

An Exploration on the Evolution and Future of Practical Shooting Teaching in IPSC

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Abstract: Beginning in the year 2000 and drawing a large audience of shooting fans, IPSC (International Practical Shooting Confederation) practical shooting has emerged as a new event in competitive sports. The researchers discovered that social setting and popularity had a significant influence on how practical shooting in IPSC developed. Despite the fact that the number of people participating in IPSC practical shooting is growing every year, little study has been done on the formation process and training program. Consequently, the aim of this study was to gather comprehensive data on IPSC practical shooting in order to gain a deeper understanding of the development and training process of the sport. In order to achieve this goal, this study will use a variety of research methods, including questionnaires, field observations, and in-depth interviews. Through these methods, the study will collect a large amount of data, including participants' age, gender, training time, training frequency, competition results, etc. This data will provide comprehensive information on IPSC practical shooting training and competitions, leading to a better understanding of the sport's training system and formation mechanisms.

Keywords: IPSC, practical shooting, Olympic shooting, training

1. Introduction

With the rapid development of the global sports industry, IPSC practical shooting has become a hot topic in the field of competitive sports. This kind of shooting sport not only needs the technical level of the shooter but also needs them to have flexible reaction ability, accurate judgment, and calm psychological quality [1]. This comprehensive skill requirement makes IPSC practical shooting a sport and an effective way to exercise the body and mind and improve self-ability. To turn IPSC practical shooting into a new mass sport, it is necessary to carry out extensive publicity and promotion on a global scale. Introduce this new type of sport to the public through various media channels, such as TV, Internet, social media, etc., so that more people can understand and participate in it. At the same time, various forms of competitions and activities can be held to attract more people to participate in them, and gradually form a popular sports culture.

In addition, there is a need to focus on training professional coaches and referees. Through training and certification, more people will be equipped with professional teaching and judging capabilities to provide better guidance and support to the public. At the same time, it is also necessary to pay attention to the organization and management of the event to ensure the fairness, fairness, and safety of the competition.

As this sport appears more and more in the public eye, this article will study and investigate it. While collecting data, this study will also assess and analyze the shooting skills of the participants. A variety of evaluation methods will be used during the study, including shooting tests and competition results. Through these data, it is possible to understand the level and development trend of the participants' shooting skills, so as to better understand the training methods and formation mechanisms of the sport.

In addition to an in-depth study of the training and competition process, this study will also focus on the influence of social environment and popularity on practical shooting at IPSC. Data on participants' social backgrounds, training environment, and competition environment will be collected through field observation. The data will provide comprehensive information on the impact of social environments and popularity on IPSC practical shooting, leading to a better understanding of trends and future directions of the sport.

In conclusion, this study will conduct relevant research on the sport by collecting comprehensive data on IPSC practical shooting. Through an in-depth understanding of the training system and formation mechanism of IPSC practical shooting, as well as the influence of social environment and popularity on this sport, it can better promote the healthy development of this sport and provide a better training and competition environment for shooting enthusiasts and athletes.

2. IPSC Practical Shooting Concept

The International Practical Shooting Confederation (IPSC), founded in 1976, has been in development for 46 years, with thousands of competitions and events held every year around the world [1]. On May 24, 1976, 45 elite marksmen gathered in Colombia, along with Colonel Jeff Cooper, to form the first international practical shooting organization. Today, the International Practical Shooting Federation (IPSC) is a truly international sports shooting organization that has revolutionized handgun shooting on all levels.

In the scene, the shooting position may be at the door, window, etc., and the player adopts a standing, half squat, or different shooting positions according to the need. The IPSC focuses on training shooters to shoot accurately in the shortest time possible, and to establish the best route for shooting all stationary or moving targets in complex situations. IPSC can be understood as a multi-angle, multi-target dynamic shooting movement in the scene.

3. IPSC Competition Categories and Rules

The IPSC has pistol competition, rifle competition, shotgun competition pistol carbine competition, mini rifle competition, and multi-shot all-around competition, from high to low divided into five levels. The number of scenes and equipment configuration are different with different grades. The higher the level, the more difficult it is, and events above level 3 need to be approved by the IPSC Federation. There is no age limit for the IPSC competition, and the junior, senior, and women groups are ranked independently. In addition to the live ammunition competition, IPSC also has an AIR rifle category - IPSC ACTION AIR competition, which also has the same rules as live ammunition [2].

