

USE OF AN AUTHORIAL TRAINING TECHNOLOGY DURING TECHNICAL AND TACTICAL TRAINING OF WOMEN EPEE FENCERS

Zoryana Semeryak¹, Yuriy Briskin¹, Maryan Pityn¹, and Oleksandr Vaulin¹

¹State University of Physical Culture, Lviv, Ukraine

SHORT SCIENTIFIC PAPER

UDC: 796.86.015.1-055.2

doi: 10.5550/sgia.130902.en.009S

SUMMARY

Fencing belongs to group of martial arts with variable conditions of competitive activities, that determines priority in training structure of sportsmen opportunities for effective realization of tactical and technical set of moves. Level of rivalry in fencing competitions in Ukraine on all kinds of weapon, including epee is very low, this must be related to the problem of absence of qualified program of training on previous stages of long-term perfection. It indicates on the problem of accented review of scientific questions of effective training of qualified sportsmen that in future would be able to realize their individual opportunities on national and international levels. Possibility of accented increase of specialized load on sportsmen training should be considered on stage of specialized basic training. As follows, necessity of increasing effective training and results of competitive activity of qualified women epee fencers form a relevant scientific and practical task for technical and tactical improvement of sportsmen on stage of specialized basic training with account of structure and content of competitive activity of modern fencing.

Key Words: fencing, improvement, means, technique, tactic.

INTRODUCTION

Main attention of specialists in fencing is concentrated on questions that are related to the structure and content of competitive activity in different kinds of weapon (Бакум, 2011; Рошцін, 2007; Войтов, 1984), training improvement of different sides of fencers (Шевчук, 2009) and their control (Кабанова, 2007; Тышлер, 2010), that mainly reveal questions of sportsmen training and partly touch theoretical and methodological aspects of fencing training.

Fencing belongs to group of martial arts with variable conditions of competitive activities (Келлер, 1983), that determines priority in training structure of sportsmen opportunities for effective realization of tactical and technical set of moves (Бычков, 2006; Мороз & Бусол, 2006; Семеряк & Смирновський, 2013).

Level of rivalry in fencing competitions in Ukraine on all kinds of weapon, including epee is very low, this must be related to the problem of absence of

qualified program of training on previous stages of long-term perfection (Семеряк & Смирновський, 2013; Смирновський, Семеряк, & Бріскін, 2013; Шевчук, 2007).

It indicates on the problem of accented review of scientific questions of effective training of qualified sportsmen that in future would be able to realize their individual opportunities on national and international levels. Possibility of accented increase of specialized load on sportsmen training should be considered on stage of specialized basic training.

As follows, necessity of increasing effective training and results of competitive activity of qualified women epee fencers form a relevant scientific and practical task for technical and tactical improvement of sportsmen on stage of specialized basic training with account of structure and content of competitive activity of modern fencing.

Aim of research is to justify means of technical and tactical training of women epee fencers with use of an authorial training technology.

METHODS

In this paper it used: theoretical analysis and generalization, comparison, abstraction, modeling, and biomechanical analysis.

Totally in process of research was analyzed more than 150 sources of information that are related with use of technical devices in training system of combat sport sportsmen, including fencing.

Comparison was used with the aim to determine existence of another analogical authorial training technologies that have intellectual right on it and compare them.

Abstraction and modeling let us to get away from minor signs of anthropometric models of high qualified fencers. This models were created by us with help of biomechanical analysis of competitive activity – 30 fights at level of European Championship and World Championship (60 sportsmen), that had place in main part of the competition.

RESULTS AND DISCUSSION

Theory and methods evolution of training in fencing led to significant changes in structure and content of technical and tactical training of qualified

sportsmen in fencing and their realization in competitive activity.

