

Artificial Intelligence in Law Enforcement Training in Mongolia's Higher Education: Current State and Challenges

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Abstract

The use of artificial intelligence is rapidly being integrated into higher education operations, and by applying AI to the teaching and research processes, quality, while having a positive impact on enhancing quality and productivity in the teaching and research processes, it continues to pose significant challenges to ethics, integrity, and information security. The research investigates how law enforcement university cadets and faculty members use artificial intelligence systems and examines their related opinions.

The scope of this study is limited to the faculty members and cadets, and the data were collected by using a questionnaire. The questions were divided into five key sections: the use of artificial intelligence, academic ethics, integrity, the impact on instructional quality, safety of the data information, and future trends. While there was no significant difference in the use of AI by faculty members and cadets based on the specifics of the law enforcement sector, the potential for data privacy and risks related to false information is much greater due to the specifics of the sector. Furthermore, a mutual or united understanding of academic dishonesty, which could serve as the researcher's ethical principle guideline, has not yet been formed. And this is directly related to the state in which the university has no rules or regulations governing the use of AI. Therefore, the university must generate and implement governing rules and regulations related to the use of AI that are based on the core principles of the law enforcement sector: information truth and correctness, confidentiality, ethics, and integrity.

Keywords: Artificial intelligence, Higher education, Law enforcement, Academic dishonesty, Ethics, Confidentiality of the data information.

1. INTRODUCTION

Artificial intelligence is becoming an integral part of daily life, and its use is expected to increase further. Our constant use of artificial intelligence raises the question: “Do we need to change ourselves, or should we develop AI to suit our needs?” [1]. Thus, due to the rapid development of artificial intelligence, new prospects and obstacles are continuously emerging in the global economy, the labor market, and the education sector.

The use of artificial intelligence in higher education has been increasing rapidly in recent years, and as of 2024, the use of AI by higher education professionals for both work and personal needs has doubled compared to the previous year [2]. 86% of students worldwide use artificial intelligence, and of those, 54% use it regularly every week [3]. In connection with this usage, the education sector is constantly facing advantages and challenges. For example, in STEM education, the successful introduction of ChatGPT in lesson planning, presentation, activity implementation, and assessment has shown that ChatGPT has positive effects, such as quick response, personalized content suggestions, encouraging creativity, connecting learning content to real life, and motivating students. However, teachers have also brought up worries about technology addiction (students are more likely to discuss topics with ChatGPT than to engage in conversations with teachers and other students), reduced teacher-student interaction, and the risk of providing false and inaccurate information [4].

Also, with the continued growth of AI in higher education, risks such as data privacy and data integrity [3], ethics in law enforcement, and public trust issues [5] are also increasing.

The current scarcity of research on the tangible impact of these risks on law enforcement education and training leaves a big gap in understanding how things might change going forward. Although introducing artificial intelligence into the curriculum at Taiwan’s Central Police University has greatly improved training, instructor skills, and lesson planning, users must transparently disclose their use of AI and provide appropriate evaluation. When working with sensitive information, one must strictly adhere to the steps outlined in the guidelines, noting that regulation in this area is crucial [5]. Moreover, these risk factors could lead to violations of the fundamental principles of upholding human rights, prioritizing ethics, and strictly safeguarding state secrets in the law enforcement sector, and consequently pose a potential risk to the organization’s information security.

Therefore, the purpose of this research is to discern patterns in artificial intelligence usage, ethics, and information security among university faculty and cadets who train law enforcement professionals.

2. LITERATURE REVIEW

2.1 Artificial Intelligence Applications

Over the past 3-4 years, research in this field has intensified in connection with the increased use of artificial intelligence in higher education.

One example is that the number of publications in 2021–2022 increased two-to threefold compared to previous years, and of the 1,388 articles published between 2016 and 2022, evaluation and assessment, AI is being used to make evaluations and conclusions, predict in advance, assist, develop training strategies, and manage the learning process. However, these types of studies have been conducted most extensively in Asian countries, particularly China, as well as in the United States. A review of these studies shows that they have, in most cases, been conducted primarily in developed countries, and research of this type is scarce in developing countries [6]. Therefore, the results of these studies indicate the need and necessity for future research on teacher and student AI use, trends, and comparative studies with other countries in developing nations.

However, Balalle and Pannilage's [7] study analyzed 1,443 articles and found that students use artificial intelligence to improve their educational abilities and writing skills, and teachers can use it to support the teaching process, but ethical and integrity issues remain pressing when using it in teaching and research. The research underscores the necessity to investigate students' and teachers' attitudes and perceptions regarding the use of artificial intelligence in education in the future. However, the research articles mainly focus on Australia, New Zealand, the United States, the United Kingdom, South Africa, Nigeria, Namibia, Zimbabwe, were conducted in Australia, New Zealand, the USA, the UK, South Africa, Nigeria, Namibia, Zimbabwe, and India, Congo, Ethiopia, and China, making it impossible to fully determine the situation and AI usage in other countries, including Mongolia.

