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SELF-EFFICACY OF YOUNG BASKETBALL PLAYERS AND PECULIARITIES OF ITS DEVELOPMENT

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CONTENT

INTRODUCION

A. Aleksejev (Алексеев, 2005), who has been analysing problems of managing athletes' mental states and self-efficacy for thirty years, argues that a self-confident athlete, able to manage their psycho-physical condition and technique, will feel no anxiety about the sports results. As sports activities take place under the difficult conditions of practice and competition, athletes need particular self-efficacy and mental stability. Mastery in sports much depends on how the athlete's mental capability is developed and what is their self-efficacy. According to sports scientists (e.g. Schunk, 1995), coaches must be aware of the important role played by the self-efficacy on sports results. Research in this area of is highly relevant because the outcomes can not only predict the future of sports performance, but also to take some steps to improve them. Sometimes, it is proposed to develop physical self-efficacy gradually and thus avoid potential crises before the competition (Henschen, Newton, 2003).

According to Social Cognitive Theory (SCT, Bandura, 1986), people are goal-oriented and are able to foresee, symbolize, use self-reflection and self-regulation as well as learn indirectly. In the Social Cognitive Theory self-efficacy takes a very important place (Bandura, 1986, 1997). As J. E. Maddux and J. T. Gosselin (2003) suggest, one of the main outcomes of high self-efficacy is the development of self-regulation abilities. Self-efficacy encourages self-regulation development, which is exposed to goal setting, the choice of activities, efforts for determination and problem-solving models (Ashford, LeCroy, 2010).

Although self-efficacy receives attention as a determinant of exercise behaviour, (e.g. Bray et al., 2001; DuCharme, Brawley, 1995; Rodgers, Hall et al., 2002), this construct has rarely been studied as a complete variable (McAulley, Blissmer, 2000; McAulley et al., 2001; Woodgate et al., 2005). First of all, self-efficacy is regarded as a determinant of exercise behaviour and a significant result of participation in exercises (McAulley, Blissmer, 2000). A. Bandura (1986) identified four major sources of self-efficacy (i.e. mastery experience, indirect experience, verbal conviction, and emotional excitation), and the self-efficacy of problems is successfully altered manipulating it with the efficiency of the sources of related information performing the exercise or evaluating it (McAulley et al., 2001). In most cases, manipulation consists of the collision with a certain activity and, if the exercise is a successful experience of mastery, problem solving is increased (McAulley, Blissmer, 2000).

A. Bandura (1997) asserts that exercise self-regulation efficacy can be successfully managed. Consequently, we can hypothesize that according to A. Bandura self-efficacy information sources (1986, 1997) manipulation should increase the effectiveness of self-regulation. Besides, adequate improvement of the different models of behavior related to exercise (e.g. improved intentions, action plans) could be a function of such manipulation.

Substantiation of the research problem. The main reviews on self-efficacy related to physical activity and sports activities state that higher self-efficacy is associated with greater motivation to exercise (McAulley, Mihalko, 1998; McAuley, Bilssmer, 2000; Culos-Reed, Gyurcsik, Brawley, 2001; McAulley, Pena, Jerome, 2001). Many of the reviews in this area are concentrated on the problem of self-efficacy (McAulley, Mihalko, 1998; Lunenburg, 2011). However, A. Bandura (1995) indicates that the evaluation of self-efficacy is not just related to the performance of certain actions (e.g. *self-efficacy of problem solving*). Self-efficacy is also associated with the management of a variety of skills carrying out multiple tasks (containing lot of parts, components), (e.g. *self-regulation self-efficacy*). In fact, A. Bandura (1995) and I. Kirsh (1995) argue that while regularly repeating a lot of healthy behaviours (e.g., quitting smoking, exercise performance), self-efficacy evaluation must be referred to.

We believe that it is necessary to reveal the peculiarities of self-efficacy of young basketball players because self-efficacy essentially includes opportunities for the self-actualization of many personal needs. However, the research has not yet proven that the development of self-efficacy enhances social adaptation of student athletes (Malinauskas, 2004; 2006). In addition, research most commonly emphasizes only one direction of self-efficacy among schoolchildren of a certain age (Bandura, 2006; Qualter et al., 2014), students (Reece, Miller, 2006) or teachers (Chan, 2008; Cone, 2009), sometimes it emphasises links of self-efficacy with leadership (Leithwood, 2008; Griffin, Moorhead, 2010), bit there is a lack of comparative analysis dealing with the self-efficacy of juniors and cadets**.** Thus we believe that it is relevant to study the age of juniors and cadets because research (Morris, Koehn, 2003) indicates that physical self-efficacy is low, and the coach as well as a sports psychologist can apply programmes for the development of mental skills or any other means of psychological support to increase the self-efficacy levels. Moreover, at present we have too few educational programmes for the development of self-efficacy of young basketball players that could

also be applied in the course of basketball coaching (Wang, Biddle, 2001; Malinauskas, 2001; 2003; Šniras, 2005). The further necessity of the study of this problem determined the topic of our dissertation research.

There is a situation in athlete training system where there is a conflict between the need to purposefully and systematically develop self-efficacy of young athletes and a lack of the solution of the problem in athlete's personality development practice as well as the lack of research revealing the dependence of self-efficacy on athletes' age. It also shows the relevance of the dissertation research and enables to define the **research problem**, formulated by the research question: *how does self-efficacy depend on athletes' age (juniors and cadets) and the effect of the educational programme?*

This question and the search of the answer to it is the basis of the scientific problem of this dissertation. Research problem question led to the **research hypothesis**: application of an educational programme would allow expecting more self-efficacy of young basketball players.

Research object was **peculiarities of the development of self-efficacy of young (juniors and cadets) basketball players.**

Research problem was solved with setting the research aim and objectives.

Research aim was to reveal peculiarities of the development of self-efficacy of young (juniors and cadets) basketball players.

Research objectives:

1. Substantiate theoretical assumptions of the development of self-efficacy of young basketball players.
2. Develop and theoretically substantiate the model of self-efficacy development (reveal the self-efficacy components) for young basketball players (juniors and cadets) and prepare a self-efficacy educational programme according to the developed model.
3. Determine the peculiarities of young basketball players' (juniors and cadets) self-efficacy.
4. By means of educational experiment, evaluate young basketball players' self-efficacy before the educational programme and after it.

Research methods applied were as follows:

1. Lithuanian and foreign research literature review aiming at the theoretical substantiation of the development of self-efficacy of young basketball players and the preparation of the theoretical model of self-efficacy development for young basketball players (juniors and cadets).

2. Questionnaire survey method aiming at identifying the peculiarities of young basketball players' (juniors and cadets) self-efficacy and evaluating as well as comparing the self-efficacy in young basketball players before and after the educational programme.

3. Educational experiment as a method to verify the efficiency of the educational programme. The essence of the educational experiment was the self-efficacy enhancing programme for young basketball players, which was based on the model of self-efficacy development, created referring to the theory of humanistic pedagogy and psychology, social cognitive theory and social constructivist theory.

4. Research data were statistically processed using *SPSS* 18.0 (*Statistical Package for Social Sciences*). For the statistical data analysis we used Kolmogorov Smirnov test, Cronbach alpha, Student t test, two-way blocked analysis of variance ANOVA or multiple blocked analysis of variance MANOVA.

The defended thesis of the dissertation research:

1. The development of young basketball players' self-efficacy is affected by the demonstration of mastery (personal achievements, previous experience), social modelling (indirect experience observing successful performance of other players), verbal persuasion (encouragement, stimulation) and emotional state (its interpretation).
2. The educational programme for young basketball players, based on the theory of humanistic pedagogy and psychology, social cognitive theory and social constructivist theory, facilitates the enhancement of learners' self-efficacy.
3. The multiple model of self-efficacy gives meaning to the idea that the following self-efficacy components are significant for the social development of young basketball players: general self-efficacy, physical self-efficacy, problem solving self-efficacy, career self-efficacy, and sport-specific self-efficacy.

Methodology of the dissertation refers to the following theoretical provisions: humanistic pedagogy and psychology, social cognitive theory and social constructivist theory.

The theory of humanistic pedagogy and psychology is referred to because it focuses on culturally meaningful approach to comprehensive personal development (Bitinas, 2000; Maslow, 2006; Jovaiša, 2009).

Ideas of *social constructivist theory* focus on links between global cognition and social environment as well as cooperation (Berger, Luckman, cit. from Risse, 2004). According to constructivist paradigm, self-efficacy education is a permanent process which is determined by personal and socio-pedagogical factors. *Social cognitive theory* (SCT, Bandura, 1986) suggests that target oriented and they are able to predict, symbolize, use self-reflection and self-regulation as well as learn indirectly, and that is the main theory of this dissertation research because the development of self-efficacy is of great importance in it (Bandura, 1986, 1997).

