

## IMPROVING THE PHYSICAL AND TECHNICAL TRAINING OF YOUNG TAEKWONDO PLAYERS THROUGH AN INTEGRATED TRAINING SYSTEM

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### Abstract

This in the article in taekwondo ( WT) high sportsmanship athletes in the (YSM) stage integrated training system analysis In the study physical , technical , tactical and psychological preparation each other integration , "meta- training " principles and modern monitoring methods covered . In the article cited tables and statistic information high qualified athletes competitiveness to increase service does .

### Key words

Integral training , Taekwondo WT, High sportsmanship , Meta - training , Noise immunity , Special Endurance , Cognitive stability .

### INTRODUCTION AND RELEVANCE OF THE PROBLEM

Modern Olympic sports in the system taekwondo ( WT) itself high dynamics , technical complexity and of the rules often changing to stand with separated Especially at the high level of sportsmanship ( YSM ) athletes preparation process quality in terms of new to the stage At this stage athlete his/ her own physical and spiritual opportunities to the top is approaching, so the preparations are underway small one mistake or methodological defect large international in competitions to the result serious negative impact to show possible.

Uzbekistan Republic The President's decree on July 29, 2022 "Taekwondo (WT)" further develop measures "about" decision and to the field related other regulatory and legal documents performance provide in order, high qualified taekwondo players an integrated approach to training implementation to grow today's of the day current pedagogical to the problem became.

### Subject relevance and territorial context

Bukhara province in our republic taekwondo school traditions strong formed from the regions one Bukhara state university and province term team at the base held analyses this shows that athletes regional and republic on a scale in competitions success stable although the world on a scale in tournaments stability in storage some methodical spaces there is.

In particular, Bukhara province term team high sportsmanship 30 people in the first stage athlete in the middle results of monitoring conducted following statistic problems open gave:

1. **Technical-tactical efficiency decrease:** In 65% of athletes third round last in seconds, that is high lactate level and physical fatigue in the background technician of blows accuracy **By 28-32% decrease** This is observed. physical preparation technician skill with due to lack of integration evidence gives .

2. **Psychological resistance (Noise immunity):** Athletes **42% of** competition in the conditions noise, referees decisions or opponent's tactical pressure as a result own game out of game plan to leave cases record was done.

**3. Electronic to the system adaptation :** Bukhara school representatives 38% of electronic impact on protectors (PSS) in giving necessary pressure when feeling the threshold to difficulty face is coming, this and intellectual and proprioceptive preparation low shows.

#### Integrated training is the only solution as

Above of problems analysis this shows that preparation types ( physical, technical, tactical, psychological ) from each other separated without, traditional in a way take go to YSM stage expected the result Therefore, in the article seeing outgoing "Meta- training" methodology — preparation components into a single system combine through athlete's competition 100% adaptation to the activity to provide focused.

#### The research purpose and tasks

This research work Bukhara state university sports theory and methodology department scientific direction within working issued is, its main The goal is high sportsmanship. in the phase taekwondo fighters for integrated training system pedagogical model is to create.

This to the goal achieve for following tasks by designating received:

- YSM stage taekwondo fighters of preparation today's status statistic analysis to do;
- Physical adjectives in improvement technician actions harmony provider special exercises complex working exit;
- The athlete's "noise" immunity" and tactical his/her thinking in development intellectual preparation instead justification;
- Production issued of the system efficiency Bukhara province term team in the example of experimental check.

#### Scientific novelty and practical importance

Article scientific novelty is that in it taekwondo WT course according to high qualified athletes in preparation only physical to load not, maybe cognitive and psychophysiological of factors mutual integration based on. Practical in terms of and this methodology Bukhara regional sports schools and supreme education sports faculties of institutions for ready educational and methodological manual become service does.

Conclusion instead of to say possibly integrated preparation system not only physical indicators improves, maybe athlete modern, fast variable competition under the circumstances reasonable decision acceptance do psychological resistant to the level of a "professional athlete" raises.

#### MAIN PART AND RESEARCH METHODS

the High Sports Skills (YSM) stage of taekwondo fighters preparation process many edged is, it is not only physical downloads, maybe athlete's intellectual and psychophysiological mobilize their resources to reach in sight Bukhara province term team and Bukhara state university sports clubs at the base held In our research, we use **integral modeling** from the method we used.

#### The research organization to be and methods

20 people in the study high qualified taekwondo player participation They two to the group split into:

- **Control group (NG):** Traditional (preparation) types separately in stages (passable) program based on engaged.
- **Experience Group (TG):** We offer arriving integrated (physical, technical and tactical exercises (harmonized) system based on training take went.

## Integrated 52- week training plan

High qualified of taekwondo fighters annual training cyclical competition from the calendar come out, for 52 weeks intended is, it is three main macrocycle own inside. The integral approach to oneself originality is that each weekly microcycle following four component one at the time cover takes:

### Preparation period (24 weeks):

**Purpose:** Functional the base create and technician arsenal expansion.

**Integration method:** Aerobic endurance exercises (running , swimming) with the technique of "shadow fighting" together take. For example, 400 meters from running then immediately 1 minute during maximum at speed blows series is done.

