling, documentation, record management, report generation, and information retrieval. This allows school counsellors to devote more time to direct counselling, student support, and intervention planning.
6. ***Data-Driven Decision-Making:*** AI enables Counsellors to make more informed and evidence-based decisions by analyzing large volumes of academic, behavioural, and psychosocial data. These insights support effective intervention planning, programme evaluation, student referrals, and the monitoring of counselling outcomes.
7. ***Continuous Monitoring of Student Progress:*** AI technologies facilitate continuous monitoring of students' academic performance, attendance, behavioural patterns, and overall development. Such ongoing assessment enables counsellors to evaluate the effectiveness of interventions, identify emerging concerns, and provide timely support where necessary.
8. ***Professional Support for School Counsellors:*** AI serves as a valuable professional support tool by assisting counsellors in preparing reports, organizing student records, accessing counselling resources, and generating relevant information for counselling practice. These capabilities improve professional productivity and contribute to more efficient and evidence-informed service delivery.

Pitfalls/Ethical Concerns

Despite its transformative potential, the integration of Artificial Intelligence into school counselling raises important ethical, legal, technological, and professional concerns that require careful consideration. Failure to address these challenges may compromise students' welfare, professional ethics, and public confidence in counselling services (European Commission, 2021; American School Counselor Association [ASCA], 2022; UNESCO, 2023)

1. ***Absence of Human Empathy:*** The counselling relationship is founded on empathy, trust, compassion, genuineness, and unconditional positive regard. Although AI systems can simulate empathetic language, they cannot genuinely experience human emotions or fully understand complex personal experiences. Consequently, AI cannot replace the emotional support provided by professional counsellors, particularly during crises involving trauma, abuse, grief, or severe psychological distress.
2. ***Confidentiality and Data Privacy:*** AI systems rely heavily on large volumes of personal information, including students' academic records, behavioural histories, psychological assessments, and health-related data. Unauthorized access, data breaches, or inadequate cybersecurity measures may expose highly confidential information. Schools therefore have a responsibility to establish robust data protection mechanisms that comply with applicable privacy laws and professional ethical standards.
3. ***Algorithmic Bias and Discrimination:*** Artificial Intelligence systems learn from existing datasets, which may contain historical biases or incomplete information. Consequently, AI algorithms may unintentionally produce discriminatory recommendations affecting students based on gender, ethnicity, socioeconomic background, disability, or cultural differences. Such bias may undermine fairness, equity, and inclusiveness within counselling services.
4. ***Overdependence on Technology:*** Excessive reliance on AI may reduce counsellors' critical thinking, professional judgment, and interpersonal interactions. Students may also become overly dependent on automated systems instead of developing healthy therapeutic relationships with qualified professionals. AI should therefore function as a decision-support tool rather than an autonomous Counsellor.
5. ***Inaccurate or Misleading Recommendations:*** AI-generated responses are based on available data and computational models rather than genuine understanding of individual

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circumstances. Incomplete, inaccurate, or biased datasets may result in inappropriate career recommendations, incorrect risk predictions, or unsuitable intervention strategies. Human verification remains essential before implementing AI-generated recommendations.

6. ***Digital Divide and Inequitable Access:*** Not all schools possess adequate technological infrastructure, internet connectivity, electricity, or financial resources required for AI implementation. Students in rural or economically disadvantaged communities may therefore experience unequal access to AI-supported counselling services, thereby widening existing educational inequalities.
7. ***Ethical and Legal Accountability:*** Determining responsibility when AI systems generate harmful recommendations remains a significant ethical challenge. Questions arise regarding accountability among software developers, educational institutions, school administrators, and professional counsellors. Comprehensive legal and ethical frameworks are therefore required to regulate AI deployment within educational environments.
8. ***Threat to Professional Identity:*** Some Counsellors express concern that increasing automation may diminish the value of professional counselling or create misconceptions that AI can replace human expertise. In reality, counselling remains fundamentally relational, requiring empathy, ethical reasoning, cultural sensitivity, and contextual understanding that AI cannot fully replicate.

Future Directions of Artificial Intelligence in School Counselling

The future of Artificial Intelligence (AI) in school counselling lies in its ethical and responsible integration to enhance counselling services while preserving the human values that underpin professional practice. Rather than replacing school counsellors, AI should serve as a complementary tool that strengthens service delivery, improves decision-making, and supports students' holistic development (American School Counselor Association [ASCA], 2022; Rogers, 1957; UNESCO, 2023).