Scientific novelty of the dissertation. For the first time the multiple self-efficacy educational programme for young basketball players was applied, and a profound study was carried out before and after it. The findings reflect the scientific novelty of the research. Literature review showed that there was similar research by foreign scientists, but the authors more often analysed one chosen aspect of self-efficacy, and this study involved general self-efficacy, physical self-efficacy, problem solving self-efficacy, career self-efficacy, and sport-specific self-efficacy, and the present research literature lacks complex studies on the education of self-efficacy. Scientific novelty is also revealed by the fact that the dissertation presents a theoretically grounded and empirically verified multiple (consisting of several components) self-efficacy development model and education programme which help improve young basketball players' self-efficacy.

Practical significance of the dissertation. The study is significant as there was designed a multiple self-efficacy development programme for young basketball players which helped improve their self-efficacy. Research in this area is important because the outcomes can not only predict the future of sports performance, but also to take some steps to improve them. Empirically-based recommendations for the coaches of young players will help increase their self-efficacy. The program can be applied not only in the training of young basketball players, but also for the preparation of young athletes in other team sports. The findings and recommendations may be useful for teachers, sports, health and other professionals working with young athletes in sports institutions.

The structure and scope of the dissertation. The dissertation consists of an introduction, definition of terms, four chapters, conclusions, recommendations, references and appendices.

Dissertation research results have been illustrated by 22 figures and 15 tables. The total scope of the dissertation is 136 (without appendices). 179 sources of literature were referred to.

1. THEORETICAL BACKGROUND OF SELF-EFFICACY DEVELOPMENT FOR JUNIORS AND CADETS BASKETBALL PLAYERS

1.1. Theoretical assumptions and conceptions of the self-efficacy concept

Self-efficacy is defined as a person's confidence in their abilities to succeed in effectively targeting their actions to achieve the set goals. It is an individual's expectations or beliefs that they are able to successfully carry out a particular task. In this sense self-efficacy can be seen as a necessary precondition for productive and efficient activities of a person (Bandura, 1997). L. Jovaiša (2007) argues that self-efficacy arises from the active human nature in the form of a spiritual life, determining the freedom of independent thinking and actions. The development of personal autonomy is based on the self-efficacy, which is the premise of initiative.

Despite the fact that the analysis of self-regulation employs many models (Bandura, 1997; Leventhal, Brissette, Levethal, 2003), there are some common things that are based on the main function of *self* and capabilities and self-reflection (Leary, Tangvey, 2003). Essential elements are the same even in different models of successful self-regulation: goal setting, self-observation, feedback, self-assessment, self-efficacy beliefs (Maddux, Gosselin, 2003). Self-action can be seen as a precondition for a productive and effective performance depending on the field of activity (Bandura, 1997).

In the area of sport self-efficacy can be perceived and treated differently than, for example, in an academic or business environment. Self-efficacy levels helps to determine how individuals will behave in different situations related to their activities. High self-efficacy in complex situations allows people to overcome the doubts, various troubles, and conflicts better and more efficiently. Self-efficacy levels can increase or decrease individual's motivation. A person who has a higher level of self-efficacy in certain areas chooses much more complicated tasks requiring considerable effort (Schwarzer, 1992).

The paper states that one of the most important sources is the athlete's personal achievements (that is, past experience performing the special tasks). Past success increases the chance of success. If a person tends to experience only easily attainable success, they expect immediate results and are very susceptible to failure. High self-efficacy requires overcoming barriers putting significant efforts. Some obstacles and difficulties are useful because when they are faced, the athlete understands that success is achieved with great effort (Bandura, 1994). In sports, it also plays an important role as the athlete's previous victories and positive reinforcement increase the positive evaluation of their abilities. The coach has to put particularly strong efforts to shape a positive and successful experience of the athlete one week before a competition.

Secondly, this is indirect experience which is acquired by observing the success of other activities. Usually it is called modelling. Modelling may give hope to the observer that he/she can perform the same task even better than the observed pattern. Modelling effect is the greatest when the model is similar to the observer. If the observer perceives the model as totally dissimilar to themselves, then the observed behaviour of the model and the result is very little influences the observer's self-efficacy. A person looks for a model that would have the abilities which they lack themselves (Bandura, 1994).

Athletes use positive self-modelling. For example, watching footage which captured the athlete's performed successful action and the important elements of the performance of the action help to achieve better results.

Self-efficacy also increases observing other high-skilled actions, performed by other athletes. However, it is not as effective as self-modelling. The positive impact in made by observing the competition with teammates experiencing success. However, a failure in the same way and in some cases even more has a negative impact on the effectiveness of self-efficacy (Pajares, 2003).

Thirdly, it is social persuasion. Often the coach tries to inspire the athlete telling stories of famous athletes. The coach describes the competition implications, explains the importance of the victory and tries to raise the athlete's self-efficacy (Donovan, Owen, 1994).

The last source of information is the emotional state. Person's emotional state determines their self-efficacy, but it also depends on the task specificity. Emotional reactions (e.g. anxiety) can lead to negative evaluation of abilities. Positive mood increases self-efficacy, but depressed mood reduces it.

1.2. Theoretical background of the multiple self-efficacy development model and its components for young basketball players

Dissertation research proves that aiming at enhancing young basketball players' self-efficacy, it is necessary to do that in complex, including the following components of self-efficacy: general self-efficacy,

physical self-efficacy, social self-efficacy, problem solving self-efficacy, career self-efficacy, and sport-specific self-efficacy.

Figure 1 gives a theoretically grounded multiple (including many components) model of self-efficacy development.

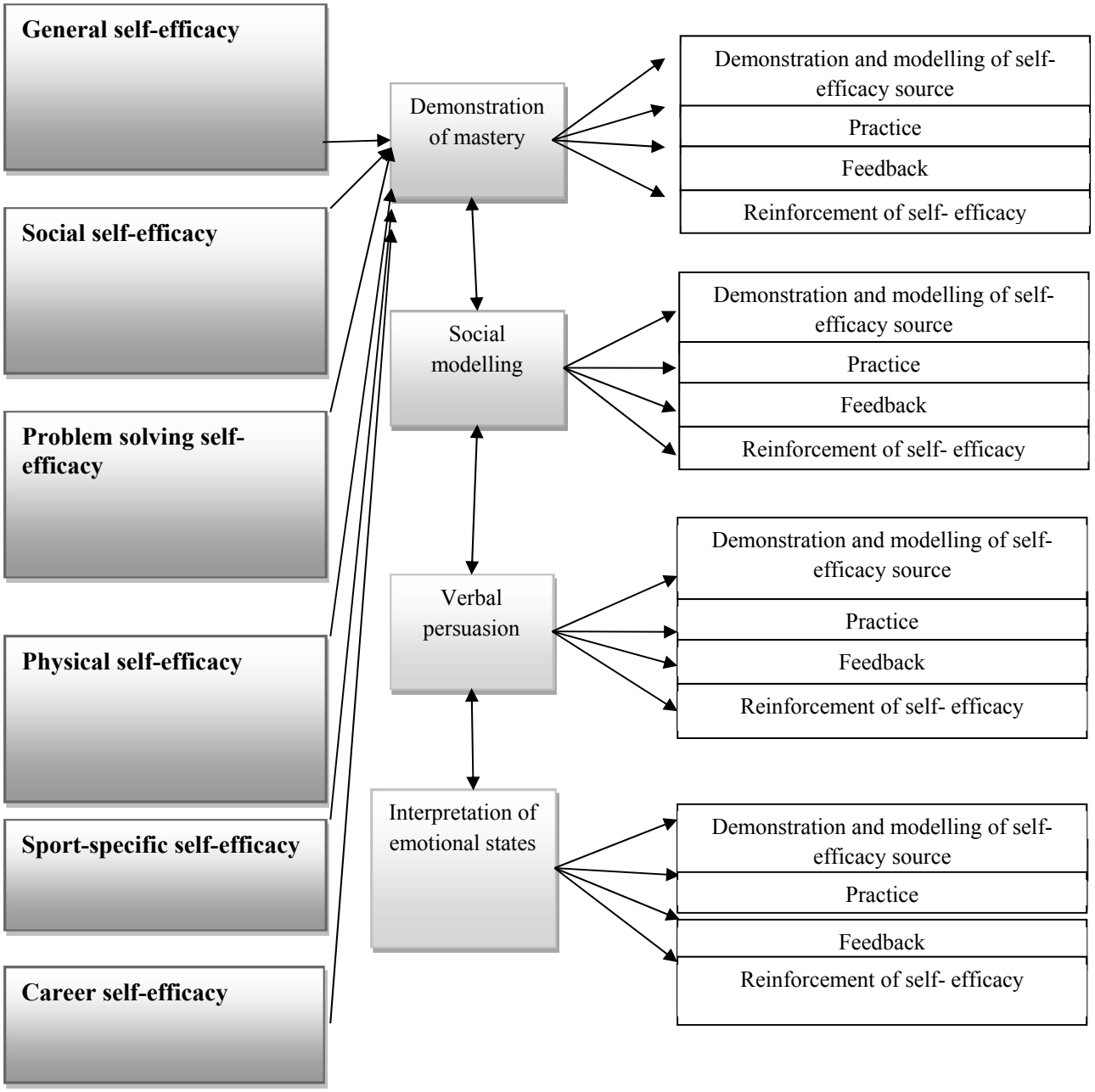

Figure 1. *Construct of a theoretical multiple model of self-efficacy development*

This is a theory based *multiple self-efficacy development model*, which can develop self-efficacy in young athletes through the educational programme. According to A. Bandura (1997), T. Moritz and S. Koehn (2003), while developing self-dependence one must give young players the task the performance of which will make them feel competent and confident in their own powers. In this way the sense of self-efficacy is increased because the higher it is, the more the effort and persistence is put to the performance of the task. The focus is on the emotions because the behaviour is strongly affected by them.

