

Social Self-Efficacy Training Programme for Basketball-Playing Students: A Case Study

Romualdas Malinauskas¹, Sarunas Sniras² and Vilija Malinauskiene³

Abstract

In this study, the effectiveness of an educational programme for enhancing social self-efficacy prepared for basketball-playing students was investigated. Fifty-four male basketball-playing students ($M_{\text{age}} = 16.47$; $SD = .73$), practicing on two teams, participated in this study. The teams were randomly assigned into an experimental ($n=26$) and a control ($n=28$) group. The intervention was designed to help basketball-playing students to determine their social self-efficacy by engaging in interactive activities and role play scenarios. To assess the effectiveness, a Social Self-efficacy Subscale, and a Multi-dimensional Control, Agency, and Means-ends Inventory for Friends were used. The findings showed that this educational programme for enhancing social self-efficacy was effective for basketball-playing students' social self-efficacy, and social self-efficacy beliefs in personal controllability and in control expectancy.

Keywords: self-efficacy; intervention; youth sports; athletes; basketball.

Self-efficacy is defined as one's belief in one's ability to effectively direct one's actions to achieve the set goals and succeed in completing a specific task (Bandura, 1993). Self-efficacy refers to a person's perceived capability, as distinct from functional ability, to perform a particular action or course of action. According to Bandura (1993) self-efficacy beliefs play a major role in changing behaviours, as these beliefs determine decision making when performing a behaviour, the effort spent, and the problems that arise throughout the process. Bandura (1993) pointed out that people with high self-efficacy tend to have greater cognitive resourcefulness, strategic flexibility, and effectiveness in managing their environment, and set motivating goals for themselves. Self-efficacy is also an important element of psychological health and psychological resistance (Rakauskiene and Dumciene, 2013). An adolescent demonstrates self-efficacy by her or his carefulness, consciousness, and the subjective experience of success and control (Iskender, 2009).

A number of research works focusing on self-efficacy among students as well as the aspects of enhancing self-efficacy have been increasing in the last years (Aşkar and Umay, 2001; Işıksal and Aşkar, 2003; Ünlü and Kalemoglu, 2011). The development of research in said field was mostly influenced by studies on the importance of sport-exercising student's general self-efficacy (Rakauskiene and Dumciene, 2013), sport self-efficacy (Malinauskas and Brusokas, 2013), and career self-efficacy (Malinauskas, Brusokas, and Gudonis, 2012). One aspect of self-efficacy little explored,

especially among adolescents, is social self-efficacy (Muris, 2002; Zullig, Teoli, and Valois, 2011). Social self-efficacy includes skills such as social boldness, participation in a social group or activity, friendly behaviours, and receiving and giving help (Connolly, 1989). Social self-efficacy relates to individuals' ability to overcome social-oriented challenges and barriers (Muris, 2001). The level of social self-efficacy plays a determinant role in the adolescent's social relationships and interaction (Bilgin and Akkapulu, 2007). Valid and reliable measures of social self-efficacy are essential for research and evaluation of efforts to foster positive social interaction, problem solving, and other social and psychological life skills among adolescents and youth (Zullig et al., 2011). It is particularly relevant to investigate this phenomenon in the context of adolescent sports (in our case, basketball) because sport is known to play a major role in personality development (Dinç, 2011). Sports participation can have a positive influence on personality, physical and emotional development in adolescence and youth. Research has consistently shown that self-efficacy is positively associated with sports (Chase, 2001; Dinç, 2011). Social self-efficacy is an important factor that helps sport-exercising individuals to achieve successful social relationships because participating in sport activities as a member of the team promotes a student's ability to cooperate (Dinç, 2011). Social self-efficacy is cardinal for individuals in the period of preadolescence and adolescence (Bilgin, 1999; Zullig et al., 2011). Consequently, we analysed social self-efficacy among basketball-playing students

¹ Lithuanian Sports University, Kaunas, Lithuania

Correspondence: Romualdas Malinauskas, Lithuanian Sports University, Sporto 6, 44221 Kaunas, Lithuania. E-mail: romualdas.malinauskas@lsu.lt

² Lithuanian Sports University, Kaunas, Lithuania

³ Lithuanian Sports University, Kaunas, Lithuania

in the present study, because adolescence is an important age period for enhancing social self-efficacy.

A strong sense of self-efficacy also influence the amount of energy that individuals are willing to invest in overcoming certain obstacles, i.e., social self-efficacy ensures the 'driving quality' of social situations and, thus, has a major influence on personal life and professional career (Bandura, 1997). Consequently, it is worth analysing how to build high social self-efficacy in students (in our case, sport-exercising students attending basketball schools) to withstand social pressure, the ability to overcome personal psychological problems which in the future may cause various divergences in social behaviour. It is expedient to study the effects of an educational training programme on the social self-efficacy of sport-exercising students to also understand which aspects are effective.