Furthermore, trends regarding artificial intelligence are also evolving and changing. For example, AI is studied more as a user assistant and collaborative agent than as a human-made object [8].

Focusing on higher education within the field of AI applications, Zacharis and Papadakis [9] found that AI makes systematic errors when evaluating student assignments, with a tendency to raise scores for poorly performed work and lower scores for well-performed assignments. This confirms that AI assessment cannot fully replace teacher evaluation, and it is considered appropriate for teachers to use AI as an assistant. Although there are certain challenges in using AI to conduct assessments independently, it can help teachers plan their lessons more effectively, organizing and implementing lessons, and using it to innovate and improve instructional design has been found to be effective [10].

In addition to these, artificial intelligence is used as a digital tool to predict performance, suggest resources, improve assessment and learning experiences[11], and execute tasks more quickly and effectively to support practices such as performance forecasting, resource recommendation, improving assessment and learning experiences, increasing efficiency, and text processing[12]. These applications were investigated in [12], among faculty and students at a University of the Netherlands, respectively, and students used AI for language processing, text editing, and generating new ideas, to explain topics and obtain information, while teachers commonly use AI for four purposes: lesson preparation, developing exam questions and assessment criteria, text editing, and information retrieval. 62% of all research on these AI applications is conducted in computer science and STEM [13]. This result shows that there is a lack of research that addresses the evolving use of AI in law enforcement education.

2.2 Difficulties Linked With the Use of Artificial Intelligence

The use of artificial intelligence in higher education provides a multitude of advantages and is significant, but it continues to demonstrate unique obstacles. Students using artificial intelligence have significant doubts about the reliability of the information and believe there is an additional need to verify the data. However, for teachers, plagiarism, the negative impact of artificial intelligence on students' learning process, and personal privacy and data security are more concerning than for students [12]. For example, ChatGPT cannot verify the truthfulness of the information it generates, fills in gaps with speculation and fabricates incorrect sources, and if there is bias in the data, it amplifies that bias [14], thereby creating unreliable information. Furthermore, the issue of intellectual property for these works remains contentious. One example is that when a student uses artificial intelligence to produce work, neither the student nor the AI itself is considered the author. However, OpenAI's policy grants users all rights to works generated by ChatGPT, meaning users are permitted to use those works for deletion and other purposes [14]. If a work produced by artificial intelligence is not considered a student's own work and is treated as an ethical issue, the systems for detecting the work are not reliable, and the text's sentence structure and detection capabilities are limited when minor changes are made to the wording or structure [15]. Is it possible for work performed by artificial intelligence to become a student's own work after a certain amount of editing? It demonstrates the need to conduct a broad study of this approach and to regulate relevant standards and appropriate measures concerning this content through university policy.

Summarizing these studies, the issues facing higher education regarding the use of artificial intelligence are, first, the reliability of AI tools; second, intellectual property and ethical issues are widespread, as these studies show.

2.3 Artificial Intelligence in Law Enforcement, Challenge

Research results illustrating the use and trends of artificial intelligence in the law enforcement sector show that a lawyer uses artificial intelligence to draft legal documents, and then uses it to revise, conduct legal research, search for legislative information, draw conclusions, and summarize. However, when the bar exam was tested on AI, it received a C+ grade. This indicates that in a take-home exam format, even a less capable student could pass the test and become a lawyer. On one hand, this could pose a risk to the ability to realistically assess professional skills; on the other hand, it demonstrates the potential to use artificial intelligence in the legal field as an auxiliary tool [16].

However, the research results show that using artificial intelligence in police organizations and police academy training is significantly effective. For example, AI tools can tailor law enforcement training content to learners' characteristics and needs [17], and training program planning, teacher competencies, and instruction have been significantly improved [5], as evidenced by research findings. Artificial intelligence is also being used in military professional education to assist with processing large volumes of reading materials and completing writing exercises [18].

While the use of artificial intelligence is creating the above opportunities in the law enforcement sector, it also faces certain challenges. These include misleading information, incorrect citations, and plagiarism [18], and challenges include instructors' reluctance to adapt to new technologies, as well as the scarcity and high demand for instructors specializing in policing and artificial intelligence

[5]. Additionally, a study conducted by the Central Police University of Taiwan found that RCI-based regulations, by establishing guidelines, enable the ethical and responsible use of artificial intelligence and set clear standards for data security and intellectual property [5]. Also, to overcome the above challenges facing the law enforcement sector, it is necessary to reduce algorithmic bias when using artificial intelligence in training, protecting personal privacy, ensuring technological accessibility, and guaranteeing ethically responsible use [17], mandatory source verification, and, when used in academic work, mandatory accurate and transparent citation and use for supportive purposes [18].

