



**ACADEMICA**  
**An International  
Multidisciplinary  
Research Journal**  
(Double Blind Refereed & Peer Reviewed Journal)



**DOI: 10.5958/2249-7137.2020.01410.X**

## **CATALOG OF TRAINING TASKS FOR TRAINING SPECIAL ENDURANCE OF YOUNG GIRL HANDBALL PLAYERS**

**A.K.Ibragimov\***

\*Associate Professor,  
Faculty of Physical Culture,  
Head of the Department of Interfaculty Physical Culture and Sports,  
Bukhara State University, UZBEKISTAN

### **ABSTRACT**

*In the study, a catalog of motor (training) tasks was developed, aimed at the education of special components of endurance, manifested in playing competitive activity among young handball players (girls). It was assumed that the progressive growth of sports-technical and physical readiness of young and young female handball players in teams of potential reserve, high efficiency of competitive activity and indicators of its effectiveness will be achieved in the conditions of building the microstructure of training in the form of motor tasks, corresponding to their training effects to the load of competitive exercises.*

**KEYWORDS:** *Handball, Youth Sports, Women's Sports, Girls Handball Players 16-17 Years Old, Motor (Training) Task, Heart Rate - Heart Rate, Cardiac Monitors "POLAR".*

### **INTRODUCTION**

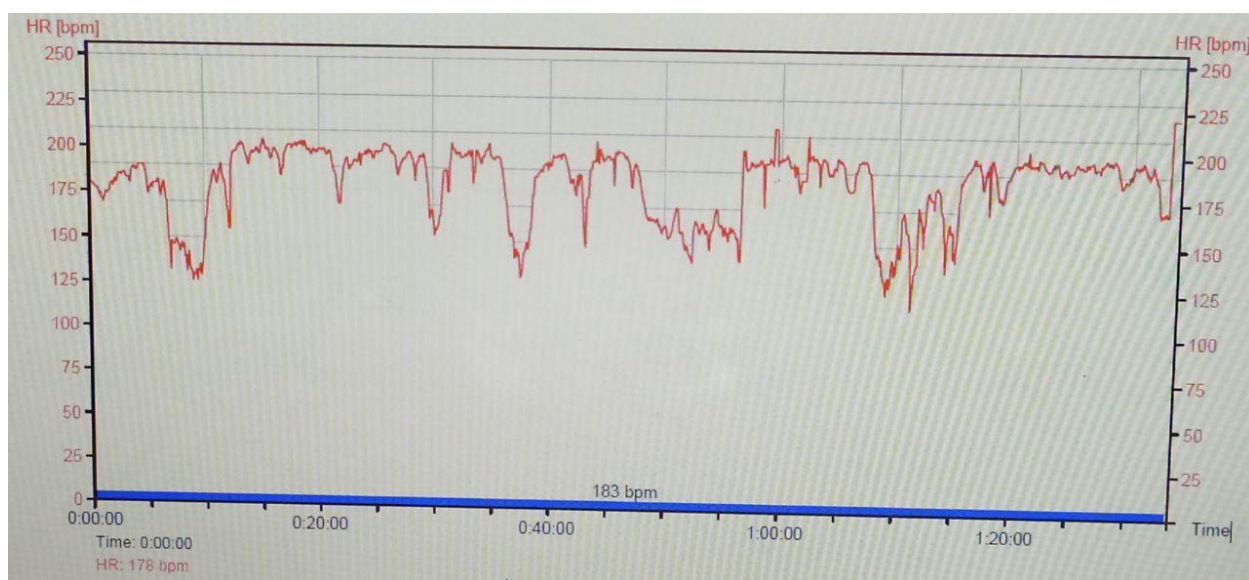
Modern views in the construction of sports training for young and qualified athletes are associated with the allocation of primary structural and functional units of the organization of motor activity, called motor (training) tasks [1,2]. The selection of such tasks in the training activity of young and qualified handball players should take into account the specialization of the functional reactions manifested in competitive activity [3]. At the same time, in the practical activity of novice coaches, due to the insufficient number of scientific and methodological recommendations, sometimes training tasks are solved that do not ensure the growth of sports, technical and physical fitness, since the composition of exercises, methods of their implementation, parameters of loads in their influence do not correspond to competitive effects [3]. By virtue of this fact, the study set a goal - taking into account the specifics of functional reactions manifested in the game competitive activity of girls-handball players, to develop a

catalog of training tasks that would ensure the growth of the leading sides of the preparedness of young athletes of 16-17 years old, and, first of all, special components of endurance [ 4].