Research has shown that the training of social skills (communication skills and interpersonal problem solving skills) was found to be significantly correlated with social self-efficacy and social skills were important predictors of social self-efficacy (Erozkan, 2013). Persons with high social self-efficacy use more effective ways to solve problems because they have self-confidence about their ability to handle problem situations (Erozkan, 2013). The level of social self-efficacy plays a determinant role in the adolescent's (in our case basketball-playing students) interpersonal relationships and interaction (Coleman, 2003). Therefore, we consider that there is a gap in the literature examining the positive results of an educational training programme for enhancing social self-efficacy even though we succeeded in finding several similar works (Connolly, 1989; Erozkan, 2013). Research has proven that student's ability to improve interpersonal relationships and interaction with others stimulates social self-efficacy (Matsushima and Shiomi, 2003) and they win more respect from peers (Zsolnai and Juzsa, 2003).

The current study makes a novel contribution to the literature because other studies on this topic focused only on changes in general self-efficacy among students when applying an educational programme for enhancing general self-efficacy (Rakauskiene and Dumciene, 2013; Wolfe, Nordstrom, and Williams, 1998) but this study examines changes of social self-efficacy specifically in the context of youth sport. This study is based on the recognition of the importance of positive youth development, for instance, social self-efficacy, while also highlighting its still relatively scarce dissemination and application to the context of sport (Esperança, Regueiras, Brustad, and Fonseca, 2013).

The aim of this study was to investigate the effects of an educational programme on social self-efficacy among basketball-playing students. The following research question guided this study what are the changes in social self-efficacy between students after an educational training programme for enhancing social self-efficacy? We hypothesised that: the basketball-playing students' social self-efficacy would

be significantly higher after the educational programme than before it.

Method

Participants

Participants in the study were 54 male basketball-playing students (M age = 16.47; SD = .73) practicing on two teams. In order not to decrease the internal validity of the study (Gall, Gall, and Borg, 2007), the teams were randomly assigned into an experimental (n = 26) and a control (n = 28) group. Both tested groups consisted of male students attending Kaunas A. Sabonis basketball school at which the second author was working as a sport coach.

Measures

Social Self-efficacy Subscale (SSES). We measured social self-efficacy using six-items from the scale developed by Sherer et al. (1982), to evaluate the belief of individuals in their own social competence. The SSES items are rated on a 5-point Likert type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A high score for the subscale indicates strong social self-efficacy. In Sherer et al. (1982), the SSES coefficient alpha was .71. The Lithuanian version of the SSES (Malinauskas and Brusokas, 2010), showed an internal consistency value .82 and a test-retest reliability coefficient of .84 for the present sample.

Social self-efficacy dimensions. Social self-efficacy beliefs in personal controllability, control expectancy, effort, ability, luck, and personal difficulty were measured with the *Multi-dimensional Control, Agency, and Means-ends Inventory for Friends (Multi-CAM for Friends)*; Little and Wanner, 1997) using a four point rating scale (1 = *almost never*, 2 = *sometimes*, 3 = *often*, 4 = *almost always*).

The students responded to 6 positively worded items for social self-efficacy beliefs – effort (e.g., 'When it comes to making new friends, are you smart enough to do it?'; six items, α = .87), ability (e.g., 'When it comes to getting a friend to play, can you put enough effort into it?'; six items, α = .84), luck (e.g., 'When it comes to keeping a good friend, can you count on your luck for it?'; six items, α = .79), and control expectancy (e.g., 'When you want to make a new friend, will you be able to do it?'; six items, α = .71).

Three items were used to measure perceived personal controllability (e.g., 'Do you think that making new friends is something you can make happen if you want to?'; α = .84). Three items were also used to measure perceived personal difficulty (e.g., 'Do you think that making new friends is hard to do?'; α = .73).

Procedures

Research Design. In the research, a two-group pre-test and post-test study design was used. This design was chosen

because experimental design can encumber educational activities due to the random selection into groups. Two-group pre-test and post-test study designs like one-shot case study designs in which random selection is not required are frequently used designs in educational research as well as guidance and psychological counselling studies (Lodico, Spaulding, and Vouegtle, 2010). For this case study, the randomly assignment of adolescent basketball players who currently play on one team into new groups was not possible. An educational programme for enhancing social self-efficacy comprising sixty four 25-minute sessions (eight months, two sessions per week) was presented to the experimental group during the 2013–2014 academic year. On the other hand, the control group was not provided with any treatment. The control group has been trained in traditional style during that time.

