

Formation of *active-effective* attitude of 12-13 years' judo athletes to sports functioning in competition period

Authors' Contribution:

- A Study Design
- B Data Collection
- C Statistical Analysis
- D Manuscript Preparation
- E Funds Collection

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Abstract

Background & Study Aim:

In competition functioning to aspects of attitude exist: orientation for achievement of success and orientation for avoiding of failure. The purpose of the research is to theoretically and experimentally substantiate methodic of *active-effective* attitude to sports functioning formation in 12-13 years' judo athletes (youngster categories) in competition period.

Material & Methods:

The first stage: during the whole annual training cycle we studied judo athletes' sports motivation and emotional state. We examined: youngsters judo athletes of 12-15 years': 30 beginners; 45 junior categories; 15 adult categories; and 20 experienced judo athletes of 18-25 years' (candidate master of sports and master of sports). At the second stage we conducted pedagogic experiment of one year duration. Two groups of judo athletes of 12-13 years' (practicing judo 1-2 years) were divided into groups in random way: experimental (n = 12); control (n = 12). The methodic included 5 stages of 12 month's duration of direct preparation for competitions.

Results:

It was found that in the process of sports perfection in structure of *active-effective* attitude to sports practicing significant changes take place. In youngsters categories judo athletes' attitude to sports functioning orientation for avoiding of failures prevail rather than orientation for success. With sportsmanship rising there appears a trend to weakening of orientation for training process and strengthening of orientation for competition functioning.

Conclusions:

In the process of formation of judo athletes' attitude to sports practicing it is necessary to consider initial level of training and competition motivation in them, as well as to strengthen attitude to competition functioning.

Key words:

attitude to sports • competition functioning • positive emotions • self-feeling

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Athlete – *noun* 1. someone who has the abilities necessary for participating in physical exercise, especially in competitive games and races 2. a competitor in track or field events [93].

Body balance disturbance tolerance skills – the ability to maintain the vertical posture in circumstances of the fall hazard [90].

Microcycle – shortest training cycle is characterising by the dynamic of loads occurring in 5 to 9 days (usually a week).

Sports psychology – *noun* the scientific study of the mental state of sportspeople, looking at issues such as motivation, concentration, stress and self-confidence [93].

INTRODUCTION

In competition functioning to aspects of attitude exist: orientation for achievement of success and orientation for avoiding of failure [1-3]. The fulfilled by us [4, 5] and other authors [6, 7] researches showed that if sportsman has expressed orientation for success, it influence positively on his pre-competition state, on his behaviour on competitions and on results of competition functioning. The decisive moment in formation of orientation for success in children is character of interaction between child and adult person. High motivation for success is formed with skilled and reasonable increasing of requirements by the child's parents. Parents' kindness in communication with children is of special importance. Low motivation is formed in children, whose parents realized too strict supervision, command-like guardianship or, who were indifferent to children. Considering these tendencies it is possible to successfully form sportsmen's orientation for success achievement.

It would be logical to assume that different interactions of coach and disciples will influence on formation of motivation for success in different way. Organization of formation of youngster judo athletes' attitude to sports functioning in competition period of annual training cycle is based on general principles of theory of management [8] and on results of researches and recommendations of authors [9-11]. Formation of youngster judo athletes' attitude to sports functioning shall be realized in the frames of annual training cycle, considering content and results of sports activity. Besides, it is necessary to consider correlations of motivation and emotions; influence of emotions on motivation. We think that in formation of attitude to sports practicing it is necessary to monitor judo athletes' emotional state for its optimization [4, 12]. For this purpose, operative methodic worked out by Kiselev [13] is recommended. The methodic stipulates registration of the following indicators: self-feeling, mood, wish to train, wish to compete, satisfaction with training process, satisfaction with competition process, communications with other trainees, relations with coach, readiness for competitions.

Among different approaches to motivation we can mark out training of personality's causation. The sense of such motivation training is based on the following initial principle: primary feature of motivation of man is striving for effective

interaction with surrounding medium, wish to change it in desired way [14]. In such cases positive emotions in process of functioning facilitate motivation strengthening.

Similar results were received by us in finding of interconnection between emotional state and character of attitude to sports functioning [4, 5]. In our other works we stressed on factors, which weaken attitude to competitions: frequent traumas, difficult relations with coach, monotonous training tasks [12, 15, 16]. We noted that attitude to training and competition functioning of elite judo athletes' is influenced only by psycho-emotional factors [17]. Besides, judo athletes' attitude to training and competition functioning in post competition period depend on efficiency of competition functioning [4]. In this connection it is necessary to create positive emotional background at trainings and competitions. It is realized by the following means: creation of proper training conditions; control over communication with trainees; application of play and competition methods in trainings; application of psycho-regulation training before trainings. In our other researches we prove that for achievement of success it is important to correctly assess workability. It permits to predict success and gives basis for determination of factors of sportsmanship's growth. For example, our researches proved importance of wrestlers' psycho-physiological qualities as the factors of success as well as analysis of correlation structures and stability of sportsmen's training. Assessment of different qualities' contribution in system permitted to find main peculiarities, depending on kind of wrestling. In this case a promising direction of training for fight optimization is increasing of the most significant psycho-physiological factors [18, 19].

