



ANALYSIS OF THE OPINION OF BULGARIAN FOOTBALL TRAINERS REGARDING THE INFLUENCE OF EARLY SPORT SPECIALIZATION AND DIVERSIFICATION OF TRAINING MEANS AMONG CHILDREN – FOOTBALL PLAYERS

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ABSTRACT

An inquiry survey has been carried out among 147 Bulgarian football trainers on the theme - their opinion regarding the early specialization of football players, as well as the place of diversification of training means and methods in the course of many-years football preparation. The inquiry is consisted of seven questions, each one of several possible replies, and the data has been analyzed by the methods of frequency analysis and two-dimensional allocation basing the categories „license“ and „age“ of the individuals, under inquiry. The opinion of trainers has been successfully analyzed regarding the early sport specialization of children-football players, the ability if Bulgarian football experts to manage the many-years sport-technical preparation, as well as the role of diversification of training means and methods in the course of sport-pedagogical process with children-football players. The achievement of high results is impossible without early specialization, deemed by the Bulgarian experts as suitable to start between 8-12 years of age, reporting the risks it hides. Planning and management of training process is a serious challenge for trainers, diversification is absolutely necessary at the training process with growing up football players.

Key words: football, children, diversification, trainers

INTRODUCTION

In the conditions of the contemporary sport activity, athletes start specializing themselves at one specific discipline sooner than ever. There are two types of athletes – such, practicing one and the same sport throughout their whole career, and others gone through a number of sport disciplines prior they reach the moment of deciding the sole one. Consequently, the aim of this investigation is to analyze the opinion of experts at a specific type of sport, of the effect of sport specializing and the differences between the specializing towards the participation in a great number of sports, in particular.

In the recent years, the profile of the juvenile sport has changes greatly. On principle, the sport activities stimulate the self-confidence, leadership and interrelations between the team mates and rivals (1). In spite of that, the level of competitive power in youth sport increases, which leads to more competitively manifested events at earlier age, specific trainings and competitive activity (1, 2). Seasons are longer and parents are stimulated to enter their children for organized club sports, where they train and compete throughout the whole year. Only in the USA, the youths participating sport activity have increased from approximately 18 million in 1987 to 60 million in 2008 (3). The early specialization supposes purposeful participation in one sport and a big number of purposeful exercises with the aim of improving the sport skills and presentation in the specific sport during the childhood (4).

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We meet a rather detailed review of the matter in the American sport practice and sport-scientific literature. According to the American Association of conditional preparation (NSCA) there are five parameters existing that are to be taken into consideration at the early sport specialization, at a given sport:

- Early starting age; early inclusion in one sole sport without participating in others; early inclusion in purposeful practice; highly intensive trainings; early inclusion in a competitive sport.

The main arguments in support of the early specialization come from a theory saying that the earlier one starts a purposeful practice of a given skill, the earlier he becomes an expert in that skill (5). Of course, there are some risks connected to the early specialization – increased risk from traumas and contusions, high level of psychological stress and early refusal of sport activities (6, 7).

Again NSCA express opinion referring the diversification, according to which, „The sport diversification could be considered as a game of as many sports as possible, and as more frequently as possible.“

The advantage of this approach is the participation in many sports with a focus on the game and not on the sport achievement. Thus, an environment is created, that would educate a devotion to the sport practicing, which is to be transformed into a productive, structured practice of a certain discipline (5).

The belief behind the diversification of sport is that the physical and cognitive capabilities could develop quicker, playing a number of sports, instead of one only, due to a potential effect of crossing of many sports. Coordination arms-eyes, as it refers to hitting and throwing in baseball, a child playing baseball and football, could also develop coordination between legs and eyes, the work of legs and mechanics for running (5).

According to Garrett Kuhlman, (8) there are three main benefits existing by the sport diversification – increased motivation and decreased levels of sport burnout, increased level of athleticism and general coordination capabilities, decreased risk of traumas.

The early diversification develops a wide range of basic motor skills and different sport

experiences, ensuring to the athletes more possibilities for performance and athleticism, if later they specialize in one sport (9, 10).

METHODS

In the period February – March, 2021 an inquiry was held among 147 Bulgarian football trainers on the theme – their opinion regarding the early specialization of football players, as well as the place of diversification of training means and methods in the course of the many-years football preparation. The inquiry consists of seven questions, each one of several possible replies, and the data has been analyzed through the methods of frequency analysis and two-dimensional allocation basing the categories „license“ and „age“ of the individuals, under survey.