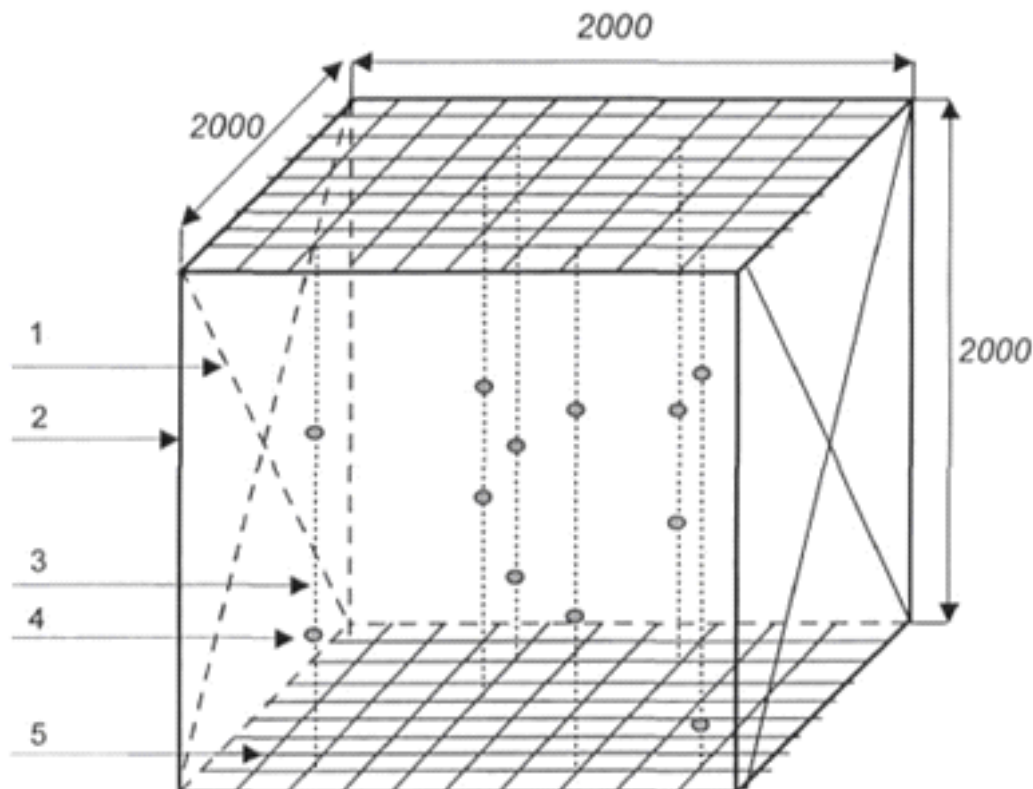
So, Келлер (1983), Тышлер (2010a, 2010b), and other show that such changes in competitive activity like introduction of devices for touch registration, changes of size and requirements to equipment, greatly effect on demands of sportsmen training. Long-term development of world fencing led to significant changes in sportive practice and to regulation of fights, touched some components of specialized moves system of sportsmen.

By statements of specialists (Алексеевко, 1970; Бычков, 2006; Смирновський et al., 2013; Тышлер, 2010; Шевчук, 2007) in fencing is traced a clear orientation on training system that improves technical and tactical actions of sportsmen.

Note that in scientific literature are widely expressed modern trends and accents of technical and tactical training of sportsmen (Алексеевко, 1970; Мороз & Бусол, 2006; Семеряк & Смирновський, 2013; Смирновський et al., 2013; Тышлер, 2010; Шевчук, 2007). Results of theoretical analysis of modern means and methods that are used for improvement technical skills of fencers allow us to affirm about existence of different approaches in this part of sportsmen training.

FIGURE 1

Authorial training technology of technical and tactical training of epee fencers (Ukraine Patent No. 76884, 2013).



Herewith, existing approaches that are expressed in scientific fencing literature for example on such kind of weapon as foil and sabre can't be used in epee fencing. It is related to specific of rules in this kinds of weapon that is shown in: minimal restriction of valid target area, absence of priority, availability of double-touches, and significant difference of weapon weight.

In recent years improvement of technical and tactical training in epee fencing was detailed by Шлевчук (2007). Author has proposed an approach with use of computer program. In form of this approach was predicted a development of automated system that analyzed competitive activity of sportsmen.

In epee fencing it is important to improve technical and tactical training system of sportsmen. It can be achieved by using of new effective technical and tactical improvement programs in long-term training.

For your attention is presented a program of technical and tactical training of women epee fencers with use of means based on use of authorial training technology of technical and tactical training which received a patent in January 2013 (Figure 1).

Device can be used as separate training exercise or in complex of exercises for fencers in different kinds of weapon and in particular on epee.