The analysis of the internal load in terms of heart rate in the conditions of the Championship of Uzbekistan was carried out using the POLAR Team System.

## RESULTS OF STUDIES

Studies conducted during the Championship of Uzbekistan among girls aged 16-17 [5] showed that in the most intense games of the finals, about 80% of the active time of the competitive game takes place in the pulse range of a large (161-180 beats / min) and high intensity load ( from 181 bpm and above). Figure 1 shows the pulse curve reflecting the intensity of physical actions in the final game for the 3rd place with a 1 point loss to one of the most productive players in the match and the competition as a whole.

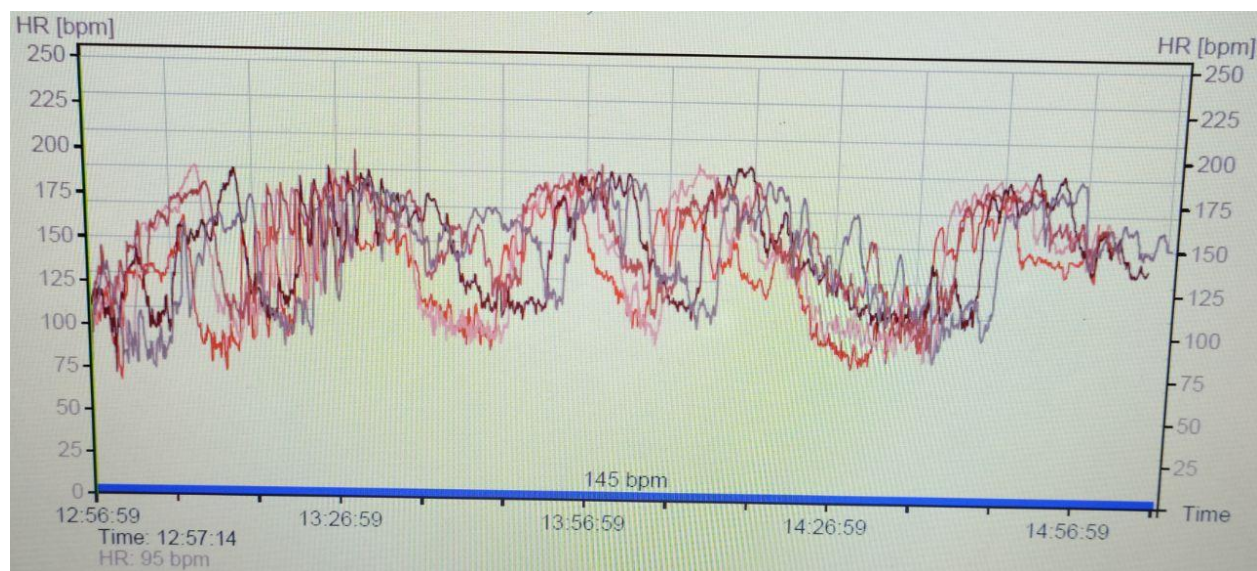


Person	RazzokovaMarjona	Date	16.02.19	Heart rate average	183 bpm		
Exercise	05020401	Time	16:29:35	Heart rate max	221 bpm		
Sport	Running	Duration	1:33:40.0				
Note				Selection	0:00:00-1:33:40(1:33:40.0)		

Figure 1 - Heart rate dynamics of a player in the final match of the Championship of Uzbekistan among girls aged 16-17

