

FEATURES OF USE OF COMBINATIONAL CIRCUITS PLAY IN ATTACK DURING VOLLEYBALL MATCHES

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Annotation. *Purpose:* To characterize tactical formation game action in the attack and the frequency of execution of power and tactical (planning) innings volleyball players of different skill levels. *Material and methods:* The analyzed video recordings of volleyball matches with the strongest teams of the world: Brazil, Russia, USA, Cuba, Italy, the leading volleyball championship teams of Russia and Ukraine. The features of tactical formation game. *Results:* It was established that the binders players strongest teams and club teams in the world is used in the organization of attack more variety of tactical combinations. So almost equally, the following combinations: Rise, Pipe and Zone (13.4 % 12.6 % 11.5%). Ukrainian binders players prefer only combinations Rise - 23%; Pipe - 2%; Zone - 2.5%, respectively. Distribution innings for planning and power for Ukrainian teams: 59.7 % versus 40.3% and 27.5 % versus 72.5 %, respectively, the strongest national teams in the world. *Conclusions:* The features of tactical formation attack suggest the best technical - tactical training players tie the strongest teams in the world and the whole team. Also leading the team to the world is much more likely to use the power supply, which indicates the nature of the power of world volleyball.

Keywords: volleyball, techniques, tactics, combination, serve, bump.

Introduction

Volleyball is a kind of outdoor games that envisages constant functioning of both brain's semi-spheres for processing, analysis and synthesis of information, which comes in the process of competition activity. In its turn it reflects in development and manifestation of certain psycho-physiological functions. For example, L.S. Frolova, I.D. Glazyrin, 2008, basing on materials of comparing of handball female players' game thinking and on sportswomen of other kinds of sports, say about specific psycho-physiological functions of out door games' sportsmen, which can be developed only in process of definite game functioning and is called "game thinking" or combination of player's intellectual operations, permitting to choose the most effective and efficient variant of actions in game [6, 7, 8]. Also it is known that different kinds of thinking have single physiological basis [2, 4]. But solution of tactical tasks by different sportsmen has certain specificity owing to different activity of brain in the process of solution of different game situations [2, 10]. It is explained by inductive nature of thinking and by its close connection with creative talent and experience [2]. That is why, considering specificity of outdoor games, specialists mark out additionally tactical and game thinking [5, 9, 10].

In the process of its progressing modern volleyball has greatly changed, concerning competition rules that, in its turn, caused changes and innovations in completing of teams, training, application of different techniques and choosing of game tactics. As on the present time information about tactical thinking in outdoor games, available in literature sources, do not give full answers concerning specificities of binding player in volleyball. The problem of choosing of setter's tactic, his application of tactical combinations and their effectiveness has still been remaining unsolved. Alongside with this, materials of A.V. Biliayev's [1] researches witness that in modern volleyball important place is taken by serve of ball and its receiving after serve that significantly influences not only on choosing of combined actions but also on its effectiveness. All these give grounds for analysis of volleyball matches for determination of specific features of setter's application of tactical combinations in volleyball matches and peculiarities of servicing alternation in modern volleyball.

Purpose, tasks of the work, material and methods

The purpose of the research determine tactical peculiarities of forward volleyball players and periodical character of power or tactical (programming) serves, basing on analysis of volleyball matches of Ukrainian championship of supreme league teams and best world combined teams and on results of most important European championships.

The purpose of the research. In our research we used the following scientific methods: analysis, synthesis, systemizing of scientific and scientific-methodic literature, publications and analysis of video records of volleyball matches.

Results of the researches

It is known from literature sources that in outdoor games, sportsmen solve identical tasks in different ways and in similar game situations they take different decisions. Complexity of choosing situations, independent on their being standard tactical schemas or non standard players' actions, lies in restricted character of information owing to time deficit for its perception and analyzing and it means that tactical thinking depends to large extent on how its operational components were formed [3, 11-15].