The inquiry has been carried out fully online, via the platform of Google – Forms. For analysis of the data software IBM SPSS was used.

The aim of the inquiry is to investigate the opinion of Bulgarian football trainers on the matter of the early sport specialization on one side, and the diversification of the training means, on the other side.

RESULTS

In Tables and Graphics, the analyzed data from the inquiry survey held with football trainers from the Bulgarian sport practice, has been presented.

In (Table 1) are presented the replies to the question „Is there, according to you, a necessity from an early sport specialization with children football players, on purpose of reaching high sport achievements “.

Totally 56 participants have replied „definitely yes“, 12.5% of them being at the age „18-25“, 42.9% - „26-35“, 41.1% - „36-50“ and only 3.6% are in the age group „over 50“. Similar data is observed to the more conservative reply „rather yes“, respectively – 17.6%, 41.2%, 36.8% and 4.4%, while this reply was indicated by 68 of the trainers. Definitely against were only 8 of the inquired persons, by percentage allocation per age groups– 12.5% (18-25), 12.5% (26-35), 75% (36-50) and 0% (over 50) respectively. As regards the index „age of the inquired persons“, the biggest number of 18-25 years old – 52.2% – reply „rather yes“. With 26-35 years old, the biggest

percentage again is for this reply – 47.5%. The same tendency is observed with the third group too – 36-50, where the percentage is 43.9%. With the smallest group, as a number of participants „over 50“, we see division between the two more conservative replies – 37.5% „rather yes“ and 37.5% „rather no“. As for the professional license of the inquired persons, the data is the following: 42.2% from the inquired ones with „C/UEFA C“ license reply „definitely yes“ (**Table 2**). The biggest here again is for the reply „rather yes“ –

44.4%. With the group with license „UEFA B“, it is observed a certain similarity in the allocation of the replies, while for „rather yes“ it is for 53.7% of the inquired persons in this group. Considerable difference is observed with the group with license „UEFA A“ – 51.5% of them announce „definitely yes“. The reply „definitely yes“ is given by 56 of the inquired persons totally, among whom 33.9% are with license C, 35.7% - UEFA B, 30.4% - UEFA A и 0% - UEFA Pro.

Table 1. Allocation per age – necessity of early specialization

| | | | necessity | | | | Total |
|-------|--------------------|--------------------|----------------|------------|-----------|---------------|--------|
| | | | definitely yes | Rather yes | Rather no | Definitely no | |
| Age | 18-25 | Count | 7 | 12 | 3 | 1 | 23 |
| | | % within age | 30,4% | 52,2% | 13,0% | 4,3% | 100,0% |
| | | % within necessity | 12,5% | 17,6% | 20,0% | 12,5% | 15,6% |
| | 26-35 | Count | 24 | 28 | 6 | 1 | 59 |
| | | % within age | 40,7% | 47,5% | 10,2% | 1,7% | 100,0% |
| | | % within necessity | 42,9% | 41,2% | 40,0% | 12,5% | 40,1% |
| | 36-50 | Count | 23 | 25 | 3 | 6 | 57 |
| | | % within age | 40,4% | 43,9% | 5,3% | 10,5% | 100,0% |
| | | % within necessity | 41,1% | 36,8% | 20,0% | 75,0% | 38,8% |
| | over 50 | Count | 2 | 3 | 3 | 0 | 8 |
| | | % within age | 25,0% | 37,5% | 37,5% | ,0% | 100,0% |
| | | % within necessity | 3,6% | 4,4% | 20,0% | ,0% | 5,4% |
| Total | Count | 56 | 68 | 15 | 8 | 147 | |
| | % within age | 38,1% | 46,3% | 10,2% | 5,4% | 100,0% | |
| | % within necessity | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | |

Table 2. Allocation license – necessity of early specialization

| | | | necessity | | | | Total |
|---------|--------------------|--------------------|----------------|------------|-----------|---------------|--------|
| | | | Definitely yes | Rather yes | Rather no | Definitely no | |
| license | C/UEFA C | Count | 19 | 20 | 3 | 3 | 45 |
| | | % within license | 42,2% | 44,4% | 6,7% | 6,7% | 100,0% |
| | | % within necessity | 33,9% | 29,4% | 20,0% | 37,5% | 30,6% |
| | UEFA B | Count | 20 | 36 | 6 | 5 | 67 |
| | | % within license | 29,9% | 53,7% | 9,0% | 7,5% | 100,0% |
| | | % within necessity | 35,7% | 52,9% | 40,0% | 62,5% | 45,6% |
| | UEFA A | Count | 17 | 10 | 6 | 0 | 33 |
| | | % within license | 51,5% | 30,3% | 18,2% | ,0% | 100,0% |
| | | % within necessity | 30,4% | 14,7% | 40,0% | ,0% | 22,4% |
| | UEFA Pro | Count | 0 | 2 | 0 | 0 | 2 |
| | | % within license | ,0% | 100,0% | ,0% | ,0% | 100,0% |
| | | % within necessity | ,0% | 2,9% | ,0% | ,0% | 1,4% |
| Total | Count | 56 | 68 | 15 | 8 | 147 | |
| | % within license | 38,1% | 46,3% | 10,2% | 5,4% | 100,0% | |
| | % within necessity | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | |

To the question „According to you, which is the most suitable age for specializing?“ (Table 3), totally 30 of the inquired ones – 20.4% – reply „6-8 years“. The biggest is the number –

65 (44.2%), that offer the age range to be „8-12 years“, as suitable for specializing in football game.

Table 3. Allocation per age – age for specialization

| | | Age for specialization | | | | Total | |
|-------|---------------------------------|---------------------------------|--------|--------|---------|--------|--------|
| | | 6-8 | 8-12 | 12-15 | over 15 | | |
| age | 18-25 | Count | 1 | 9 | 10 | 3 | 23 |
| | | % within age | 4,3% | 39,1% | 43,5% | 13,0% | 100,0% |
| | | % within age for specialization | 3,3% | 13,8% | 22,7% | 37,5% | 15,6% |
| | 26-35 | Count | 10 | 32 | 15 | 2 | 59 |
| | | % within age | 16,9% | 54,2% | 25,4% | 3,4% | 100,0% |
| | | % within age for specialization | 33,3% | 49,2% | 34,1% | 25,0% | 40,1% |
| | 36-50 | Count | 18 | 20 | 17 | 2 | 57 |
| | | % within age | 31,6% | 35,1% | 29,8% | 3,5% | 100,0% |
| | | % within age for specialization | 60,0% | 30,8% | 38,6% | 25,0% | 38,8% |
| | over 50 | Count | 1 | 4 | 2 | 1 | 8 |
| | | % within age | 12,5% | 50,0% | 25,0% | 12,5% | 100,0% |
| | | % within age for specialization | 3,3% | 6,2% | 4,5% | 12,5% | 5,4% |
| Total | Count | 30 | 65 | 44 | 8 | 147 | |
| | % within age | 20,4% | 44,2% | 29,9% | 5,4% | 100,0% | |
| | % within age for specialization | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | |

In (Table 4) the allocation for the same question as regards the license of the inquired person is given. The biggest number of trainers with acquired license C/UEFA C, reckon the age in the range „8-12“ – 48.9% as suitable for specializing. The same opinion is

shared by the trainers with license UEFA B too, observing here approaching the percentage correlation of football experts reckoning the suitable age groups „8-12“ (41.8%) and „12-15“ (31.3%).

Table 4. Allocation license – age for specialization

| | | Age for specialization | | | | Total | |
|---------|---------------------------------|---------------------------------|--------|--------|---------|--------|--------|
| | | 6-8 | 8-12 | 12-15 | over 15 | | |
| license | C/UEFA C | Count | 8 | 22 | 12 | 3 | 45 |
| | | % within license | 17,8% | 48,9% | 26,7% | 6,7% | 100,0% |
| | | % within age for specialization | 26,7% | 33,8% | 27,3% | 37,5% | 30,6% |
| | UEFA B | Count | 14 | 28 | 21 | 4 | 67 |
| | | % within license | 20,9% | 41,8% | 31,3% | 6,0% | 100,0% |
| | | % within age for specialization | 46,7% | 43,1% | 47,7% | 50,0% | 45,6% |
| | UEFA A | Count | 8 | 13 | 11 | 1 | 33 |
| | | % within license | 24,2% | 39,4% | 33,3% | 3,0% | 100,0% |
| | | % within age for specialization | 26,7% | 20,0% | 25,0% | 12,5% | 22,4% |
| | UEFA Pro | Count | 0 | 2 | 0 | 0 | 2 |
| | | % within license | ,0% | 100,0% | ,0% | ,0% | 100,0% |
| | | % within age for specialization | ,0% | 3,1% | ,0% | ,0% | 1,4% |
| Total | Count | 30 | 65 | 44 | 8 | 147 | |
| | % within license | 20,4% | 44,2% | 29,9% | 5,4% | 100,0% | |
| | % within age for specialization | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | |

From the ones replied to the question, „Do you think the Bulgarian football trainers manage successfully the sport specialization and many-years sport-technical development of football players?“, with trainers of age „18-25 years“ with a reply „definitely yes“ only 4.3% are engaged, and the biggest percentage goes to the reply

„rather no“ – 60.9%. With the age group „26-35 years“, we observe 35.6% for the reply „rather yes“, and 39% for „rather no“. „Definitely no“ is declared by 23.7%. The biggest trust in trainer’s capabilities have the inquired persons of the age over 50 years, while there 62.5% give the reply „rather yes“ (**Table 5**).

Table 5. Allocation per age – management of training process

| | | Management | | | | Total | |
|-------|---------------------|---------------------|------------|-----------|---------------|--------|--------|
| | | Definitely yes | Rather yes | Rather no | Definitely no | | |
| age | 18-25 | Count | 1 | 4 | 14 | 4 | 23 |
| | | % within age | 4,3% | 17,4% | 60,9% | 17,4% | 100,0% |
| | | % within management | 9,1% | 8,0% | 21,2% | 20,0% | 15,6% |
| | 26-35 | Count | 1 | 21 | 23 | 14 | 59 |
| | | % within age | 1,7% | 35,6% | 39,0% | 23,7% | 100,0% |
| | | % within management | 9,1% | 42,0% | 34,8% | 70,0% | 40,1% |
| | 36-50 | Count | 8 | 20 | 28 | 1 | 57 |
| | | % within age | 14,0% | 35,1% | 49,1% | 1,8% | 100,0% |
| | | % within management | 72,7% | 40,0% | 42,4% | 5,0% | 38,8% |
| | over 50 | Count | 1 | 5 | 1 | 1 | 8 |
| | | % within age | 12,5% | 62,5% | 12,5% | 12,5% | 100,0% |
| | | % within management | 9,1% | 10,0% | 1,5% | 5,0% | 5,4% |
| Total | Count | 11 | 50 | 66 | 20 | 147 | |
| | % within age | 7,5% | 34,0% | 44,9% | 13,6% | 100,0% | |
| | % within management | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | |

At the allocation towards the professional license to the same question, we see that trainers with the lowest C/UEFA C license

give most frequently the „rather no“ – 51.1% (**Table 6**).

Table 6. Allocation license – management of training process

| | | Management | | | | Total | |
|---------|---------------------|---------------------|------------|-----------|---------------|--------|--------|
| | | Definitely yes | rather yes | rather no | Definitely no | | |
| license | C/UEFA C | Count | 4 | 15 | 23 | 3 | 45 |
| | | % within license | 8,9% | 33,3% | 51,1% | 6,7% | 100,0% |
| | | % within management | 36,4% | 30,0% | 34,8% | 15,0% | 30,6% |
| | UEFA B | Count | 3 | 23 | 32 | 9 | 67 |
| | | % within license | 4,5% | 34,3% | 47,8% | 13,4% | 100,0% |
| | | % within management | 27,3% | 46,0% | 48,5% | 45,0% | 45,6% |
| | UEFA A | Count | 4 | 11 | 11 | 7 | 33 |
| | | % within license | 12,1% | 33,3% | 33,3% | 21,2% | 100,0% |
| | | % within management | 36,4% | 22,0% | 16,7% | 35,0% | 22,4% |
| | UEFA Pro | Count | 0 | 1 | 0 | 1 | 2 |
| | | % within license | ,0% | 50,0% | ,0% | 50,0% | 100,0% |
| | | % within management | ,0% | 2,0% | ,0% | 5,0% | 1,4% |
| Total | Count | 11 | 50 | 66 | 20 | 147 | |
| | % within license | 7,5% | 34,0% | 44,9% | 13,6% | 100,0% | |
| | % within management | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | |

As for the replies to the question „According to you, does the diversification (participation in more than one sport) help or hinder the football players at children’s age?“, the allocation presented in (**Table 7**), is as follows – 94.6%

of the inquired individuals reckon that this methods of work rather helps the development of players, and only 5.4% have the opposite opinion.