Known at present methods of fencing training that provide causing touches in target areas of mannequin that is situated in one position, in frontal plane ("Tysler simulator (TTD)", "Favero Fencing Target" and other). But, this method doesn't show opportunities in using variable options of competitive activity and anthropometric characteristics of the opponent (height, length and correlation of parts of the body).

In methods basics of technical and tactical training of fencers is set a task to increase quantitatively and qualitatively level of options for performing specialized moves with given algorithm of motor task (Ukraine Patent No. 76884, 2013).

Introduced improvement method of complex technical and tactical training of fencers has a generalized structure of training means, analogical to already known exercises but they are different because it gives possibility to consider anthropometrical options of opponents in training and determine conditions of competitive activity.

Use of improvement methods for complex technical and tactical training provides disposition of simulator on fencing lane (3D-target) (Figure 1), that directly provides demonstration of objective conditions of performance that is solving a training task where for touch areas are used balloon targets that are located on vertical guides 1, 2, 3, 4, 5, that are

installed in one-piece cube simulator, that models same options of competitive activity and anthropometric characteristics of opponents.

Fencer gets an algorithmic task from coach which is done for successively performing touches in different sections of simulator one by one (3D-target), that are located in accordance with anthropometric characteristics and style of simulated opponent.

As follows, introduced method of technical and tactical training of fencers allows considering anthropometric characteristics of opponents and letting training conditions closer to reality of competitive activity and improve the process of training. Our introduced program of technical and tactical means of training solve main tasks of skills improvement of women epee fencers (Figure 2).

Generalized structure of the program and some methods contains training exercises that are divided by difficulty and distance and their combination with use of training forms of competition exercise.

Reviewing the structure by content of methods we noted and divided them by difficulty on those that have 1 action, 2 actions or 3 actions. Analysis of scientific and methodological literature and experience of practice allowed including such valid target areas of opponent body with exercises that have 1 action: hand, forearm, shoulder, head, four sectors of trunk, hip, foot. They can be done from close, medium and long distance. The most popular target areas are sectors of trunk because its valid target area is the biggest.

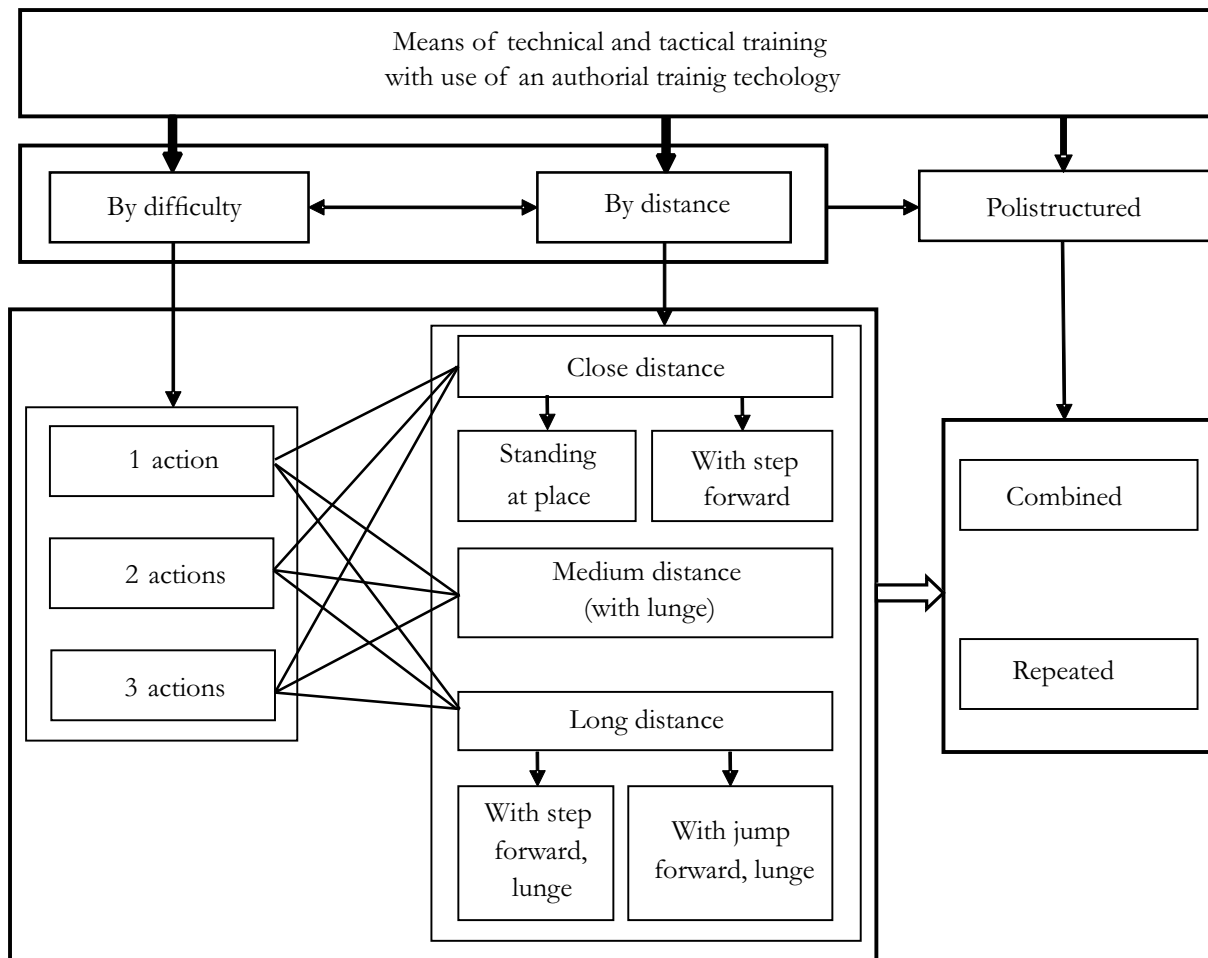
With analysis of competitive activity of high qualified women epee fencers to exercises with 2 actions we include the most used combinations: hand-forearm, hand – shoulder, hand – hip, hand – trunk, hand – foot, hip – foot, trunk – foot.