Basing on results of a number of authors [6, 20] we think that formation of attitude to success achievement will be realized in youngster judo athletes' with observation of the following conditions: 1) formation of youngster judo athletes' syndrome of achievement, i.e. prevalence of desire of success over desire to avoid failure; 2) self-analysis of own functioning; 3) creation of optimal tactic of target-formation in judo trainings; 4) interpersonal support in medium "coach – other trainees".

Each of these directions implies application of definite pedagogic means and techniques [21-24].

Optimization of loads can be a good supplement in this case [25-27], as well as assessment of children's motor fitness [28, 29], choice of pedagogic control methods, adequate to age [30, 31].

The hypothesis of the research: it is assumed that study of characteristics of *active-effective* attitude to sports functioning in competition period formation (in annual training cycle) as well as study of factors, influencing on its dynamic, will facilitate the following:

working out and successful application of methodic of youngster judo athletes' *active-effective* attitude to sports practicing formation;

strengthening and development of youngster judo athletes' *active-effective* attitude to sports practicing and efficient performances at competitions.

The purpose of the research is to theoretically and experimentally substantiate methodic of *active-effective* attitude to sports functioning formation in 12-13 years' judo athletes (youngster categories) in competition period.

MATERIAL AND METHODS

The present research was being conducted from 2009 to 2012.

Participants and stage of the research

The first stage: implied study of features and dynamic of judo athletes' attitude sports functioning at stage of direct preparation for competitions, after competitions, in annual training cycle as well as for determination of factors, influencing on judo athletes' attitude to sports practicing. During the whole annual training cycle we studied judo athletes' sports motivation and emotional state. At precompetition stage we studied judo athletes' attitude to sports functioning and their emotional state: at the beginning of involving microcycle (the beginning of the stage); at the end of involving microcycle; at the end of main microcycle; at the end of restoration microcycle (the end of stage).

We examined: youngster judo athletes' of 12-15 years' age: 30 beginners; 45 junior categories; 15 adult categories; and 20 experienced judo athletes of 18-25 years' (candidate master of sports and master of sports). All sportsmen were participants

of Krasnoyarsk (Russia) city and regional competitions. Direct training of judo athletes to competitions at all stages was realized in compliance with general plan, used in judo sport.

At the second stage we conducted pedagogic experiment of one year duration in sports school of Krasnoyarsk (Russia). In experiment two groups of judo athletes of 12-13 years' age participated: experimental (n = 12); control (n = 12). Sportsmen were divided into groups in random way. Experience of their sports practicing was 1-2 years. The methodic included 5 stages of 12 month's duration of direct preparation for competitions. Results of pedagogic experiment were registered before and after every competition.

Control group was trained in compliance with commonly accepted methodic [32]. Indicators of attitude to sports functioning were registered in the following way: at the beginning of precompetition stage; after involving, main and restoration microcycles; one day before competitions; during one week after competitions. During competitions we determined efficiency of competition functioning [4] and noted the place, won in competitions.

Procedure

Efficiency of judo athletes' competition functioning [33]. This method was applied for study of judo athletes' competition functioning efficiency during competitions and for determination of sportsmen's prestart state. Experimenter registered fulfilment of techniques by a judo athletes. The fulfilled technique was considered efficient. Total quantity of techniques, fulfilled by a judo athletes and quantity of techniques, fulfilled in one fight were counted.

Further coefficient of *competition efficiency* (Ec1) of a judo athlete was found by dividing quantity of techniques by the quantity of fulfilled techniques. The higher was this coefficient (maximum – one) the higher was competition efficiency of the judo athlete. Second coefficient of *competition efficiency* (Ec2) was calculated in the following way: we counted total quantity of opponent's techniques in one fight and the quantity of techniques fulfilled by the opponent. Then we divide quantity of fulfilled by opponent techniques by total quantity of his techniques. The less was this coefficient, the higher was efficiency of judo athlete. Total efficiency coefficient was found by formula: $E_c = E_{c1} - E_{c2}$.

Efficiency of judo athletes' competition functioning considers judo athletes activity in fulfilment of own techniques and in resisting the opponent. Judo athletes' prestart state was determined by observation over external behaviour features of a sportsman by methodic of Viatkin [34].

Determination of characteristics of sportsmen's attitude to competition functioning was conducted before competitions. For this purpose we used colour test [35]. The test is based on experimentally found dependence between person's preference of definite colours (tints) and his/her current psychological state. The test is also based on assumption that choice of colour reflects orientation of the tested for definite functioning, mood, functional state and the most stable personality's features. Usage of this test proved its effectiveness also in other researches [36-38].

Study of judo athletes' sports motivation and some personality's qualities was realized with the help of questioning. We used methodic of Piloian [39] in modification of Babushkin [6, 40]. The answers were assessed by five points' scale. The answer "yeas, very important" was given 5 points; "rather not important than important" 4 points; "not very important" 3 points; "rather not important than important" 2 points; "not important" 1 point.

Sports motivation included the three categories of principles.

Motivating principle, includes two factors: C1 reflects sportsman's principle orientation for satisfaction of spiritual demands; C2 self-affirmation, self-expression, fulfilment of social duty.