As a comparative example, Figure 2 shows the dynamics of heart rate for a number of players during a training session. The structure of the training consisted of the following scheme of sequential tasks: warm-up running and running tasks along the diagonal; stretching exercises - stretching; passing the ball in pairs along the court with the goal attack, back - a 2 × 2 game; Exercise in passing the ball with 3 versus 6 defense throughout the entire court; throws in pairs

from medium and long distance; 6 × 6 game with repetition of tactical interactions; free throws; 6 × 6 game with personal protection throughout the court; free throws. Despite the fact that high-intensity exercises were used in this training, the general parameters of the load differ significantly from the competitive ones. So, in the high-intensity zone, the players were 12.8% of the training time, in the high-intensity zone - 24.6%, in the medium-intensity zone - 22.8%, in the low-intensity zone - 39.8%.



o	Exercise	Date	Cursor	HR rate	Heart	Duration	Note
	Razokova Marjona/05012901	29.01.19	1 0 1	133 / 186		2:01:20.0	
	AmrulloevaMohigul/0 5012901	29.01.19	102	153 / 201		2:03:40.0	
	NurullaevaNigina/050 12901	29.01.19	111	145 / 189		2:03:25.0	
	ChorievaUmida/0501 2901	29.01.19	96	146 / 195		2:07:45.0	
	NiyozovaGulmira/050 12901	29.01.19	95	143 / 196		2:04:15.0	
	Mavlonova Farida/05012901	29.01.19	108	145 / 189		2:10:25.0	

Figure 2 - Dynamics of players' heart rate during a training session

Thus, in the training process, up to 60% of active time actually falls on work in the zone of moderate power (medium and low intensity), which hardly meets the requirements of effective competitive activity. The analysis of pulse curves made it possible to compile a catalog of motor tasks, in which the value of the load was determined according to the point system. Intensity gradation the load was determined: insignificant - heart rate - 114–120 beats / min, 1–2 points; moderate - heart rate - 126-132-138 beats / min, 3-4-5 points, respectively; average - heart rate - 144–150–156–162 beats / min, 6–7–8–10 points, respectively; large - heart rate - 168–174–180 beats / min, 12–14–16 points, respectively; submaximal and maximum - heart rate - 185-192-198beats / min, 20-24-32 points, respectively. For example, one training session used pulse response exercises with 192, 174, 137, 186, 150 bpm, which corresponds to 25, 14, 5, 21, 7 points, i.e. a total of 73 points. Naturally, the next or previous trainings had different total scores, for example, 96, 112, 64, 82, etc. Thus, summing up the normalized cost of the load, we get a value that characterizes both an individual training session and the training stage as a whole. By determining the overall total assessment of the load at each stage, it is possible to compare these stages with each other in quantitative terms using a single indicator. In the course of the research, a catalog of motor tasks aimed at developing special game endurance was developed, including 4 clusters [1, 2, 4]: I Cluster - heart rate up to 135 beats / min. The intensity is low to moderate. The orientation is aerobic. Education of flexibility, strength. Exercise is mostly not specialized, simple. The magnitude of the load is from 1 to 5 points. Motor tasks: a set of stretching exercises; set of exercises ORU; even running; about-preparatory jumps; jumping from a place in pairs; recovery swimming; strength exercises on simulators. Cluster II - heart rate 136–160 bpm. Average intensity. Orientation, mixed aerobic-anaerobic. Education of special endurance, strength. Exercises mostly specialized, simple and complex. The value of the HR load is –144, 150, 156, 160 beats / min, 6, 7, 8, 9 points. Motor tasks: free throws - "picked up and threw"; free throw in pairs; medicine ball passing in place and in motion; dribbling with two balls in place and in motion; passing in motion in pairs, alternately with two balls; dribbling in pairs, holding the hand, one pulls the other player behind him, both dribble the ball; "Jerking" with a change in the direction of movement, stopping with "stomping" ("dance"); dribbling the ball with a change in direction, with transfers followed by an attack; jump in pairs in series of 10; going to the right and left, a jump throw after a step; hitting the ball on the backboard; "Handball" cross, shuttle with throws from different distances.