In fencing practice also widely used are technical and tactical moves with 3 actions. This happens in case when opponent is at long distance. In our research is introduced such options: hand – forearm – trunk, hand – trunk – hip, hand – foot – trunk, trunk – hip – trunk, hand – hip – foot, hand – forearm – shoulder, hip – shoulder – trunk, forearm – shoulder – trunk, forearm – trunk – hip. Mainly combinations with 3 actions are used by sportsmen of high qualification because they require wide set of fencing moves. Considering this appears a necessity of including exercises with use of 3 actions in training process, including improvement of technical and tactical training in epee fencing.

Other structural units of proposed methods are exercises that are performed from different distances: close, medium and long.

FIGURE 2

Means of technical and tactical training with use of an authorial training technology.



In epee fencing practice is shown that distance from what touches are made has a notable value with the look on its results, possibility of counter-attack moves. Close distance gives opportunities for simple attacks, parry and attacks on opponent's preparation (remise, straight arm). Except main moves medium and long distance allows to include also preparation moves (exploration, disguise, call, game of blades, imaginary attack, maneuvering). To main actions can be included attacks (main attack, repeated attack, attack in answer and attack on preparation), defenses (parry and circle parry), attacks from both fencers (double-attacks, counterattacks).

But technical and tactical moves that are done regardless from distance must predict its effective ending. This gives requirements to include distance feeling in improvement of technical and tactical training of sportsmen.

Important for training process and especially for technical and tactical training of women epee fencers is performance of polistructured moves. This is related with situations in competitive activity. In most situations there is a necessity of combining touches from different distances and in different target areas.

And also sportsmen often try to hide their moves by tactic (Figure 3).

So, to totality of means we include group of polistructured exercises. It includes exercises of repeated character and combined exercises. In first case (repeated) exercises are characterized by two or more times performance from one distance. For example close distance – starting position, touch in to trunk, repeated touch in to trunk, or medium distance – touch into trunk with lunge, repeated touch into trunk with lunge. Also as an example of an exercise in this group can be performance from long distance – touch into trunk with step forward and lunge, repeated touch with step forward and lunge.

Combined exercise also includes more movement actions in conditions of solving technical and tactical task. But by its content they include different distance and different target areas. For example: standing at place with a touch into hand, two steps back, touch in foot with lunge or with step forward touch in trunk, three steps back, touch in foot with lunge. Also one of the options is a touch in hip, three steps back, touch with step forward and lunge in to trunk; touch with step forward in hand, two steps back, touch with lunge in shoulder.

