OPINIONS OF TEACHERS ON TEACHING GYMNASTICS IN BANSKÁ BYSTRICA

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ABSTRACT

The aim of this article was to find out the views and attitudes of teachers of the fifth and sixth grades of elementary schools in Banská Bystrica on gymnastics. The research group consisted of total number of 25 physical and sport education teachers, 11 male and 14 females from eleven schools. We used our electronical questionnaire to find out the opinions of the teachers. We studied the opinions on teaching the gymnastics but also material equipment at elementary schools. In average we found out positive attitude of teachers toward gymnastics. The teachers consider the existing material equipment at elementary schools in Banská Bystrica to be sufficient.

Keywords: gymnastics; opinions; physical and sport education

Introduction

According to the ISCED 2 - the state education program (SEP), the subject of physical and sports education provides basic information about the biological, physical and social foundations of a healthy lifestyle. The pupils should develop skills and acquire knowledge, skills and habits that are part of a healthy lifestyle not only during school but also in adulthood. The educational standard has four basic parts: Health and its disorders, Healthy lifestyle, Physical fitness and physical performance, and Sport activities of the movement regime that take into account the movement and health-oriented concept of physical and sports education. The part Sports activities of the movement regime is divided into following basic thematic units: Theory of physical education and sports, General gymnastics, Athletics, Basics of gymnastic sports, Sport games, Swimming, Seasonal activities, Compulsory selective thematic unit and Testing. The authors of the state educational program recommend that the basic thematic unit of general gymnastics should be taught as a part of every physical and sports lesson in duration of 15% of the lesson time. We can see that gymnastic activities play an essential role in physical and sports education. According to Chrudimsky (2011) gymnastics should be for everyone and should follow the philosophy of 4F: Have Fun – to perform gymnastics to bring joy and pleasure. Gain Fitness – fitness development. Acquire good Fundamentals – developing basic movement literacy. Enjoy healthy Friendship – development of interpersonal relationships, trust, self - esteem.

In fact the teachers play an important role in shaping their pupils' opinions and attitudes. Perečínska & Jankura (2018) found in their research that the lack of inclusion or complete omission of gymnastic activities is the cause of negative attitudes of pupils. The decisive element in the implementation of gymnastic activities is the PE teacher whose expertise and interest in teaching the activity determine the quality and effectiveness of the teaching process and thus the attitude of the pupils. We agree with the opinion of Bartík (2009) that physical and sports education teachers should first see themselves as the ones who can influence and positively lead pupils to sport and sports activities. If an educator leads the teaching process in an interesting and attractive way for pupils, the pupils' interest in physical activity increases (Sližik, 2008, Gumbo, at al. 2017). Modern innovative technologies

contribute to the attractiveness of the teaching process for example the inclusion of well-known sport or gymnastic games using non-traditional tools and equipment (Antala et al., 2014). According to Wan (2014) sports teaching must constantly introduce innovative teaching concept to combine theory with practice and continue to expand and deepen our P.E education. Using the innovation education concept in P.E teaching can deepen the reform of the physical education teaching and help us to better realize the goal of sports, achieving the goal of all-round development of body and mind for students.

We know from experience that the teacher has difficulty in guiding the teaching process in an interesting and attractive way while using an old gymnastics equipment and torn mats. In order to make the teaching process more attractive and especially safer, the city of Banská Bystrica bought an innovative and safe gymnastic set of equipment for all state elementary schools. On this basis, we are interested in the opinion of PE teachers on the inclusion of this innovative gymnastics set in the teaching process of physical education in Banská Bystrica elementary schools.

The aim and tasks of the article

The aim of the article is to find out and evaluate the opinions of teachers on the inclusion of innovative gymnastic equipment in the teaching process of pupils in the 5th and 6th grade at elementary schools in Banská Bystrica.

Methodology

The main method was an anonymous questionnaire. It was submitted electronically via a Google form and featured a set of closed and open questions. The teachers answered by either marking or writing the answer. The aim of the questionnaire was to find out the opinions of teachers on the inclusion of innovative equipment - gymnastics set in the teaching process of gymnastics. The gymnastic set includes:

- acrobatic carpet track 6 m
- mats 4 pieces 2 × 1 m
- foam beam
- foam wedge
- foam vaulting box
- foam cylinder
- inflatabe mat 6 m Airtreck + compressor
- small inflatabe mat

We addressed the teachers who teach the subject of physical and sports education, specifically 5^{th} and 6^{th} graders. The questionnaire contains questions that are categorically divided into these main units:

Attitude to the subject of physical and sports education:

- Relationship to sport.
- Relationship to gymnastics in physical and sports lessons.
- Difficulty in teaching gymnastics.
- The popularity of using individual types of equipment in sports gymnastics.
- Material conditions in schools in relation to gymnastics.
- Involvement in the school competition "Gymnastic all around competition"

We sent an electronic questionnaire to all 11 state elementary schools in Banská Bystrica. The answers were sent back by teachers from 10 elementary schools. The research group consisted of 25 teachers, including 11 men and 14 women. All teachers had the required university education and qualifications. In the results, we analysed the individual responses from the questionnaire using percentages separately for male and female teachers.