All this can be explained, as scientists F. George, 1963; M.P. Shestakov; I.G. Shestakov, 2001 [2, 10] think, by different brain's activity in the process of solution of certain game situations. That is why we analyzed video records of

volleyball matches, in which the best world combined teams participated: from Brazil, Russia, USA, Cuba, Italy, records of best volleyball teams of championship of Russia: “Dinamo”, Moscow, “Zenit”, Kazan and from Ukraine: “Impercargo Sport Cherkassy”, Cherkassy, “Favorit”, Lubny, “VNAU”, Vinnitsa, “Loco-Express”, Kharkov, “Krymsoda”, Krasnoperekopsk and determined certain specific features of application by setters of combined action in attacks both after receiving of ball and after defensive actions (see figs. 1 and 2) and serves’ alternation (tactical or power) (see fig. 3).

(%)

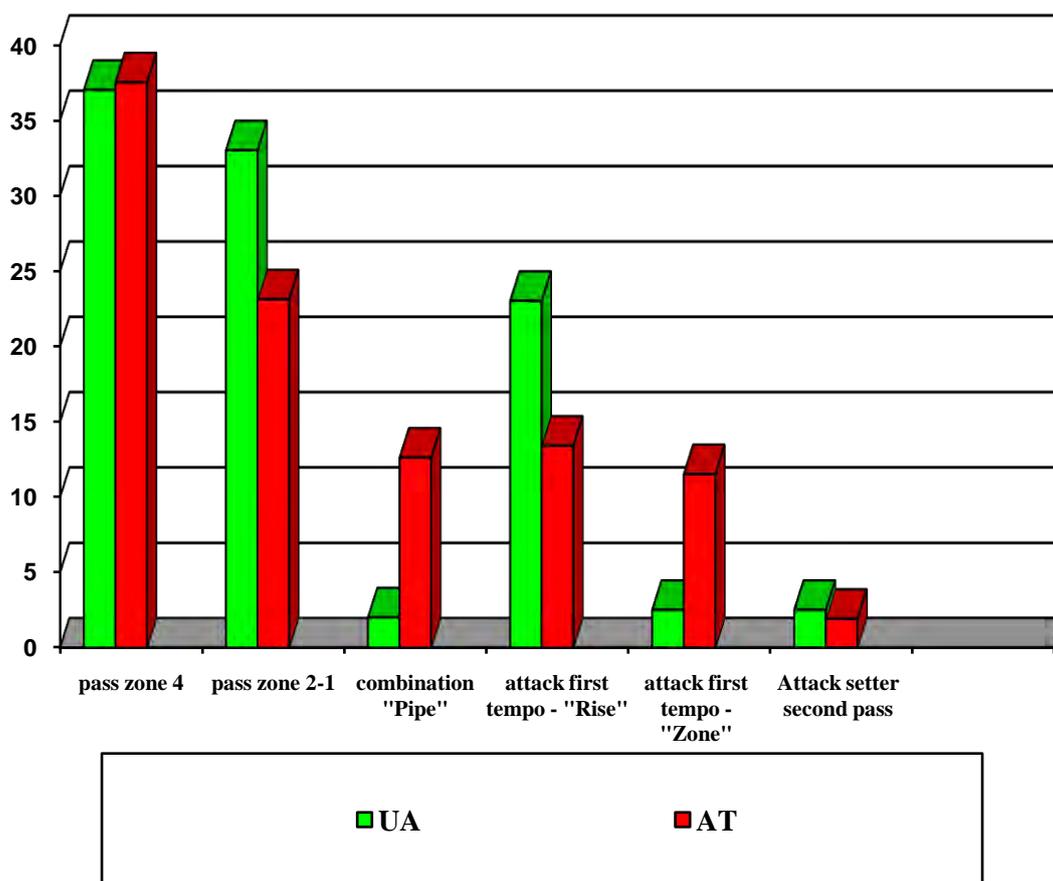


Fig.1. Quantitative characteristic of attacking tactical combinations' application by volleyball players of different qualification after receiving of ball

