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IMPROVING THE PROFESSIONAL TRAINING OF MIA OF UKRAINE EMPLOYEES THROUGH THE IMPLEMENTATION OF JIU-JITSU TRAINING ELEMENTS

*In contemporary times, training in various martial arts disciplines has become quite popular among the general population. The percentage of individuals with some degree of proficiency in martial arts is as high among lawbreakers as it is among the general population. Therefore, the demands on the level of professional training for police officers are increasing in response to the challenges they face. Currently, there is no unified system of training for law enforcement personnel in Ukraine, making it challenging to draw statistical conclusions about the overall effectiveness of any specific system. However, in Western law enforcement agencies, Jiu-Jitsu has long been recognized for its effectiveness, particularly in defending against strikes during its utilization in the context of so-called “No-Holds-Barred” fights in the early 1990s, which we now know as MMA (Mixed Martial Arts). The high sporting efficiency of Jiu-Jitsu, supported by years of statistical research in Western countries, suggests that its application in police work could be a pivotal factor in changing the professional training landscape for law enforcement personnel in Ukraine. **Research objective.** To evaluate the potential use of Jiu-Jitsu methods to enhance the effectiveness of police officers during detainment procedures and further refine their skills in the application of hand-to-hand combat techniques. **Research object.** Professional training of police officers. **Research subject.** The level of professional training of police officers from the law enforcement agencies of MVS Ukraine. **Research methods.** The research methods employed include theoretical analysis, data systematization and generalization, conducting a pedagogical experiment, and mathematical processing of the obtained results. Initial indicators of the police officers’ proficiency in executing hand-to-hand combat techniques were relatively low. The research results indicate a positive and statistically significant improvement in the indicators for the group that incorporated Jiu-Jitsu methods compared to the control group. The inclusion of Jiu-Jitsu into the training process for police officers has demonstrated its effectiveness, as evidenced by the enhancement of relevant indicators.*

Key words: hand-to-hand combat techniques, law enforcement agencies, jiu-jitsu, of police officers, police, professional training, professional responsibilities, jiu-jitsu.

Problem statement. Today, combat sports are very popular, and due to complex training and sports competition, they have a comprehensive impact on the human body. This interaction creates a specific form of respect between the opponents which can then be transferred to other people or other spheres of life [2–4]. Ensuring adequate physical fitness and training in practical sports among law enforcement officers contributes to enhancing their physical and psychological readiness to perform their official duties, including the effective use of physical force, combat techniques, and special tools [14]. One of the key tasks to achieve this goal is the development of practical skills and abilities in self-defense and personal safety in extreme situations during official activities. Currently, students and graduates of educational institutions under the Ministry of Internal Affairs of Ukraine often encounter difficulties in applying combat techniques when preventing crimes and administrative violations, both during the apprehension of offenders and in protecting citizens and police officers from violence [1; 5].

Currently such an analogy can be distinguished in relation to relatively young non-Olympic martial arts-related disciplines, which include and Brazilian ju-jitsu (BJJ). Their popularity is growing very dynamically in the world as well as in Ukraine. BJJ is not only merely sports disciplines or forms

of combat. Clubs where these disciplines are practised provide a lot more, showing players a way of life built on the basis of a credible philosophy [10; 13]. Law enforcement officers frequently face situations involving large crowds while carrying out their duties. In such circumstances, it is often difficult or even impossible to use firearms, underscoring the importance of mastering unarmed self-defense skills and hand-to-hand combat techniques for successfully fulfilling their tasks [6; 12].

As statistics indicate, the majority of apprehensions of wrongdoers conclude with ground combat. Therefore, it is crucial to address the issue of enhancing the effectiveness of law enforcement officers' actions in the event that they need to engage in ground combat during the apprehension of offenders.

Article objective. The objective of this article is to explore the potential of using Brazilian Jiu-Jitsu (BJJ) to enhance the effectiveness of police actions during apprehensions and improve their skills in applying hand-to-hand combat techniques.

Materials and methods. In our research, we employed various methods, including theoretical analysis, data systematization and synthesis, pedagogical experiments, and mathematical data processing.

Results. With the intention of identifying opportunities to improve the professional training of police officers in Ukraine, considering the high risk of engaging in ground combat, we selected Brazilian Jiu-Jitsu as a martial arts system known for its diverse ground-fighting techniques [9; 11]. This hand-to-hand combat methodology is designed for defeating armed and armored opponents without the use of firearms or with the possibility of brief firearm use.

The word "jiu" translates to "gentle, soft, flexible, pliable," while "jiu-jitsu" can be understood as the "art" or "technique" of manipulating an opponent's force against themselves rather than directly opposing it.