Basic principles, including three factor: C3 reflects sportsman's interest in favourable social conditions of sports functioning; C4 reflects sportsman's interest in accumulation of knowledge (special) and skills; C5 reflects sportsman's interest in absence of pain.

Procedural principles, including two factors: C6 reflects sportsman's interest in accumulation of knowledge about his opponents; C7 reflects sportsman's interest in absence of psychogenic influences, which could negatively impact on his competition functioning.

When analysing results of judo athletes sport motivation study we came from the following. All

seven coefficients were divided into three groups by their correlations with sports results. First group includes coefficient C1, reflecting principle orientation for satisfaction of sportsman's spiritual demands. It is directly connected with sports result: the higher its value is the better are sportsman's results. Second group includes coefficient having feedback with sport result. They are C3, C4, C5, and C7. They reflect accordingly demands in favourable psychological climate, in special knowledge, in absence of psychogenic influences and pain. Third group includes coefficients C2 and C6. They reflect sportsman's material; orientation and his demand in information about future duel. The value of these coefficients is in optimal range and is determined individually in every case.

For determination of *sportsmen's attitude to competition functioning* we used questionnaire [6], which permits to find orientation of attitude to "achievement of success" and to "avoiding of failure". The tested were offered the questionnaire, which included 20 questions. Every of questions required answer "yes" or "no". Further we counted quantity of answers "yes" in odd and even questions separately. The total of points in odd questions characterized attitude to "achievement of success"; in even questions – to "avoiding of failure".

For determination of *attitude to training and competition functioning* we worked out special questionnaire, based on methodic of Khanin [41]. With this questionnaire four indicators are found. The higher indicator is the more "unfavourable" is sportsman's attitude to coming competition. We found the following indicators:

Assurance (As) "if I can?" High value means: absence of belief in own forces; absence of wish to perform; unreality of the set tasks and so on. 7 points mean that sportsman subjectively thinks that he is not ready for competitions. 0 points mean the highest sportsman's readiness.

Perception of opponents' potentials (Op) "if opponents can?" Comparing of own potentials with potentials of opponents: 7 points is high mark of opponents potentials; 0 low potentials of opponents.

Wish to participate in competition and competition's significance (Cs) "if I want?" 7 points mean high subjective significance and great wish

to participate in competitions; 0 points absence of desire to compete.

Subjective perception of sportsman's potentials by other people (O) "if I can from the point of coach's, other trainees', spectators?" 7 points mean high subjective significance and great wish to perform; 0 points low significance and absence of desire to compete.

The training of control group were conducted in compliance with traditional methodic, recommended for children-junior sports schools [32].

Trainings of experimental group sportsmen were conducted as per worked out by us methodic during competition period of annual training cycle. The methodic implies two directions of work with sportsmen: after sports competition; before competition. The following indicators were used for assessment of judo athletes' attitude to competition functioning and efficiency:

- 1) orientation of sportsman [39]: on spiritual demands; on material demands; on social life; on replenishment of special knowledge; on absence of pain; on accumulation of information about opponent; on absence of psychogenic influences;
- 2) character of sport interest to sports;
- 3) attitude to training and competition functioning;
- 4) orientation of competition functioning on achievement of success and avoiding of failures;
- 5) efficiency of competition functioning in fights with different opponents;
- 6) level of sports achievements (the places, taken in competitions);
- 7) attitude to coming competition (by methodic of Khanin [41]).

Statistical analysis

When processing the received results we calculated the following indicators [42]: \bar{x} mean arithmetic; s mean square deviation; r correlation coefficient; t Student's criterion for correlated and not correlated samples; F Fisher's coefficient for determination of factors' influence.

RESULTS

The first stage of our research implied determination of character of correlations between attitude to training and competition functioning of

different qualification sportsmen. We assumed that they are interconnected aspects of attitude to sports functioning and the character of this connection can change depending on judo sports qualification (Table 1). Analysis of correlations between attitude to training and competition functioning of different qualification sportsmen points at tendency to strengthening of the correlation with sportsmanship rising: from 0.31 (youngster categories of judo athletes) to 0.67 (judo athletes of high qualification $p < 0.05$).

Table 1. Correlations between attitude to training and competition functioning of different qualification sportsmen

Qualification of sportsmen	Correlation coefficients
Youngster categories (n=15)	0.31
Junior categories 1 and 2 (n=15)	0.48
Candidate masters of sports (n=10)	0.52
Masters of sports (n=10)	0.67*

* $p < 0.05$

Indicators of emotional state are interconnected in group of youngster judo athletes and in group of adult judo athletes (Table 2). Indicators of attitude to training process and competition are interconnected in both tested groups (except attitude to coach and other trainees). Determination of how factors influence on youngster judo athletes' attitude to training functioning showed that the analysed factors render significant influence (Table 2). Emotional and social-psychological factors influence on judo athletes' attitude to training and competition functioning. Judo athletes' attitude to competition functioning is influenced only by emotional factors (self-feeling, activity, mood).