UA – Ukrainian teams; AT –Foreign teams; pass zone 4 –Service to number 4; pass zone 2-1 – Service to number 2-1

Having analyzed video record of volleyball matches we determined that regularities of setter’s application of combined actions in volleyball depends to large extent on quality of receiving, but still, for championship of Ukraine main attacking role is played by “diagonal” player, who attacks from 2nd and 1st numbers – 33% while in best world teams “diagonal” player attacks only 23.1% of passes that witness about more even distribution of players in different game positions. Though indicators of quantity of attacks are rather high and imply special role for “diagonal” player this, in its turn, requires appropriate attention with completing of team. 37% of passes after own receiving of ball in Ukrainian teams “go” to number 4, in foreign world teams we register 37.5% of passes that witness about special importance of receiving players in teams. Among combination first temp attacking actions in championship of Ukraine “Rise” undoubtedly dominates– 23%, while other combination “Zone” is played only in 2.5% of attacks in contrast to best world team, in which combination “Rise” is used in 13.4% and “Zone” – in 11.5% that witness about extreme complexity of combination “Zone”, because it is fulfilled at distance of nearly 3 meters and requires special technical fitness of setters and thus says about insufficient technical fitness of setters, forwards and insufficient combination potential of Ukrainian teams, because they use very little of available combinations. At the same time combination “Pipe” after own receiving is used by Ukrainian teams only in 2% of attacks, while best world teams use it in 12.6% of attacks that witness about insufficient effectiveness of receiving in Ukraine teams and higher technical-tactic fitness of world teams’ players. Attack of setter from second pass is used by Ukrainian teams in 2.5%, by other teams – 1.9%; it is explained by removing of ball from net after its receiving owing to complexity of passes. Analysis of combination attacking actions after defense period (see fig.2) of Ukrainian teams and best world teams permits to say that game is reduced to “simple” – high passes in 4th number – 42% and 37.5% accordingly to forwards of second temp and in

numbers 2-1 (37% and 42.5%) to “diagonal” player that says that setter should not risk with organization of attack, but simply fulfill good pass for attacking blow. Among first tempo attacks we did not register any special distinctions in Ukrainian teams: again combination “Rise” dominates (14%) against 10% and again combination “Zone” is used by world teams oftener (in 4.5% of cases against 1%) that witness about their higher tactical level. Combination “Pipe” is used approximately equally (in 5% against 4.5%) that can witness rather about need in involving of 6 number player in attack after defense than about tactic complication of game by setter; setter’s attacks are practically absent – 1%.

