

ABSTRACT

**Inaugural Dissertation for the Degree of Doctor of Philosophy (PhD)
Specialty 6D090200 – Tourism Osman Agitovich Sardarov
Topic: Organizational, Scientific, and Methodological Bases of Development of
Children and Youth Tourism in the Republic of Kazakhstan.**

The relevance of the research topic is a reflection of the fact that children and youth tourism is the most important means of health promotion and education of the younger generation in the Republic of Kazakhstan. The changes in public life in Kazakhstan have led to the collapse of children and youth tourism organizations of supplementary education, children health camps began to close, and the number of children and youngsters engaged in tourist and local history activities have decreased. The lack of qualified pedagogical, tourist, and sports specialists who master the technologies of organizing and conducting tourist events has become a significant problem.

At present, there are some positive changes in the development of children and youth tourism in Kazakhstan, but there is still no unified organizational structure that would coordinate the joint activities of public-private partnerships in the development of children and youth tourism. The training personnel for children and youth tourism that meets the modern requirements of the XXI century is in its formative stage. Currently, special attention is paid to tourism only from the position of economics, where a specialist - a Tourism Manager - must provide income from a particular tourist event. The lack of tourism instructors, school tourism instructors, and guides is an issue for social (mass) tourism and children and youth tourism. Training of professional specialists in these areas can be carried out in higher educational institutions of tourist and sports specialization, which have licenses for the Tourism and Physical Culture and Sport educational programs. Also, the specifics of training areas in the working curricula ("minor" educational trajectories), the availability of material and technical base, and professional training of the teaching staff should be taken into account.

In the regulatory framework of the Republic of Kazakhstan, in the field of tourism and education, special attention is paid to highly qualified personnel, in particular specialists in children and youth tourism, which determines tendencies in increasing information load and overload of students, which can lead to a significant, negative impact on the quality of physical, psychological and emotional health. In the meantime, the coverage of children with supplementary education is significantly less than in other countries, and is only 21.5%, and the coverage of sports sections is 20%.

In this regard, the issues of improving the health of the younger generation by increasing the number of tourist and sports sections in schools and extracurricular organizations are becoming relevant. However, the left-over principle in the approach to solving social problems is extremely painful for mass forms of sports and recreation tourism: hikes, mass tourist and sports events, organization of gatherings and camps.

The main goal of children and youth tourism is forming a healthy lifestyle for children and youngsters, which is reflected in the Kazakhstan-2030 Strategy, which

notes that children and youth are the new generation of our country and they should not lose their moral compass in modern social and economic conditions.

The article *Looking into the Future: Spiritual Revival* emphasizes that one of the main conditions for the modernization of public consciousness is the preservation of own national cultural and genetic code, the fundamental basis of which is patriotism. Thereupon, patriotism is considered as part of the national strategy of the state, and one of its foundations is laid in the love of a small motherland, native land – Tugan Zher (Kaz.- "native land"). The main goal of the Tugan Zher program is to foster a sense of true patriotism among Kazakhstanis, which is expressed in love, pride, and devotion to their village, city, region, its history, culture, traditions and life, and moral duty to the Motherland.

The *Seven Facets of the Great Steppe* article indicates that "Space is the measure of all things, time is the measure of all events". A nation that remembers, values, takes pride in its history has a great future. Pride in the past, a pragmatic assessment of the present, and a positive future outlook are the keys to our country's success."

The tasks set for the Kazakh society by N.A.Nazarbayev, the First President of the Republic of Kazakhstan, and K.K.Tokayev, the Head of state on the development of mass physical culture, have caused the need and importance of solving the problem associated with the development of children and youth tourism, the broad involvement of students in tourist and local history activities from an early age. Participation in various tourist hikes creates unique conditions for the formation of a healthy lifestyle, health promotion, as well as for the development of the intellectual, cognitive, emotional, and strong-willed personality of children and youngsters.