According to the theory based *multiple self-efficacy development model,* different self-efficacy (self-efficacy components) can be enhanced demonstrating mastery, modelling, verbally persuading, and interpreting emotional states.

Every self-efficacy source as an educational effect is given in stages: 1) demonstration and modelling of self-efficacy source, 2) practice, 3) feedback, and 4) reinforcement of self- efficacy.

Demonstration and modelling of self-efficacy source can be the most powerful method of self-efficacy *(presenting the behaviour which should be learned)*. Starting an exercise, care must be taken immediately to perform it as indicated. Demonstration of mastery reflects the experience. When planning a programme for the development of social skills, one must take into account the characteristics of the specialist who will change the learners' behaviours. While learners learn a new behaviour, the characteristics of the (adult) model are of very high importance, and a favourite leader, positive authority among learners has a better chance to get a children's attention and the desire to replicate the behaviour.

According to the AP Goldstein (1999), learning is most effective when the model: a) is highly skilled and professionally demonstrates certain behaviours; b) is the authority for the observer; c) gives the learner the desired incentives; d) is of the same gender, similar age and social status; e) is friendly and helpful, and most importantly f) gets a reward for appropriate behaviour.

Modelling is effective when:

- Behaviour is demonstrated clearly and precisely;
- Education starts from the easiest to more complex social skills;
- Taught ability is repeated until assimilated;
- Efforts are being made to avoid insignificant details;
- When the behaviour is exhibited by more than one model.

Practice, *or role play is a social skill training method,* which helps to master actual behaviour; the learner is given the opportunity to perform the social skill demonstrated by the adult themselves. Offering a learner the chance to try out a new skill in practical application, we can expect that the learner will apply it in their behaviour repertoire.

Social skills training method is different working with individual learner and conducting a social exercise group. When developing social skills individually, there is enough time to practice each of the social skills. Meanwhile, working in the group, depending on its size, the numbers of activities and duration, students often have less time to adapt new forms of behaviour during the role-play. For this reason, the practitioner working with a group of children is offered to take time to begin to develop new social skills, also to provide sufficient time for each participant in the group to try to apply the new forms of behaviour in their own behaviour.

Feedback. *It is providing information about how successful a learner was applying a new skill in a simulated situation, emphasizing how much his/her behaviour coincided with the model's behaviour.* In this training phase it is particularly important to provide positive social incentive - evaluation, praise. Incentive is any event that increases the probability that certain behaviour will recur. Feedback is provided after each role play. This education approach helps the learner to know how lucky (or unlucky) he/she was to apply the behaviour and at the same time it enables the young person to apply the behaviour of in their life.

Reinforcement of self-efficacy. *It is the ability to apply the learnt behaviour in real life.* It is not so important that the participants learnt to perform a particular behaviour, but the fact that he/she would be able to apply it in real life. Learners need to be explained in what situations they can apply the developed skill. For this purpose, they are given homework after each training session. The aim of the homework is to reinforce the social skill learnt and to encourage applying it in the natural environment.

2. RESEARCH METHODOLOGY

2.1. Theoretical and methodological research provisions

Research methodology of the dissertation is grounded on the following theoretical and methodological provisions: theory of humanistic pedagogy and psychology, social cognitive theory and social constructivist theory.

Theory of humanistic pedagogy and psychology emphasizes the approach to culturally meaningful comprehensive personal development (Bitinas, 2000; Maslow, 2006; Jovaiša, 2009).

Dissertation research refers to A. Maslow's (1969) and K. Rogers's (1968) *ideas of humanistic personal theory,* which states that each person is a unified, unique, organized whole in permanent transformation. The most important personality trait is their rush into the future, the desire to freely realize their powers. To fulfil this calling, one has to be constantly active, not only in relation to the world, but also their own. Significant impact on the development of the model was made by K. Rogers' formulated maturation criteria: actualization of their own nature and becoming a well-functioning person, unconditional self-acceptance and openness to survival, recognition of the highest values and ideals (Žukauskienė, 2008). In M. Rokeach's (1992) *humanistic conception,* values are perceived as conscientious human beliefs, the essential principles of life, firstly evaluating them as cognitive elements of personal structure, distributing them into terminal and instrumental. Value orientations in the dissertation research were chosen as the basis for self-efficacy design.

Ideas of the **social constructivist theory** emphasize links between world cognitions and social environment as well as cooperation (Berger, Luckman, cit. from Risse, 2004). The process of the cognition of reality and thinking construction is active, dynamic, continuous, and the knowledge and skills are of the interpretive nature (Nvak, 1998). Theories focus on experience-based learning, application of the acquired knowledge in different situations, the development of higher-level thinking skills, and the promotion of active learning process, not only to learn but also to change the reality of education (Papertas, 1995; Jucevičienė, Tautkevičienė, 2004). Supporters of social constructivism argue that knowledge is the outcome of the sharing of information in the ongoing socio-cultural context during discussions, agreements and interactive processes. Learning takes place as a social and cultural system in which many students can interact creating a collective activity.

According to **social cognitive theory (**SCT, Bandura, 1986), people are goal-oriented and are able to predict, symbolize, use self-reflection and self-regulation as well as learn indirectly. Self-efficacy in social cognitive theory occupies a significant place (Bandura, 1986, 1997).

According to social cognitive theory (Bandura, 1997), a sense of personal control influences the parameters of self-efficacy. Self-efficacy is related to the sense of control of environment and human behaviour. Self-efficacy is a factor determining whether healthy lifestyle changes will start, or our efforts to it will increase and how long will the resistance to difficulties and failures will remain (Schwarzer, 2001). Self-efficacy also affects efforts to change risky behaviour and persistence to achieve despite barriers and obstacles that weaken motivation. Self-efficacy is directly related to a healthy lifestyle, but it also influences it through indirect effects on aspirations. It affects people's challenges and the high aspirations they tend to set. People with high self-efficacy choose more complex and more ambitious goals (DeVellis and DeVellis, 2000). They concentrate on opportunities rather than obstacles.

Researchers of sport-specific self-efficacy combined social expectation fulfilment theories (Ames, 1992; Nicholls, 1984) and self-efficacy/certainty in sport (Bandura, 1997; Vealey, 2001), aiming at understanding how individual differences in achievement expectations (or the clarity of skills and achievements) can lead to the cognitive assessment of the self-efficacy/ certainty information. Previous studies in sport have shown the relationship between competing orientations among athletes (e.g., the desire to win / perform better than others or to perform well, according to the established goals for themselves) and self-efficacy expectations (Martin and Gill, 1995), but these studies did not apply the construct of the evolution of goal achievement theory.

According to the theory of goal achievement, there are two main prospects for achieving goals: the task set for themselves (such as learning or mastery) and regulatory requirements ego (ability or performance). Task objectives represent attention to learning, hard work, improvement and the pursuit of excellence in order to perform the desired task. Such goals can help master achievement constructs, such as the selection of the task presenting a challenge, maximal efforts perseverance in the face of difficulties. For comparison, the ego goals reflect a desire to demonstrate better abilities (than those of others) through social

comparisons, and combining this with the perception of poor skills, it is possible that the selected task could be too easy or too difficult, not every effort will be put and no perseverance will be shown.

Social cognitive theory suggests that optimistic self-efficacy encourages perseverance and efforts. A. Bandura (1997) warned that "the lack of information leads to poor academic preparation" (p. 65). If self-esteem may be considered as reflection of personal knowledge or as form of metacognition, the serious false assessments of personal skills may undermine academically.