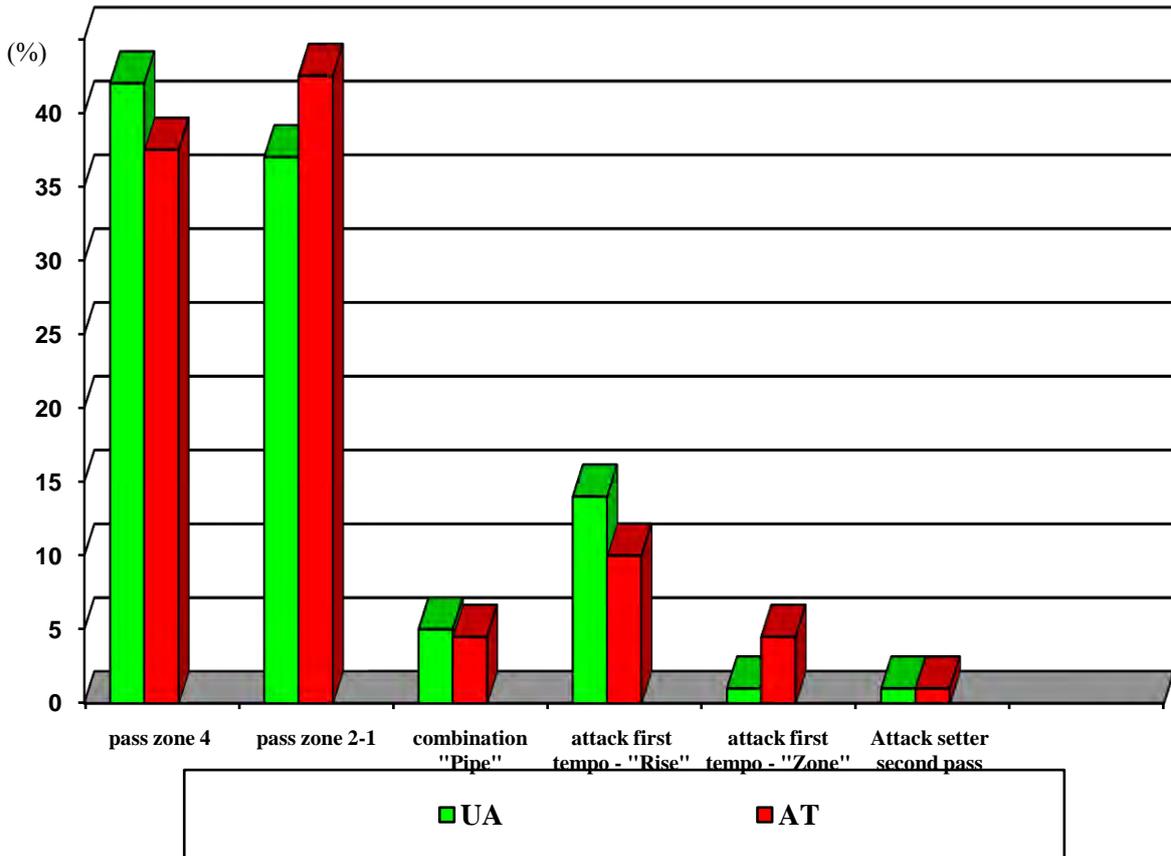


Fig.2. Quantitative characteristic of tactical combinations’ application in attacks by volleyball players of different qualification after playing in defense

UA – Ukrainian teams; AT –Foreign teams; pass zone 4 –Service to number 4; pass zone 2-1 – Service to number 2-1

Basing on literature sources’ analysis, referring to A.V. Beliayev, 2000 [1] we can say that in modern volleyball important place is taken by serves and receiving of ball after serve that influence significantly not only on choosing of combinations but also on their effectiveness. That is why after analyzing of video records of volleyball matches we determined that division of serves into power and tactical ones in modern Ukrainian volleyball is practically equal with little prevailing of tactical “programming” serves (59.7% against 40.3%) (see fig.3), while in best world teams power serves are used oftener (72.5% against 27.5% of programming ones).