Analysis of initial data of second stage of experiment showed low orientation of both groups' sportsmen on spiritual and material demands. Prevailing indicator in this case is orientation on training functioning and weakly expressed orientation for achievement of success (Table 3). In structure of attitude to sports functioning of experimental group sportsmen there took place significant changes in components' expressiveness. Strengthening of youngster sportsmen's orientation was a positive moment: 1) orientation on spiritual demands (self-expression, self-affirmation, communication, feeling of belonging to group, demand in sports perfection and etc.) ($p < 0.05$); 2) orientation on replenishment of

Table 2. Character of interconnection between components of youngster judo athletes attitudes (30 beginners, 15 junior categories)

Indicators of attitudes/ factors	Indicators of attitudes							Fisher's coefficient	
	2	3	4	5	6	7	8	A	B
1. Self-feeling	0.8 **	0.7 **	0.75 **	0.25	0.75 **	0.23	0.65 **	F-calculated = 7.5 F-critical = 3.6	F-calculated = 4.5 F-critical = 4.3
2. Activity		0.73 **	0.8 **	0.46 **	0.37 *	0.29	0.73 **	F-calculated = 8.5 F-critical = 3.3	F-calculated = 4.3 F-critical = 3.4
3. Mood			0.7 **	0.35 *	0.27	0.38 *	0.68 **	F-calculated = 6.6 F-critical = 4.2	F-calculated = 5.5 F-critical = 4.4
4. Wish to train				0.69 **	0.57 **	0.64 **	0.56 **		
5. Satisfaction with training process					0.58 **	0.72 **	0.37 *	F-calculated = 8.5 F-critical = 3.6	F-calculated = 3.4 F-critical = 4.2
6. Relations with trainees						0.24	0.31	F-calculated = 6.9 F-critical = 3.7	F-calculated = 2.5 F-critical = 4.4
7. Relations with coach							0.68 **	F-calculated = 6.1 F-critical = 4.7	F-calculated = 2.4 F-critical = 3.7
8. Wish to compete									

A to training process; **B** to competition functioning; **F** Fisher's coefficients; significance level of correlation coefficient (in bold type): * $p < 0.05$; ** $p < 0.01$

special knowledge in the field of sports trainings ($p < 0.05$); 3) orientation on accumulation of knowledge about opponent ($p < 0.05$); 4) orientation on absence of psychogenic influences and pain ($p < 0.05$). In control group changes in structure of sports motivation were not significant (Table 3).

Analysis of experimental results showed positive changes in attitudes to training and competition functioning in both groups (Table 3). In indicator "attitude to sports functioning" youngster judo athletes' had significant changes. They had substantially strengthened orientation on training ($p < 0.01$) and competition ($p < 0.001$) functioning. With it, competition functioning became more attractive for them. It is characteristic for highly qualified sportsmen. In structure of indicators "attitude to sports functioning" there appears tendency to achievement of success. It is a necessary condition for a sportsman in his struggle for victory. In control group we did not register positive (confident) changes in indicators "attitude to training functioning" and "attitude to competition functioning".

Results colour test of Lüscher witness about the following: at the beginning of pedagogic experiment there were little main colours at first places (positions): blue, orange-red, green, light-yellow. These colours symbolize feeling of assurance, calmness, insistence, will power, courage before competitions. They witness about presence of

judo athletes' *active-effective* attitude. Rather significant part of youngster sportsmen puts on first positions additional colours (violet, black, brown and grey). These colours reflect negative tendencies in attitude to coming competition: anxiety, fear, uncertainty, disappointment. Prestart state of youngster sportsmen, having such emotions, is characterized as unfavourable. After finishing of work with youngster judo athletes in indicator "attitude to sports functioning" great changes took place. Most of the tested began to put on first positions blue, green and orange colours. It witnessed about positive changes in attitude to competition functioning.

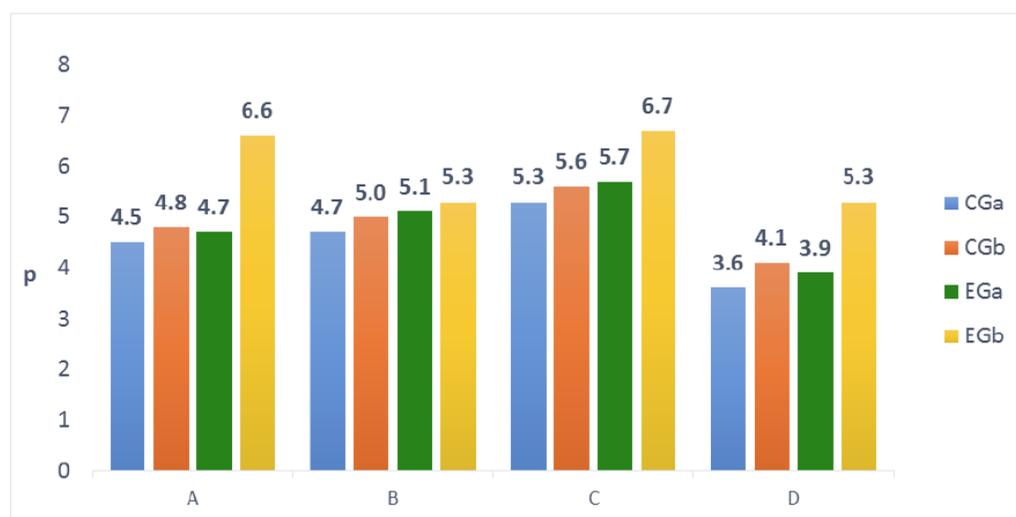
The received data characterize youngster judo athletes' attitude to coming competition as *active-effective* (Figure 1). Such attitude renders positive influence on behaviour at competitions and results of performances that is shown in Figure 2. At the beginning of experiment initial competition functioning indicators of both groups' sportsmen did not differ. In both groups there was tendency to weakening of efficiency with rising of combat sports category. At the end of experiment in experimental group there happened substantial increase of competition functioning efficiency in fights with different opponents.