IPSC pistol competition is divided into original, standard, open, Revolver, Classic, Original optical, and original optical seven categories according to the gun type: The original group: must use a certified gun type, and each magazine is allowed to hold a maximum of 15 rounds. Standard group: The gun is measured in the box before the competition, and the external parts can be slightly modified, but the optical sight, the infection, etc., cannot be added. Open Group: Except the magazine must not exceed the limit length, the shooter can be modified as needed. Common modifications are the addition of optical scopes, thumb mounts loaded handles, and lengthening magazines. Revolver Group: Use revolvers, no other modifications. Classic Group: The 1911 Classic-style pistol can be

divided into two magazines of 8 and 10 rounds, depending on the firepower. A small fire is 10 rounds, normal fire is 8 rounds. The original optical set is the same as the original optical set: the optical sight can be added on the basis of the original set.

In the IPSC rifle competition, shotgun competition, and multi-gun all-around competition, the IPSC rifle competition is divided into different gun types: semi-automatic open group, semi-automatic standard group, manual open group, manual standard group, and manual lever group. There are also carbine competitions and mini-rifle competitions with rules similar to those of rifle competitions. The IPSC shotgun competition is divided into open group, modified group, standard group, and standard manual according to different gun types. Shotgun rounds are usually gauge 12 [2].

The scoring rules of IPSC competition are different from those of ordinary competitions, and the paper targets are divided into three zones, A, C, and D. Each paper target is fired at least 2 shots, according to the firepower and the caliber of the gun used, divided into a small fire and a large fire. Using low-fire ammunition, the score of hitting A, C, and D areas is 5, 3, and 1 point respectively; Using high-powered ammunition scores 5, 4, and 2 points. Metal targets are divided into collapsible steel targets and round/square metal plate targets, each metal target is shot at least 1 shot, and the knockout score is 5 points. When the shooter misses the target, 10 points are deducted for each shot (maximum 20 points for paper targets, maximum 10 points for metal targets), and 10 points for each shot for hostage targets (maximum 20 points for paper targets, maximum 10 points for metal targets) [3]. The score is deducted from the score, divided by the time taken, and then the judge calculates the shooting factor. The highest shot factor gives the scene a perfect score. Other shooters, calculate the points each player deserves in the scene on a pro-rata basis. The player's total score is the sum of other scores, and the highest total score wins the championship.

4. Comparative Analysis of IPSC Competition and 10-Meter Air Rifle

The 10-meter air rifle is one of the events in the Olympic Games. The competition rules are that the competition distance is 10 meters, and the competitors stand on the shooting line to shoot. In terms of weapons and ammunition, competitors compete with air rifles, which use 1.77 calibers (4.5 mm) gas or spring-compressed air-propelled bullets. The bullet fires at about 170 meters per second. In the shooting position, players usually shoot in a standing position. They must stand steadily in the firing line and hold the gun steadily on their shoulder. There are no supports or auxiliary devices that can be used to keep the firearm stable. In terms of shooting target surface, the competition uses the standard 10-meter air rifle target surface. The target surface is divided into 10 rings, numbered from the innermost ring (center) to the outermost ring (edge). Each ring has a specific score. From the shot sequence and time competition, the player is required to perform a series of shots, usually 40 or 60 shots. These numbers are determined before the competition and vary depending on the event. Players have a certain time limit in each set of shots to complete the shot. At the end of the shooting, the judges will calculate the score of the competitor. Points are calculated based on the accuracy of the shot and the location of the hit. Each ring has a corresponding score value, for example, the center ring may be 10 points, and the outermost ring may be 1 point. The judge scores all the shots hit to calculate the final game score.

4.1. Differences

IPSC practical shooting is not an Olympic sport; The 10-meter air rifle is one of the Olympic events. IPSC practical shooting requires players to move in the simulation scene to shoot; In contrast, competitions such as the 10-meter air rifle require the shooter to adopt a standing position and stand in the firing line without moving. The types of guns used in IPSC practical shooting are mostly

different types of pistols, rifles, and shotguns of military and police equipment; However, the guns used in competitions such as the 10-meter rifle are compressed air guns. The target of IPSC is divided into three areas of ACD, each area has a different score value, and there are other steel plates; The 10-meter rifle only has the official choice of electronic target IPSC practical shooting includes air guns and live ammunition but competitions such as the 10-meter air rifle only use compressed air guns. The 10-meter air rifle is divided into the juvenile group, youth group, and adult group; But IPSC practical shooting also has a women's group and senior group. The ammunition used for IPSC practical shooting is an air-gun 6 mm bb round and a live 9 mm round. In contrast, the 10-meter rifle competition uses 4.5 mm lead ammunition.