The importance of the topic is due to the fact that a significant part of Kazakhstan's territory is mountains, desert, and semi-desert country with a hot climate, where there is an abundance of archaeological, historical, cultural sites and monuments, which have not been needed for a long time and have kept their ancient savagery.

Carrying out tourist hikes in these regions will be very attractive for young people, both for educational, health and sports purposes.

However, many issues related to the scientific and methodological justification for the effectiveness of using mountain conditions in the system of health and rehabilitation measures, improving physical performance in semi-desert and desert areas with hot climates have been studied very insufficiently. Prospects for the development of children and youth tourism are associated with a significant interest of young people in the historical past of the Kazakh people and the revival of the Silk Road. All of the foregoing makes it necessary to develop recommendations for optimizing physical activity, motor activity modes in extreme natural and climatic conditions, and search for ways and means that increase the human's reserves, preserve his performance capability, and strengthen his health.

Generally, it can be noted that children and youth tourism is a unique means of educating the personality, which contributes to the following:

- sense of nationhood and patriotism education;
- formation of a fully developed and physically healthy personality;

- introducing the younger generation to a healthy lifestyle through active motor activity, communication with nature, as an alternative to drugs and bad habits, education of will and spirituality;
- practical knowledge of the native land, acquaintance with historical and cultural monuments, with the natural environment;
- organization of active leisure and summer recreation for students;
- formation of ecological culture;
- instilling skills of labor, social activity, search and research work, professional orientation, social adaptation.

The topic coverage. Analysis of scientific and methodological literature, materials of dissertations revealed that issues, problems, areas, organization features of children and youth tourism, tourism and local history activities and training are considered by Kazakh and foreign scientists in the following areas of interdisciplinary sciences: pedagogy, psychology, geography, economics, ecology, medicine, biology, physical culture, and sports.

The problems of teaching Kazakhstan people about patriotism, national traditions, moral education, the use of Kazakh ethnopedagogy, ethnography are presented in the works of the following scientists: S.K. Kasenov, Z.H. A. Kasymbekov, A.A. Kalyuzhnyi, L.A. Bayserkeyev, K. M. Omarov, S.K. Alshymbekov and others.

The scientific works of Ye. L. Pisarevskiy, N.S. Mironenko, I.T. Tverdokhlebov, V.A. Kvartalnyi, I.V. Zorin, R.S. Erdavletov, N.A. Guliyev, I.I. Duranov, Ye.S. Nikitinskiy, O. B. Mazbayev, B.N. Asubayev, B Sh. Abdimanapov and a number of other authors have sufficiently covered the issues related to tourist and recreational resources, territorial and recreational systems, tourist attractions, sustainable tourism, etc.

Various aspects of active types of tourism, development of tourist routes, regulation of physical activity of children and youth, health effects of mountain hikes, optimization of motor activity of tourists in mountainous and desert areas, training personnel in active types of tourism are reflected in numerous works of domestic and foreign researchers A.N. Makogonov, V.N. Vukolov, Yu.V. Baykovskiy. T.V. Baykovskaya, A.A. Guzhalovskiy, I.V. Zorin , A.I. Zorin , N.A. Ogiyenko, V.A. Korablev, M.I. Irgebayev, and others.

The works of Russian authors such as A.V. Darinskiy, A.A. Ostapets-Sveshnikov, V.I. Kurilov, Yu.S. Konstantinov, D.V. Smirnov, I.N. Popov, A.I. Popov provide information about theoretical and methodological foundations of children and youth tourism, tourism and local history activities, regional and local history component, environmental education, activities of children health camps.

In their works, domestic scientists such as O.B. Mazbayev, V.P. Fomin, N.V. Ivleva, A.N. Litvinova, M.N. Musabayeva, A.M. Tekesbayeva, D.D. Baydaliyev, T.V. Imangulova, L.S. Nurabayeva have covered the issues of youth tourism mainly from the pedagogical, geographical, local history and ecological positions.