In experimental group there were 43 prize places (from 60 possible); in control 27 (Table 4). It facilitated judo athletes wish to achieve high results: in experimental group wish to achieve

Table 3. Characteristics of judo athletes' attitude to training and competition functioning at the beginning and at the end of pedagogic experiment (points)

Group	Attitude to sports functioning (points)							Attitude to training and competition functioning (points)			
	C1	C2	C3	C4	C5	C6	C7	training functioning	competition functioning	achievement of success	avoiding of failures
Control (n = 12)											
before experiment	2.7	2.8	2.4	3.2	3.3	3.3	3.0	6.2	5.1	5.5	6.1
after experiment	2.7	2.9	2.6	3.2	3.4	3.2	3.2	6.4	5.6	5.7	6.3
Experimental (n = 12)											
before experiment	2.8	2.9	2.3	3.0	3.5	3.4	3.1	6.3	5.0	5.6	6.2
after experiment	3.7*	3.4*	3.1*	3.7*	3.6	3.8*	3.7	7.5**	8.3***	7.3	6.0

C1 to C7 coefficients (components of structure of attitude to sports functioning expressiveness); * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

**Figure 1.** Judo athlete' attitude to coming competition at the beginning and at the end of experiment

P points; **A** assurance; **B** perception of possible opponents; **C** wish to participate in competitions; **D** coach's assessment of sportsman; **CGa** control group before experiment, **CGb** control group after experiment; **EGa** experimental group before experiment; **EGb** experimental group after experiment.

high results increased from 43.5 points (average level) to 67 points (high level); in control group – from 46.2 points (average level) to 50.7 points (average level).

DISCUSSION

General comments to own findings

In group of low qualification judo athletes, attitude to training and competition functioning is a kind of independent characteristic. Concerning highly qualified judo athletes, results of their competition functioning are determined by efficiency of training functioning. It is conditioned

by the fact that at training sessions the basis for success at competitions is formed. Highly qualified sportsmen understand importance of training in preparation for competitions. In this aspect their attitudes to trainings and to competition functioning are interconnected.

In our opinion significant role in increment of experimental group's indicators was played by strengthening of *active-effective* judo athletes' attitude to sports functioning. In control group there were registered no such changes. Besides, we did not register positive changes in formation of attitude to sports functioning.

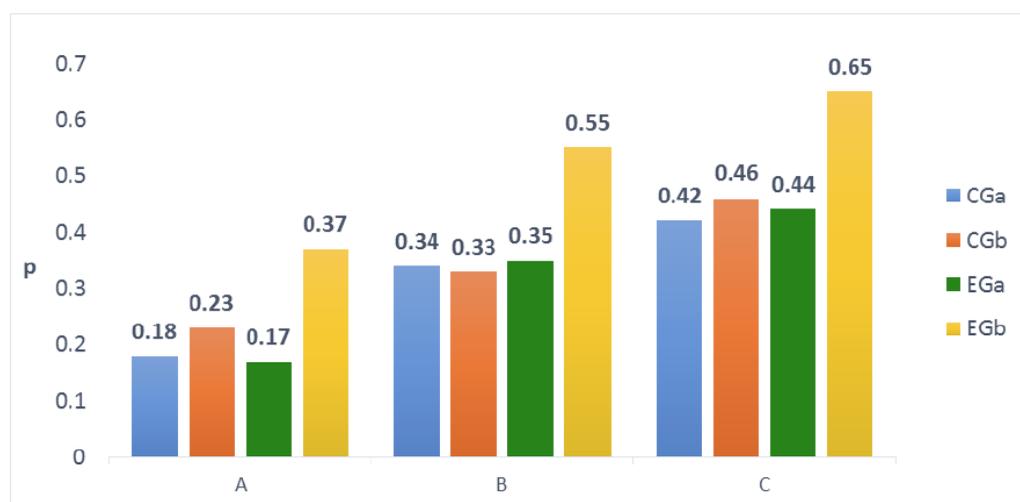


Figure 2. Efficiency of competition functioning of control and experimental groups' judo athletes (coefficient).

BP highest category; HP lowest category; **A** opponent of higher qualification; **B** opponent of equal qualification; **C** opponent of lower qualification; **CGa** control group before experiment; **CGb** control group after experiment; **EGa** experimental group before experiment; **EGb** experimental group after experiment.