2.2. Principles of research ethics

The study followed the main principles characteristic of social research ethics: volunteering and goodwill, privacy and respect, justice, and anonymity (Kardelis, 2002; Tidikis, 2003; Bitinas, Rupšienė, Žydžiūnaitė, 2008). Educational experiment was based on these provisions of ethics:

- Voluntary participation of subjects in the study;
- Full disclosure of information to the subjects and the accuracy of this information;
- Securing confidentiality;
- Assuring anonymity.

The following principles of research ethics were observed: the right not to be hurt, the right not to be exploited; research efficiency; the ratio between risk and reward; respect for individual dignity, justice, privacy, and confidentiality. The subjects gave written consent to participate in the study. Parents also gave written consent for their children to participate in the study.

2.3. Research methods and organization

The dissertation employed the following **research methods:**

1. Lithuanian and foreign scientific literature review aiming at theoretical substantiation of the education of young basketball players in the development of their self-efficacy and preparation of the self-efficacy development model for young basketball players (juniors and cadets).

2. Questionnaire survey method was used to establish the peculiarities of young basketball players' (juniors and cadets) self-efficacy and evaluate as well as compare young basketball players' self-efficacy before and after he educational programme.

3. Educational experiment was used as a method of the assessment of efficiency of the educational programme. The basis of the educational experiment was the programme for the enhancement of young basketball players' self-efficacy, which was built upon the multiple model of the development of self-efficacy, and the model was constructed on the basis of humanistic theory of pedagogy and psychology, social cognitive theory and social constructivist theory.

4. Research data were processed using *SPSS* 18.0 (*Statistical Package for Social Sciences*). The statistical analysis of the data was performed using Kolmogorov Smirnov test, calculation of Cronbach's alpha, Student *t* test, two-way blocked data analysis of variance ANOVA of multi-way blocked data analysis of variance MANOVA.

Declarative research was aimed at revealing peculiarities of cadets' and juniors' self-efficacy, and the experimental study was designed to determine the effectiveness of the educational programme.

Research was empirically grounded and divided into the following stages:

Stage I – setting the research idea, preparation of research methods, the development of the self-efficacy educational programme.

Stage II – declarative research aiming at determining young basketball players' self-efficacy on the basis of the questionnaire survey representing the whole population.

Stage III – initial research of the experimental and the control groups aiming at establishing the levels of young basketball players' self-efficacy.

Stage IV – application of the self-efficacy education programme and the experimental impact on the experimental group.

Stage V – final research of the experimental and the control groups, writing a report.

Methods:

General Self-Efficacy Scale (*Jarusalem, Scwarzer, 1995).* Aiming at evaluation the general self-efficacy, we chose a short version of a scale, developed by German M. Jerusalem and R. Schwarzer (1995) and adapted by V. G. Romek. The aim of the General Self-Efficacy Scale was to reveal the personal conviction of their ability to act effectively in various stressful situations. The first version of the scale consisted of 20 statements and then it was shortened to 10 statements.

D. L. Feltz and M. A. Chase (1998) present a model of their ***Physical Self-Efficacy Scale*** (PSS: Ryckman, Robbins, Thornton and Cantrell, 1982) which reflects self-conceptual evaluation, but not self-efficacy though this scale is called self-efficacy. Physical Self-Efficacy Scale consists of 22 statements. The scale has been adapted using pilot studies (2010) in the LAPE Department pf Sports Pedagogy and Psychology.

Social Self-efficacy was established using a scale developed by M. Jerusalem, R. Schwarzer and V. G. Romek. This method was also applied in research by G. Oettingen (1995), E. Andrejeva (2008) and others. However, social self-efficacy has been little researched. Aiming at assessing the levels of social and academic self-efficacy, we summarized the data that reveal the links between learning and self-efficacy. The subject has to choose the most appropriate option for them.

Problem Self-Efficacy Scale (*Carver el al., 1989).* While the social problem-solving self-efficacy has not been evaluated in tasks, literature contains a variety of psychological areas where the problem solving options have been researched. Participants were asked to evaluate statements that they can solve eight problems during the four weeks period. Participants were instructed that many people faced problems which have hampered solving their regular tasks (they were tired, had too much work or school obligations, were ill, injured or were on holiday), and they were asked to remember these problems. The subjects' confidence to use the eight problem solving strategies to maintain their regular tasks regime during four weeks was assessed.

Career Self-Efficacy Research (CSESS, Anderson, Betz, 2001)*,* employed the assessment of self-efficacy sources (personal achievements, indirect experience, convincing others, positive and a negative emotional state). The study is based on the belief that a person whose career self-efficacy is high will be inclined to look for work, which would enable him/her to pursue a career. This research is important because there is a lack of research on the subject. The methodology consists of 20 statements. Career self-efficacy component scale consists of 25 statements (CDMSE-SF; Betz et al., 1996). This scale reflects person's self-confidence characteristics performing the actions related to the choice of their future career. The methodology helps to reveal the career self-efficacy components: assessment of their career choice, occupational information, setting career goals, career planning, career problem solving.

Sport-Specific Self-Efficacy Scale (Vealey, 1998). Sport-specific self-efficacy can be studied using the questionnaire of sport-specific self-efficacy (sport-specific self-confidence) components, developed by R. Vealey (Vealey, 1986; Vealey & Hayashi, 1998). The questionnaire consists of 43 statements.

Structural self-efficacy model. In view of the chosen methodology, it is possible to present a structural model of self-efficacy, which includes all components and sub-components of the tested construct (Figure 2).

