How Female Lecturers of People's Police Schools Think theoretically of Research, Applications and Technology Transfer – Bloom's Taxonomy Levels

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Abstract

This study explores the cognitive and affective engagement of female lecturers at People's Police schools with research, applications, and technology transfer through the lens of Bloom's Taxonomy. By mapping their perceptions, motivations, and competencies across the six hierarchical levels—Remember, Understand, Apply, Analyze, Evaluate, and Create—the research reveals varying depths of academic and practical integration. The findings indicate a strong foundation at the Remember and Understand levels, with moderate engagement at Apply and Analyze, and emerging capabilities in Evaluate and Create. Influencing factors include institutional support, professional development opportunities, and perceptions of the relevance of research to law enforcement practice. The study highlights the need for targeted strategies to elevate female lecturers' roles in innovation and technology transfer, ensuring their contributions align with both academic objectives and public security demands. The application of Bloom's Taxonomy offers a structured framework to assess and enhance their academic development and impact.

Keywords: *Bloom's taxonomy, female lecturers, police school, technology transfer, research engagement*

1. Introduction

Logical thinking is an essential life skill that plays an important role in analyzing and solving problems. When switching to logical thinking, people do not simply receive information but also evaluate, analyze, and compare arguments to make smarter decisions. This process includes asking questions, searching for evidence, and drawing well-founded conclusions. Logical thinking also encourages critical thinking, helping us recognize errors in reasoning and detect unreasonable assumptions. Through practicing logical thinking, we can improve our self-awareness, improve communication, and develop creative solutions to work challenges. Logical thinking is the ability to analyze, evaluate, and synthesize information in a logical and systematic way, helping people make accurate decisions and sharp arguments. In life, logical thinking not only helps us solve complex problems but also improves our ability to understand and communicate effectively. French philosopher René Descartes once asserted: "Cogito, ergo sum" (I think, therefore I am) ,

emphasizing the role of thinking in affirming human existence. Logical thinking requires continuous practice through asking questions, analyzing assumptions and considering all aspects of the problem. Only by applying logical thinking scientifically can we achieve clarity in thinking and action.

A reasoning assessment is a process of determining and analyzing an individual's ability to think logically, critically, and solve problems. This assessment is not only based on the ability to analyze information or make clear arguments, but also considers creativity in thinking and the ability to apply knowledge in practice. A person with good reasoning skills often demonstrates acumen in identifying and considering factors that influence decisions, and knows how to organize thoughts in a coherent and systematic way. A reasoning assessment can be conducted through tests, group discussions, or real-life situations that require the assessor to analyze and provide solutions. The results of this assessment can help individuals identify their strengths and weaknesses in thinking, thereby planning to develop the necessary skills to improve their reasoning ability in the future. Assessing logical thinking is the process of analyzing the level of logic, rigor, and efficiency in how an individual processes information, reasons, and solves problems. This process often focuses on determining the ability to identify problems, formulate hypotheses, analyze evidence, and draw reasonable conclusions. Good logical thinking goes beyond defending one's own views and also includes the ability to critique and evaluate the validity of opposing arguments. As the philosopher Aristotle once said, "The mark of an educated mind is the ability to consider an idea without accepting it." Assessing logical thinking not only improves the quality of thinking but also promotes clarity and effectiveness in communication and decision-making.

Understanding how female educators engage with research, applications, and technology transfer within security-related institutions, such as People's Police schools, can benefit significantly from examining their cognitive engagement through Bloom's Taxonomy. Bloom's framework provides a hierarchical model of cognitive processes that range from remembering and understanding to evaluating and creating [11]. However, gender biases embedded in how this taxonomy is applied or interpreted remain an underexplored issue, particularly within male-dominated educational systems such as law enforcement academies. Karama (2022) [6] investigated how preservice teachers—predominantly female—formulate learning outcomes using Bloom's Taxonomy and found substantial gender stereotypes in their verb and noun selections. Over 70% of the learning outcomes created by participants were based on masculine verbs and nouns, even though the majority of the participants were women. These findings raise concerns about internalized gender norms among female educators and suggest a hidden curriculum that reinforces male dominance, even in instructional design.