Description of the educational programme for enhancing social self-efficacy. The educational programme for enhancing social self-efficacy was based on the Bandura's (1997) self-efficacy model, principles of social self-efficacy beliefs in personal controllability, control expectancy, effort, ability, luck, and personal difficulty (Little and Wanner, 1997) as well as principles of relationship between social skills training and increased social self-efficacy, (DeRosier, 2004; Harrell, Mercer, and DeRosier (2009)). The goals of the educational programme were to help basketball-playing students to determine their social self-efficacy by engaging in interactive activities and role play scenarios. They learned how to apply social skills and to identify, examine, and execute solutions in basketball team activities. Meta-analytic studies (Spence, 2003) suggest that social skills training interventions that combine behavioural modelling with instruction in communication skills, self-regulation techniques, and interpersonal problem solving skills produce the most positive treatment effects. Consequently, these elements were included in the present social self-efficacy training programme to maximize its effectiveness.

An educational programme for enhancing social self-efficacy in basketball-playing students was offered du-

ring an 8-month period (from October till May). It is not tailored to the needs of each individual member of the team but was presented on an equal dose to all of them. The programme format consisted of 25 minute sessions 2 times a week. The programme comprised of two sections. One section was designed to train communication skills and the second – interpersonal problem solving skills. Each session targeted the four sources of self-efficacy (i.e., mastery experiences, vicarious learning, verbal persuasion, and psychological arousal), as identified by Bandura's model (1997). Social skills teaching techniques were modelling (observational learning through modelling (i.e. watching others do a certain task)), rehearsing (practicing by repetition so as to improve performance; for instance, practicing an action, a play, a conversation, etc.), and verbal rewarding (e.g. verbal praise, positive feedback, realistic encouragement (i.e. encouraging learners but being realistic about their capabilities of performing a task; Weinberg and Jackson, 1990).

The intervention itself included discussion, group learning, and written worksheets. Each session included both theoretical and applied components of training social skills. Training objectives were introduced in combination with sport practice. In the first session of the programme, the students were given information about definitions of social self-efficacy and the consequences for students who lack these beliefs, which include difficulties in interacting with team members, and demonstrating problem behaviours. The sessions ended with discussions with time allotted for questions and answers. The basketball-playing students also watched real-life videos showing the difficulties experienced by students in terms of low self-efficacy and then discussed the proper techniques to be used as a remedy for each of the problem situations. During the training, participants gave and received individual feedback regarding their social self-efficacy. During the first 4-month period, their communication skills were trained and sessions during the last 4-month period focused on interpersonal problem solving skills. Description of social self-efficacy training programme for basketball-playing students is presented in Table 1.

Table 1
Description of Social Self-Efficacy Training Programme for Basketball-Playing Students

Intervention	Number of sessions	Content	Goals	Training methods
Communication skills	8	Verbal communication skills	Learn and practice verbal communication skills, such as give and receive feedback, questioning, clarification	Role play scenarios, discussion, and group learning
	8	Non-verbal communication skills	Learn and practice to understand body language	Role play scenarios, discussion, and group learning,
	8	Listening skills and empathy	Learn and practice to understand thoughts and feelings of other players	Role play scenarios, discussion, group learning, and written worksheets
	8	Conflict resolution skills	Learn and practice adaptive coping strategies for dealing with social conflict	Role play scenarios, discussion, group learning, and written worksheets
Interpersonal problem solving skills	8	Athlete's positive vision of the self	Build self-esteem and enhance respect for self	Watching the video about basketball player, discussion, group learning, and written worksheets
	8	Emotional awareness	Learn and practice to recognize and express emotions	Role play scenarios, discussion, and group learning
	8	Personal responsibility	Learn and practice to demonstrate self-control and respect for others	Method of impulse control, role play scenarios, discussion, and group learning
	8	Positive relationships with team members	Learn and practice social skills, such as cooperation and compromise	Role play scenarios, discussion, and group learning

For training of every category of social skills eight 25 minute sessions 2 times a week were used (in total 3 hours 20 minutes). For instance, during the first month 3 hours 20 minutes verbal communication skills were trained, during the second month non-verbal communication skills were trained, the third month was dedicated to enhance listening skills and empathy while the fourth month - to enhance conflict resolution skills. Sessions during the last 4-month period focused on interpersonal problem solving skills: during the fifth month players tried to build self-esteem and enhance respect for self, the sixth month was dedicated to learn and practice how to recognize and express emotions, during the seventh month players learned and practiced to demonstrate self-control and respect for others, while during the eight month they enhanced social skills, such as cooperation and compromise. Teaching of communication and interpersonal problem solving skills in each session was combined with the identification of negative perceptions and behaviors to help basketball-playing students manage their emotions and enhance their self-efficacy beliefs. Social skills are trained through didactic instruction, practice, role plays, and positive reinforcement. For instance, when basketball-playing

students were trained verbal communication skills, they watched real-life video showing the difficulties experienced by players in terms of low level of communication skills. After watching the video, players were asked to answer the questions (e.g. «If you had to tell the shooting technique to one friend of yours who has made some mistakes by shooting, what would you say?»). Later players were grouped into pairs and practiced how to give explanations, and how to give and receive feedback. Then players all together discussed and shared their emotional experiences. Similar techniques were used during each session.