Therefore, law enforcement training schools are clearly demonstrating that, rather than ignoring technological advances, they need to update their curricula and prepare students to work in new technological environments [14]. These studies reveal several research gaps regarding faculty and students' use of artificial intelligence in higher education, including:

1. Studies on AI usage are mostly conducted in developed countries, and research on AI use and trends in developing countries is insufficient.
2. In the field of higher education, issues related to data privacy, security, and adherence to ethical standards in the use of artificial intelligence have not been fully studied in law enforcement and higher education.
3. Research on higher education faculty and students' attitudes toward, concerns about, and risks associated with AI use is insufficient;
4. Empirical research on the reliability of information and data privacy arising from the use of artificial intelligence in higher education.

Given these research gaps, this study aims to examine the use of artificial intelligence and its trends among cadets and faculty members at the university, which has a special mandate to train Law enforcement officers in Mongolia.

3. RESEARCH METHODOLOGY

The study quantitatively examined the use of artificial intelligence, as well as their attitudes and future expectations towards artificial intelligence, among cadets and faculty members at the Mongolian University of Internal Affairs, which trains law enforcement and security professionals.

The study included 88 faculty members (39.6% of the school faculty) and 257 cadets (9.1% of the cadet population). This indicates that the study's sample size is representative.

Data were collected through 19 questions from cadets and 21 questions from faculty members in five main areas: the use of artificial intelligence, ethics and fairness related to the use of artificial intelligence, the impact of the use of artificial intelligence on the quality and outcomes of education, safety and risk, and future trends in artificial intelligence. The questionnaire was based on prior research in this area [12], but additional modifications were tailored to the specific requirements of schools and the law enforcement sector.

To assess the reliability and internal consistency of the questionnaire, Cronbach's alpha was computed. The Cronbach's Alpha coefficient for the 21 questions from the faculty members was $\alpha = .651$, and for the 21 questions from the cadets, $\alpha = .677$. This is consistent with the findings of [19], who found that internal reliability estimates of alpha coefficients of 0.60-0.69 are suitable for research use only (but not for clinical use), indicating that the reliability of the questionnaires is at an acceptable level.

The responses to the open-ended research questions were effectively used in the Qualitative Content Analysis method, which coded each response into meaningful units, grouped similar codes, and modified the processing. The method made it possible to systematically integrate the trends in the use of artificial intelligence by cadets and faculty members, and the tools used.

The survey included faculty members from 8 units of the University and cadets from 5 schools. The faculty members who participated in the survey were classified by job title as "Lecturer", "Senior Lecturer", "Associate Professor", and "Professor". 35.2% of the faculty members had more than 6 years of experience.

The research participants consisted of cadets in years 1-4, with 35.4% in year 1, 12.1% in year 2, 37.7% in year 3, and 14.8% in year 4. The inclusion of cadets from many schools in the study allows us to present a general picture and the results of all cadets at the University.

3.1 Research Ethical Issues and Participant Confidentiality

Before collecting research data, we had the study's objectives, methodology, and other aspects reviewed and officially approved by the Internal Affairs University's Research Ethics Committee. The committee approved the use of the school's name and ensured there were no conflicts of interest affecting the rights and interests of research participants.

We obtained "informed consent" from all participants and made the study-related information available before they began the survey. This included:

1. Purpose of the study
2. Promise to use the data solely for research purposes
3. Reminder not to include personally identifiable information
4. The right to participate in the study on a voluntary basis or to withdraw from the study at any time

After participants reviewed this information, a section was included to obtain consent for voluntary participation in the study, and it was configured so that, if they declined, the study window would close immediately. Of the cadets who accessed the survey, 12 declined to participate; therefore, we used data from 257 cadets.

As defined by Cohen et al. [20], the data we collected do not contain any personally identifiable information. Since the data we collected does not include any personally identifiable information,

we have fully ensured data confidentiality by storing and protecting it in an environment accessible only to members of the research team. In doing so, we believe we have ensured the security of participants’ information and complied with ethical standards.

4. RESULT

4.1 Cadets and Faculty Members’ Use of Artificial Intelligence

According to the survey results, the use of artificial intelligence (AI) is very high among all participants. Specifically, 83% of faculty members and 95.7% of cadets use AI tools for educational and personal purposes, with cadets’ use significantly higher than faculty members’.