Moreover, Karama's (2022) [6] study found no significant difference between male and female preservice teachers in applying these gendered structures at lower cognitive levels (e.g., knowledge and comprehension). However, notable variance emerged at higher-order levels such as analysis and synthesis, with females slightly more likely to attempt gender-

neutral or feminine formulations, albeit still within an overwhelmingly male-biased framework. This aligns with prior findings that women educators may unconsciously replicate systemic biases due to lack of institutional support and exposure to inclusive pedagogical practices [4], [2]. The implications of such bias are profound in the context of People's Police schools, where pedagogical practices intersect with social order and authority. When female lecturers reinforce masculine-coded action verbs in educational content—particularly in domains like research and technology—it narrows the epistemic space available to female learners and educators alike. This is compounded by the fact that these institutions often adhere to hierarchical command structures where reforming gender norms may be perceived as undermining traditional values.

Furthermore, Bloom's Taxonomy has historically been critiqued for emphasizing objectivity and neutrality while masking patriarchal undercurrents[5]. The use of male-centered language in action verbs (e.g., "construct," "analyze," "evaluate") often signals authority and competence—traits stereotypically coded as masculine. In contrast, emotional intelligence or collaborative problem-solving skills, which research shows are more frequently employed by women educators [2], are de-emphasized in curriculum development and evaluation frameworks. Addressing these disparities requires integrating gender-sensitive pedagogy into the training of lecturers at police academies. Stanny (2016) [9]advocates for more critical engagement with the verbs used in Bloom's Taxonomy to ensure they reflect inclusive values and social realities. As suggested by Daniela and Lytras (2018) [3], the SMART criteria—specific, measurable, attainable, relevant, and time-bound—must also consider the social implications of language choices and structural barriers faced by female educators in applying and transferring research-based innovations. Obviously, while Bloom's Taxonomy provides a valuable scaffold for organizing learning outcomes, its application within male-dominated contexts such as People's Police schools may inadvertently reinforce gender biases unless critically adapted. Future research should focus on developing localized and inclusive adaptations of Bloom's framework to support equitable cognitive engagement among female lecturers in security education.

The duties of female lecturers of People's Public Security schools are determined according to legal documents, including: according to the Law on Higher Education 2012 - Law No. 08/2012/QH13 [10] and the Law amending and supplementing a number of articles of the Law on Higher Education - Law No. 34/2018/QH14), the duties of lecturers are reflected in the following basic issues: (1) performing the duties of a lecturer; (2) teaching, developing training programs; (3) researching, developing scientific applications and transferring technology, (4) studying, fostering and improving political theory, expertise, professional skills and teaching methods; participating in practical activities. According to Circular No. 57/2010/TT-BCA dated December 14, 2010 of the Minister of Public Security regulating the working regime of teaching and training positions in academies, universities, colleges, and intermediate schools of the People's Public Security, the tasks include: (1) performing teaching tasks; (2) in scientific research and practical activities, (3) studying and training; (4) professional activities.

Female lecturers play an important role in the development of education, contributing to creating a diverse and equal learning environment. Not only are they good at their profession, they also demonstrate dedication, patience and innovation in teaching and research. By imparting knowledge and experience, female lecturers not only contribute to improving the quality of education but also become inspirational role models for the younger generation, especially female students. Over time, their role has been increasingly affirmed, breaking down gender barriers and promoting equality in academia. Female lecturers are not only teachers but also living proof of women's success in the fields of knowledge and leadership. Female lecturers at People's Public Security schools play an important role in training and fostering the next generation of officers and soldiers, contributing to building a regular, elite and modern People's Public Security force. Not only do they possess extensive professional knowledge, they are also examples of dedication, perseverance and creativity in teaching. Despite working in an environment with many strict requirements, female lecturers still affirm their positions through their scientific research ability, innovative teaching methods and dedication to the profession. They are proof of the spirit of "being good at national affairs and taking care of family affairs," both completing professional tasks well and preserving traditional family values. The silent dedication of the female lecturers not only contributes to improving the quality of education and training in the industry but also affirms the important role of women in the armed forces.