Our research was conducted from March 2019 to December 2020, based at the patrol police regiment in the city of Kryvyi Rih. Before commencing the study, we collected data for the preceding period, utilizing official documents and surveys of personnel to determine the number of instances of hand-to-hand combat techniques used, the number of injuries sustained by officers during the performance of their duties, particularly during apprehensions, and the number of injuries among those apprehended. We also examined the use of self-defense tools such as tasers and pepper spray. Injuries were assessed in terms of severity, including both severe and moderate injuries.

In our study, a group of 60 patrol police officers was involved, with 30 of them (the experimental group) receiving Brazilian Jiu-Jitsu training. To support their physical fitness throughout an extended training period, we employed an approach with increased intensity and motor density during training sessions. This included accelerating the pace of certain exercises, transitioning them from the "moderate" level of intensity (average heart rate of 140-170 beats per minute) to the "high" level of intensity (average heart rate of 170-200 beats per minute). These exercises were aimed at developing speed-strength abilities and agility.

The research results and their discussion demonstrate that combat-related martial arts, specifically those involving grappling, encompass unique aspects that include both training for enhanced effectiveness and specialized preparation, as well as instruction in technical and tactical skills.

Specific motor skills and the ability to perform certain motor actions depend on the structure and functions of the organism. These motor abilities can be identified and developed as part of the overall structure and functions [2; 10]. Among various motor skills, some are particularly crucial for specific sports disciplines [7; 9].

It is important to note the complexity and multifaceted nature of Brazilian Jiu-Jitsu as a sport. This complexity is explained by the presence of numerous aspects of combat, including stand-up grappling with a wide variety of throws, ground grappling with control, pain, and submission holds, as well as striking techniques with hands and feet targeting the head and torso [8]. Successful implementation of tactical plans in extreme conditions depends not only on physiological indicators but also on the characteristics of the nervous system and the temperament of police officers, which ultimately determine their fighting style.

In our opinion, at the beginning of the experiment, most injuries sustained by police officers and detainees, as well as the need to use a gas canister and a stun gun, were a result of insufficient

proficiency in control skills by the police officers. Therefore, during the training, the primary focus was on enhancing the police officers' ability to control situations from a technical standpoint.

In the context of control, firstly, we mean the ability to maintain a safe distance between the police officer and the detainee, regardless of whether the latter attempts to act actively or not. Secondly, this includes the ability to anticipate the detainee's actions during arrest while maintaining positions that allow for maximum control over them [15]. Thirdly, it involves the interaction between partners for maximum situational control. We dedicated a portion of our time to exercises aimed at improving the ability to react to the detainee's movements and, if necessary, move together with or away from them while maintaining a safe distance. Alternatively, reacting to their movements while working as a team and maintaining the necessary positioning relative to the detainee. These skills contribute to reducing the risk of unexpected strikes from the detainee, which, in our opinion, is extremely important, especially considering that police officers must work as a cohesive team, interacting with each other and maintaining the required positions concerning the detainee.

Analyzing the statistics, which showed that most detention situations end up on the ground, we focused on improving control under such conditions and teaching ground transition techniques. When developing training programs, we initially relied on the self-defense aspect of Brazilian Jiu-Jitsu.

An important concept in Brazilian Jiu-Jitsu is the action and reaction to that action. In standard situations, most people react similarly, and this reaction can be predicted and used to one's advantage [14]. Therefore, we were able to enhance the ability to anticipate the detainee's actions.

Next, we selected the safest control positions and focused on teaching how to control these positions and transition to them. The following techniques were used for ground transitions:

"Ko-soto gake" (outside trip). This technique allows for close contact with the opponent, significantly reducing the risk of receiving strong blows and being less amplitude and less dangerous for the detainee.

"Morote gari" (double leg takedown). This technique was also used with similar considerations.

"Single leg" takedown. This technique was chosen for its simplicity and safety. Moreover, the last two techniques were practiced with a partner to enhance control.

It is well known that the least dangerous positions for control on the ground include the mount (also known as *tate-shiho gatame*), back control, and back mount. We paid significant attention to developing control skills from these positions, learning transitions between them, and considered them as key points for detentions and arrests.

The sequence was determined by the need to be able to control the offender when transitioning to the ground. Typically, when a person cannot stand up, they will attempt to move into the position from which standing up is easiest. Therefore, law enforcement officers must be proficient in maintaining control during changes in the detainee's position, which involves transitioning from one position to another. The primary goal is to arrest the offender. Officers must be adept at using arrest and escort techniques from various positions while understanding the specific characteristics and strengths and weaknesses of each position.