In Russian scientific works, the scientists like Ye.A. Klyushnikova, S.A. Ivanova, Ye.A. Pavlov, S.A. Goniants, D.F. Lavrov, A.M. Kuzmin, and others

consider issues about the pedagogical conditions for the development of children and youth tourism, training and retraining of personnel for public tourist organizations in the system of supplementary education.

In scientific publications of such Russian scientists as A.M. Vetitnev, E.V. Orgina, A.N. Kosykh, Ye.A. Maslakov, A.A. Bakhvalov the issues of children and youth tourism were discussed from the perspective of economics and management, social aspects of children tourism, management of the market for children health tourism, services for children and youth tourism in the context of the formation of a socially-oriented economy.

However, many of the recommendations of such scientists as A.U. Appenyanskyi, V.N. Sergeyev, L.G. Rubis, V.F. Builenko, A.A. Kozlov, S.A. Petrosyan, O.V. Pirogova, S.A. Sergeyeva, Yu.A. Shtyurmer concerning the organization of carrying out of tourist hikes are developed in the conditions of plain areas with a more temperate climate. In a dry and very hot climate, there is a decrease in the reserves of the body. There is a close relationship between an increase in body temperature and heart rate (HR) according to I.M. Mammadov, A.G. Grigoryan, Ye.I. Frank, L.M. Kurbanova, Yu.A. Ivanov, A.Yu. Tilis, B.G. Bagirov, N.D. Bagirova, V. P. Kovalenko, V.P. Kovalenko, A.S. Andropov and according to the research results of F.F. Sultanov, A.N. Azhayev, H.B. Rowell, G.H. Brengelmann, J.A. Murray, B.R. Rakhmetov, A.R. Khekimova, and others.

Analysis of materials of scientific research works, practitioners, research of the practical experiences of the advanced education centers of the Ministry of Education and Science of the Republic of Kazakhstan, practitioners of children and youth tourism also shows that there are a number of unresolved issues related to the study of health effects of tourism on the body of the younger generation and optimization of motor activity during campaigns in different climatic and geographical conditions, training and retraining for youth tourism and others.

Therefore, many controversial and problematic issues remain, which has led to the current **contradictions**

- between the need to develop mass children and youth tourism and the lack of professional tourism personnel.

- between the need to develop children and youth tourism and the lack of a single state management body for institutions of supplementary education, tourism and sports, tourism and local lore, and the lack of software and methodological support for their activities.

- between the possibility of mass use of the richest tourist and recreational resources of Kazakhstan and the lack of awareness of people about the health benefits of active recreation in the mountains and the lack of scientific developments containing recommendations for organizing motor activity of tourists in various climatic and geographical conditions, providing stimulation of adaptive capabilities and improving exercise performance.

All the above-mentioned contradictions have determined the choice of the following **research topic**: Organizational, Scientific, and Methodological Bases of Development of Children and Youth Tourism in the Republic of Kazakhstan.

The research target is the system of children and youth tourism.

The research subject is the conditions for the development of children and youth tourism in the Republic of Kazakhstan.

The research hypothesis: If the science-based recommendations on regulating physical activity for young tourists while hiking in different climate-geographic conditions of the regions of Kazakhstan are developed, the training of professional personnel is carried out for the children and youth tourism (CYT), it will contribute to the development of health and cognitive sphere of personality, as this forms a healthy lifestyle, social maturity of the younger generation, which is the basis for the development of youth tourism. In this regard, there is a need to develop a training program for training personnel for children and youth tourism.

The research purpose is the scientific and methodological justification of the effectiveness of using mountain conditions for health purposes, optimization of motor activity of young tourists in areas with a hot climate. Development and implementation of a personnel training program for children and youth tourism.

In accordance with the proposed hypothesis and stated purpose, the following **research tasks** were defined:

1. Reveal the concept, nature, types, functions of children and youth tourism; identify the role of age-related peculiarities in youth tourism; show the importance and technique of education of physical qualities of tourists.