Table 7. Allocation age – diversification of training efforts

| | | | diversification | | Total |
|-------|--------------------------|--------------------------|-----------------|----------------|--------|
| | | | Rather helps | Rather hinders | |
| age | 18-25 | Count | 19 | 4 | 23 |
| | | % within age | 82,6% | 17,4% | 100,0% |
| | | % within diversification | 13,7% | 50,0% | 15,6% |
| | 26-35 | Count | 57 | 2 | 59 |
| | | % within age | 96,6% | 3,4% | 100,0% |
| | | % within diversification | 41,0% | 25,0% | 40,1% |
| | 36-50 | Count | 55 | 2 | 57 |
| | | % within age | 96,5% | 3,5% | 100,0% |
| | | % within diversification | 39,6% | 25,0% | 38,8% |
| | over 50 | Count | 8 | 0 | 8 |
| | | % within age | 100,0% | ,0% | 100,0% |
| | | % within diversification | 5,8% | ,0% | 5,4% |
| Total | Count | 139 | 8 | 147 | |
| | % within age | 94,6% | 5,4% | 100,0% | |
| | % within diversification | 100,0% | 100,0% | 100,0% | |

As for the license of the inquired persons (**Table 8**), replied to the question „According to you, does the diversification (participation in more than one sport) help or hinder the football players at child’s age?“ we observe that the biggest number of trainers standing

behind the opinion, that the diversification helps is for those having license UEFA B – 46.8%. From the trainers with license C/UEFA C – 88.9% reply positively, and 11.1% - negatively.

Table 8. Allocation license – diversification of training efforts

| | | | diversification | | Total |
|---------|--------------------------|--------------------------|-----------------|----------------|--------|
| | | | Rather helps | Rather hinders | |
| license | C/UEFA C | Count | 40 | 5 | 45 |
| | | % within license | 88,9% | 11,1% | 100,0% |
| | | % within diversification | 28,8% | 62,5% | 30,6% |
| | UEFA B | Count | 65 | 2 | 67 |
| | | % within license | 97,0% | 3,0% | 100,0% |
| | | % within diversification | 46,8% | 25,0% | 45,6% |
| | UEFA A | Count | 32 | 1 | 33 |
| | | % within license | 97,0% | 3,0% | 100,0% |
| | | % within diversification | 23,0% | 12,5% | 22,4% |
| | UEFA Pro | Count | 2 | 0 | 2 |
| | | % within license | 100,0% | ,0% | 100,0% |
| | | % within diversification | 1,4% | ,0% | 1,4% |
| Total | Count | 139 | 8 | 147 | |
| | % within license | 94,6% | 5,4% | 100,0% | |
| | % within diversification | 100,0% | 100,0% | 100,0% | |

CONCLUSIONS

In view of the results from the analysis of the data, from the inquiry held, the following conclusions could be drawn. Over 84% of the

inquired trainers reckon that there is a necessity of an early specialization with children-football players, the most definite support to this assertion is stated by the trainers

with License „A“ – 51,5%. The elder trainers are more balanced in their replies, it could be ascribed to their bigger experience, probably basing it and reporting the risks, hidden in the early specialization connected to an increased risk of traumas and contusions, high level of psychological stress and early dropping off from system sport occupations. Similar tendency is revealed in the replies of the inquired ones towards their license. Trainers with license UEFA C and B, who most probably work with children, also are balanced in the replies – 60% and 100% respectively, of all that have replied that there is no need of early specialization. Almost half of the inquired experts (44,2%) deem the most suitable age for early specialization 8-12 years. A solid theme for thinking, the management of the training process on football, has been reported in the analysis of the data, as regards the possibilities of Bulgarian trainers to manage the training process. 60% of trainers deem that they have not got the necessary competencies to manage this process. Logically, the younger experts and those with lower licenses are more uncertain in this respect. As for the diversification of the training means, a big part of the inquired experts (95%) deem that it would be useful and would help the training process. The opinion of our experts is in unison with such recommendations (11), who show that for children and teenagers it is recommendable to take active participation at 60-minute purposeful and diverse physical activity. The benefits are not for the normal growth and development only, but for a solid base for reaching supreme sport achievements in many types of sport too (12).

The recommendations that could be made from the investigation carried out for the practice are in several directions. The achievement of high results is impossible without the early specialization, which the Bulgarian experts deem most suitable to start between the age 8-12, reporting the risks it hides. Planning and management of the training process is a serious challenge for the trainers, it is necessary to create conditions to get methodical support that could be possible if in the clubs working with children-juvenile football there is a requirement for availability of an expert methodologist. The investigation shows that diversification of the training means is necessary, as we recommend for the training

process of growing up football players to include means and a set of exercises from other sports. As is asserted by Danaïl Ivanov, the using of means from other sports helps the all-round development of football player (13).

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