Key future directions include:

1. ***Development of Human-Centred AI Models****:* Future AI applications should be designed to complement the expertise of professional school counsellors. AI systems should primarily support routine administrative tasks, data analysis, and decision-making, while counsellors continue to provide therapeutic relationships, ethical judgment, crisis intervention, and personalized counselling.
2. ***Strengthening Ethical AI Frameworks****:* Future AI systems should incorporate robust ethical safeguards, transparent algorithms, explainable decision-making processes, and culturally responsive designs. These measures will enhance accountability, minimize algorithmic bias, protect students' rights, and promote trust in AI-assisted counselling services.
3. ***Advancement of Research and Evidence-Based Practice****:* Future research should focus on evaluating the effectiveness of AI-assisted school counselling through experimental, longitudinal, and mixed-methods studies. Greater attention should be given to students' experiences, counsellors' acceptance, counselling outcomes, ethical considerations, and the long-term impact of AI on students' academic, career, and psychosocial development.
4. ***Investment in Digital Infrastructure****:* Governments and educational institutions should invest in reliable digital infrastructure, including internet connectivity, cybersecurity systems, and technological resources, to facilitate equitable access to AI-supported counselling services across educational institutions.
5. ***Capacity Building and Professional Development:*** Artificial Intelligence literacy should become an integral component of counsellor education and continuous professional development. School counsellors should receive regular training on AI applications, digital

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counselling competencies, ethical AI use, and data management to enhance their preparedness for technology-assisted counselling practice.

6. ***Development of International Ethical Standards****:* Professional counselling associations and international educational organizations should develop comprehensive ethical standards and regulatory frameworks to guide the responsible use of AI in school counselling. Such standards should ensure that AI applications uphold professional ethics, protect students' privacy and welfare, promote equity and inclusion, and remain aligned with the core values of the counselling profession.

Implications for Counsellor Education and Policy

The integration of Artificial Intelligence (AI) into school counselling has significant implications for counsellor education, professional practice, and educational policy. To ensure the effective and ethical use of AI technologies, the following areas require attention:

1. ***Curriculum Reform in Counsellor Education****:* Counsellor education programmes should integrate courses on Artificial Intelligence, digital counselling, learning analytics, data ethics, cybersecurity, digital mental health, and technology-assisted counselling. This will equip future counsellors with the technological competencies required to effectively utilize AI while maintaining professional counselling standards.
2. ***Continuous Professional Development****:* Practicing school counsellors should receive ongoing professional development through workshops, seminars, conferences, certification programmes, and in-service training. Such training should focus on AI literacy, ethical AI applications, digital counselling competencies, and emerging technological innovations to enhance professional practice.
3. ***Institutional Policy Development****:* Educational institutions should establish comprehensive policies governing the use of AI in school counselling. These policies should provide clear guidelines on data privacy, informed consent, confidentiality, ethical AI use, cybersecurity, professional accountability, and the responsible management of students' information.
4. ***National Policy and Regulatory Frameworks****:* Governments and educational regulatory agencies should develop national policies and regulatory frameworks to guide the integration of AI into school counselling services. These policies should establish standards for AI implementation, quality assurance, ethical compliance, and the protection of students' rights while promoting responsible technological innovation.
5. ***Revision of Professional Ethical Standards****:* Professional counselling associations should review and update their ethical codes to reflect the realities of AI-assisted counselling practice. Revised ethical guidelines should address issues relating to AI-supported decision-making, digital record management, confidentiality, professional competence, accountability, and the ethical responsibilities of counsellors in technology-mediated counselling.

Conclusion

Artificial Intelligence (AI) has significantly enhanced school counselling by improving career guidance, academic advising, mental health screening, predictive analytics, and personalized interventions. Through data-driven decision-making and early identification of students' needs, AI increases the accessibility, efficiency, and effectiveness of counselling services while supporting students' academic, career, personal-social, and emotional development. However, its adoption also raises ethical and professional concerns, including data privacy, confidentiality, algorithmic bias, accountability, and the inability of AI to replicate human empathy and professional judgment. The paper concludes that AI should complement rather than replace professional school counsellors and recommends robust ethical frameworks, policy development, counsellor capacity building, digital infrastructure investment, and interdisciplinary

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collaboration to ensure responsible AI implementation. The paper also contributes to the growing discourse on technology-assisted counselling and provides practical recommendations for educational policymakers, counsellor educators, and practitioners seeking to integrate AI into comprehensive school counselling programmes.

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