2. Analyze the regulatory base and current state of children and youth tourism in the Republic of Kazakhstan.

3. Develop and implement the Children and Youth Tourism educational program

4. Determine the health-improving effectiveness of mountain hiking; develop scientifically-based recommendations for regulating physical activity and optimizing motor activity during hiking in mountainous areas and in hot climates.

5. Develop and implement educational and methodological support tools for training and retraining of personnel in children and youth tourism.

The methodological and theoretical basis of the research is the concept of education and development of the personality; the concept of an integral pedagogical process; the concept of children and youth tourism (A. A. Ostapets-Sveshnikov) The work uses the positions of the most famous experts of the present time in the field of children and youth tourism (Yu.S. Konstantinov, D.V., Smirnov, Yu.V. Baykovskiy, E.A. Pavlov, I.N. Popov, A.N. Makogonov, Ye.S. Nikitinskyi, O.B. Mazbayev, V.N. Vukolov, M.I. Irgebayev, V.P. Fomin, N.V. Ivleva, T.V. Imangulova, and others. We have also analyzed the scientific works of economists, geographers, and other specialists.

The law on tourism activity defines the social and economic, and organizational bases of tourism activities in the Republic of Kazakhstan, which emphasizes that tourism in the country should develop in three focuses (economic, geographical, and pedagogical). This dissertation research has a social and pedagogical focus.

The research sources: regulatory documents: Law of the Republic of Kazakhstan on Education; Law of the Republic of Kazakhstan on Tourism Activities;

Kazakhstan-2030 Strategy of Development of Kazakhstan, where special attention is paid to forming of a healthy way of life through the sphere of youth tourism and local history; Tourism Services national standard ST RoK. Services for children and youth tourism. General Requirements and others.

The following **research methods** were used to test the hypothesis and stated tasks:

- **theoretical methods:** analysis of psychological and pedagogical, educational and methodical and specialized literature on the issue of the research; analysis of regulatory documentation; method of theoretical generalization;

- **empirical data:** personal participation in monitoring the educational process at the university; questionnaires; organization and performance of pedagogical experiments; assessment of the impact of hikes on physical qualities, physical performance; statistical processing of the experiment results.

- **medical and biological methods:**

a) chronometry – as a research method was used when hiking in mountainous areas and in hot climates to regulate physical activity and rest pauses during walking

b) registration of heart rate - determination of the heart rate at rest, as well as during laboratory stress tests, was performed using an electrocardiogram (ECG), which was recorded on electrocardiographs such as EK1T-03M (ЭК1Т-03М), AT-101 (Schiller, Switzerland). To improve the accuracy of heart rate detection during functional loads, ECG recording lasted at least 30 seconds. In this case, to calculate the heart rate per minute, the number of R-R intervals (taking into account at least such ten intervals), followed by recalculation per minute.

c) determination of the respiratory minute volume at rest, as well as during functional loads, was carried out by collecting exhaled air (gas exchange) for a strictly fixed time in gas-tight containers (Douglas bags with a volume of 160 liters) made of plastic covered with silk. Mouthpieces and breathing masks were used with a respiratory valve that creates minimal resistance at the inlet and outlet (no more than 10-15 mm of the water column when air flows at a volume speed of 250 l/min. The duration of exhaled air collection varied from 30 seconds to 5 minutes, depending on the research tasks, and its volume was determined using a gas meter of the ГСБ-400 (GSB-400) type. The temperature and barometric pressure were recorded simultaneously, and a small portion of air was sent for gas analysis, which was carried out on the ГВВ-2 (GVV-2) apparatus. The accuracy of this method of gas analysis is so high (0.05-0.1%) that the operation of all modern automatic and high-speed gas analyzers is monitored and corrected based on data obtained on the device type ГВВ-2.