CONCLUSION

Need of improvement of technical and tactical training of fencers must be solved at all stages of long-term training process of sportsmen by improving such options of training like increasing quantitatively and qualitatively of technical and tactical actions realization, increasement of efficiency of specialized moves with given algorithm of movement task, realization of sportsmen skills in competitive activity.

Improvement program of technical and tactical training of women epee fencers with use of an authorial training technology includes system of training means that include means divided by difficulty (one action, two action and three action), by distance (close, medium and long) and polistructured (combined and repeated).

Possibilities of further research predict to justify options of dosage to introduced means of improvement technical and tactical training of women epee fencers with use of an authorial training technology.

ACKNOWLEDGEMENTS

This research is performed according to topic 2.9. “Individualization of training process of qualified combat sport sportsmen” of Consolidates plan of

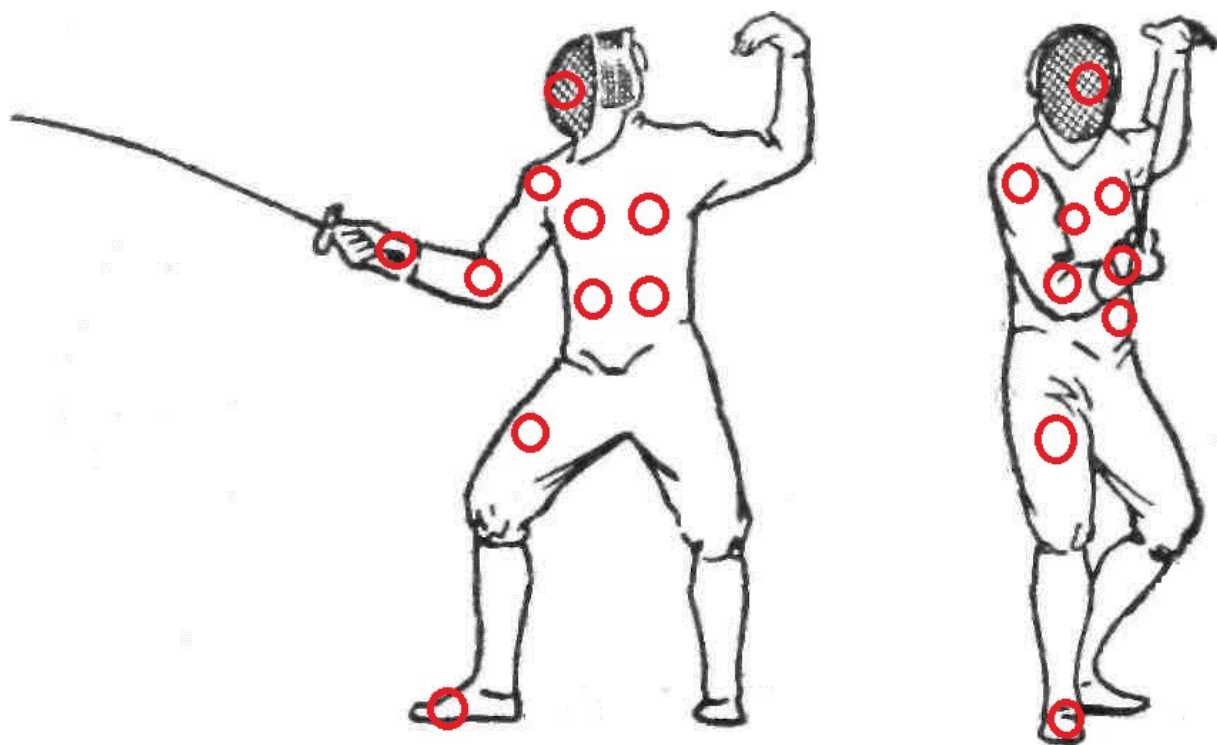
scientific research work in field of physical culture and sport for period 2011-2015.