All basketball-playing students of experimental group attended training sessions on a regular basis. After the first 4-month period training programme participants successfully achieved intermediate goals of the training programme and improved their communication skills. The participants of the training programme wrote in a free form that they improved verbal communication skills, listening skills, and conflict resolution skills. At the end of the experiment participants had also the possibility to evaluate social self-efficacy training programme in a *free form*. All training programme *participants* expressed the position

that they are satisfied with the *programme* because they improved relationships with team the members and implemented their social skills without fear of making mistakes.

Data Collection Procedures. A permit for data collection was obtained from the Ethics Committee of the Lithuanian Sports University, and the data were gathered in the randomly selected teams by a researcher who implemented the educational programme in the experimental group. The data collection procedure was carried out by providing students with the appropriate environment and sufficient time for individuals to answer the questions in the classroom. The questionnaires were administered in the classroom of the sport school by the researcher. The presentation time of the SSES varied between 3-4 minutes for basketball-playing students. The presentation time of the Multi-CAM for Friends varied between 20–25 minutes for participants. All participants had parental permission. Written consent by parents was obtained prior to experiment.

The study was conducted in three distinct phases. Firstly, there was a pre-assessment of the variables studied in the two groups. Secondly, the educational programme was implemented in the experimental group, as the control group continued with their traditional training. Thirdly, once the implementation of the intervention in the experimental group was completed, there was a post-test for both groups.

Data Analysis. The Shapiro-Wilk test was employed to assess normality of data distribution. Results indicated that normality values were in acceptable ranges. A 2 (Group) \times 2 (Time) repeated measures (RM) multivariate analysis of variance (MANOVA) was employed to examine group mean differences in the social self-efficacy dimensions. Effect sizes for F-statistics were expressed as partial eta-squared (η_p^2). Partial eta squared (η_p^2) ranges from 0 to 1 and represents the proportion of variance in the dependent variable explained by the independent (group) variable as small ($\eta_p^2 = .01$), medium ($\eta_p^2 = .09$), and large ($\eta_p^2 = .25$) effects (Tabachnick and Fidell, 2007).

To investigate differences among pre-test scores between experimental group and control group, independent samples

t-test was employed. For the purpose of investigating the effectiveness of the educational programme on social self-efficacy and its dimensions the comparison of the variables of experimental group or control group before the experiment and after was performed by applying the dependent samples *t*-test. Statistical significance was set at .05 α level. Effect sizes for mean differences were expressed as Cohen's *d*, which are generally defined as follows: small ($d = .2$), medium ($d = .5$), and large ($d = .8$) (Tabachnick and Fidell, 2007). The data were analysed using SPSS for Windows version 20.0 statistical package.

Results

Social self-efficacy and six of its dimensions were analysed. The RM MANOVA examining the manipulation effect on social self-efficacy revealed a significant effect for time by group interaction, Wilks Lambda = .65; $F(7, 46) = 3.50$; $p < .01$; $\eta_p^2 = .35$) which is a large effect according to Cohen, with 35% of variance accounted for time by group interaction effect. A significant Group by Time interaction indicated that the change from pre-test to post-testing was different depending upon the treatment groups (experimental group and control group) because a significant Group by Time interaction shows that individual effects of Group and Time are insignificant (Dimitrov and Rumrill, 2003). The independent samples *t*-tests were conducted to determine the differences between the experimental and control groups before the experiment. No statistically significant difference ($p > .05$) was found between the experimental and control groups before the experiment according to social self-efficacy and six dimensions (personal controllability, control expectancy, effort, ability, luck, and personal difficulty).

The results of the dependent samples *t*-tests conducted to determine the differences between experimental group of young basketball players before and after the experiment according to social self-efficacy and six dimensions are presented in Table 2.

Table 2
Social Self-efficacy and its Dimensions among Basketball-Playing Students, M \pm SD

Parameter/Group	Experimental group (n = 26)		Control group (n = 28)	
	Before experiment	After experiment	Before experiment	After experiment
Social self-efficacy	3.63 \pm 0.47	4.12 \pm 0.55**	3.65 \pm 0.54	3.74 \pm 0.71
Personal controllability	5.31 \pm 1.23	6.04 \pm 1.11*	5.64 \pm 1.16	6.00 \pm 1.36
Control expectancy	4.96 \pm 1.11	6.65 \pm 1.16**	5.18 \pm 1.22	4.29 \pm 1.88
Effort	5.08 \pm 1.02	5.65 \pm 1.47	5.54 \pm 1.48	5.64 \pm 1.37
Ability	4.62 \pm 1.06	4.31 \pm 1.41	4.71 \pm 1.08	5.07 \pm 1.51
Luck	5.31 \pm 1.57	5.58 \pm 1.45	5.07 \pm 1.41	5.18 \pm 1.16
Personal difficulty	3.46 \pm 0.51	3.50 \pm 0.65	3.39 \pm 1.87	3.57 \pm 0.63

Note. * $p < .05$; ** $p < .01$. M = mean; SD = standard deviation.