d) determination of exercise performance - the PWC₁₇₀ test in our observations was performed using an electric Ergoracer ergometer by Kettler (FRG). In addition to the PWC₁₇₀ indicator, exercise performance (EP) was determined at a heart rate of 130 and 150 b/min. Determination of exercise performance was carried out in full accordance with the generally accepted methodology, the essence of which was as follows. The power of the first load was identified depending on the body weight and resting pulse rate. The second load is selected so that the heart rate in the fifth minute

of work rises to 170 b/min. Calculation of exercise performance at a heart rate of 170 b/min is made using the following formula:

$$PWC_{170} = N_1 + (N_2 - N_1) \cdot 5 \frac{170 - HR_1}{HR_2 - HR_1},$$

where: PWC_{170} is load power at a heart rate of 170 b/min;

N_2 and N_1 are the power of the first and second degrees on the bicycle ergometer, kg-m/min;

HR_1 and HR_2 are heart rate at the first and second degrees of the bicycle load on the ergometer, b/min.

The scientific novelty of the research is as follows:

- the essence of the definition of the "children and youth tourism" concept, types and functions of children and youth tourism is clarified;

- the potential of the features of children and youth tourism in the formation and development of the individual's personality through age categories is revealed;

- for the first time the educational program, as well as Children and Youth Tourism educational tools in the framework of the Tourism educational program on the Sports and Health Tourism trajectory of training were developed and implemented in the educational process.

- for the first time, the effectiveness of mountain hikes was experimentally confirmed, depending on their duration.

- it is concluded that a significant health effect of weekend mountain hikes occurs after three or four hikes in the mode of one hike per week. A one-week hike in the middle altitude improves aerobic capacity, exercise performance, and exercise tolerance.

- it was first demonstrated that a significant factor affecting the intolerance of physical activity during a hike is the high air temperature; the severity of muscle work and the energy cost of walking young tourists in a hot climate has been assessed, depending on the composition of the soil, the weight of the load carried and the air temperature.

- it was shown that mountain training is the most effective means of maintaining exercise performance during a hike in a hot climate.

- for the first time, science-based recommendations have been developed for regulating physical activity during hikes for young tourists in various climatic and geographical conditions.

- the obtained experimental results were used to develop courses and disciplines for training tourist personnel.

The main provisions submitted for defense are the following:

- the essence of the definition of the concepts of "children's and youth tourism", types and functions of children's and youth tourism;

- educational potential, age characteristics, categories of children and youth tourism and methods of education of physical qualities of tourists;

- the developed educational program, as well as Children and Youth Tourism educational tools in the framework of the Tourism educational program on the Sports

and Health Tourism trajectory of training is recommended for implementation in the educational process in universities that train tourist personnel.

- weekend hikes, three-and six-day mountain hikes have a significant impact on improving exercise performance, the aerobic capacity of the body, which can be effectively used to strengthen the health of the younger generation.

- assessed the severity of muscle work during hiking, depending on the terrain, the state of the ground, the weight of the load carried, and the air temperature, which are the basis for the development of optimal modes of motor activity of young tourists in various climatic and geographical conditions.

- educational and methodological support tools for training children and youth tourism.

The theoretical and practical significance of the research is as follows:

- the educational program, as well as Children and Youth Tourism educational tools in the framework of the Tourism educational program on the Sports and Health Tourism trajectory of training were developed and implemented into the educational process.

- Reference Dictionary of Camping Terms electronic study guide was prepared and implemented;

- experimentally confirmed the effectiveness of hiking trips and developed recommendations for regulating physical activity in mountainous areas and in hot climates.

- held lectures and practical training courses, "Development of creative abilities of students in the conditions of additional education", "Organization of work of the trainer-instructor of children and youth tourism" master classes, together with the Republican Training Center for Supplementary Education of the Ministry of Education and Science of the Republic of Kazakhstan;

- research materials can be used by specialists in the work of tourist groups, clubs, sections, when conducting hiking trips, organizing tourist camps, etc.

- the theoretical provisions of the research can contribute to improving the effectiveness of tourist work in the field of youth tourism in the Republic of Kazakhstan.

The reliability of the results obtained is based on a scientifically based methodology: analysis of foreign and domestic scientific and methodological literature, regulatory documents of the Republic of Kazakhstan on the problem, based on the use of modern complex methods that correspond to the object and subject of research; adequacy, testing of research results in practice and reports at international scientific conferences.