REFERENCES

- Алексеевко, В. А. (1970). *Исследования двигательных реакций у фехтовальщиков в процессе тренировки и обоснование подбора специальных упражнений для контроля за их совершенствованием* [Research of moving reactions of fencers in training process and justification of selection of special exercises for control on its improvement]. Unpublished doctoral dissertation, GCOLIFK, Moscow.
- Бакум, А. В. (2011). *Современные тенденции технической подготовки фехтовальщиков* [Modern trends of technical training of fencers]. Kharkiv, UA: Pedagogical, psychological and medicobiological problems of ph. cult. and sport.
- Бріскін, Ю., Пітин, М., & Семеряк, З. (2013). *Ukraine Patent No. 76884*. Kiev, UA: Ukraine Patent Office.
- Бычков, Ю. М. (2006). *Тренер в уроке фехтования: монограма* [Coach in fencing lessons: monogram]. Moscow, RU: Phys. culture.
- Кабанова, И. А. (2007). *Уровни взаимосвязей объемов и результативности атак и контратак с показателями двигательных качеств и длины тела*

FIGURE 3

Main valid target areas on opponent body in epee fencing.



- [Connection levels of extent and effectiveness of attacks and counterattacks depending on movement qualities and body length]. St. Petersburg, RU: Theory and practice of physical culture.
- Келлер, В. С. (1983). *Теоретические основы спортивной тактики* [Theoretical basics of sport tactics]. Moscow, RU: Fencing: collection of articles.
- Мороз, О., & Бусол В. (2006). Залежність стилю змагальної діяльності фехтувальників-шпажистів від особливостей темпераменту. [Style dependence of competitive activity of epee fencers depending on characteristics of temperament]. *Young Sport Science of Ukraine: col. of scientific works in ph. cul.*, 274–280.
- Рыжкова, А. Г. (2011). Тактическая информация о намерениях на применение разновидностей действий в фехтовальном бою [Tactical information about use of different movements during fencing match]. *Scientific articles*, 173-178.
- Рощин, І. Г. (2008). *Оптимізація техніко-тактичної підготовки фехтувальників-шаблістів на етапі спеціалізованої базової підготовки* [Optimization of technical and tactical training of sabre fencers on level of specialized basic training]. Unpublished doctoral dissertation, University of Lviv.
- Семеряк З. С., & Смирновський, С. Б. (2013). Техніко-тактична підготовка фехтувальників на шпагах: стан та перспективи досліджень. [Technical and tactical training of epee fencers: condition and possibilities of research]. *Young Sport Science of Ukraine: col. of scientific works in ph. cul.*, 239–244.
- Смирновський, С., Семеряк, З., & Бріскін Ю. (2013). Актуальні питання техніко-тактичної підготовки фехтувальників. [Current questions of technical and tactical training of fencers]. *IV Inter. electronic. scien.-practical conf.* (pp. 35–37). Odessa, UA.
- Шевчук, Е. Н. (2007). Состояние проблемы технико-тактической подготовки квалифицированных фехтовальщиков. [Problem status of technical and tactical training of qualified fencers]. *XI Inter. scien.congress "Modern Olympic sport and sport for all"* (pp. 56–59). Minsk, BY.
- Шевчук, Е. Н. (2009). Компьютерная программа "Анализ и моделирование соревновательной деятельности фехтовальщиков" как средство и метод подготовки к соревнованиям [Computer program "Analysis and modelation of modern fencing activity" like a mean and method of preparation to competition"]. *Messages of Chernigiv national university*, 311–315.
13. Tyshler D.A. (2010) Тышлер Д.А.. Фехтование. Начальное обучение. Техничко-тактичские приоритеты. Методики и упражнения: методическое пособие. [Fencing. Beginning of training. Technical and tactical priorities. Methods and exercises: methodological manual] - Moscow – P. 100–128.
- Войтов, В. Г. (1984). *Методика технико-тактической подготовки на этапе углубленной специализации в фехтовании на саблях* [Methodology of technical and tactical training on level deep specialization in sabre fencing]. Unpublished doctoral dissertation, Moscow.
- Тышлер, Д. А. (2010) *Фехтование. Техничко-тактичская и функциональная тренировка: Метод. пособие* [Fencing. Technical, tactical and functional training: Method. manual]. Moscow.

Received: September 19, 2013

Revision received: November 11, 2013

Accepted: December 18, 2013

Correspondence to:
Maryan Pityn, PhD
Lviv State University of Physical Culture
Department of theoretical and methodological
foundations of sport
Kostyushka str. 11
Lviv, zip code 79000
Ukraine
Phone: 003809 68 79 88 58
E-mail: pityn7@gmail.com