Table 4. Increment of indicators of experimental and control groups in process of pedagogic experiment

Indicators	Group	Beginning of experiment	End of experiment	p
Wish to achieve high competition results [43, 44] (points)	EG	43.5 ± 4.6	67.0 ± 7.2	<0.01
	CG	46.2 ± 4.8	50.7 ± 5.3	
Demand in achievement [45, 46] (points)	EG	16.3 ± 2.4	21.4 ± 2.6	<0.01
	CG	17.6 ± 2.5	18.1 ± 2.4	
Taking prize places at competitions	EG		43	
	CG		27	

EG experimental group; **CG** control group; **p** level of significance

Low orientation on material demands can be explained by the fact that in that age material demand are not the leading ones in system of junior sportsmen's demands. Low level of spiritual demands (self-affirmation, self-expression) and desires of highest sportsmanship resulted from insufficient pedagogic work with youngster sportsmen. It is witnessed also by low indicators of interest to sports. These indicators can be characterized as unstable.

Additional work on formation of *active-effective* attitude to sports functioning with sportsmen of experimental group substantially influences on formation of components. It is reflected in strengthening their interest to sports and success

of their sports functioning, as well as in competition functioning efficiency in fights with different qualification sportsmen.

References to published knowledge and practice training

In connection with certain controversy of hypothesis and results of our researches it is necessary to note that the results can be interpreted in different ways. Our conclusions cannot coincide with results of other scientists. Success in mastering of definite kind of sports and achievement of high sports results to large extent depends on character of youngster and junior sportsmen's and his attitude to this kind of sports. For example, researches of combat sports, conducted in sports

schools, showed that 60–80% of children stop practicing of sports [47, 48]. It is conditioned by two factors: first, coaches do not pay proper attention to preservation of trainees' contingent; second – this problem is not studied sufficiently and there are no required recommendations for coaches.

It is necessary to admit that the data on psychological training, available in literature, do not contain detail, practical recommendations on monitoring of youngster and junior judo athletes' attitude to sports practicing in competition period [2, 49-51].

We can state the fact that youngster and junior judo athletes' attitude to sports practicing is noticeable just in competition period. In this period participation in competitions is of special importance that is connected with predicted and actual results of competition functioning. It is of special importance in period of youngster and junior sportsmen's training for competitions.

Not less important is the question of influence of youngster judo athletes' competition functioning on their further attitude to training and competition activity. Unsuccessful performances at competitions can result in negative attitude to competitions and trainings. Exactly unsuccessful performances of youngster and junior sportsmen at competitions are one of factors, influencing on leaving sports. In this connection the problem of monitoring of sportsmen's attitude to sports practicing is especially important.

Sports atmosphere with decisive role of victory or defeat forms children's responsibility for own successes and failures. The more adolescents take themselves as subjects of own functioning, the more effective they can simulate conditions of achievement of their goals and manifest flexibility of regulatory functions [52].

In sports sciences great experience of management of sportsmen's technical-tactic training, development of their general and special fitness has been accumulated. As on to day the questions of youngster and junior sportsmen's attitude to training and competition functioning have been less explored. One of main features of sportsmanship realization and high sports results' achievement is purposeful formation and preservation of youngster sportsmen's *active-effective*

attitude to sports functioning in annual training cycle and formation of motivations in pedagogic process [53, 54]. We think it could be necessary to find youngster sportsmen's attitude to sports practicing in pre competition and post competition stages. It is connected with the fact that results of performances at competitions influence greatly on athlete's attitude to sports. Results of our researches prove the data of [31]. The authors note that such approach permits to predict children's sports potentials.

Effectiveness of management of judo athletes' training process at initial stages is directly connected with the fact to what extent this process will consider specific potentials of trainees. In this aspect results of our experiment supplement the data of other researches. For example in research of Klymenko [20] it was found that sports psychologists and coaches, mainly, address to training of psychic functions. The author noted five groups of emotional reactions of martial arts wrestlers. They were directed to development of ability to overcome extreme situations in competition functioning without extra emotions.

Influence of psychological stability on increase of sports indicators' level and efficiency of sports functioning is shown in several works [55-58]. It permitted for the authors to find personalities' features (types of thinking, intellectual level, personal anxiety, will power, attention, aggressiveness). Such approach permitted to determine certain changes of psychological status of different qualification sportsmen under influence of competitions. In experienced sportsmen more optimal state and favourable dynamic, illustrating high level of functioning reliability was found [59].

In other research it was determined that school-children's self-assessment was excessively high. It was in average 80–85% from maximal indicator. It was also found that by all indicators self-assessment of sportsmen's physical condition is higher [60–63]. In practical work of judo coaches it is very important to find individual fighting styles and working out of individual methodic of judo athletes' training. In the research of [64] the model was determined, on the base of which it was possible to find individual features of sportsmen. Such approach permitted for the authors to determine statistically significant distinctions in self-assessment of the tested groups of sportsmen. Besides, it was noted that training experience has

statistically confident and positive correlation with level of sportsmen's self-assessment [65]. In other researches [3, 66, 67] it was shown that children with high sport assurance are characterized by ability to solve more difficult tasks. With moderate physical intensity children's activity is characterized by higher ambitions. It is noted that it is necessary to strengthen motivation of sports assurance since early childhood.

A number of other authors' researches prove appropriateness of our work in the aspect that sportsmen's preparation for competitions, participation in competitions, results of competitions influence on judo athlete attitude to competitions and training. This attitude can strengthen or weaken up to leaving sports [47, 48].