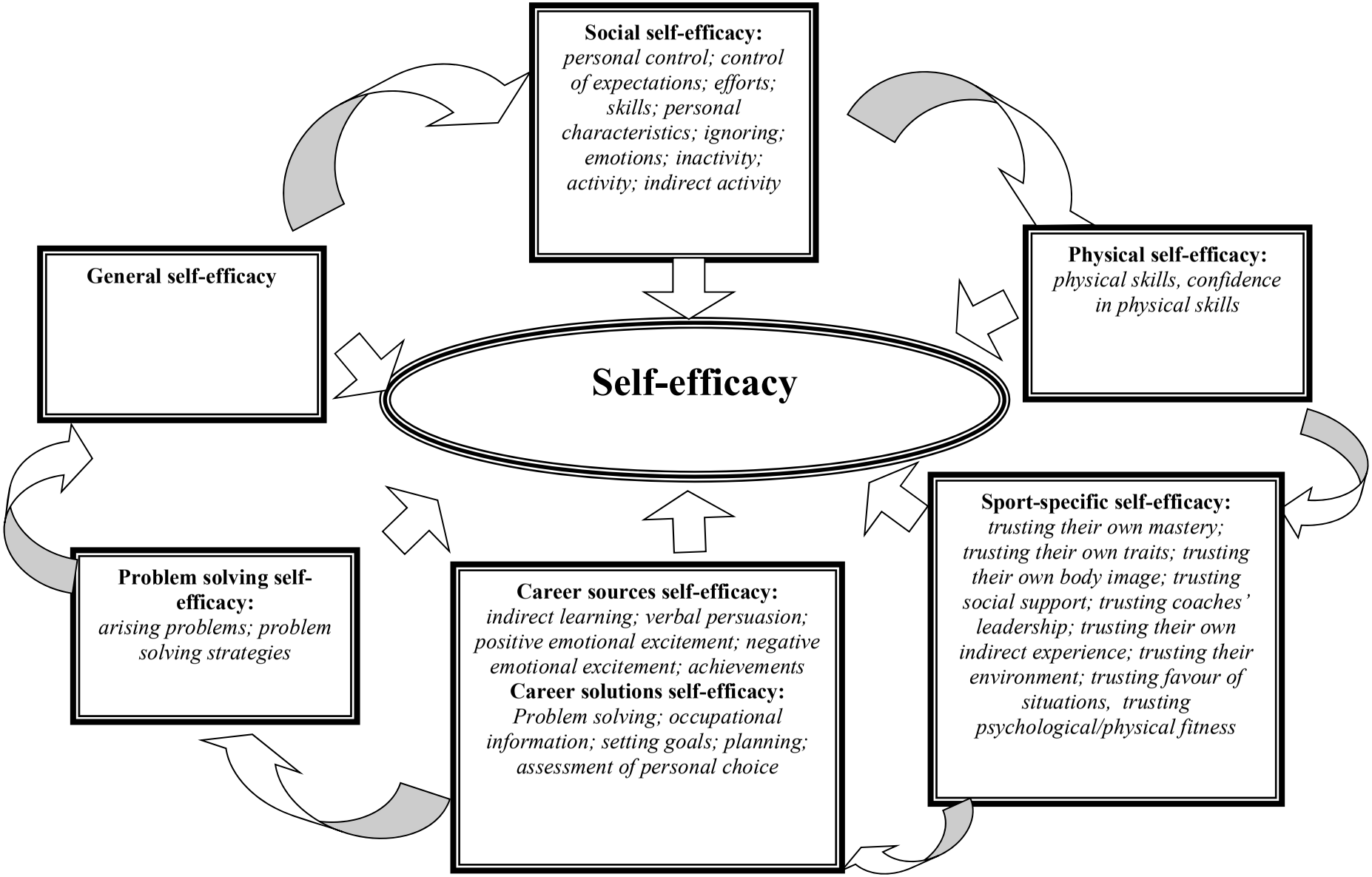

Figure 2. *Structural self-efficacy model*

Subjects. The study employed random sampling strategy, i.e. all learners from Lithuanian basketball sport schools should have equal opportunities to be included into the sample. According to the *Lithuanian Sports Statistics Chronicle* (2009), basketball sport schools include 1917 cadets and 1378 juniors, i.e. 3295 schoolchildren. When the population (general population) is more than 3000 cases, normal or systematic random sampling is not applied, and the sample is constructed using serial sampling method (Kardelis, 2002). Representative sample (with 5 percent error) for a questionnaire survey, when the population (general population) is greater than 3000, must be no less than 350 cases of respondents (Kardelis, 2002). We interviewed 219 cadets and 162 juniors from different sports schools: N. Akmenė SC, Š. Marčiulionis KA (Vilnius), Marijampolė ŽM, Vilniaus KM, Sabonis KC (Kaunas), Jonava KKSC, Raseiniai KKSC,, Šakiai SC, „Aisčių" KM (Kaunas), KM „Perkūnas" (Kaunas), V. Knašius KM (Klaipėda), „Tornado" KM (Kaunas).

For the educational experiment, the random serial sampling method was used to for an experimental group of 26 cadets and the control group of 28 cadets (all in all 54 subjects). Both groups of subjects were from Sabonis Basketball Centre.

The educational experiment aimed at evaluating the self-efficacy of cadet and juniors basketball players before the educational programme and after it. The educational experiment was meant to enhance basketball players' self-efficacy. The basis of the educational experiment was the programme for the enhancement of young basketball players' self-efficacy, which was built upon the multiple model of the development of self-efficacy, and the model was constructed on the basis of humanistic theory of pedagogy and psychology, social cognitive theory and social constructivist theory.

Research data were processed using *SPSS* 18.0 (*Statistical Package for Social Sciences*).

3. RESEARCH RESULTS

3.1. Declarative study results

General self-efficacy. It was established that general self-efficacy for juniors and cadets did not statistically significantly differ: it was similar in both juniors and cadets basketball players. It was found that subjects demonstrated the average level of general self-efficacy.

Physical self-efficacy. It was found that physical self-efficacy levels in both cadets and juniors were average and did not significantly differ. As it was mentioned before, physical self-efficacy scale consisted of two subscales: perception of personal physical abilities and confidence in personal physical abilities. There was a significant difference in the confidence in personal physical abilities between juniors and cadets basketball players ($p < 0.05$): juniors' confidence in their physical abilities was higher than that of cadet basketball players. Juniors and cadets evaluated their physical abilities in a similar way ($p > 0.05$).

Sport-specific self-efficacy. It was established that the evaluation of different components of sport-specific self-efficacy was different. Statistically significant difference between cadet and junior players was found in the evaluation of confidence in their mastery. Juniors more trusted their mastery levels than cadets ($p < 0.05$). Juniors more trusted their physical abilities than cadets ($p < 0.05$). No difference was established in juniors' and cadets' trust in their image. Both juniors and cadets evaluated their body image in a similar way. Juniors better evaluated social support, but the difference was not significant compared to cadet basketball players ($p > 0.05$). Trust in coaching leadership was higher among juniors than cadets. A statistically significant difference in the evaluation of coaching leadership was found ($p < 0.05$). We suggest that sport-specific self-efficacy levels were higher for juniors than cadets.

Career self-efficacy. We analysed the following sources of career self-efficacy: indirect learning, verbal persuasion, positive emotional excitement, negative emotional excitement and achievements. We established statistically significant differences in the sources grounding self-efficacy ($p < 0.05$). Evaluations of juniors in the self-efficacy scales were higher than those of cadets. Indirect learning of junior basketball players was higher than that of cadets and the difference established was statistically significant ($p < 0.05$). Positive and negative emotional excitement was higher for junior players, but the difference between groups was not statistically significant ($p > 0.05$). Juniors evaluated their achievements better than cadet basketball players ($p < 0.05$). It can be argued that the evaluation of career self-efficacy sources of junior players was higher than that of cadets.

Career decisions were revealed by the following indicators: problem solving, professional information, setting goals, planning and evaluation of their own choices. Cadets and juniors solve their problems similarly, as there is no significant difference between the evaluations ($p > 0.05$). Junior players have more professional information than cadets ($p < 0.05$). Juniors set higher goals than cadets basketball

players. Thus, the juniors seek goals more than cadets ($p < 0.05$). Cadets and juniors rated planning similarly. The choice was better evaluated by junior basketball players, i.e. junior basketball players more believe that their choice is appropriate ($p < 0.05$).

Social self-efficacy. It was found that social self-efficacy of juniors was higher than that of cadets ($p < 0.05$). It was found that junior players' self-control was greater than that of cadet basketball players ($p < 0.05$). Expectations of cadets and juniors are control similarly. There was no statistically significant difference between the groups in the control of expectations ($p > 0.05$). The efforts were higher rated by junior basketball players compared to cadets ($p < 0.05$). No difference was found in the evaluation of skills between juniors and cadets ($p > 0.05$). Juniors and cadets have similar personal characteristics and they were evaluated in a similar way. Basketball players tended to assess success factors objectively ($p > 0.05$). Ignoring, emotions, inactivity and indirect actions evaluated by basketball players do not differ ($p > 0.05$). It can be stated that junior basketball players' social self-efficacy level is higher than that of cadets.

Problem solving self-efficacy. Problem solving self-efficacy is revealed by the evaluation of the problems encountered and their solutions. Although the problem solving self-efficacy was higher evaluated by the cadets, the difference was not statistically significant ($p > 0.05$). The analysis of problem solving self-efficacy shows that cadets and juniors solve their problems in a similar way. A tendency can be observed that cadets solve their problems better than junior basketball players, but there is no statistically significant difference between the evaluations ($p > 0.05$). Both juniors and cadets solve problems applying similar strategies ($p > 0.05$). Problem solving self-efficacy is independent of age.

3.2. Results of the educational experiment

General self-efficacy. A comparison of the results of the experimental and the control group showed that general self-efficacy of the experimental and the control group before the experiment did not differ ($p > 0.05$). The blocked data-factor analysis of variance ANOVA revealed that the influence of interactions of time and belonging to a group was significant (Wilks Lambda = 0.91, $F(1, 52) = 5.10$, $p < 0.05$, partial $\eta^2 = 0.09$). Since it appeared that Student's t test for dependent samples showed a statistically significant ($t(25) = -3.99$, $p < 0.01$) change of general self-efficacy only in the experimental group of young basketball players from 33.35 ± 2.38 before the experiment to 35.65 ± 1.57 after the experiment, thus we suggest that the repeated study after the educational experiment proved that the educational measures of impact affected the general self-efficacy.

Physical self-efficacy. A comparison of the results of experimental and the control group showed that physical self-efficacy and its components (indicators of subscales) of the experimental and the control group before the experiment did not differ significantly ($p > 0.05$). The blocked data multifactor analysis of variance MANOVA established effect of the educational programme on physical self-efficacy, i.e., the influence of interactions of time and belonging to a group was significant (Wilks Lambda = 0.88, $F(2, 51) = 3.51$, $p < 0.05$, partial $\eta^2 = 0.12$). physical self-efficacy of the experimental group improved form 69.54 ± 9.02 points before the experiment to 76.54 ± 7.08 points after the experiment ($t(25) = -2.04$, $p < 0.05$). The improvement of physical self-efficacy in the control group after the experiment was not statistically significant ($p > 0.05$).

Sport-specific self-efficacy. Student's t test for dependent samples showed that according to the components of sport-specific self-efficacy, the experimental and the control group before the experiment did not differ significantly ($p > 0.05$). The blocked data multifactor analysis of variance MANOVA established a significant effect of the educational programme on the components of sport-specific self-efficacy, i.e. the influence of interactions of time and belonging to a group was significant (Wilks Lambda = 0.70, $F(9, 44) = 2.14$, $p < 0.05$, partial $\eta^2 = 0.30$).