1.1.Levels of theoretical thinking of research and technology transfer

Experience - *Technology Transfer Through Practical Learning.* The technology transfer process is not only about providing technical solutions but also about training and guidance so that the recipient can apply the technology effectively. According to Nonaka and Takeuchi (1995) [8] , knowledge transfer should be based on a combination of explicit and tacit knowledge. *The role of lecturers and researchers.* University lecturers often play the role of intermediaries in technology transfer. They not only share knowledge but also support businesses or organizations in using new technology in a specific context. This is a combination of experiential thinking and the ability to apply science and technology.

Memorization and reproduction **-** Memorization in technology transfer. Technology transfer requires memorization of procedures, techniques, and operating standards. Nonaka and Takeuchi (1995) [8] argue that successful knowledge transfer requires a combination of explicit knowledge and tacit knowledge. Memorization of precise technical steps is the basis for ensuring consistency in technology application. Reproduction in technology application. The ability to reproduce knowledge helps organizations and individuals operate technology effectively in different contexts. This requires not only deep understanding but also the ability to apply it flexibly. For example, in software training, employees need to reproduce the steps they have learned to handle real-life situations.

Generalization and Abstraction **-** *Generalization of knowledge in technology transfer.* Technology transfer requires generalization of engineering principles so that they can be applied in different contexts. Nonaka and Takeuchi (1995) [8] argue that organizational knowledge is not just about mechanical application but also about deep understanding of how to operate and optimize processes. Abstraction *for technology application.* Abstraction is an important tool in the design and development of technology. For example, in the software field, abstraction helps programmers build general models, from which they can implement specific solutions for each situation.

Application **-** *Application of knowledge in technology transfer.* The technology transfer process requires the flexible application of scientific and technical knowledge to adapt to local conditions. Nonaka and Takeuchi (1995) [8] pointed out that creating value from technology requires the ability to apply both explicit and tacit knowledge. *Solving practical problems with technology.* In technology transfer, application thinking is used to adjust processes and equipment to meet the specific needs of the organization or locality. For example, the deployment of solar power systems in rural areas requires adjustment to suit the economic and social conditions there.

Analysis **-** *Assessing the feasibility of technology transfer.* Analytical thinking helps identify key elements in the technology transfer process, including the adaptability of the technology to local conditions and the readiness of the parties involved. According to Nonaka and Takeuchi (1995) [8], understanding the components and their relationships is the first step to successful technology implementation. *Risk analysis in technology transfer.* Risk analysis is an integral part of technology transfer. This includes assessing potential risks and developing contingency plans. For example, when implementing renewable energy systems, engineers need to analyze factors such as cost, resources, and environmental impact.

Evaluation Level **-** *Assessing the feasibility of technology*. Evaluation thinking helps researchers and businesses analyze the feasibility of technology before implementation. According to Nonaka and Takeuchi (1995) [8], evaluating factors such as costs, benefits, and risks is an essential step to ensure success in the technology transfer process. Evaluate *effectiveness after implementation.* After technology transfer, organizations need to evaluate the actual effectiveness of the technology through criteria such as productivity, cost effectiveness, and user satisfaction. This helps optimize the process and increase the value of the technology. ***Creativity*** **-** *Developing new technological solutions.* Creative thinking is a key factor in researching and developing innovative technological products. Nonaka and Takeuchi (1995) [8] emphasize that creativity is the basis for organizations to create knowledge and convert it into practical value. *Customize technology according to local needs.* In the process of technology transfer, creative thinking helps managers adjust and optimize technology to suit local conditions and requirements. This ensures the sustainability and effectiveness of technology projects.

Therefore, this study not only assesses the current situation but also encourages the teaching staff to actively innovate methods and improve the quality of theoretical thinking

to meet the requirements of modernizing People's Public Security education. It can be said that *the theoretical thinking of female lecturers of People's Police schools is the ability to analyze, evaluate and synthesize information in a logical and systematic way, helping lecturers make accurate decisions and sharp arguments in the process of performing tasks according to the general requirements of the law and the requirements of the Public Security sector, according to the viewpoint of Marxism-Leninism and Ho Chi Minh's thought. At the same time, many theoretical bases can be applied to assess the current state of theoretical thinking of female lecturers of People's Police schools, but the most suitable theory is to use Bloom's cognitive scale.*

Method

The main purpose of the survey is to assess the current level of theoretical thinking capacity of female lecturers in public security schools. By collecting data from criteria such as the ability to analyze, synthesize, argue and apply theory to practice, the survey helps to identify strengths and weaknesses, thereby clarifying factors affecting the development of their theoretical thinking. The first task in surveying the current status of theoretical thinking of female lecturers at People's Police schools is to objectively and comprehensively assess the current level of theoretical thinking. This process includes analyzing constituent elements such as cognitive capacity, analytical and synthesis skills, as well as the ability to apply theory to teaching and research practice. Through the use of questionnaire survey tools and document analysis, the goal is to identify the strengths, weaknesses, and factors affecting the theoretical thinking of this team.