A statistically significant improvement was found ($t(25) = -3.14, p < .01$, Cohen's $d = .54$) for social self-efficacy after an educational experiment. Analysis of the results of experimental group among young basketball players before and after the experiment showed statistically significant ($t(25) = -4.67, p < .01$, Cohen's $d = .78$) improvement of control expectancy in the experimental group after the experiment.

Also beliefs in personal controllability in the experimental group of young basketball players statistically significantly improved ($t(25) = -2.47, p < .05$, Cohen's $d = .68$) after the experiment. A statistically significant difference was not observed between the experimental group of young basketball players before and after the experiment according to the other social self-efficacy beliefs (dimensions) ($p > .05$).

No statistically significant difference ($p > .05$) was found between control group of young basketball players before and after the experiment according to the social self-efficacy and six dimensions (personal controllability, control expectancy, effort, ability, luck, and personal difficulty).

Discussion

The purpose of the present study was to investigate the effectiveness of an educational programme on social self-efficacy among basketball-playing students. The main factor determining the validity of the present research was that the experimental group and the control group were not statistically different according to social self-efficacy and six dimensions (personal controllability, control expectancy, effort, ability, luck, and personal difficulty) before the experiment. The present study partially supported the effectiveness of this educational programme for enhancing social self-efficacy. Analyses indicated that the educational programme was effective in changing social self-efficacy and several its dimensions (personal controllability and control expectancy) for the experimental group. The effect sizes for most observed differences due to treatment were in the medium (Cohen's $d = .50$) to large (Cohen's $d = .80$) range. It was established that social self-efficacy of basketball-playing students in the experimental group and the dimensions of this construct (personal controllability and control expectancy) after the enhancement of social self-efficacy were higher in comparison with those of the experimental group before the educational experiment.

The hypothesis, that the basketball-playing students' social self-efficacy would be significantly higher after an educational programme than before it, was partially supported by the results of this study. This finding was consistent with previous research that identified that educational programmes have a positive effect on improvement of self-efficacy. For instance, Zagórska and Guskowska (2014) have evaluated the effectiveness of educational program for

enhancing generalized self-efficacy among young athletes. The duration of the programme was shorter (4 psycho-educational workshops over a 10-day period) as compared to the current programme. The results showed that athletes' level of self-efficacy significantly increased in experimental group after participating in the programme as compared to the baseline assessment (medium effect size, Cohen's $d = .66$). Study by Harrell, Mercer, and DeRosier (2009) evaluated the efficacy of a social skills training intervention (duration was 12-week period) designed to improve adolescents' social behavioral adjustment also reported a medium effect size (Cohen's $d = .53$). The study is similar by content of some sessions, but different by target group because it has been applied to the population of non-athletes. The results of the pilot study with basketball players by Villani, Caputo, Balzarotti, and Riva (2017) indicated that the athletes receiving the web-based interactive training reported higher levels of self-efficacy compared to the baseline assessment. The web-based interactive training lasted seven weeks, was based on the four sources of self-efficacy information identified by Bandura (similar to educational programme in the present study), and has medium effect (Cohen's $d = .62$) on generalized self-efficacy of young basketball players.

The present research data may be explained by the self-efficacy theory (Bandura, 1993), which emphasises that methods for enhancing (building, maintaining, regaining) social self-efficacy are based on the information from the four major self-efficacy sources (i.e., mastery experiences, vicarious learning, verbal persuasion, and psychological arousal). The results of the present study add to the argument of Miller, Lane, and Wehby (2005), Pinar and Sucuoğlu (2013), who indicated that the most effective teaching techniques were modelling, rehearsing, and rewarding, and among these techniques, modelling was the most important. Furthermore, with modelling students not only observe the correct/appropriate skills, but they also have the opportunity to implement the desired behaviour without fear of being excluded and making mistakes.

In the experimental group, the basketball-playing student's social self-efficacy score after the experiment was significantly better than before the experiment (effect size was medium, Cohen's $d = .54$). This finding was similar to the findings of Anderson, Sabatelli, and Trachtenberg (2007) and Sabatelli, Anderson, and Lamotte (2001) and also supported the findings of Escartí, Gutiérrez, Pascual, and Llopis (2010), and Escartí, Gutiérrez, Pascual, and Marín (2010) whose effect size was large ($\eta_p^2 = .13$ and $\eta_p^2 = .24$, respectively). The positive feedback transmitted by the participants during each educational programme session promoted the development of social self-efficacy. This style of intervention used in the present educational programme was based on the self-efficacy theory, which places great emphasis on the way in which individuals acquire self-efficacy beliefs (Bandura, 1993). Thus, compared to before the experiment, basketball-playing students of the experimen-

tal group after the experiment had enhanced several social self-efficacy beliefs, and the educational programme is likely to influence the results in our study. It might be expected that positive program evaluation by participants of the self-efficacy training programme at end of experiment could indicate that changes are attributable to the social self-efficacy training programme itself.