When faculty members’ AI use is classified by work experience, experienced faculty members with more than six years of service have a higher rate of AI use than other Faculty members. However, faculty members and cadets use artificial intelligence for the following purposes and TABLE 1, shows faculty members’ artificial intelligence usage and TABLE 2, shows cadets’ artificial intelligence usage purposes, respectively. These are:

Table 1: Faculty members’ use of artificial intelligence (%)

Use of artificial intelligence	Lecturer	Senior Lecturer	Associate Professor	Professor	Total
A. Generating necessary cases and examples for lessons.	12.5	10.2	2.3	0.0	25.0
B. Developing assignments and exam questions.	3.4	1.1	0.0	1.1	5.6
C. Collecting research sources.	4.5	12.5	1.1	4.5	22.6
D. Preparing presentations and lecture materials	1.1	0.0	1.1	0.0	2.2
E. Conducting data analysis	3.4	1.1	1.1	2.3	7.9
F. Assess and evaluate learners’ assignments	0.0	0.0	0.0	1.1	1.1
G. In other areas	8.0	6.8	1.1	5.7	21.6
H. Haven’t tried using it.	5.7	5.7	1.1	1.1	13.6

From the results shown in TABLE 1, faculty members primarily use artificial intelligence (AI) to prepare for instruction, gather research sources, and analyze data. The form of AI use is directly related to faculty members’ job categories and responsibilities. For example, while instructors and senior instructors primarily use AI in teaching methodologies and instructional activities, professors make greater use of it in their research and scholarly output. This shows that as faculty members’ positions increase, the purpose of using AI shifts from teaching to research.

However, cadets are using artificial intelligence for the following purposes. These include:

Table 2: Cadets’ use of artificial intelligence (%)

Use of artificial intelligence	Frequency	Percent
Unanswered	1	.4
Assignment and homework completion	34	13.2
Other tasks	83	32.3
Criminal case reporting and situational analysis development	3	1.2
Coding and devising technical solutions	5	1.9
Conducting research	71	27.6
Research ideation	22	8.6
Legal case study analysis	13	5.1
I. Drafting essays and presentations	25	9.7
Total	257	100.0

As shown in TABLE 2, Cadets commonly use artificial intelligence in their learning activities, such as conducting research and analysis, completing independent assignments, and doing homework.

Regarding usage frequency, both faculty members (40.9%) and cadets (48.6%) use AI tools “when needed,” that is, when a specific need arises. However, regular daily use was reported by 12.5% of faculty members and 9.7% of cadets. which represents a relatively small percentage, indicates that AI is currently being used more as a situational tool than as a basic utility.

4.2 Academic Integrity and Ethics Related to the Use of Artificial Intelligence by Cadets and Faculty Members

When asked whether it is right to consider work done by artificial intelligence as one’s own, cadets and faculty members gave the following answers:

In the survey, the majority of cadets and faculty members held the view that work performed by artificial intelligence “cannot be considered one’s own creation.” However, 26.1% of faculty members and 19.8% of cadets believe it is their own work (FIGURE 1).

Meanwhile, 71% of faculty members believe that cadets should not use artificial intelligence when completing homework and independent assignments. “While the majority of both faculty members (57.9%) and cadets (68.1%) viewed this as requiring regulation rather than simply an “ethical violation,” 61.5% of cadets said they do not feel it is unfair to use artificial intelligence.” However, a majority of faculty (57.9%) and cadets (68.1%) support the view that the use of artificial intelligence in one’s work should be officially disclosed.

When open-ended questions were used to clarify the issues faced by the university’s faculty members and cadets in using artificial intelligence, it emerged that, for the faculty, there is no university-wide policy or regulation regarding AI use. (repeated 11 times), leakage of state and private confidential information (repeated 5 times), insufficient knowledge and skills in using artificial intelligence (repeated 5 times), deepfake (repeated 4 times), concerned about the risks arising from the lack of AI policies and legal regulation for faculty, while for cadets, issues such as unreliable information

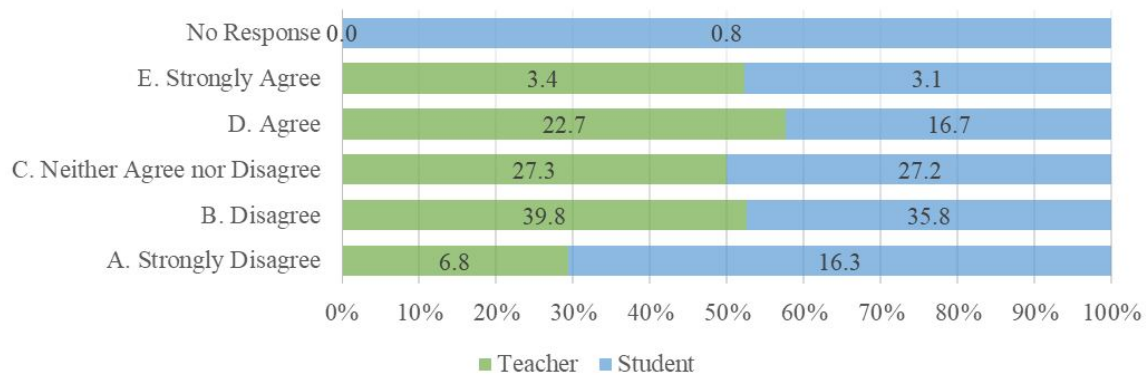


Figure 1: Cadets’ and faculty members’ attitudes toward academic integrity regarding Artificial Intelligence (AI)- generated work/performance.