Statistically significant ($p < 0.01$) difference was found in the assessment of other sport-specific self-efficacy components before the experiment and after it. Statistically significant ($p < 0.01$) changes were observed in the trust in the body image, social support and benevolence of situations of the experimental group young basketball players, also confidence in the psychological / physical fitness of the experimental group young basketball players increased. All of these significant changes demonstrate the impact of the educational programme on the sport-specific self-efficacy. We cannot speak about the improvement in the evaluation of other sport-specific self-efficacy components (trust in coaches' leadership, confidence in the environment, confidence in indirect experience), as there is no statistically significant difference in the results of the experimental group before and after the experiment. Analysis of the results of sport-specific

self-efficacy components in the control group of young basketball revealed no statistically significant differences before and after the experiment.

Career self-efficacy. It must be stated that according to the indicators of the *Career Self-Efficacy Sources Scale* the experimental and control groups before the experiment did not statistically significantly differ (*p* > 0.05). The blocked data multifactor analysis of variance MANOVA established a significant effect of the educational programme on the career self-efficacy sources, i.e. the influence of interactions of time and belonging to a group was significant (Wilks Lambda = 0.61, $F(5, 48) = 6.14$, $p < 0.05$, partial $\eta^2 = 0.39$). The negative emotional excitement in the experimental group decreased, which also shows the effectiveness of educational programme. It must be stated that according to the indicators of the career self-efficacy the experimental and control groups before the experiment did not statistically significantly differ (*p* > 0.05) – experimental and control groups were the same. The blocked data multifactor analysis of variance MANOVA established an insignificant effect of the educational programme on the career solutions self-efficacy (*p* > 0.05). The choice assessment indicator for the experimental group increased (*p* < 0.01). Evaluation differences of other subscales of the *Career Self-Efficacy Sources Scale* were not statistically significant.

Social self-efficacy. It was found that before the experiment the experimental and control groups were not statistically significantly different according to social self-efficacy and its components (*p* > 0.05). Student's *t* test for dependent samples and the analysis of changes in the generalized social self-efficacy indicators of the players in the experimental group before and after the experiment showed that after the experiment they improved statistically significantly (p < 0.05).

Student's *t* test for dependent samples and the analysis of changes in the statistical indicators of the social self-efficacy components before and after the experiment showed that control of expectations in the experimental group improved statistically significantly (*p* < 0.01). Also there were significant (p < 0.05) improvements in the personal traits of young basketball players in the experimental group, there was significantly less ignorance (*p* < 0.01). Statistically significant (*p* < 0.01) changes were observed in the indirect activities of the experimental group players. Statistical indicators of other components of social self-efficacy changed only slightly, statistically significant difference before and after the experiment was not established (*p* > 0.05).

Problem solving self-efficacy. It was found that the experimental and control groups before the experiment did not statistically significantly differ according to the indicators of problem solving self-efficacy and its components was (*p* > 0.05). Student's *t* test for dependent samples and the analysis of changes in the statistical indicators of problem solving self-efficacy components before and after the experiment showed no statistically significant difference (*p* > 0.05). It can be argued that before and after the experiment young players in both the control and the experimental group use similar strategies to address the problems.

4. DISCUSSION

Interpreting our research results on the basis of the provisions of humanistic pedagogy and psychology (Rogers, 1986), social constructivism (Berger, Luckman, cit. from Risse, 2004) and social cognitive theories (Bandura, 1986), we can say that the self-efficacy level of junior and cadet basketball players is associated with factors of their behaviour, environmental knowledge, which are determined by factors of their age (social skills) and others.

Given more experience of older players (juniors) than cadets, higher levels of self-efficacy could be expected form junior basketball players. Our research showed that the general self-efficacy of junior and cadet players was not statistically significantly different. We believe that the absence of differences was due to the fact that both 15-16 and 17-18-year-old young basketball players demonstrated the same expectations and beliefs, how they could successfully carry out the tasks, as the objectives of sports activities are similar in these age groups. We support the position of other researchers (Cleary, Zimmerman, 2001) that the self-efficacy rates change depending on other variables, such as the ability to adjust one's own actions.

We support the position that the general self-efficacy is associated with current physical activity, and is one of the strongest factors of adolescent activity in the future (Nahas, Goldfine, & Collins, 2003). Studies using objective physical activity assessment tools, such as motion sensors to monitor physical activity for a specific period of time, showed that the general self-efficacy is associated with high levels of physical activity among 10-16-year-old adolescents (Strauss et al., 2001). In addition, perceived confidence in the

ability to be physically active was the only variable among the psychosocial and environmental variables that differentiated active and low-active African American adolescents (Trost, Pate, Ward, Saunders, & Riner, 1999). Boys' involvement in sport was another determining factor of the level of physical activity.

It can be argued that general self-efficacy and behaviour control determined physical activity and further participation in sport. Our data are in compliance with the claims that the intentions, attitudes and subjective norms also have a relationship and were associated with self-efficacy, but through the agency of self-efficacy they were indirectly related to physical activity (Trost et al., 2003). Some studies have provided evidence that self-efficacy has a stronger relationship with the adolescent physical activity than the perceived benefits, perceived barriers and social norms (Wu, Pender, Noureddine, 2003).

In addition to their evaluation of achievements young athletes try to gain confidence and refer to verbal persuasion, encouragement and support from significant people, such as parents or coaches (Feltz, Chase, 1998; Magyar, Feltz, 2003). Our research data in compliance with the data of other researchers on the changes of statistical indicators of social self-efficacy components of during the experiment: in the experimental group control of expectations and personal characteristics improved ($p < 0.05$), significantly less inherent ignorance ($p < 0.01$), significant ($p < 0.01$) changes were observed in the indirect actions of the experimental group young basketball players. Statistical indicators of other components of social self-efficacy altered only slightly, statistically significant difference before and after the experiment was not established ($p > 0.05$).

Possible areas for further research. Research on young athletes' self-efficacy for sports is still in the initial stages, but a lot has already been done. The current results show the complexity and nature of the development of self-efficacy sources, important for young athletes who want to achieve something in sport. In addition, the dissertation outlined self-efficacy research areas for researchers in the future to supplement the available knowledge. Further we will discuss future research areas.

One of the main areas can be focussing on R. Vealey's (2001) model of sport-specific efficacy (sometimes called social cognitive self-confidence in sport). The results should substantiate this model and determine whether sport-specific efficacy depends on gender, sports branch and level.

One possible way to examine the assessment of information of self-efficacy is the integration of goal setting / achievement and self-efficacy theories. This should help to find out how adolescents and young adults engaged in sport assess self-efficacy related information on the basis of their skills. Previous studies have shown a link between goal achievement constructs and physically active lifestyle. It was noted that the orientation of the objectives of the task and mastery motivational climate positively correlated with adolescents' and young adults' physical activity (Dempley, Kimiecik, Horn, 1993) and their intentions to participate in sport (Biddle, Goudas, 1996). In addition, the relationship between the achievement goals and self-efficacy of activities show that a good focus on the tasks is associated with better beliefs concerning the task, and in addition, the task becomes easier (Cumming, Hall, 2004). Additional studies determining whether similar motivational constructs appear in during adolescence will improve the understanding of how physical activity can be structured to achieve the best motivation.

Also, additional studies are needed to reveal how self-efficacy interacts with motivation to participate in sport. A. Bandura (1990) found that young athletes should have strong self-efficacy to remain persistent even in the face of failures, pain, fatigue, competitive pressures or traumas. Experience of failures and injuries reflects the significant development periods which they face in sports or physical activities. In these difficult times, individuals with high self-efficacy will not let distractive thoughts affect their belief in their potential regardless of the circumstances. Even more long-term self-efficacy research is necessary so that athletes understood how they could be effective and persistent in the face of difficulties. Besides, when some young athletes completely lose their confidence, self-efficacy enhancement is of great importance. Researchers demonstrated that coping with the trauma coaches and significant persons play an important role in the recovery of young athletes' self-efficacy and their ability to return to the activities with full capacity (Magyar, Duda, 2000). We believe that in the future researchers should consider whether the same results are suitable for adolescents' and young adults' sports and physical activity contexts.

Another development issue that needs extra attention is research on learning self-efficacy (Schunk, 1995). With the exception of a few studies designed to investigate the self-regulation of learning motor skills (Kitsantas, Zimmerman, 1998; Kitsantas, Zimmerman, Cleary, 2000; Schunk, 1995), most of other young persons' sport-specific efficacy research has concentrated on the performance of the activities and only a little attention has been dedicated to learning. It is necessary to consider the development (from beginner to expert), self-efficacy to improve through motor skills, especially under the conditions of training and

competition. Researchers should also consider the self-efficacy sources which correspond to different stages of learning aiming at understanding the links between learning and sport-specific efficacy as well as social environment (Feltz, 1994).