More specifically, the results also showed that scores of social self-efficacy beliefs in personal controllability among basketball-playing students of the experimental group after the educational programme were higher than the same students before the experiment (effect size was medium, Cohen's $d = .68$). This result was in line with Cross (2002), where a small effect size was recorded (Cohen's $d = .48$). It might be expected that the present educational programme might have a greater effect in accounting for personal controllability than would only basketball exercises. In conclusion, our finding that basketball-playing students of the experimental group after the educational programme had better personal controllability than the same students before experiment might be explained by Thompson and Schlehof (2011), who stated that people have a sense of perceived controllability when they believe that, in general, personal action controls outcomes and they personally have the skills to enact those actions (self-efficacy).

The results confirmed that that scores of social self-efficacy beliefs in control expectancy among basketball-playing students of the experimental group after the educational programme were higher than the same students before the experiment (effect size was medium, Cohen's $d = .78$). The positive effect of the educational programme on self-efficacy beliefs in control expectancy has been not proven in other studies.

The experimental group did not have significant changes with respect to the comparison group in four social self-efficacy dimensions: effort, ability, luck, and personal difficulty. These results can be explained by the fact that the programme was implemented in a sport school, where students showed high levels of these indicators. For instance, Anderson et al. (2007) highlighted that youth educational programme participants that showed the greatest changes were those who were least competent before the programme began. In summary, the current study partially supported the effectiveness of an educational programme for enhancing social self-efficacy of basketball-playing students,

and could further our understanding of interventions appropriate for student athlete samples. The intervention could be adjusted to the particular needs of the sport club, because higher social self-efficacy can foster the development of team members' social relationships and interaction, and these indicators can foster team satisfaction and cohesion (Borrego, Silva, and Guerrero, 2012).

Limitations and Future Prospects

Like all case studies, the current research is limited in its ability to be generalized and has a few significant limitations. First, the educational programme was only applied to a single team. The second limitation of the present study was lack of random assignment of participants to condition because only whole teams were randomly assigned into an experimental and a control group. These shortcomings may limit generalizability of the programme. Randomized controlled studies are needed to generalize the findings.

Another limitation was that our results were limited to male basketball-playing students. This analysis did not examine female basketball-playing students, and as a result, the conclusions only apply to changes in social self-efficacy before an educational programme for enhancing social self-efficacy and after among male basketball-playing students.

In addition, since the experiment lasted relatively a long time (eight months), the results could have been influenced by other factors, too; for example, participants could have experienced physiological changes, become stronger, more consolidated or could have improved their ability to think abstractly, but the impact of these factors for both groups was the same – thus, controllable.

And lastly, in the current study was the lack of evidence that self-efficacy increases led to improved social behaviour.

The study indicated that further research is necessary to reveal how long the improved social self-efficacy beliefs last after the educational programme. It would be useful to continue research in this field and to analyse social self-efficacy beliefs not only among male basketball-playing students but also among students of different gender and different sports activities. The analysis of the educational programme's efficiency, when social self-efficacy beliefs are individualised, could be also a direction for further studies.

Programa de capacitación social de autoeficacia para estudiantes que juegan baloncesto: Caso de estudio

Resumen

En este estudio, se investigó la efectividad de un programa educativo para mejorar la autoeficacia social preparado para los estudiantes que practican baloncesto. Participaron en este estudio cincuenta y cuatro estudiantes masculinos que practican baloncesto ($M = 16.47$; $SD = .73$), divididos en dos equipos. Los equipos fueron asignados aleatoriamente a un grupo experimental ($n = 26$) y uno de control ($n = 28$). La intervención fue diseñada para ayudar a los estudiantes que practican baloncesto a determinar su autoeficacia social al participar en actividades interactivas y escenarios de juego de roles. Para

evaluar la efectividad, se usó una subescala de autoeficacia social, un control multidimensional, agencia y un inventario de medios y fines para amigos. Los resultados mostraron que este programa educativo para mejorar la autoeficacia social fue efectivo para los estudiantes que practican baloncesto, y las creencias de autoeficacia social en la capacidad de control personal y en la expectativas de control.

Palabras clave: autoeficacia; intervención; deportes juveniles; atletas; baloncesto.