Research base: experimental work was carried out at the bases of the Research Institute of Tourism, Research Institute of sports, Department of Tourism and Service of the Kazakh Academy of Sports and Tourism, in the centers of youth tourism and excursions in the towns of Esik and Tekeli.

36 students of the Tourism educational program on the Sports and Health Tourism trajectory of training of the Department of Tourism and Service of the Kazakh Academy of Sports and Tourism (2016-2017 academic year-13 students in

the state language of education; 2017-2018 academic year – 10 students in the Russian language; 2017-2018 academic year – 13 students in Russian), as well as young tourists aged 15 to 18 years old participated in the research. A total of 164 people participated in the experiments.

Experimental research related to the assessment of the effectiveness of wellness tourism hikes in the highlands, depending on their duration, severity walking on various terrain and soil, development of optimal regimes of motor activity of young tourists in various climatic and geographical conditions was conducted in Almaty (800 m) in the mountains of Trans-Ili Alatau (1500-3000 m) and desert and semi-desert areas (areas of Sharyn and Bakanas, Almaty region).

The evaluation of the research results. The results of the research were discussed at a meeting of the Tourism and Service Academic Department of Kazakh Academy of Sports and Tourism; the organization and conducting of mountain trails and hikes were implemented into practice; in lecturing and conducting training courses, workshops in the Republican Training Center for Supplementary Education of the Ministry of Education and Science of the Republic of Kazakhstan, as well as in centers of youth tourism and tours of Tekeli and Esik towns. The author has experience in children and youth tourism as a methodologist, instructor, tour guide, as well as scientific and pedagogical experience in the Kazakh Academy of Sports and Tourism.

The publication of the research results. The research results are published in 11 scientific papers published in 2016-2020. Including 1 article in scientific journals listed in Scopus database; 3 articles in journals included in the list of the Control Committee in Education and Science under the Ministry of Education and Science of the Republic of Kazakhstan; 3 articles in collections of international conferences and 1 article in an international conference held in Kazakhstan; 2 articles in journals of national significance; 1 electronic study guide - Reference Dictionary of Camping Terms, with a certificate of copyright No. 5144 dated 3 September 2019.

The structure and scope of the dissertation. The dissertation consists of an introduction, 3 chapters, 28 tables, 19 figures, conclusion, appendices, and references.

The introduction substantiates the relevance and choice of the topic; formulates the purpose, target, subject, hypothesis, tasks and methods of scientific and pedagogical research; determines the scientific novelty, theoretical and practical significance; presents the provisions submitted for defense; provides information about the testing of research results, and reveals the logic of the research.

The main part consists of three sections (analysis of the state of the issue, methods and organization of research, author's research and its discussion).

The first section, the Organizational Bases of Youth Tourism, discloses the concept, essence, types, and functions of youth tourism; shows the goal functions of youth tourism, which allow creating not only a holistic view about CYT, but reveal its essence on a territorial basis, for the purposes of travel, the method and forms of organization, duration, seasonality, and funding; shows that many regulative documents concerning the development of CYT is still not fully implemented and are fundamental documents, regulating the various aspects of children tourist

organizations; attention is drawn to the necessity of coordinating joint activities of public and private non-profit sectors aimed at the development of infrastructure of CYT, financing of tourism activities, training and scientific-methodical maintenance of activity of establishments of supplementary education, tourism and sport, and local history work.

The second section, the Methodical Aspects and Opportunities of Youth Tourism, shows the educational potential of youth tourism in the formation and development of the personality of the individual based on the analysis of scientific and methodological literature; describes the main forms of tourist and local lore activity; methods of education in CYT; pedagogical principles that allow the successful formation of the fully developed personality of the young tourist.