Research on collective self-efficacy sources and their evaluation was conducted in adult sport (Fetlz, Lirgg, 2001) and physical activity (McAuley et al, 2001). The influence of coaches and trainers on adults' collective achievements and attributes was also investigated (Magyar, 2002). Many sports and physical activity conditions allow adults to communicate and trust each other. However, the researchers have not investigated yet how the perception of collective self-efficacy may vary depending on age, for example, for cadets and juniors

D. Feltz et al. (2008) proposed a number of great ideas on how to improve the athlete's problem involving self-efficacy including modelling and demonstrating strategies for dealing with problems. For example, athletes could observe performances of other athletes able to cope well with stressful situations. Another self-efficacy improvement method proposed by D. Feltz et al. for dealing with the problems is to encourage athletes to speak with athletes who have improved problem solving self-efficacy about their strategies used. Similar methods were applied in our on multiple education programme.

We agree with J. Blustein (1997) that it is easiest to investigate adolescents' and young persons' career self-efficacy since this age group subjects are usually characterized by a natural curiosity. Studies in children can prove to be quite difficult and inefficient. On the other hand, in the studies of individuals who are already seeking some career (in our case - sports career), experiences of these individuals enriches research on education for career (Atkinson, Murrell, 1988).

When the sport-specific self-efficacy is low, the coach or the sports psychologist working with the team can apply psychological skills training programme or other psychological support measures to raise the level of self-efficacy. However, it would be much more useful develop sport-specific self-efficacy gradually in order to avoid potential crises before the competition (Henschen, Newton, 2003).

The last area for future research should be modelling self-efficacy education programmes and verification of their effectiveness. Although there are studies that present educational programmes as a way to improve self-efficacy in sport and physical activity (Garza, Feltz, 1998; Kitsantas et al., 2000; Kitsantas, Zimmerman, 1998; Weiss et al, 1998), additional studies are needed on the impact of education programs on young athletes. Long-term and constant attempt to create a supporting environment improves the motivation of young people, as well as important social and emotional expectations (Elias, 2003). A. Bandura, G. V. Caprara, C. Barbaranelli, M. Gerbino, C. Pastorelli (2003) investigated the role of effective and empathetic self-regulatory self-efficacy in adolescence and realized that adolescents with high levels of self-efficacy easier overcome the problems of their development (e.g., depression, anxiety). We believe that consideration should be given to the dissemination and deepening of the research field involving social and emotional factors in adolescents' and young adults' sports or physical activity. For example, researchers should develop educational programmes teaching sports and physical activity leaders to create a better motivational climate, and to investigate the effect of such climate on the social and emotional expectations (Newton et al., 2004). In summary, the application of educational programmes for the self-efficacy of young athletes should be further developed.

CONCLUSIONS

1. 1. After the theoretical substantiation of the preconditions for the self-efficacy development of young basketball players it appeared that:
   - Self-efficacy strongly affects the person's behaviour. First, self-efficacy determines the person's choice. Second, self-efficacy determines how much effort people will need to put in some work and how long a person will do that. Third, the behavior of a person is affected through patterns and emotional reactions. Fourth, due to self-efficacy the behavior of a person is easily predictable: high self-efficacy determines success and low self-efficacy - irresolute behavior or unsuccessful attempts.
   - Self-efficacy development is affected by the following sources: demonstration of mastery (personal achievements, past experience), social modelling (indirect experience gained in observing the success of the activities of others), verbal persuasion (promotion, encouragement) and emotional state (its interpretation).

- Education of young basketball players' self-efficacy can be implemented on the basis of the ideas of humanistic pedagogy and psychology as well as social cognitive and social constructivist theories.

2. After the preparation and theoretical substantiation of the self-efficacy development model for young basketball players (cadets and juniors) and the preparation of self-efficacy education programme for young athletes according to the created model, it was revealed that:

- Research literature review and the generalization of results allowed distinguishing the components of self-efficacy as a multiple construct which embody the multiple self-efficacy development model for young basketball players. The multiple development model gives meaning to the idea that the following self-efficacy components are important to the social development of a young basketball player: general self-efficacy, physical self-efficacy, social self-efficacy, problem solving self-efficacy, career self-efficacy, and sport-specific self-efficacy.
- The eight-month long self-efficacy education programme for young basketball players was developed on the basis of the theoretically grounded multiple self-efficacy development model for young basketball players:
  - Different self-efficacy (self-efficacy components) is strengthened demonstrating mastery, modelling, using convincing words and interpreting the emotional states.
  - Every self-efficacy source as an effect of education is given in the following stages: 1) demonstration and modelling of a self-efficacy source; 2) practice; 3) feedback; 4) self-efficacy reinforcement.
  - Self-efficacy is enhanced using the following education methods: conversation, role play, sensitive training in small groups, relaxation training, vigorous games, and physical exercises.
  - Every component of young basketball players' self-efficacy is allots the same amount of time, i.e. one sixth of the whole programme.

3. The following self-efficacy peculiarities for cadets (15–16 years of age) and juniors (17–18 years of age) basketball players were established:

- General self-efficacy between cadets and juniors basketball players does not differ and its level is average;
- Physical self-efficacy is of average level and is not statistically significantly different;
- Social self-efficacy of junior basketball players is of a higher level ($p < 0.05$) compared to that of cadets basketball players;
- Problem solving self-efficacy does not depend on age, i.e. both cadets and juniors solve problems in a similar way and use similar strategies;
- Assessment indicators of career self-efficacy sources for junior basketball players are higher ($p < 0.05$) than those of cadets; their career self-efficacy is more grounded on the following sources: indirect experience, persuasion by other people, positive emotional state, and personal achievements;
- Sport-specific self-efficacy of junior basketball players is higher ($p < 0.05$) than that of cadets: juniors have more confidence in their skills, qualities, social support, coaching, leadership, favour of situations, their psychological and physical fitness; their indirect experience is higher.

5. By means of the educational experiment we established the effect of the self-efficacy education programme for young basketball players on their self-efficacy: during the experiment the applied measures of educational impact had a statistically significant ($p < 0.05$) effect on the components of experimental group basketball players' general self-efficacy, physical self-efficacy, social self-efficacy, sport-specific self-efficacy and career self-efficacy: after the educational programme these self-efficacy indicators statistically significantly improved.

SANTRAUKA

Sportinė veikla vyksta sunkiomis pratybų ir varžybų sąlygomis, tad tokiai veiklai būtinas ypatingas savaveiksmiškumas, sportininko psichikos stabilumas. Sportinis meistriškumas daug priklauso nuo to, kaip išugdytos sportininko psichinės savybės, koks jo savaveiksmiškumas (Aleksejevas, 2005). Mūsų manymu, yra būtina atskleisti jaunųjų krepšininkų savaveiksmiškumo ypatumus, kadangi savaveiksmiškumas savo esybe įtraukia daugelio asmenybės poreikių realizacijos galimybes. Vis dėlto tyrimais dar nėra įrodyta, kaip savaveiksmiškumo ugdymas stiprina sportuojančių mokinių socialinę adaptaciją (Malinauskas, 2004; 2006). Šuo metu yra per mažai sukurta ugdymo programų, kurios būtų tinkamos jaunųjų krepšininkų savaveiksmiškumui ugdyti, ir kurias būtų galima pasitelkti krepšinio pratybų metu (Wang, Biddle, 2001; Malinauskas, 2001; 2003; Šniras, 2005). Tolimesnis šios problemos tyrimo bei nagrinėjimo būtinumas ir nulėmė mūsų disertacinio tyrimo temą ir **mokslinę problemą**, formuluojamą klausimu: *kaip savaveiksmiškumas priklauso nuo sportininkų amžiaus (jaunučiai ir jauniai) ir nuo ugdymo programos poveikio*?

Šis klausimas bei atsakymo į jį paieška ir sudaro šio disertacijos tyrimo mokslinio problemiškumo pagrindą.Probleminio klausimo formulavimas leido suformuluoti šio **tyrimo hipotezę:** taikant ugdymo programą galima tikėtis didesnio jaunųjų krepšininkų savaveiksmiškumo.

Dažniausiai akcentuojama kokia nors viena savaveiksmiškumo kryptis tam tikro amžiaus mokinių (Bandura, 2006), studentų (Reece, Miller, 2006) ar mokytojų (Chan, 2008; Cone, 2009), kartais buvo akcentuojamos savaveiksmiškumo sąsajos su lyderyste (Leithwood, 2008), bet lyginamosios analizės darbų, kuriuose būtų analizuojamas jaunučių ir jaunių savaveiksmiškumas, stokojama, tad **tyrimo objektas**– jaunųjų krepšininkų (jaunučių ir jaunių) savaveiksmiškumo ugdymo ypatumai.

Mokslinės problemos sprendimas įgyvendinamas, užsibrėžus tyrimo tikslą ir uždavinius.

Tyrimo tikslas – atskleisti jaunųjų krepšininkų (jaunučių ir jaunių) savaveiksmiškumo ir ugdymo ypatumus.