Note: In the legend, 'Teacher' refers to faculty members and 'Student' refers to cadets within the law enforcement university context.

(repeated 70 times), and the negative impact on creative thinking (2 times) were encountered, they answered. While faculty members are concerned about the risks posed by the absence of AI policies and legal regulation, cadets perceive unreliable information as their greatest challenge.

4.3 Impact of Artificial Intelligence on the Quality of Learning and Learning Achievement

Among the faculty members surveyed, the prevailing view is that integrating artificial intelligence into instructional activities can positively impact the quality of teaching. For example, 78.2% of faculty members believe that the use of artificial intelligence in teaching and research is important for reducing workload and increasing productivity.

Also, when cadets use artificial intelligence to complete lessons and independent assignments, faculty members express the following attitudes, as shown in TABLE 3.

As shown by the results in the table, the majority of faculty members participating in the study (79.5%) concluded that effectively integrating artificial intelligence into instructional activities improves the quality of cadets’ lessons and homework. This trend demonstrates that faculty members trust artificial intelligence and are willing to accept its use as a teaching tool.

However, 63.2% of the faculty members surveyed reported that using artificial intelligence (AI) helped them understand the course content and improve learning outcomes, and 58.8% of those cadets reported that it can reduce the burden of the learning process. These indicators are also recognized as effective tools for improving learning outcomes and supporting independent learning activities.

Cadets and faculty members are using artificial intelligence in their training and research. Although this has shown positive results, the indicators in FIGURE 2, suggest a long-term threat to that; in

Table 3: Impact of appropriate use of artificial intelligence on teaching quality: Faculty members' ratings (%)

The proper use of artificial intelligence can improve the quality of cadets' homework and independent assignments.	Faculty members experience				Total
	Up to 1 year	2-4 years	4-5 years	6 years and over	
Strongly Disagree	0.0	0.0	0.0	0.0	0.0
Disagree	0.0	1.1	1.1	3.4	5.6
Neither	3.4	3.4	2.3	5.7	14.8
Agree	17.0	21.6	10.2	25.0	73.8
Strongly agree	2.3	2.3	0.0	1.1	5.7

the long term, it may negatively affect cadets' creative thinking and independent decision-making abilities.

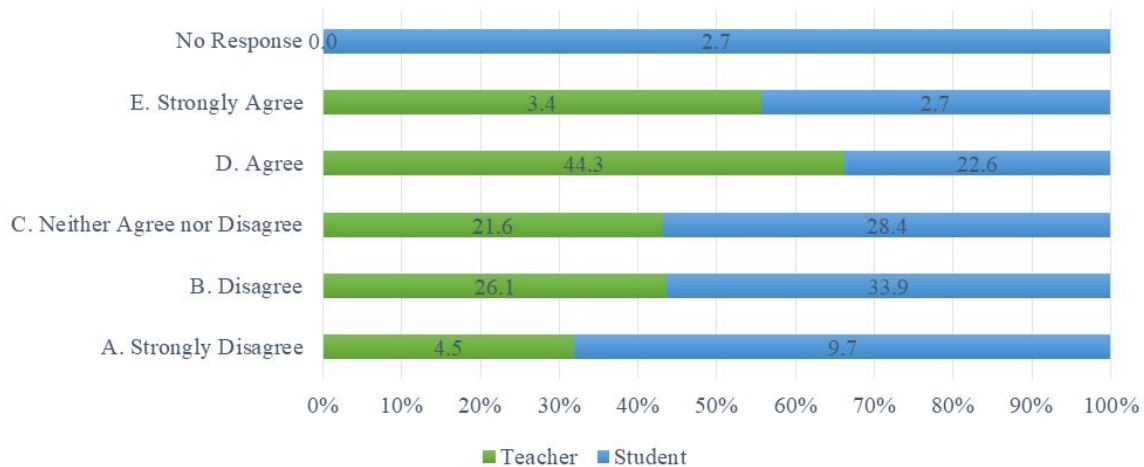


Figure 2: The adverse impact of the use of artificial intelligence on cadets' creative thinking and independent decision-making capabilities.

Note: In the legend, 'Teacher' refers to faculty members and 'Student' refers to cadets within the law enforcement university context.