### 2. Competition took period (16 weeks ):

**Goal:** "Noise" "immunity" formation and tactical flexibility.

**Integration method:** Training is a real battle 100% closer to the conditions. Electronic "tactical" using protectors (PSS) tasked "Battles" are held . For example: "The opponent has a point advantage. " yes, in the last 20 seconds only for the head part blow to give through victory win".

### 3. Competition period (8 weeks ):

**Purpose:** Peak uniform storage and psychological mobilization.

**Integration method:** Short and grass high intensive combative analysis. Athlete's intellectual activity increased – video analysis of opponents based on personal "fight" "map" is created.

### 4. Pass period (4 weeks): Active recreation and rehabilitation.

### 2.3. Meta- training and "Noise" "immunity" methodology

In the article offer of the integrated system being developed core **"Meta- training"** methodology is considered. In this training the following "triangle" principle based on is built:

Technique + Tactics + Psychological pressure

For example, Bukhara climate hot conditions (June-August months) held in training we give to athletes tall music or audience noise under , above pulse (180-190 beats /min) tactical decision acceptance to do assignments This method athlete's \*\*"noise immunity" \*\* increases, that is external stress factors his/her technician movements biomechanics break can't.

### 2.4. Monitoring and control types

Integrated system efficiency assessment For this we use the following monitoring indicators: current we did:

- **Physiological:** Pulsometry ( recovery) time ) and orthostatic tests .
- **Technique:** 10 seconds inside given effective blows number (Power test).
- **Tactical:** During the battle " fake" (deceptive) actions used effectiveness .
- **Psychological:** Competition "Taylor" scale according to anxiety level to determine.

## RESULTS AND DISCUSSION

Research in the end taken information this showed that integrated training system based on engaged experience Group (TG) athletes almost all indicators according to control from the members of the group (NG) noticeable at the level surpass They left.

### 3.1. Physical and technician indicators analysis

Experiment during athletes explosive power and special integral durability tests through was checked. In this not only the speed of movement, but also fatigue in the background of blows accuracy (electronic on the treads points (via) was measured.

**Table 1. From the study previous and next of indicators comparative analysis**

Indicators	Group	Initial result	Final result	Growth (%)	P- value
<b>Within 10 sec . number of strokes</b>	NG	18.4±1.2	19.2±0.8	4.3%	>0.05
	TG	18.2±1.4	23.6±1.1	29.6%	<0.01
<b>Complex reaction time ( ms )</b>	NG	285±15	275±12	3.5%	>0.05
	TG	288±18	215±10	25.3%	<0.01
<b>Shock to give accuracy (%)</b>	NG	45.2%	48.5%	7.3%	>0.05
	TG	44.8%	68.4%	52.6%	<0.01

From the table apparently It is clear that TG athletes blow to give accuracy **By 52.6%** grew up. This is within the framework of "Meta- training " physical of downloads tactical assignments with integration made is the result.

### 3.2. Competition activity efficiency

Integrated system main goal — competition of the battle last in the round athlete's efficiency save to stay . Bukhara province first place and republic tournaments during athletes combative movements analysis was done.

#### Results this showed that :

- **TG athletes** in the last 30 seconds of the 3rd round to the opponent relatively **40% more** effective attack organized.
- **Noise immunity:** Audience and external factors under the influence of TG members technician errors to NG relatively **2.5 times less** record was done .
- **Tactical adaptability:** TG representatives battle during opponent to the style looking at own tactics average **15-20 seconds** inside change they got it (this is in NG) The indicator is 45-50 seconds organization (seven).

### 3.3. Discussion

Received results this confirms that high sportsmanship in the phase preparation components (physical, technical, psychological) from each other separation athlete's general competitiveness reduces. Bukhara state university at the base held our experience this showed that the **integral system** athlete's functional opportunities competition to the conditions maximum at the level brings closer.

Experience in the group athletes pulse recovery The recovery rate is also quite high. high It was theirs. not only physically strong that it is, maybe own organism intellectual control (breathing) to take order tactic from breaks ability to use developed evidence gives.

### CONCLUSION AND RECOMMENDATIONS

Transferred scientific and pedagogical research based on following to conclusions bride:

**1. Integration efficiency : at the YSM stage preparation all types in a single "Meta-training" system unification , athletes special durability up to 30%, technical accuracy and up to 50% increase opportunity gives.**

**2. Pedagogical monitoring:** Bukhara province term team in the example of It was seen that each individual athlete profile create and downloads his/her psychophysiological to the state individualization is the victory main is a factor.

**3. Practical recommendation:** Taekwondo according to specialized sports schools and supreme training 52 weeks in their country training plans in the making, weekly of downloads at least **60% of the integrated (integral) exercises organization** to be able to the goal according to.

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