Programa de treinamento de auto-eficácia social para estudantes de basquetebol: um estudo de caso

Resumo

Neste estudo, foi investigada a eficácia de um programa educacional para melhorar a auto-eficácia social preparada para estudantes de basquete. Cinquenta e quatro estudantes masculinos de basquetebol (Mage = 16,47; SD = 0,73), praticando em duas equipes, participaram deste estudo. As equipes foram distribuídas aleatoriamente em um grupo experimental (n = 26) e controle (n = 28). A intervenção foi projetada para ajudar estudantes de basquetebol a determinar sua auto-eficácia social, envolvendo atividades interativas e cenários de jogadas de papéis. Para avaliar a eficácia, utilizou-se uma Subescala de auto-eficácia social, e um controle multidimensional, agência e Means-ends inventário para amigos. Os resultados mostraram que este programa educacional para melhorar a auto-eficácia social foi eficaz para a auto-eficácia social dos estudantes de basquete e as crenças de auto-eficácia social na controlabilidade pessoal e na expectativa de controle.

Palavras-chave: auto-eficácia; intervenção; esportes juvenis; atletas; basquetebol.

References

- Anderson, S. A., Sabatelli, R. M., and Trachtenberg, J. (2007). Community police and youth programs as a context for positive youth development. *Police Quarterly*, 10, 23–34.
- Aşkar, P., and Umay, A. (2001). Perceived computer self-efficacy of the students in the elementary mathematics teaching programme. *Hacettepe University Journal of Education*, 21, 1–8.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117–148.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bilgin, M. (1999). Developing a social self-efficacy expectation scale for adolescents at the age of 14-18. *Turkish Psychological Counseling and Guidance Journal*, 2(12), 7–15.
- Bilgin, M., and Akkapulu, E. (2007). Some variables predicting social self-efficacy expectation. *Social Behavior and Personality*, 35(6), 777–788.
- Borrego, C. M. C., Silva, C. M., & Guerrero, J. P. (2012). Programa de Intervención psicológica para la optimización del concepto de equipo (team building) en jóvenes futbolistas. *Revista de Psicología del Deporte*, 21(1), 49-58.
- Chase, M. A. (2001). Children's self-efficacy, motivational intentions, and attributions in physical education and sport. *Research Quarterly for Exercise and Sport*, 72, 47–54.
- Coleman, P. K. (2003). Perceptions of parent-child attachment, social self-efficacy and peer relationships in middle childhood. *Infant and Child Development*, 12, 351–368.
- Connolly, J. (1989). Social self-efficacy in adolescence: Relations with self-concept, social adjustment, and mental health. *Canadian Journal of Behavioural Science*, 21, 258–269.
- Cross, R. (2002). The effects of an adventure education programme on perceptions of alienation and personal control among at-risk adolescents. *Journal of Experiential Education*, 25, 247–254.
- DeRosier, M. E. (2004). Building relationships and combating bullying: Effectiveness of a school-based social skills group intervention. *Journal of Clinical Child and Adolescent Psychology*, 33, 125–130.
- Dinç, Z. (2011). *Social self-efficacy of adolescents who participate in individual and team sports*. *Social Behavior and Personality*, 39(10), 1417–1424.
- Dimitrov, D. M., and Rumrill, P. D. (2003). Pretest-posttest designs and measurement of change. *Work*, 20, 159–165.
- Erozkan, A. (2013). The effect of communication skills and interpersonal problem solving skills on social self-efficacy. *Educational Sciences: Theory & Practice*, 13(2), 739–745.
- Escartí, A., Gutiérrez, M., Pascual, C., and Llopis, R. (2010). Implementation of the Personal and Social Responsibility Model to improve self-efficacy during physical education classes for primary school children. *International Journal of Psychology and Psychological Therapy*, 10(3), 387–402.
- Escartí, A., Gutiérrez, M., Pascual, C., and Marín, D. (2010). Application of Hellison 's Teaching Personal and Social Responsibility Model in physical education to improve self-efficacy for adolescents at risk of dropping-out of school. *The Spanish Journal of Psychology*, 13(2), 667–676.