The female lecturers at the People's Police schools is an important force in the education and training system of the police sector. They not only take on the role of teaching and imparting knowledge but also actively contribute to scientific research and building specialized theories. With the characteristics of being both lecturers and members of the armed forces, their theoretical thinking is shaped not only by professional pedagogical factors but also by the discipline and political tasks of the police sector. Therefore, surveying the current state of theoretical thinking of this team helps identify strengths and limitations, thereby providing solutions to improve thinking capacity and contribute to the overall development of the police education system. In addition, the theoretical thinking of female lecturers in special environments such as People's Police schools is also affected by factors such as gender roles, social division of labor and educational innovation requirements. Despite being well-trained and having the opportunity to participate in theoretical research programs, this team still faces challenges such as work pressure, the need to balance work and family, as well as the ability to access in-depth research materials. By applying the Bloom's cognitive scale, the survey will help assess their level of response to the requirements of educational innovation and the industry's development strategy in the modern context.

The survey focused on aspects related to the theoretical thinking capacity of female lecturers, including the focus on Bloom's thinking levels in performing tasks according to

general regulations and tasks of the Public Security sector as well as the ability to analyze, synthesize, and solve theoretical problems in the fields of legal science, state management and national security. The research content also mentioned the level of application of theory in teaching, scientific research and participation in policy making. In particular, the survey investigated the role and influence of factors such as educational level, work experience, and organizational support on the development of theoretical thinking capacity. In terms of space, the survey was conducted at typical People's Police schools, with a diverse sampling scope to ensure representativeness. In terms of time, the study focused on the current period, associated with innovation in training programs, as well as new theoretical requirements in the context of international integration and national education reform.

The survey results, which are expressed by the relationship between Bloom's cognitive level and the task of performing work according to the provisions of the law and the Public Security sector, will contribute to the theory of developing high-quality human resources in the context of modern social transformation. Research on the theoretical thinking of female lecturers not only reflects their role in training future People's Public Security officers but also contributes to shaping the theory of gender equality and sustainable development in education and training of the armed forces. This helps create motivation and theoretical basis to promote the comprehensive development of female lecturers in the security education system.

The survey tool is used to comprehensively assess the theoretical thinking capacity of female lecturers at People's Police schools. This toolkit includes scientifically designed questionnaires, focusing on aspects of Bloom's cognitive taxonomy, as well as the ability to apply theory to practice. The questions are designed on a Likert scale, helping to collect quantitative and qualitative data on the influence of personal factors, environment, and support systems on the development of theoretical thinking. The survey results were analyzed to identify the strengths and weaknesses in the theoretical thinking of female lecturers, thereby providing a basis for proposing improvement measures. This tool not only helps to assess current capacity but also determines the necessity and feasibility of solutions to improve theoretical thinking. In addition, factors such as personality, experience, remuneration policies, and infrastructure were also considered, to provide an overview and support strategic planning for future development of the teaching staff.

Table 1 General characteristics of the survey sample

Gender	No	%
Male	95	44.8
Female	117	55.2
Year old		
<30	9	4.1
31-39	142	64.8

40-49	56	25.6
>50	12	5.5
Seniority		
<5	8	3.8
5-10	64	30.3
10-20	111	52.6
>20	28	13.3
Management experience		
<5	58	36.9
5-10	52	33.1
10-20	37	23.6
>20	10	6.4
Education		
College	1	0.5
University	10	4.8
Postgraduate	199	94.8
Title		
Teaching Assistant	9	4.3
Lecturer	104	49.8
Main Lecturer	96	45.9