Numerous studies have shown that tourism occupies an important place in the system of physical education of children of different ages. Active types of tourism, due to its large educational potential, character, and significant opportunities, are one of the best means of forming a core value of a healthy lifestyle, an effective way to meet the need for recreation, expand the worldview and cultural needs of the younger generation;

It is shown that taking into account the age peculiarities of students is significant for the development of CYT. In this paper, the essence of age peculiarities is clearly revealed by the example of the physical development of children of the primary, middle, and high school age, since the biological and spiritual development of a person is closely linked, and age-appropriate changes occur in the intellectual, social and spiritual spheres. Taking into account age peculiarities is one of the fundamental pedagogical principles. Based on it, teachers, coaches, and instructors in CYT regulate the training load and physical activity, determine the most favorable daily routine, labor, and rest regime.

An important element of CYT is tourist and sports training. In this regard, the method of education of such physical qualities as endurance, strength, speed, coordination abilities, which are of great importance in terms of the effectiveness of hiking and the safety of participants, is revealed.

Based on long-term observations, a method of dosage of physical exercises has been developed that ensure the development of motor skills of young tourists, contributing to health promotion and improving performance. The classification and regulatory requirements of tourist routes in children and youth tourism are presented.

The third section Results of Author's Research and Thei Discussion shows developed and implemented Children and Youth Tourism educational discipline in the educational process of the Tourism educational program within the Sports and Primary Wellness Tourism course of study, which allows students to get an additional qualification of Tourism Instructor, and work in the field of children and youth tourism.

Theoretical and practical training of graduates have shown a high level of their training, as evidenced by the results of their practical work in the organization of tourist and sports and cultural events involving students of secondary schools in the form of summer camps, weekend trips, tourist groups, and more; experimental

research related to the study of the influence of physical fitness on the exercise tolerance in trekking and on exercise performance of young tourists; health effects of the trekking have presented, depending on their duration and the severity of various modes of walking and hiking conditions optimize the movement of tourists in the region's hot climate; exercise performance of tourists in a hot climate; the influence of hiking at temperatures 28⁰-35⁰ 35⁰-40⁰ and on exercise performance capacity in trained young tourists; the optimal speed of walking.

In general, based on the results of comprehensive research, new data have been obtained that significantly expand and deepen knowledge about the conditions for optimizing the mobility of young tourists in mountain hikes in hot climates. Experimental research materials were used in the development of the Children and Youth Tourism educational program.

In conclusion, the results of the research are summarized, confirming the solution of the stated tasks, and the main findings and recommendations are presented.

In accordance with the tasks stated in the dissertation, the following **conclusions** were made:

1. The current state of children and youth tourism was analyzed and the concept of "children and youth tourism" was clarified based on the study of scientific and methodological literature. Children and youth tourism is a type of tourism that combines various areas of organization of sports, health, research, and educational activities of groups of children and youth in the form of hikes, expeditions, trips, and excursions aimed at comprehensive personal development and implementing an active approach to an effective model of forming a healthy lifestyle.

2. The target functions of children and youth tourism are defined, which allow forming a holistic view of its essence, make it possible to carry out the comprehensive analysis of the directions through which the impact on children and young people occurs.

3. Taking into account age peculiarities is one of the fundamental pedagogical principles. Based on it, teachers, coaches, and instructors of children and youth tourism regulate the educational and physical activity, determine the daily routine, labor regime, and determine the choice of forms and methods of educational and tourist activities.

4. Children and youth tourism is a unique model of the harmonious development of the personality of teenagers, forming such qualities as purposefulness, courage, resoluteness, perseverance, endurance, patience, mutual assistance, and mutual readiness to help, and at the same time laying a solid foundation for a healthy lifestyle.

5. Physical training of young tourists should always be an object of attention of tourism organizers. Lack of physical training, especially in mountain hikes, is the cause of defatigation, injuries, violations of coordination movements, which often leads to negative consequences.

6. Insufficient control over the implementation of normative documents regulating relations in the tourism sector is largely due to the lack of a management

center for children and youth tourism. It is necessary to coordinate the joint activities of the public and private non-profit sectors aimed at developing the tourist infrastructure for children and youth tourism, financing tourist events, training professional tourist personnel, and providing scientific and methodological support for the activities of institutions of supplementary education, tourism and sports, and tourism and local lore.