47.7% of the faculty members surveyed believe that the use of artificial intelligence (AI) risks negatively impacting cadets' creative thinking and independent decision-making skills. In contrast, 43.6% of cadets reported that the use of AI would not negatively affect their creative abilities. These indicators show that cadets and faculty members have markedly different attitudes regarding AI's impact on cognitive abilities. This divergence of opinion indicates that a unified understanding of AI's impact on education has not yet been established and highlights the lack of empirical evidence from trials and research in this field (FIGURE 2).

4.4 Information Security Approach Related to Artificial Intelligent Property Use

According to the results of the previous section, the obstacles encountered by the school’s faculty members and cadets in using artificial intelligence were information privacy and reliability. In this regard, 49.2% of cadets acknowledged that they are in desperate need of receiving safety guidelines and methodological recommendations on artificial intelligence from their faculty members.

Among Faculty members, 70.5% considered using artificial intelligence in law enforcement training and research to be “risky for information security.” This indicates that such concerns are relatively high among them. When faculty members and cadets were asked to clarify what security risks they faced in using artificial intelligence, the result emerged is shown in FIGURE 3.

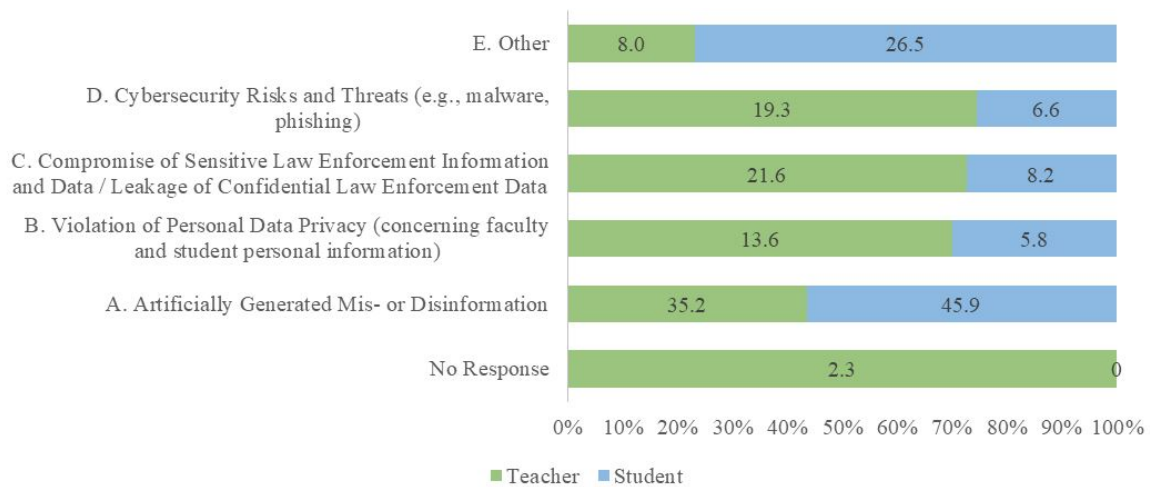


Figure 3: Information security vulnerabilities precipitated by AI integration

Note: In the legend, 'Teacher' refers to faculty members and 'Student' refers to cadets within the law enforcement university context.

While faculty members and cadets are unanimous in their belief that the use of artificial intelligence could potentially provide false and inaccurate information, only faculty members emphasized the risk of sensitive law enforcement information being lost (FIGURE 3), TABLE 4 shows measures need to be taken to address this:

Faculty members and cadets surveyed identified improving control systems and avoiding the use of personal or government-confidential information in artificial intelligence applications as ways to ensure information security.

4.5 Future Trends of Artificial Intelligence Usage Among Faculty Members and Cadets

The state of how faculty members and cadets have identified the need and demand for increasing the use of artificial intelligence in the law enforcement sector.

Table 4: Methods for ensuring information security and preventing risks

Cadets	Faculty members
- Protects the privacy of personal information, does not share private confidential information (26 times)	- Protecting information privacy (government and private confidential information) - (11 times)
- Does not create official records (7 times)	- Promoting appropriate use (8 times)
- Double-checks information (3 times)	- Limiting artificial intelligence use to a certain extent (5 times)
- Limits use (2 times)	- Increase knowledge and skills in using artificial intelligence (4 times)- Establish legal regulation
- Activating protection mode, deleting usage history, using a one-time code (1 time)	- Develop and use detection software, refrain from using it, conduct pilot studies, and use a paid version (1 time)
- Not taking specific protective measures (14 times)	- Unaware of protective measures (9 times)
- Not aware of protective measures (4 times)	