III Cluster - heart rate 161-180 beats / min. The intensity is great. Orientation, mixed aerobic-anaerobic. Education of special endurance, strength, speed-strength qualities. The exercises are mostly specialized and complex. The value of the heart rate load - 162, 168, 174, 180 beats / min, 10, 12, 14, 16 points. Motor tasks: playing with a "shuttle"  $5 \times 4$ ,  $6 \times 6$ ; two-sided games without pressure; game  $1 \times 1$  on two gates; game  $5 \times 3$ ,  $6 \times 5$ ,  $4 \times 4$  on two shields; double-sided games with periodic use of pressure; "Repeated" jumps; running on segments of 300, 400, 600 m.

IV Cluster - heart rate from 181 and above beats / min. The intensity is submaximal and maximum. The orientation is anaerobic. Education of speed, speed-strength abilities. The exercises are mostly specialized and complex. The value of the heart rate load is 185, 192, 198 beats / min, 20, 24, 32 points, respectively. Motor tasks: varieties of "eights" - narrow, wide, with catching up, followed by a game of  $5 \times 2$ ; the game  $6 \times 3$ ,  $6 \times 6$ ,  $6 \times 5$  with access to the "fast break"; exercises in fast break  $6 \times 1$ ,  $6 \times 2$ , etc. ; shuttle running with or without dribbling

from front to back; game in a numerical advantage  $6 \times 1$ ,  $6 \times 2$ , etc. ; playing with pressure throughout the court; control and qualifying games using substitution.

Thus, in our study, the parameters of the training load were determined on the basis of the relationship between heart rate, the nature of energy supply and the predominant orientation of tasks when solving certain pedagogical tasks. In general, the value of the training load characterized the degree of influence of certain exercises performed by the player on his body. The catalog clusters also took into account the indices of specialization, complexity and orientation of training loads [5]. The predominant fulfillment of motor tasks from one cluster of the catalog allows achieving a certain intensity in the load, programming the general functional effect, while clear parameters of the training load in terms of the duration of the task, its repetition, the duration of rest are provided by the standard reactions of the body. The inclusion of tasks from various clusters will help us regulate the dynamics of the increase in the load, and their vertical ordering will provide an opportunity to take into account the individual reactions of the body of athletes-handball players.

## CONCLUSION

When planning training sessions, it is recommended to use the catalog of complexes-tasks according to the training effect indicators - the heart rate. For exercises with a low load, choose tasks mainly from cluster I (heart rate - up to 135 beats / min), from the middle - the second (heart rate - 136–160 beats / min), from the big one - from the third (heart rate - 161–180 beats / min), with the maximum - IV cluster (heart rate - 181 and above). Summing up the assessment of the load in points, you can get a normalized value that characterizes both a separate training session and the training stage as a whole.

## REFERENCES

1. AkramovaSurayoRenatovna. Interpretation of lexical and semantic features of uzbek-tajik words in jamalkamal's poem "Uzbek language. ACADEMICIA: An International Multidisciplinary Research JournalYear: 2020, Volume: 10, Issue: 5First page: (1434) Last page: ( 1440) Online ISSN: 2249-7137. Article DOI : [10.5958/2249-7137.2020.00342.0](https://doi.org/10.5958/2249-7137.2020.00342.0)
2. Akramova G. R.Modern approaches to the development of critical thinking of students. European Journal of Research and Reflection in Educational Sciences Vol. 7 No. 11, 2019 ISSN 2056-5852.
3. Akramova G.R., Akramova S.R. Developing critical thinking on elementary class pupils is the most important factor for preparing social relationship. JOURNAL OF CRITICAL REVIEWS. ISSN- 2394-5125 VOL 7, ISSUE 17, 2020. [Electronic Resource]. URL: <http://www.jcreview.com/?sec=cissue/>.
4. AkramovaGulbakhorRenatovna. Psychological and pedagogical foundations for the development of critical thinking of students. Academicia: An International Multidisciplinary Research Journal Year: 2020, Volume: Vol. 10, Issue 4. First page: (581) Last page: (584) Online ISSN: 2249-7137. Article DOI: [10.5958/2249-7137.2020.00184.6](https://doi.org/10.5958/2249-7137.2020.00184.6)
5. Azimovna FatullayevaMuazzam, Ashrapovich NarzullayevFarrux. Motivation of students to do sports as part of physical education classes ACADEMICIA: An International Multidisciplinary Research Journal. Year : 2020, Volume : 10, Issue: P: 1446-1450. Online ISSN : 2249-7137. Article DOI : [10.5958/2249-7137.2020.00344.4](https://doi.org/10.5958/2249-7137.2020.00344.4)