7. For the development of mass children and youth tourism, the issue is an acute shortage of professional personnel. A significant number of those who work in the field of children and youth tourism do not master the technology of conducting mass tourist health and sports events.

8. In order to train personnel in CYT, the Children and Youth Tourism educational program and Reference Dictionary of Camping Terms electronic study guide were developed and implemented in the educational process of KazAST. Theoretical and practical training of graduates has shown a high level of their professional training, which is confirmed by the result of their practical work in organizing tourist events with students of different ages of educational schools.

9. The participation of young tourists in one-day mountain hikes (once a week for a month) provides significant health and stimulating effect. One-week hikes in the mountains contribute to a significant improvement in the activity of the cardiovascular and respiratory systems and the tolerance of high physical activity.

10. During hikes in semi-desert areas, with an optimal combination of physical and thermal load at an air temperature of up to 30⁰, not only the tasks of a tourist hike can be successfully solved, but also the effect of increasing the body's reserves, which means strengthening health, is achieved.

11. One-week mountain training is an effective tool for maintaining physical performance during a hike in a hot climate.

12. Based on years of experimental studies health efficiency of mountain hikes was defined depending on their duration; the weight of our movement was estimated in various terrain and soil, depending on the weight of the goods transported, speed, and temperature; optimal regimes of motor activity of young tourists were developed and put into practice in various climate and geographical conditions that ensure a healthy and stimulating effect.

Practical guidelines are as follows:

1. Coordinate joint activities of the public and private non-profit sectors aimed at developing the tourist infrastructure for children and youth tourism, financing tourist events, training professional personnel, and providing scientific and methodological support for the activities of institutions of supplementary education, tourism and sports, and tourism and local history work.

2. To attract professional staff for children and youth tourism, establish their remuneration at the level of teachers of basic education.

3. In accordance with article 9 (para 2 of item 3) of the Law of the Republic of Kazakhstan on Tourist Activities, it is necessary to assume measures at the regional and local levels to provide preferential conditions for organizations of tourist work

among children, adolescents, youth, paying special attention to children from socially vulnerable families, orphans and disabled people.

4. When choosing the forms and methods of educational and tourist activities, it is necessary to take into account age peculiarities in children and youth tourism, which is one of the fundamental pedagogical principles.

5. Hiking trips with younger students should be limited to radial routes that do not require much physical training. The content of the campaign should be more focused on the emotional sphere, which helps to get positive emotions.

6. Physical training of young tourists should always be the object of the attention of instructors and trainers, which is primarily due to their safety.

7. For professional training in the field of youth tourism is recommended to introduce developed and tested in practice Children and Youth Tourism educational program in the framework of educational trajectories (minor) into the educational process of universities. This program allows training specialists for mass tourist events, as well as for all age groups.

8. It is not recommended that young tourists take part in hikes at extremely high temperatures (over 35⁰) without special training. The participation of untrained young tourists can lead to serious thermal injuries.

9. To determine the optimal weight of the transported cargo of young tourists in hot climates, use the developed formula based on determining the level of physical performance at a pulse rate of 130 b/min.

10. The materials of scientific research are recommended for publication of the "Children and Youth Tourism" textbook and should be used in training courses at the Republican Training Center for Supplementary Education of the Ministry of Education and Science of the Republic of Kazakhstan.

The appendix presents a **certificate** from the Republican Training Center for Supplementary Education of the Ministry of Education and Science of the Republic of Kazakhstan; **the act of implementation** of evaluation of results in the educational process at the Tourism and Service Academic Department of Kazakh Academy of Sports and Tourism on Youth Tourism educational-methodical complex; **the act of implementation and certificate of copyright** No. 5144 dated 3 September 2019 on the Reference Dictionary of Camping Terms electronic study guide; the **acts of implementation** of the centers of youth tourism of Esik and Tekeli.