Table 1 provides detailed information on the demographic and professional characteristics of the survey sample, including the following factors: gender, age, seniority, management experience, education level and job title. ***In terms of gender,*** the survey sample included a total of 212 individuals, of which: Male : 44.8% (95 people), representing a significant proportion of the sample. Female = 55.2% (117 people), indicating that the number of women in the survey was higher than that of men. ***In terms of age.*** The age distribution in the survey sample showed a high concentration in the middle-aged group: Under 30 years old : Only 4.1% (9 people), reflecting the low participation of the younger age group. From 31-39 years old : This is the group with the largest proportion, with 64.8% (142 people). This shows the large participation of the middle-aged labor group, an age group that is often very capable and enthusiastic about work. 40-49 years old : 25.6% (56 people), showing the stable participation of this age group. Over 50 years old : Only 5.5% (12 people), reflecting the low proportion of the older workforce. ***Regarding seniority, the*** distribution of seniority shows that most individuals have a significant working time: **Under 5 years :** Only **3.8%** (8 people), showing that few people are new to the job. **5-10 years : 30.3%** (64 people), showing a significant proportion of people in the middle stage of their career. **10-20 years** : The largest proportion with **52.6%** (111 people). This confirms that the majority of survey participants have achieved a significant level of stability and experience in their careers. **Over 20 years :** 13.3 **%** (28 people), reflecting a small group of individuals with many years of experience; ***Management experience*** is evenly divided between different levels: **Under 5 years :** Has the highest rate, accounting for **36.9%** (58 people), showing that many individuals are just starting to take on

management roles **. From 5-10 years** : **33.1% (52** people), a rate quite similar to the above group. **From 10-20 years :** 23.6 **%** (37 people), reflecting a group of managers with significant experience. **Over 20 years** : Only **6.4%** (10 people), showing a small number of people with long-term management experience.

The educational level in the survey sample shows the superiority in academic ability: **College:** Very low, only **0.5%** (1 person), reflecting the high entry standards of the survey group. **University**: **4.8%** (10 people), the average education group. **Postgraduate** : Dominating with **94.8%** (199 people). This reflects the high focus of the survey group on individuals with high professional qualifications; ***Job titles*** of the survey sample have the following distribution: **Teaching assistant** : Only **4.3%** (9 people), showing that this role is not popular. **Lecturer** : The highest percentage, **49.8%** (104 people). This confirms that the role of lecturers is the dominant group in the survey. **Senior lecturer** : **45.9%** (96 people), reflecting a large group of people with high professional titles. The survey sample mainly consisted of middle-aged individuals (31-39 years old), with 10-20 years of seniority and less than 5 years of management experience. The majority of survey participants had postgraduate qualifications and held highly professional positions such as lecturers or senior lecturers. These data indicate that the survey sample focuses on individuals with professional competence and extensive work experience.

The sample showed a relatively balanced gender balance, with women accounting for 55.2%. This reflects a positive trend in women entering highly specialized fields, and highlights their growing role in education and research. However, this disparity may raise questions about opportunities and suitable working environments for both genders; The **majority** of the sample fell into the 31-39 age group (64.8%), which is often considered the peak of productivity and dedication in a career. This suggests that the sample focuses on a dynamic workforce with the potential to make the greatest impact. However, the low numbers in the younger and older age groups raise questions about career development opportunities and industry experience inheritance. With over 52.6% of respondents having 10-20 years of experience, the sample represents a stable and experienced group. This is valuable in studying issues related to management and organizational development. However, the low proportion of new entrants (3.8%) also raises questions about the ability to attract and retain young employees in the industry; The distribution of management experience shows diversity in the sample, with the highest proportion (36.9%) belonging to the group with less than 5 years of experience. This may be due to the trend of appointing young or new individuals to leadership roles. However, the low number in the group with over 20 years (6.4%) may reflect a shortage of veteran leaders or the issue of turnover in the organization.

The overwhelming proportion (94.8%) of those with postgraduate qualifications suggests that the sample is focused on a highly qualified professional population. This ensures the quality of data collected in the study. However, the low proportion of those with university or college education may limit the diversity of perspectives and experiences of the participants; The distribution of titles with the highest proportion belonging to lecturers

(49.8%) and senior lecturers (45.9%) suggests that the sample is mainly focused on individuals with primary teaching and research responsibilities in the institution. This reflects the current state of the education sector, but the low number of teaching assistants (4.3%) may raise questions about the development of new staff or training support. In summary, the sample provides an insight into the demographic and professional characteristics of the participants. However, some limitations such as lack of diversity in age, seniority, and education need to be noted to ensure comprehensiveness and objectivity in the study.