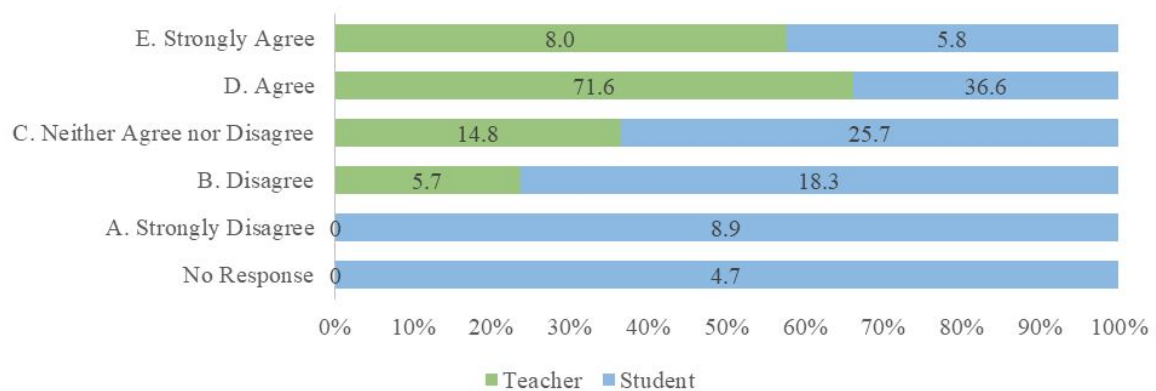


Figure 4: Future trends in the use of artificial intelligence by faculty members and cadets.

Note: In the legend, 'Teacher' refers to faculty members and 'Student' refers to cadets within the law enforcement university context.

As shown in the results presented in FIGURE 4, In response to the statement, “The use of AI in law enforcement education and research needs to increase in the future,” 79.6% of faculty members and 42.6% of cadets, respectively, responded “agree.” This indicates that, compared with cadets, faculty members place greater value on the need for and demand for artificial intelligence and deem it beneficial for future educational and research applications.

In response to the open-ended question, “For what purposes and in which directions do faculty members and cadets wish to use artificial intelligence in the future?” they provided the answers shown in TABLE 5. These are:

Table 5: Types of Future Artificial Intelligence Use by faculty members and cadets.

Faculty members	Cadets
- Conduct research effectively (6 times)	- Obtaining reliable information from multiple sources;
- Ensure lesson planning and preparation (5 times)	- Writing code;
- Prepare e-lessons (4 times)	- Learning foreign languages, improving language proficiency;
- Process data (3 times)	- Conducting research analysis;
- Prepare video recordings and presentations, perform translation, and improve language skills (1–2 times)	- Creating video content.

According to the research results, the need for and interest in using artificial intelligence (AI) differ between faculty members and cadet groups. Faculty members tend to use artificial intelligence in professional contexts to improve the quality of lesson planning, preparation, and research. However, cadets are interested in using it in a multifaceted way, not only for learning activities but also to enhance their personal skills.

5. DISCUSSION

Research findings indicate that university faculty members and cadets in law enforcement commonly employ artificial intelligence. However, both faculty members and cadets generally use AI only when needed. This is similar to the frequency of AI use among faculty members and cadets in the Netherlands schools. They also use AI in similar ways, only when specific requirements arise and for defined purposes [12]. Faculty at law enforcement universities in Mongolia use artificial intelligence for lesson planning and preparation to improve the quality of research and scholarly work, a practice similar to that of university faculty in the Netherlands and internationally [7, 10, 12], but differs from practical legal applications such as drafting and editing legal documents [16].

The use of artificial intelligence in research, self-study, and homework by law enforcement school cadets in Mongolia is different from the use by university cadets in the Netherlands. For example, students at the University of the Netherlands use AI for language processing, text editing, idea generation, topic explanation, and information retrieval [12]. However, in the same type of American military professional education, AI is used to assist with processing large volumes of reading materials and completing writing exercises [18], which is similar to the use of artificial intelligence in higher education within our country’s law enforcement sector. There is a general trend in law enforcement training, with its specialized functions, to use artificial intelligence to help process data and facilitate mechanical operations.

Our research findings confirm the need to study the impact of faculty members’ and cadets’ use of artificial intelligence on the quality of instruction based on real data and experimentation. According to research findings, integrating artificial intelligence into teaching and research can reduce faculty members’ workloads, increase productivity, and, consequently, improve instruction. A positive attitude toward the potential of AI to positively impact teaching and learning activities predominates

among the study participants. This positive attitude is more common among cadets than among faculty members, and these results are fully consistent with the conclusions of [7, 12, 17], and [5]. This ensures the possibility of introducing internationally recognized beneficial applications of artificial intelligence into the training of Mongolia's law enforcement sector, customized to its specific needs and characteristics.