Finally, a section on ground striking defense was included in the program, particularly when an officer finds themselves in a disadvantageous position beneath the detainee. Attention was given to the closed guard position, which allows for effective distance control to defend against strikes, transition into control and arrest techniques, or, when necessary, to stand up.

Systematic training and practical exercises in these situations significantly improved the skills of the police officers during the apprehension of resisting individuals. The practical application of Brazilian Jiu-Jitsu techniques was successfully integrated into their skill set, resulting in positive outcomes in their performance of control standards. According to the data obtained, the experimental group showed the following positive changes: a 17% reduction in the use of tasers, a 35% reduction in injuries sustained by police officers, an 18% reduction in the use of pepper spray, a 40% reduction in injuries among detainees, and a 49% reduction in the use of hand-to-hand combat techniques. In contrast, the control group exhibited a slight trend toward deterioration, and in some cases, an increase in these indicators, emphasizing the better training of athletes in the experimental group where the proposed training system was implemented.

Therefore, we believe that control skills and the ability to apply them are crucial for police officers in the performance of their duties. A properly trained police officer is capable of performing their professional duties much more effectively.

Conclusions. Our research indicates a positive impact of incorporating a complex of Brazilian Jiu-Jitsu training methods and techniques into the training process of police officers. Among those who participated in the training, there was a noticeable decrease in injuries inflicted on them by offenders during confrontations. Additionally, a reduction in injuries among detainees was observed. This can be attributed to the fact that police officers have become more effective in their actions and have more tools for safely apprehending criminals, especially in challenging situations.

It is worth noting that the overall number of instances of using special techniques and tools also decreased, indicating an increase in the confidence of police officers in their abilities. All of this reaffirms the viability of including Brazilian Jiu-Jitsu in the professional training of police officers.

Prospects for further research. There are plans to investigate the possibility of incorporating Brazilian Jiu-Jitsu into the training program for students of higher education institutions within the framework of the Ministry of Internal Affairs of Ukraine.

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Гінзбург Ігор

УДОСКОНАЛЕННЯ ПРОФЕСІЙНОЇ ПІДГОТОВКИ ПРАЦІВНИКІВ МВС УКРАЇНИ ШЛЯХОМ ВПРОВАДЖЕННЯ ЕЛЕМЕНТІВ НАВЧАННЯ ДЖИУ-ДЖИТСУ

У сучасний час серед населення доволі популярним заняттям є тренування з різних видів єдиноборств, і відсоток осіб, які в тій чи іншій мірі володіють певним видом єдиноборств серед правопорушників, є таким же високим, як і серед населення в цілому. Тому вимоги до рівня професійної підготовленості співробітників поліції зростають у відповідності до викликів, що постають перед ними. Наразі в Україні не існує єдиної системи підготовки співробітників, тому дуже важко робити статистичні висновки про загальну ефективність тієї чи іншої системи. Але на Заході у правоохоронних органах давно звернули увагу на джиу-джитсу, яке доказало свою ефективність при захисті від ударів під час використання його в рамках так званих боїв без правил на початку 90-х, які ми знаємо під назвою ММА. Висока спортивна ефективність джиу-джитсу та доведена багаторічними статистичними дослідженнями в західних країнах ефективність її використання у поліцейській роботі може бути тим чинником, який змінить професійну підготовку співробітників в Україні. **Мета дослідження** – оцінити можливість використання методів джиу-джитсу з метою підвищення ефективності застосування поліцейськими під час процедури затримання та подальшого вдосконалення їх навичок та вмінь. **Об'єкт дослідження** – професійна підготовка поліцейських. **Суб'єкт дослідження** – співробітники силових структур МВС України. **Предмет дослідження** – рівень професійної підготовки співробітників силових структур МВС України. **Методи дослідження:** теоретичний аналіз, систематизація та узагальнення даних, проведення педагогічного експерименту, математична обробка отриманих результатів. Вихідні показники рівня підготовки поліцейських у виконанні прийомів рукопашного бою були невисокими. Результати дослідження свідчать про позитивний та статистично достовірний приріст показників у групі, яка залучала методи джиу-джитсу порівняно з контрольною групою. Включення джиу-джитсу до процесу підготовки поліцейських продемонструвало свою ефективність, що підтверджується покращенням відповідних показників.

Ключові слова: прийоми рукопашного бою, правоохоронні органи, джиу-джитсу, співробітники поліції, поліція, професійна підготовка, професійні обов'язки, джиу-джитсу.