Besides, there is no explanation of this phenomenon in literature. That is why our research will be demanded and practically useful initiative for further researches on this topic. In the whole, analysis and generalization of pedagogic practice and data of modern scientific-methodic literature witness about presence of rather controversy contradictions in this field:

on social-practical level: between demand in preservation of trainees' contingent in sports schools (on the one hand) and insufficient level of their psychological fitness for successful overcoming of negative influences of competition results' functioning (on the other hand);

on scientific-theoretical level: between demand in control over youngster and junior judo athletes' attitude to sports practicing (in connection with active participation in competitions in annual training cycle) and absence of scientifically substantiated methodic on control over attitude to judo trainings (before competitions, in the process and after competitions).

The conducted by us research of judo athletes' attitude to sports functioning in competition period [12] showed the following: we found the factors, influencing on attitude to coming competition [15], i.e. positive emotional background, presence of coach at training sessions and at competitions in time of fights; systemic analysis of competition functioning, moral and emotional support of coach; setting tasks and goals for the given competition; familiarizing with plan of trainings for microcycle and for all stage of

pre competition trainings; feeling of readiness for competition; favourable psychological climate at trainings; successful performance at previous competitions; participation in important competitions in own city. Factors, weakening attitude to competitions are the following: frequent traumas, difficult relations with coach, monotonous character of training sessions.

Attitude of junior judo athletes to training process is influenced by psycho-emotional factors [17] (self-feeling, activity, mood) and by social-psychological factors (satisfaction with training process, relations with other trainees and with coach). Attitude to competition process is influenced by psycho-emotional factors. Attitude of highly qualified judo athletes to training and competition functioning is influenced only by psycho-emotional factors. Attitude of judo athletes to training and competition functioning at post competition period depends on efficiency of competition functioning [4], place, won in competition, personal features (self-assessment, character, motives). Attitude to training functioning strengthens at fourth training session after competition. Attitude to competition functioning strengthens at sixth training session.

Analysis of individual characteristics of attitude to sports functioning confirmed our assumption and showed the following: strengthening of components of attitude to sports functioning in competition period (training, competition, achievement of high results) was observed in judo athletes, who win prize places at competitions. The other judo athletes demonstrated weakening of the listed above components.

Youngster judo athletes' attitudes to training and competition functioning are a kind of independent characteristics. With rising of sportsmanship interconnection between them strengthens. In highly qualified sportsmen these kinds of correlations are interconnected.

In structure of judo athletes' attitude to sports functioning there is observed the following tendency: with increasing of sportsmanship, its orientation on training process reduces and orientation on competition process increases. It was found that in junior sportsmen orientation on training process prevails. In highly qualified adult sportsmen orientation on competition process prevails. Highly qualified sportsmen have

sufficient physical fitness and perfect technique. Competition functioning is the basis of their sports practicing [5].

On the base of our research's results we worked out methodic of formation of junior judo athletes' *active-effective* attitude to sports functioning, which include work in the following directions: determination and satisfaction of current demands; ensuring of favourable cooperation with youngster judo athletes; ensuring of positive emotional atmosphere at trainings and competitions; formation of favourable interpersonal relations in systems "coach-sportsman" and "sportsman-team"; formation of syndrome of achievement in youngster judo athletes; analysis of competition efficiency with determination of success and failure's reasons; development of efficiency quality; optimization of attitude to training and competition functioning with orientation on competition activity; formation of adequate assessment of own fitness, balancing of sportsman's ambitions and fitness.

When defining the methodic directions we oriented on the received by us results of our previous work [12, 15, 17, 19] and on the following

principles, known in theory of physical education and sports psychology: influence of interpersonal relations in sports team on strengthening and preservation of attitude to sports practicing [68-71]; at stage of initial specialization in structure of judo athletes' sports motivation efficient motivation with orientation on achievement of success becomes important [6, 47]; influence of sportsmen's self-assessment on setting goals and participation in competitions [72, 73]; favourable pedagogic cooperation of coach and sportsman influences positively on formation and preservation of sportsman's attitude to sports practicing [10, 74]; influence of positive emotions on human functioning [45, 75].

The work on formation of youngster judo athletes' *active-effective* attitude to sports functioning was fulfilled at precompetition stage and at postcompetition stage. For formation of judo athletes' *active-effective* attitude to sports functioning trainings are used. At precompetition stage they are as follows: training of personality's causation, actualization of mental functioning, motivation of achievement. At postcompetition stage the following trainings are used: casual schemas and inner motivation. The results of conducted by