6. Kadirov Shokhrukh Nematovich, Abduyeva Sitorabonu Savriddin kizi, Fatullayeva Muazzam Azimovna, Kurbanov Shukhrat Kuldoshevich. USING OF INNOVATION TERMS IN PHYSICAL EDUCATION AND SPORT LESSONS AND THEIR SOCIAL AND EDUCATIONAL FEATURES. *Journal of Critical Reviews*. doi: [10.31838/jcr.07.06.84](https://doi.org/10.31838/jcr.07.06.84). 2020; 7(6): 470-471.
7. KasimovaZeboKhamidovna. Application of interactive methods in teaching psychology. *Academicia: An International Multidisciplinary Research Journal* <https://saarj.com>. Year : 2020, Volume: 10, Issue: 9. P. 197-205. Article DOI : [10.5958/2249-7137.2020.01046.0](https://doi.org/10.5958/2249-7137.2020.01046.0)
8. MirzayevaSayyoraRustamovna. Psychological features of attitudes of students to their own health in conflict situations. *Journal of Critical Reviews*. ISSN- 2394-5125 VOL 7, ISSUE 17, 2020. <http://www.jcreview.com/?sec=cissue>.
9. Nematovich KS, Savriddinkizi, AS, Azimovna FM, Kuldoshevich KS. Using of innovation terms in physical education and sport lessons and their social and educational features. *Journal of Critical Reviews* 2020;7(6):470-471. doi:10.31838/jcr.07.06.84.
10. S.S.Abdueva, Sh.Kadirov, M.Fatullaeva, Sh.Khurbonov. Using of innovation terms in physical education and sport lessons and their social and educational features. *Journal of Critical Reviews* ISSN-2394-5125 Vol 7, Issue 6, 2020
11. S.S.Abdueva, Sh.Khurbonov, N.Sabirova. Evolution of physical performance and techniques of handball girls aged 11-12. *International Journal of Advanced Research in Science, Engineering and Technology (IJARSET)*. 2019 december
12. S.S.Abdueva. Activities that increase children's interest in the sport of handball. *Innovatsionno-razvitiye nauki I obrozovaniye jdnarodnaya nauchno-prakticheskaya konferentsiya 2020*
13. Samarova Shoxista Rabidjanovna, Rakhmonova Muqaddas Qahramanovna, Mirzarahimova Gulnora, Ikromovna, Maratov Temur Gayrat ugli, Kamilov Bobir Sultanovich. Psychological aspects of developing creative personality and the concept of reduction of creativity to intellect. *JCR*. 2020; 7(17): 498-505. doi: [10.31838/jcr.07.17.69](https://doi.org/10.31838/jcr.07.17.69)
14. Абдуллаев М.Ж. *Swot-анализ в структуре информационных технологий физического воспитания // Система менеджмента качества в вузе: здоровье, образованность, конкурентоспособность. Сб. науч. тр. VII Междунар. науч. - практ. конф., 2018, С. 14-18.*
15. Андрианова, Р. И. Планирование этапа предсоревновательной подготовки к главным стартам сезона женских баскетбольных команд резерва : автореф. дис. канд. пед. наук : 13.00.04 / Андрианова Раиса Игоревна. Краснодар, 2017.
16. Германов, Г. Н. Классификация двигательных заданий игрового характера (на примере баскетбола) в программном материале по физической культуре школьников 5-х классов / Г.Н. Германов, И.В. Машошина // Вестник Тамбовского университета. Серия : Гуманитарные науки. – 2009. – Вып. 12
17. Германов, Г. Н. Тренировочное задание как первичная единица микроструктуры спортивной тренировки / Г.Н. Германов, Е.Г. Цуканова // Ученые записки университета им. П.Ф. Лесгафта. – 2011. – № 4 (74). – С.
18. Ибрагимов А.Х. Оценка эффективности системы раннего оповещения о сильных землетрясениях в условиях редкой сети сейсмических станций. DOI:

<https://doi.org/10.33408/2519-237X.2020.4-3.280> УДК 550.34.03.