4.2. Training Status of Both Athletes

The ten-meter air rifle requires athletes to achieve a training state of many aspects, the first is to train breath control ability. Contrary to many people's perceptions, reasonable breathing is also one of the skills that must be mastered when practicing shooting [2]. As for why shooting athletes should train for breathing, the main reasons are the following:

With the shooting action: due to the special nature of the shooting competition - shooting within a distance of 10 meters only with the naked eye [4]. This requires the athlete to maintain absolute concentration and stability at the moment of shooting [5].

Master the shooting rhythm: in any shooting event, the breathing rhythm and shooting action are dependent on the number of times the athlete lifts the gun, so the shooter must have a fixed time to learn and master the shooting rhythm suitable for his own, so as to increase the effect of precision shooting.

Improve the accuracy of shooting: the most ideal state in the process of precision shooting is to stop breathing during this period of time. Therefore, through long-term practice, learning to stop breathing in the familiar period of time to achieve the best state, is not only conducive to the improvement of shooting accuracy but also to make the whole breathing process better and faster to adapt to the shooting state of the shooter.

The second thing that athletes need to achieve is strength and endurance [3]. The strength required to shoot is sustained static endurance. Therefore, in strength training, consciously and targeted development and improvement of shoulder strap strength, lower back and abdominal strength, and lower limb strength. Both can strengthen the athlete's support and maintain body balance, thus improving stability.

In addition, the aerobic endurance required by shooters, through enhanced endurance training and improved cardiorespiratory function, can help them stay in the same shooting position longer while shooting, thus reducing subtle errors [6].

It also requires balance and perception. Balance can be divided into static balance and dynamic balance [6]. Shooters need to maintain a stable posture in a relatively static state, so gradually strengthening, stabilizing, and adjusting the static balance time can ensure the stability of the entire shooting movement [7].

The training state that IPSC practical shooting requires athletes to achieve is presented in different aspects: First of all, in IPSC shooting training, shooters need to have a suitable venue. The site should be a spacious shooting range with equipment including guns, ammunition, targets, etc. Before training, the archer needs to conduct a detailed inspection of the equipment to ensure that they are working properly. Secondly, training needs to have a suitable training plan. The training plan should include different shooting movements, such as static shooting, moving shooting, changing magazines, etc. The training program should be adjusted according to the skill level and goals of the shooter to ensure the effectiveness of the training. And IPSC shooting training needs to have a suitable instructor. The coach should have rich shooting experience and professional knowledge, and be able to guide the

shooter to the correct shooting movements and techniques. The coach should also be able to make timely feedback and adjustments based on the shooter's performance to help the shooter continue to improve. IPSC shooting training requires a suitable weather condition. Weather factors will have an impact on the shooting effect, so the shooter should choose the right weather for training. For example, on rainy or foggy days, the humidity in the air can affect the accuracy of the gun, and in hot or cold climates, the shooter's hands may become inflexible, affecting shooting performance. IPSC shooting training requires suitable equipment. Shooters must be equipped with appropriate clothing and shoes to ensure they will not be harmed during the shooting process. In addition, shooters need to be equipped with proper protective gear such as helmets and goggles to protect themselves from injury.

In addition to objective factors, IPSC shooting training requires a proper mindset [8]. The archer should remain calm, focused, and confident, constantly challenging himself and constantly improving his skill level. Shooters should also pay attention to safety and follow shooting rules and safe operating procedures to ensure the safety of themselves and others. IPSC shooting training requires a proper training cycle [9]. Shooters need to have a reasonable training plan, including weekly training time and intensity, to ensure that their skill level is constantly improving. At the same time, the shooter also needs to pay attention to rest and recovery, to avoid overtraining resulting in physical injury [10]. IPSC shooting training requires a suitable opponent. In training, the shooter needs to have a suitable opponent who can train against him to improve his skill level. However, the choice of rivals also needs to consider security factors to avoid excessive competition leading to security accidents.

5. Conclusion

The results of this study reveal the significant impact of new sports training on the popularity of the public. After an in-depth analysis, it concluded that IPSC practical shooting needs to further strengthen and refine its training structure to attract more people to participate in and experience the sport.

In the future, it should continue to pay attention to the in-depth study of training methods. To achieve this goal, it can consider the following aspects: First, design a more scientific and systematic training plan to ensure that participants can comprehensively improve their shooting skills and safety awareness. Secondly, increase the popularity and attractiveness of IPSC practical shooting by holding more competitions and events. Finally, cooperate with educational institutions and community organizations to jointly promote shooting safety knowledge and improve public awareness and acceptance of shooting sports. The research results and conclusions of this paper provide useful enlightenment and direction and provide a new idea for the development of IPSC practical shooting. Through in-depth research and exploration of training methods, it can further promote the popularity and promotion of this sport, so that more people have the opportunity to participate in this fun and safe sport.

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