Results and Discussion

Table 2: Levels of thinking in research, applications and technology transfer

Contents	**Levels**													
	1		**2**		**3**		**4**		**5**		**6**		**7**	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Content[1]	9	4.1	7	3.2	34	15.3	38	17.1	41	18.5	67	30.2	26	11.7
Content[2]	7	3.2	6	2.7	44	19.8	39	17.6	45	20.3	36	16.2	45	20.3
Content[3]	6	2.7	10	4.5	13	5.9	41	18.5	56	25.2	69	31.1	27	12.2
Content[4]	4	1.8	8	3.6	16	7.2	27	12.2	63	28.4	42	18.9	62	27.9
Content[5]	8	3.6	6	2.7	42	18.9	36	16.2	47	21.2	53	23.9	30	13.5
Content[6]	5	2.3	10	4.5	22	9.9	30	13.5	54	24.3	70	31.5	31	14.0
Content[7]	7	3.2	11	5.0	34	15.3	42	18.9	43	19.4	35	15.8	50	22.5
Content[8]	8	3.6	5	2.3	19	8.6	39	17.6	46	20.7	48	21.6	57	25.7

Table 2 provides information on the t**heoretical thinking in research, development of scientific applications and technology transfer** of female lecturers at public security

[1]Preside over or participate in implementing scientific and technological tasks at all levels
[2] Preside over and participate in evaluating scientific research projects and topics.
[3] Preside over or participate in compiling training programs, textbooks, monographs, and reference materials for teaching.
[4] Write articles published in domestic and international scientific journals; write topics, presentations and participate in scientific reports at conferences and scientific seminars at all levels.
[5] Participate in international cooperation activities on scientific research and technology transfer
[6] Guide students in performing scientific research tasks; participate in evaluating students' scientific research results.
[7] Participate in scientific innovation competitions, inventions, patents, and other scientific and technological activities.
[8] Complete assigned scientific research tasks corresponding to the job title or position held.

schools. **(1) Carrying out scientific and technological tasks.** Chairing or participating in carrying out scientific and technological tasks is an important activity, divided into many different levels. Level 1 has only 4.1% of participants, while the highest level (level 6) accounts for the largest proportion with 30.2%. This shows that the level of participation in these tasks is wide, reflecting the differences in capacity and responsibility of each individual ; **(2) Evaluating research projects and topics.** Evaluation activities of scientific research projects and topics focus mainly on levels 4 to 7, with the highest participation rates at levels 5 and 7 (both 20.3%). The lower levels (1 and 2) have participation rates below 4%, showing a clear difference in the level of contribution ; **(3) Compilation of educational materials.** Compilation of training programs, textbooks, monographs, and reference materials has a high participation rate at levels 5 and 6, 25.2% and 31.1%, respectively. The low levels of participation (1 and 2) account for only 2.7% and 4.5%. This reflects the important role of a small group of experts in developing academic documents ; **(4) Publishing scientific articles and presentations.** Publishing domestic and international scientific articles accounts for the highest rate at levels 5, 6, and 7, 28.4%, 18.9%, and 27.9%, respectively. The lowest participation rates are at levels 1 and 2, at only 1.8% and 3.6%, demonstrating that only a few individuals are active in this field ; **(5) International cooperation and technology transfer.** International cooperation in scientific research and technology transfer is concentrated at levels 5 and 6 at 21.2% and 23.9%. Level 7 accounts for 13.5%, indicating that there is a group of leading experts focused on expanding global cooperation ; **(6) Guidance and evaluation of scientific research.** Guidance of students and evaluation of scientific research results has the highest participation rate at level 6 (31.5%). The participation rates are low at levels 1 and 2, at only 2.3% and 4.5%. This reflects the leading role of experienced scientists in training and evaluation; **(7) Participation in scientific innovation competitions.** Participation in innovation competitions and other scientific activities is quite evenly distributed, with levels 7 (22.5%) and 5 (19.4%) accounting for the highest proportion. This reflects the innovation efforts of individuals in the field of science and technology; **(8) Completing scientific research tasks.** Completing scientific research tasks corresponding to job positions is an important criterion, with the highest participation rate at level 7 (25.7%). The lowest level is level 2 (2.3%), indicating that the completion level is often concentrated at medium and high levels.