Tyrimo uždaviniai:

4. Pagrįsti jaunųjų krepšininkų savaveiksmiškumo ugdymo teorines prielaidas.
5. Parengti ir teoriškai pagrįsti jaunųjų krepšininkų jaunųjų krepšininkų (jaunučių ir jaunių)savaveiksmiškumo ugdymo modelį (atskleisti savaveiksmiškumo komponentus) bei parengti jaunųjų krepšininkų savaveiksmiškumo ugdymo programą pagal sukurtą modelį.
6. Nustatyti jaunųjų krepšininkų (jaunučių ir jaunių) savaveiksmiškumo ypatumus.
7. Ugdomuoju eksperimentu įvertini jaunųjų krepšininkų savaveiksmiškumą prieš ugdymo programą ir po jos.

Disertacijos mokslinis naujumas.Pirmą kartą buvo taikoma daugialypė savaveiksmiškumo ugdymo programa jauniesiems krepšininkams, bei atliktas išsamus tyrimas prieš programą ir po jos. Gauti duomenys atspindi tyrimo mokslinį naujumą. Analizuojant literatūrą tyrimo tema, rasta panašių tyrimų užsienio autorių darbuose, tačiau autoriai dažniau analizavo vieną pasirinktą savaveiksmiškumo kryptį, o šiame darbe buvo siekama apjungti bendrąjį, fizinį, socialinį, problemų sprendimo, karjeros ir sportinį savaveiksmiškumus, nes mokslinėje literatūroje stokojama savaveiksmiškumo ugdymo tyrimų, kurie būtų kompleksinio pobūdžio. Taip pat mokslinį naujumą atskleidžia ir tai, kad pateikiamas teoriškai pagrįstas ir empiriškai patikrintas daugialypis (sudėtas iš daug dalių, komponentų) savaveiksmiškumo ugdymo modelis bei programa, padedanti pagerinti jaunųjų krepšininkų savaveiksmiškumą.

Disertacijos praktinis reikšmingumas. Tyrimas reikšmingas tuo, kad parengta daugialypė savaveiksmiškumo ugdymo programa jauniesiems krepšininkams padėjo pagerinti savaveiksmiškumą, Šios srities tyrimai yra reikšmingi, nes naudojantis gautais rezultatais galima ne tik prognozuoti būsimus sportinius rezultatus, bet ir imtis tam tikrų priemonių, siekiant juos pagerinti. Empiriškai pagrįstos rekomendacijos treneriams padės didinti jaunųjų krepšininkų savaveiksmiškumą. Programą galima pritaikyti ne tik ugdant jaunuosius krepšininkus, bet ir rengiant kitų komandinių sporto šakų jaunuosius sportininkus. Rezultatai ir rekomendacijos gali būti naudingos pedagogams, sporto, sveikatos ir kitiems specialistams, dirbantiems su jaunaisiais sportininkais sporto institucijose.

IŠVADOS

1. Teoriškai pagrindus jaunųjų krepšininkų savaveiksmiškumo ugdymo prielaidas išryškėjo, kad:

- Savaveiksmiškumas stipriai veikia asmens elgesį. Pirma, savaveiksmiškumas lemia asmens pasirinkimą. Antra, savaveiksmiškumas lemia, kiek daug pastangų žmogui reikės įdėti atliekant tam tikrą

veiklą ir kaip ilgai asmuo tai darys. Trečia, asmens elgesys yra veikiamas per modelius ir emocines reakcijas. Ketvirta, dėl savaveiksmiškumo asmens elgesys nesunkiai nuspėjamas: didelis savaveiksmiškumas lemia sėkmę, o mažas – neryžtingą elgesį ar nesėkmingus bandymus.

- Savaveiksmiškumo ugdymui(si) daro įtaką šie šaltiniai:meistriškumo demonstravimas (asmeniniai laimėjimai, praeityje įgyta patirtis), socialinis modeliavimas (netiesioginė patirtis, įgyjama stebint sėkmingą kitų asmenų veiklą), žodinis įtikinimas (skatinimas, drąsinimas) ir emocinė būsena (jos interpretavimas).
- Jaunųjų krepšininkų savaveiksmiškumo ugdymas(is) gali būti įgyvendintas remiantis humanistinės pedagogikos ir psichologijos, socialinės kognityviosios bei socialinio konstruktyvizmo teorijų idėjomis.

2. Parengus ir teoriškai pagrindus jaunųjų krepšininkų (jaunučių ir jaunių)savaveiksmiškumo ugdymo modelį bei parengus jaunųjų krepšininkų savaveiksmiškumo ugdymo programą pagal sukurtą modelį, atskleista, kad:

- Mokslinės literatūros analizės ir tyrimų rezultatų apibendrinimo pagrindu galima išskirti savaveiksmiškumo kaip daugialypio konstrukto komponentus, kurie sudaro daugialypį jaunųjų krepšininkų savaveiksmiškumo ugdymo modelį. Daugialypis ugdymo modelis įprasmina idėją, kad jaunojo krepšininko socialinei raidai yra svarbūs šie savaveiksmiškumo komponentai: bendrasis savaveiksmiškumas, fizinis savaveiksmiškumas, socialinis savaveiksmiškumas, problemų sprendimo savaveiksmiškumas, karjeros savaveiksmiškumas, sportinis savaveiksmiškumas.
- Aštuonių mėnesių trukmės jaunųjų krepšininkų savaveiksmiškumo ugdymo programa sukurta remiantis teoriškai pagrįstu daugialypiu jaunųjų krepšininkų savaveiksmiškumo ugdymo modeliu:
  - Skirtingų krypčių savaveiksmiškumas (savaveiksmiškumo komponentai) stiprinamas demonstruojant meistriškumą, modeliuojant, įtikinant žodžiais ir interpretuojant emocines būsenas.
  - Kiekvienas savaveiksmiškumo šaltinis, kaip ugdomasis poveikis, pateikiamas etapais: 1) savaveiksmiškumo šaltinio demonstravimas ir modeliavimas; 2) praktikavimas; 3) grįžtamasis ryšys; 4) savaveiksmiškumo įtvirtinimas.
  - Savaveiksmiškumui stiprinti pasitelkiami šie ugdymo metodai: pokalbis, vaidybiniai žaidimai, mažųjų grupių, jautriosios treniruotės, relaksacijos treniruotės, judrieji žaidimai, fiziniai pratimai.
  - Kiekvienam jaunųjų krepšininkų savaveiksmiškumo komponentui ugdyti skiriama vienodai laiko – t. y. viena šeštoji visos programos dalis.

3. Nustatyti tokie jaunučių (15–16 metų) ir jaunių (17–18 metų) krepšininkų savaveiksmiškumo ypatumai:

- bendrasis savaveiksmiškumas tarp jaunių ir jaunučių krepšininkų statistiškai reikšmingai nesiskiria ir yra vidutinio lygio;
- fizinis savaveiksmiškumas yra vidutinio lygio ir statistiškai reikšmingai nesiskiria;
- jaunių krepšininkų socialinis savaveiksmiškumas yra aukštesnio lygio ($p<0,05$) negu jaunučių krepšininkų;
- problemų sprendimo savaveiksmiškumas nepriklauso nuo amžiaus, t. y. tiek jaunučiai, tiek jauniai problemas sprendžia panašiai ir taiko panašias strategijas.
- jaunių krepšininkų karjeros savaveiksmiškumo šaltinių vertinimo rodikliai aukštesni ($p<0,05$) negu jaunučių; jų karjeros savaveiksmiškumas yra labiau grindžiamas šiais šaltiniais: netiesiogine patirtimi, aplinkinių įtikinėjimu, teigiama emocine būsena, asmeniniais laimėjimais.
- jaunių krepšininkų sportinis savaveiksmiškumas didesnis ($p<0,05$) negu jaunučių: jauniai labiau pasitiki savo meistriškumu, savo savybėmis, socialinę parama,trenerių vadovavimu, situacijų palankumu, savo psichologiniu ir fiziniu parengtumu; didesnė jų netiesioginė patirtis.

4. Ugdomuoju eksperimentu nustatytas jaunųjų krepšininkų savaveiksmiškumo ugdymo programos poveikis jaunųjų krepšininkų savaveiksmiškumui: eksperimento metu taikytos pedagoginio poveikio priemonės darė statistiškai reikšmingą ($p<0,05$) poveikį eksperimentinės jaunųjų krepšininkų grupės bendrajam savaveiksmiškumui, fiziniam savaveiksmiškumui, socialiniam savaveiksmiškumui, sportiniam savaveiksmiškumui, karjeros savaveiksmiškumo komponentams: po ugdomo programos šie savaveiksmiškumo rodikliai statistiškai reikšmingai pagerėjo.

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