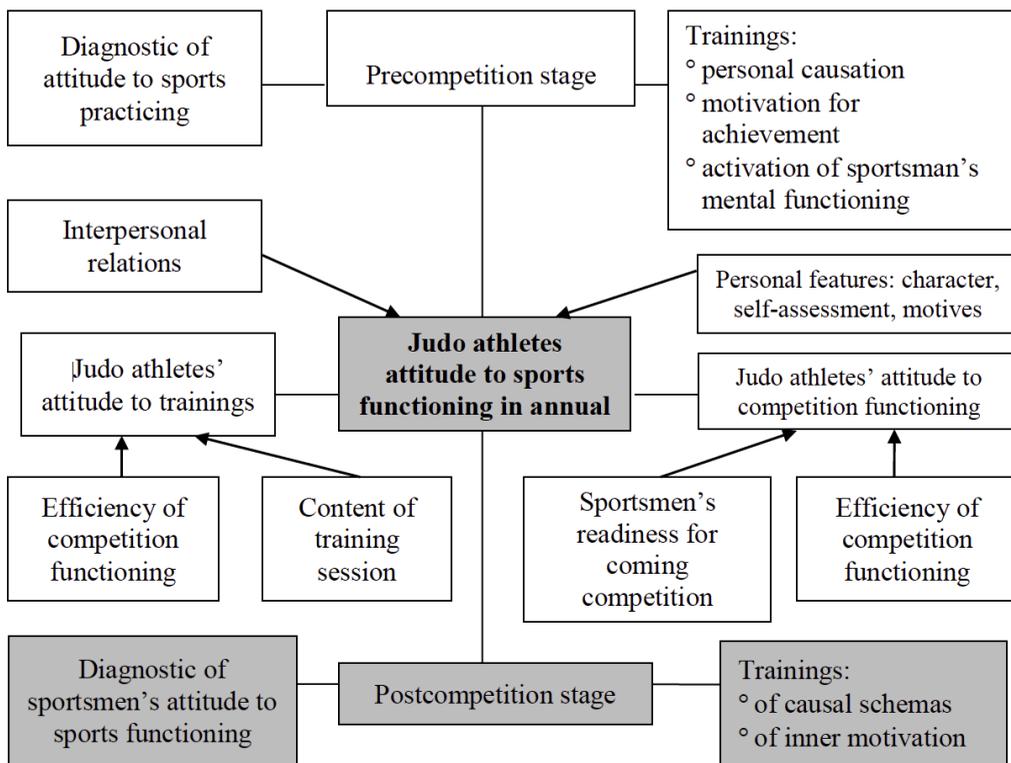


Figure 3. Formation of youngster judo athlete' attitude to sports practicing in annual training cycle

us pedagogic experiment witness about significant increase of the tested indicators, which characterize judo athletes' attitude to training and competition functioning and results of their participation in competitions.

Research of judo athletes' attitude to sports functioning and results of pedagogic experiment permit to present schematic model of formation of judo athletes' attitude to sports practicing in competition period of annual training cycle (Figure 3).

The issue which is still undervalued and rarely discussed in the scientific literature is the possibility to adapt the researches achievements related to the training motivation to practice of martial arts [76, 77] and effectiveness during the competitions tournament of combat sports (especially judo) for personal training self-defence [78-82]. This is a very important problem from the perspective of defence formations (policeman's, anti-terrorists, prison officers, body guards etc.), where physical intervention is an essential element of the social mission [83-88]. Methods and means of struggle according to the judo criteria finely enable an effective counteraction of the physical aggression according to the criteria right of self-defence [89]. An advantage of judo is also that long-term training (also other combat sports) stimulates the body balance disturbance tolerance skills [90]. Thus, the recommendation is justified that judo as a part of the training of firefighters [91, 92] and paramedics, because during rescue operations come to an interpersonal aggression. For example, in the Tokyo area at the beginning of this century from 18,000 of firefighters 3,600 practised judo recreational. [91].

CONCLUSIONS

Youngster judo athletes' *active-effective* attitude to sports practicing includes the following components, which differently influence on judo athletes' competition activity: orientation of competition functioning on achievement of success and avoiding of failures; orientation on training and competition functioning; interest to sports; sportsmen's orientation: on spiritual and material demands, social life, replenishment of special knowledge.

Study of youngster judo athletes' attitude to sports practicing in competition period permitted to mark out two groups of judo athletes. These groups are rather different by character of attitude to sports functioning and individual personalities' characteristics (self-assessment, character, motives for sports practicing): for first group of youngster judo athletes, with increasing of *active-effective* attitude to sports functioning (training and competition) it was characteristic: desire of success in sports, improvement of personal sports results; desire of sports perfection for successful performances at competitions; adequate and increased self-assessment; strong character; for second group of youngster judo athletes, with weakening of *active-effective* attitude to sports functioning (training and competition) it was characteristic: desire to show one's best (sports practicing and successes are felt and regarded from the point of own prestige, respect of friends, spectators); desire to participate in sports events due to their high emotional level, informal communication, social and emotional freedom; reduced self-assessment; weak character.

The fulfilled research of attitude to sports functioning in competition period permits to say that the character of youngster categories' judo athletes' *active-effective* attitude to training and competition functioning is determined by the following: place, won at competitions; personalities' features of junior sportsmen (self-assessment, character, motives).

Implementation of the worked out methodic into educational training process of 12-13 years' judo athletes' in competition period permitted to form their *active-effective* attitude to sports practicing. In the process of formation of judo athletes' attitude to sports practicing it is necessary to consider initial level of training and competition motivation in them, as well as to strengthen attitude to competition functioning.

The received positive results permit to recommend the worked out by us methodic for implementation in practice of youngster and junior judo athletes' training, also during judo in personal self-defence training and also as important element of professional training of defensive formations officers.

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