- Esperança, J. M., Regueiras, M. L., Brustad, R. J., and Fonseca, A. M. (2013). Um olhar sobre o desenvolvimento positivo dos jovens através do desporto. *Revista de Psicologia del Deporte*, 22(2), 481-487.
- Gall, M. D., Gall, J. P., and Borg, W. R. (2007) *Educational research: An introduction*. Boston: Pearson Education.
- Harrell, A. W., Mercer, S. H. and DeRosier, M. E. (2009). Improving the social-behavioral adjustment of adolescents: the effectiveness of social skills group intervention. *Journal of Children and Family Study*, 18, 378-387.
- Işıksal, M., and Aşkar, P. (2003). Mathematics and computer self-efficacy scales for primary school students. *Hacettepe University Journal of Education*, 25, 109-118.
- Iskender, M. (2009). The relationship between self-compassion, self-efficacy, and control belief about learning in Turkish university students. *Social Behavior and Personality*, 37(5), 711-720.
- Little, T. D., and Wanner, B. (1997). *The Multi-CAM: A multidimensional instrument to assess children's action-control motives, beliefs, and behaviors* (Materialen aus der Bildungsforschung Nr. 59.) Berlin: Max-Planck-Institut für Bildungsforschung.
- Lodico, M. G., Spaulding, D. T., and Vouegtle, K. H. (2010). *Methods educational research: From theory to practice* (2nd ed.). San Francisco, CA: John Wiley & Sons, Inc.
- Malinauskas, R., and Brusokas, A. (2010). Self-efficacy concept and characteristics of athletes self-efficacy. *Science and Processes in Education*, 13(4), 68-80.
- Malinauskas, R., and Brusokas, A. (2013). Indicators of general and physical self-efficacy among representatives of youth basketball. *Theory and Practice of Physical Culture*, 3, 27-29.
- Malinauskas, R., Brusokas, A., and Gudonis, V. (2012). Peculiarities of career self-efficacy of young basketball players. *European Journal of Contemporary Education*, 1, 30-33.
- Matsushima, R., and Shiomi, K. (2003). Social self-efficacy and interpersonal stress in adolescence. *Social Behavior and Personality*, 31(4), 323-332.
- Miller, M. J., Lane, K. L., and Wehby, J. (2005). Social skills instruction for students with high incidence disabilities: A school based intervention to address acquisition deficits. *Preventing School Failure*, 49(2), 27-39.
- Morton, M., and Montgomery, P. (2011). Youth empowerment programs for improving self-efficacy and self-esteem of adolescents. *Campbell Systematic Reviews*, 5, 1-80.
- Muris, P. (2001). A brief questionnaire for measuring self-efficacy in youth. *Journal of Psychopathology and Behavioral Assessment*, 23, 145-149.
- Muris, P. (2002). Relationships between self-efficacy and symptoms of anxiety disorders and depression in a normal adolescent sample. *Personality and Individual Differences*, 32, 337-348.
- Pinar, S., and Sucuoglu, B. (2013). The outcomes of a social skills teaching program for inclusive classroom teachers. *Educational Sciences: Theory & Practice*, 13(4), 2247-2261
- Rakauskiene, V., and Dumciene, A. (2013). Alteration of adolescent self-efficacy when applying brief counseling at school. *Social Behavior & Personality: An International Journal*, 41(6), 893-899.
- Sabatelli, R. M., Anderson, S. A., and Lamotte, V. A. (2001). *Assessing outcomes in youth programs: A practical handbook*. Storrs, CT: University of Connecticut, Centre for Applied Research.
- Sherer, M., Maddux, J. E., Mercadante, B., Prentice-Dunn, S., Jacobs, B., and Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports*, 51, 663-671.
- Spence, S. (2003). Social skill training with youth and young people: Theory, evidence practice. *Child and Adolescent Mental Health*, 22, 84-96.
- Tabachnick, T. B., and Fidell, L. (2007) *Using multivariate statistics* (5th ed.). Boston, MA: Allyn & Bacon.
- Thompson, S. C., and Schlehofer, M. M. (2011). *Perceived control: Description, theoretical background, and history*. Available at: http://dccps.cancer.gov/BRP/constructs/perceived_control/perceived_control1.pdf.
- Ünlü, H., and Kalemoglu, Y. (2011). Academic self-efficacy of Turkish physical education and sport school students. *Journal of Human Kinetics*, 27, 190-203. doi:10.2478/v10078-011-0015-z.
- Villani, D., Caputo, M., Balzarotti, S., and Riva, G. (2017). Enhancing self-efficacy through a blended training: A pilot study with basketball players. *International Journal of Sport and Exercise Psychology*, 15(2), 160-175.
- Weinberg, R., and Jackson, A. (1990). Building self-efficacy in tennis players: A coach's perspective. *Journal of Applied Sport Psychology*, 2, 164-174.
- Wolfe, S. L., Nordstrom, C. R., and Williams, K. B. (1998). The effect of enhancing self-efficacy prior to job training. *Journal of Social Behavior and Personality*, 13(4), 633-650.
- Zagórska, A., and Guskowska, M. (2014). A program to support self-efficacy among athletes. *Scandinavian Journal of Medicine and Science Sports*, 24, e121-e128.
- Zsolnai, A., and Juzsa, K. (2003). Possibilities of criterion referenced social skills development. *Journal of Early Childhood Research*, 1(2), 18-34.
- Zullig, K. J., Teoli, D. A., and Valois, R. F. (2011). Evaluating the performance of a brief measure of social self-efficacy among U.S. adolescents. *Psychological Reports*, 109(3), 907-920.