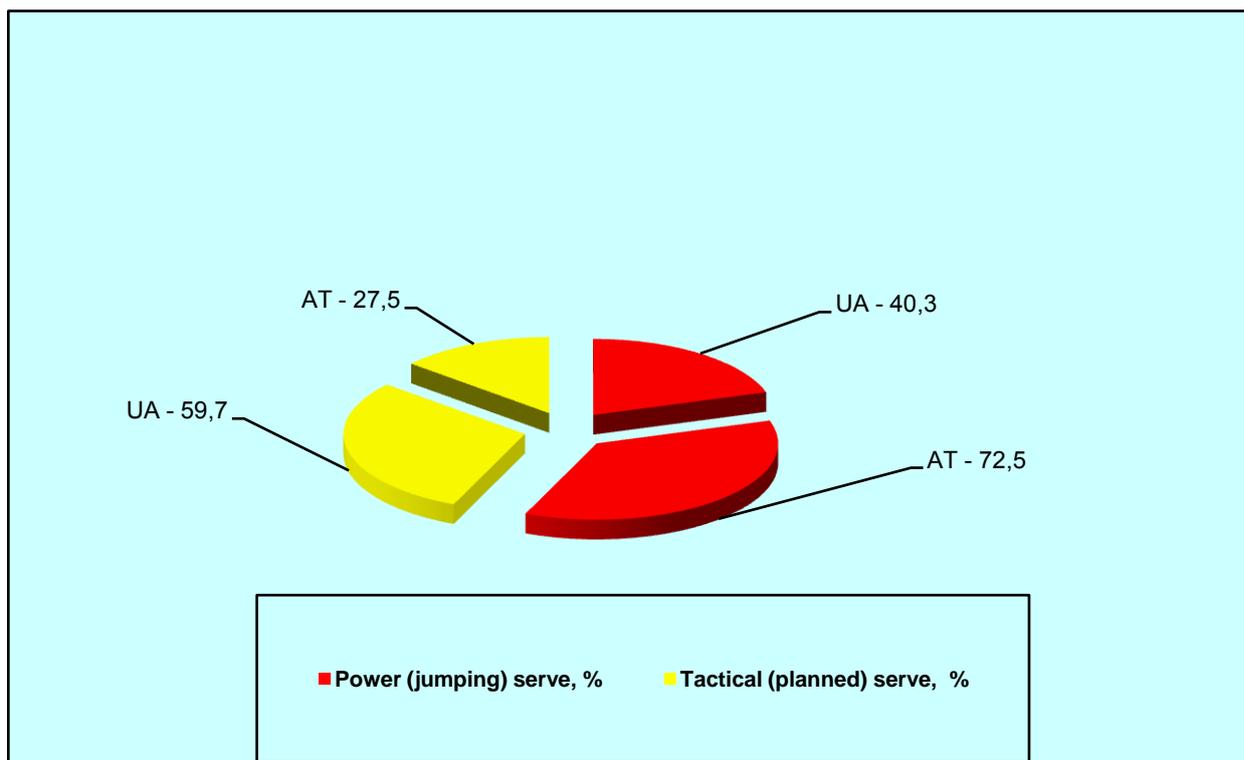


Fig.3. *Quantitative characteristics of different serves' application by volleyball players of different qualification*
UA – Ukrainian teams; AT –Foreign teams;

The data, presented in fig.3 witness that in Ukrainian teams as a rule two players fulfill power serve, sometimes – three, more seldom – one player, who has stable, strong serve. The rest players as a rule fulfill tactical serves, thus, giving opportunities to players, who fulfill power serves, to risk. Specific feature of such serves' distribution is that team takes scores in power serves, while tactical serves are usually only exchange of attacks; the best world teams take greater risk, using power serves nearly by all players, excluding, may be, only the most responsible final episodes of matches. They also rely on own initiative of a player, who bases on his physical and emotional state during game that can witness about higher level of sportsmanship of best world teams.

Also, basing of data, given in figs. 1, 2 and 3 we can affirm that level of Ukrainian teams' technical-tactic fitness is lower in comparison with best world teams and requires reviewing of present approaches of Ukrainian coaches to organization of volleyball players' improvement, basing not only on own experience but also on materials of scientific researches and experience of foreign coaches.

Conclusions:

1. The analyzed in this article combinations' specificities of setters' tactic witness that at championship of Ukraine: both after receiving and after defense main load is on "diagonal" player, who attacks from 2nd and 1st numbers and then on forwards of second tem from 4th number. Among all variety of first temp combinations, combination "Rise" dominates; it is used oftener than other both after receiving and after defense.

2. The strongest teams of the world have wider range of game combinations in attacks, comparing with teams of Ukrainian championship, because they oftener use such combinations as "Pipe" and "Zone" that witness about higher technical-tactic fitness both of setters and forwards.

It was found that division of serves in power and tactic is nearly equal with little prevailing of tactical "programming" serves (59.7% against 40.3%) wile the strongest world teams oftener use power serves 72.5 %, against 27.5% – of programming (tactic) serves that witness about need in paying to power serves greater attention both in trainings and in games.

The prospects of further researches imply studying of individual features (tactic fitness) of setters during choosing of combination schemas for different game situations and influence of this choosing on quality and effectiveness of combinations for teams both in episodes of game and in volleyball match.

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