While the introduction of artificial intelligence into teaching and research activities has the potential to increase productivity, it also poses certain challenges for law enforcement and higher education institutions. First, the concern that the use of artificial intelligence may negatively affect cadets' creative thinking and independent decision-making skills is widespread among instructors, which aligns with the results of a research project conducted at the University of the Netherlands [12]. This concern is also being observed in law enforcement educators, and it highlights the lack of experimental research on the impact of AI use on cognitive abilities.

Secondly, our research results show that there is a discrepancy between instructors' and students' perceptions of whether work completed with the help of artificial intelligence can be considered "one's own work". However, this challenge is not limited to the context of Mongolia, as international studies have shown similar doubts. For example, Ajevski et al. [14] found in their study that work was performed by artificial intelligence. The issue of "copyright" remains unclear, and OpenAI's usage policy, which grants users the rights to work produced by ChatGPT, indicates that it recognizes humans as the primary owners. This policy is insufficient to fully address copyright issues in the academic environment. Michel-Villarreal et al. [8] highlight that attitudes toward artificial intelligence are changing, noting that AI is increasingly perceived not merely as an object but as an assistant and collaborator for researchers and learners. In such a context, academic work could evolve based on the collaborative interaction between human intelligence and artificial intelligence, and it may become necessary to make drastic changes to intellectual property issues in the future.

Third, information security, including state and official confidentiality and data reliability, is a strategic risk for universities that train law enforcement professionals. According to the survey, "fake information" (45.2% of faculty members, 35.9% of cadets) and the risk of state and official secrets being leaked were viewed as the highest, which directly contradicts the principles of making decisions based on real data in the law enforcement sector and of strictly safeguarding official secrets.

These risks both limit the potential for integrating artificial intelligence into the sector and strongly reinforce the view that human-in-the-loop validation is mandatory. The results of our study confirm the findings reported in [3–5] and [18], which suggest that the use of AI in law enforcement education necessitates meticulous source verification, monitoring of algorithmic bias, and the establishment of ethical and safety guidelines.

We consider that our study has the following limitations. First, because the questionnaire used to collect information from faculty members and cadets was newly developed and had not been used in similar studies before, its Cronbach's alpha ranged from .651 to .677. Although Nunnally (1978) and Garson (2005) specify that values above $\alpha = .60$ are acceptable for empirical research (as cited in [19]), this may have imposed specific limitations on the precision with which the variables measured by the questionnaire can be assessed. Therefore, we acknowledge the need to further refine and improve the questionnaire's structure in the future. Secondly, we only studied

the AI usage and trends of faculty and cadets within a single university responsible for training law enforcement professionals, and these results cannot be generalized to other universities in Mongolia. cannot represent the faculty and cadets of other higher education institutions in Mongolia. Third, the conclusion that AI use has a positive impact on teaching quality was based solely on faculty members' and cadets' responses, and this may yield different results in real-world conditions.

6. CONCLUSION

This study aimed to identify the trends and usage of artificial intelligence among faculty members and cadets of universities that train law enforcement and security professionals in Mongolia, and to reach the following conclusions:

1. According to research, faculty members and cadets commonly use artificial intelligence to enhance the quality and productivity of teaching and research. Faculty members primarily use artificial intelligence for instructional planning and research, while cadets mainly use it for completing independent assignments and homework. The pattern of AI usage among faculty and cadets at law enforcement universities in Mongolia differs slightly from the common international usage, but shows that it is similar to the use in American military professional education.
2. Research has identified two main issues associated with the use of artificial intelligence. First, the differing positions of faculty and cadets on academic integrity and ethical issues confirm that the university lacks unified ethical guidelines and policies tailored to the unique characteristics of the law enforcement sector. Second, the regular use of AI in teaching and research poses serious risks to information security and data reliability. For example, while faculty members are concerned about leaks of state and official secrets, listeners are more worried about the “fake information” generated by large language models. Although these are common risks encountered across all international sectors, in the law enforcement field, confidentiality and data-driven decision-making are the fundamental pillars of operations. Therefore, the results of this study indicate that breaches of these principles carry more serious consequences than in other sectors and that it is urgent to establish and implement a risk management system tailored to the unique characteristics of the field.

Therefore, as a university that trains professionals for the law enforcement sector of Mongolia, it is necessary to implement an open, accessible policy that systematically studies the risks encountered rather than restricting the use of artificial intelligence. In doing so, it is strategically important to define criteria for assessing academic integrity, transparently disclose the use of LLMs, and develop special procedures to safeguard official confidentiality.

In the future, it is necessary to conduct long-term experimental studies on whether the use of artificial intelligence has a real impact on the quality of education, as well as detailed studies on whether the use of artificial intelligence affects the creativity and decision-making of teachers and students. There is also a need to thoroughly study the risk of loss of confidential and sensitive information in the field of law enforcement and propose preventive measures.

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