The data provides a valuable lens through which to examine how female lecturers at People’s Police schools conceptualize and engage with research, applications, and technology transfer through various cognitive levels based on Bloom's Taxonomy. The table's alignment with Bloom's framework—from basic remembering to higher-order creation—allows us to assess patterns in cognitive engagement and application among female lecturers in this context. A key observation from the table is the significant concentration of activities in the upper levels of Bloom’s taxonomy, particularly levels 5 (evaluating), 6 (creating), and 7 (synthesizing and innovating). For instance, in activities such as guiding student research, participating in writing academic articles, and compiling textbooks, the majority of respondents reported operating at levels 5 through 7. Specifically, 31.5% of female lecturers engage in guiding student research at level 6 (creating), while 14.0% operate at level 7 (synthesizing). Similarly, in participating in

research publications and conferences, 28.4% work at the evaluating level (5), and 27.9% at the synthesizing level (7).

This distribution suggests that female lecturers are not merely executing routine educational tasks but are engaging in complex and creative intellectual labor. Such results align with research by Belenky et al. (1986) [2], who posited that when given appropriate academic and institutional support, women construct knowledge in ways that emphasize collaboration, critical reflection, and innovation—key components of higher Bloom levels. Moreover, involvement in compiling academic materials (e.g., textbooks and monographs) shows a robust engagement with higher-order thinking: 25.2% are at level 5 and 31.1% at level 6. This emphasizes a shift from mere transmission of knowledge to transformative and constructive pedagogical involvement, resonating with the ideals of constructivist pedagogy [9]. Such involvement underscores the role of female lecturers as content creators and evaluators of academic quality, rather than passive disseminators of existing curricula.

However, a nuanced gender perspective must be applied here. While the data is encouraging in showing that female police lecturers are engaged at advanced cognitive levels, it does not fully address potential structural or cultural constraints they may face. Karama (2022) [6] found that female educators often unconsciously replicate gendered language and male-centered paradigms even at higher cognitive levels due to entrenched stereotypes in educational systems. Thus, despite high engagement at levels 5–7, questions remain about the inclusivity and gender sensitivity of the content they produce and evaluate. Furthermore, activities such as participating in innovation competitions and fulfilling role-based research tasks also cluster in the higher levels. For instance, 25.7% engage in job-aligned scientific tasks at level 7, and 22.5% engage in innovation contests at the same level. These findings mirror the argument by Daniela and Lytras (2018) [3] that female academics are increasingly taking leadership roles in technology transfer and innovation, driven by competency-based assessment models like SMART and Bloom’s revised taxonomy. Clearly, the distribution of female lecturers' engagement across Bloom’s levels indicates a strong presence in higher-order thinking tasks related to research and innovation. This reflects growing cognitive empowerment, although it must be contextualized within broader discussions about gender equity and curriculum reform in male-dominated environments such as police academies.

Conclusion

Developing the theoretical thinking of female lecturers at People's Police schools is not only an objective requirement in the process of educational innovation but also a strategic task to improve the quality of training of officers in the police force. Solid theoretical thinking helps female lecturers effectively handle practical issues, contributing to the construction and protection of the theoretical foundation of the police force, thereby affirming their important role in the education system and national security.

The development of theoretical thinking of female lecturers at People's Police schools is influenced by many factors such as the specific educational environment, professional requirements and gender characteristics. The combination of professional development with scientific research activities has created favorable conditions for this team to improve their ability to analyze, synthesize and apply theory to practice. However, there is a need for policies and support programs to create motivation and opportunities for more comprehensive development for female lecturers.

To sustainably develop the theoretical thinking of female lecturers at People's Public Security schools, it is necessary to build an open academic environment that encourages creativity and innovation in teaching and research. At the same time, raising awareness of gender equality, combined with specialized training programs, will help female lecturers maximize their potential and make positive contributions to the cause of education and national security.

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