<https://cyberleninka.ru/article/n/otsenka-effektivnosti-sistemy-rannego-opovescheniya-o-silnyh-zemletryasenyah-v-usloviyah-redkoy-seti-seysmicheskikh-stantsiy>

- 19.** Ибрагимов А.Х. Оценка эффективности системы раннего оповещения о сильных землетрясениях в условиях редкой сети сейсмических станций. DOI: <https://doi.org/10.33408/2519-237X.2020.4-3.280> УДК 550.34.03. <https://cyberleninka.ru/article/n/otsenka-effektivnosti-sistemy-rannego-opovescheniya-o-silnyh-zemletryasenyah-v-usloviyah-redkoy-seti-seysmicheskikh-stantsiy>
- 20.** Кадиров Ш.Н. РАЗВИТИЕ ЖЕНСКОГО СПОРТА В УЗБЕКИСТАНЕ [DEVELOPMENT OF WOMEN'S SPORTS IN UZBEKISTAN] // INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS OF PEDAGOGY AND PSYCHOLOGY (Boston, USA - 19 April, 2018). с. {см. \_\_\_\_\_ сборник} Свободное цитирование при указании авторства: <https://scientific-conference.com/h/sborniki/pedagogicheskie-nauki2/1110-development-of-women.html>
- 21.** Кадиров Ш.Н. ФИЗИЧЕСКОЕ ВОСПИТАНИЕ КАК ФАКТОР УСПЕХА СТУДЕНТОВ // European research № 5 (52) / Сб. ст. по мат. «European Research: Innovation in Science, Education and Technology/Европейские научные исследования: инновации в науке, образовании и технологиях»: ЛП межд. науч.-практ. конф. (Лондон. Великобритания. 08 мая, 2019). С. {см. сборник}. Свободное цитирование при указании авторства: <https://internationalconference.ru/13-00-00-pedagogicheskie-nauki.html?type=atom&start=76>
- 22.** Касимова З.Х. РАЗВИТИЕ ВАЖНЫХ ПСИХОЛОГИЧЕСКИХ КАЧЕСТВ ЛИЧНОСТИ РУКОВОДИТЕЛЯ [DEVELOPMENT OF IMPORTANT PSYCHOLOGICAL QUALITIES IN THE PERSONALITY OF THE LEADER] // LXXIV International Scientific Review of the Problems and Prospects of Modern Science and Education Свободное цитирование при указании авторства: <https://scientific-conference.com/grafik/grafik-2020-pervoe-polugodie.html> (Boston, USA. - 27 October, 2020). с. {см. \_\_\_\_\_ сборник} Свободное цитирование при указании авторства: <https://scientific-conference.com/h/sborniki/pedagogicheskie-nauki2/2274-development-of-important-ps.html>
- 23.** Касимова З.Х. ОСОБЕННОСТИ НАЦИОНАЛЬНЫХ ЦЕННОСТЕЙ И МЕЖКУЛЬТУРНЫХ КОММУНИКАЦИЙ В СОДЕРЖАНИИ ГУМАНИТАРНОГО ОБРАЗОВАНИЯ // Вестник науки и образования №22(76), 2019. [Электронный ресурс]. URL: [http://scientificjournal.ru/images/PDF/2019/VNO-76/osobennosti-natsionalnykh\\_1.pdf](http://scientificjournal.ru/images/PDF/2019/VNO-76/osobennosti-natsionalnykh_1.pdf)
- 24.** Леднички, А. Уровень развития физических качеств молодых баскетболистов сборной Словакии в категории U14 / А. Леднички, Л. Долежаева, Т. Галлова // Теория и практика физ. культуры. – 2017. – № 12.