SCHOOL	SEX	AGE	YEARS OF EXPERIENCE	SPECIALIZATION
ZŠ Ďumbierska	male	23–30	1–5	Sports gymnastics
ZŠ Golianova	male	61–65	31 and more	Sports gymnastics
	male	36–40	11–15	Ice Hockey
ZŠ Jána Bakkossa	male	41–45	16–20	Atletics
ZŠ Radvanska	male	31–35	6–10	Football
ZŠ Sitnianska	male	51–55	26–30	Atletics
	male	23–30	1–5	Sports games
ZŠ SI. sl. vysielača	male	46–50	21–25	Football
ZŠ Spojova	male	36–40	11–15	Conditioning preparation
	male	46–50	21–25	Atletics
ZŠ Trieda SNP	male	31–35	6–10	Football

Table 1	The group	of PE male	teachers in	Banská Bystrica
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Table 2 The group of PE female teachers in Banská Bystrica

SCHOOL	SEX	AGE	YEARS OF EXPERIENCE	SPECIALIZATION
ZŠ Ďumbierska	female	46–50	16–20	Sports gymnastics
ZŠ Golianova	female	41–45	6–10	Sports gymnastics
ZŠ Jána Bakkossa	female	36–40	6–10	Atletics
ZŠ J.G Tajovského	female	51–55	11–15	Basketball
ZŠ Pieninská	female	23–30	1–5	Volleyball
	female	31–35	6–10	Volleyball
ZŠ Radvanska	female	56–60	31– and more	Downhill skiing, football
ZŠ Sitniaska	female	31–35	6–10	Basketball
ZŠ SI. sl. vysielača	female	31–35	1–5	Downhill skiing, swimming
	female	41–45	1–5	General
ZŠ Spojova	female	31–35	1–5	Volleyball
	female	41–45	16–20	Basketbal, tenis bedminton
ZŠ Trieda SNP	female	31–35	6–10	Atletics
	female	56–60	31– and more	Atletics

Results

The analysis of the individual questions from the questionnaire provided the answers below. The first five questions brought the basic information about each teacher, which we presented in the methodology. The following questions were aimed on the teaching process.

We have found that 64% of teachers at elementary schools teach boys and girls separately, while the remaining 36% teach boys and girls together. The majority of schools give grades for the subject of physical and sports education with the only exception of J. G Tajovsky elementary school. 93% of schools have two hours a week; only ZŠ Spojova has three hours of physical and sports education a week. In 64% of cases, the male teachers consider the number of lessons as insufficient, followed by 29% of teachers from elementary school J. Bakossa, elementary school of Pieninska and elementary school of SNP stated that the given number of hours is sufficient and one of the respondents was unable to assess the extent of teaching hours.

Female teachers rate the numbers of physical and sports education per week as insufficient in 73% of cases. On the other hand, two teachers (18%) from the Spojova and SI. sl. vysielača claimed that 2 hours of physical and sports education per week was enough. One teacher from the elementary school Golianova was unable to assess the extent of the teaching hours. With these findings, we can state a clear dissatisfaction of most teachers with the current time dotation of physical and sports lessons.

All but one of the teachers share the opinion that gymnastics is a suitable basis for other sports. Only one teacher thinks gymnastics is not as necessary as athletics. All twenty-five teachers (100%) indicated that they would welcome a professional workshop considering how to use innovative gymnastic equipment. They would also welcome a methodological publication, which would recommend a series of gymnastic exercises and training together with a videos on DVD.

The following questions were to find opinions on the inclusion of innovative tools in the teaching process:

How many percent of time do you teach basics of gymnastic sports?

From the female teachers' answers, we found that 21% of the respondents devoted more than 20% to the thematic plan of gymnastics. Four teachers (29%) give 20% of total lessons to gymnastics lessons and two teachers (14%) marked 15%. Four teachers (29%) teach only 10% of given time the gymnastics and two teachers (14%) only 5% of the total lesson time. We found that (27%) of the male respondents plan to devote only 15% to gymnastics. Six teachers (57%) give 20% of total lessons to gymnastics during physical education lessons. There were also two teachers (18%) who dedicated to gymnastics 20% or more of the total lessons time.

Is teaching gymnastics your favorite activity?

35% of female teachers said they liked gymnastics lessons. On the contrary, 30% of teachers expressed a negative attitude and the remaining 35% did not see any difference between the teaching any other thematic units. Up to six male teachers (55%) gave a positive response and thus expressed a positive attitude. On the other hand, one teacher from the elementary school Golianová (9%) expressed a negative attitude to the teaching of gymnastics at the PE lessons. The remaining 36% of teachers do not distinguish any differences between teaching thematic units.

Is teaching gymnastics more challenging than the other thematic units?

36% of female teachers do not think that gymnastics is more demanding. The remaining 64% of teachers do not share this view and claim that gymnastics is one of the units that are difficult to teach. Up to seven out of eleven male teachers (64%) do not think that gymnastics is more demanding than other thematic units in physical and sports education. Three other teachers (27%) do not share this

view and claim that gymnastics is a challenging thematic unit. The reasons were mainly related to safety and possible injury and reasons such as difficulties in demonstration, error correction, lack of interest and lack of general fitness of pupils.

After purchasing an innovative gymnastics set of equipment, do you teach the thematic unit basics of gymnastics sports more willingly or like a duty?

Most of the female teachers (57%) responded positively and they are happy to teach gymnastics. For other teachers (43%), gymnastics is taught because they have to. It is different with male teachers. Ten of the eleven male teachers (91%) said they were happy to teach gymnastics using the new equipment. One teacher (9%) teaches gymnastics still only as a duty. We are pleased that none of the asked teachers has said that he is reluctant to teach gymnastics or not willing to teach it.

To which gymnastic disciplines do you devote the most and least time?

The conclusion we have made according to the answers is that female teachers spend most of their time on floor exercise and less time on vault and rings. The lowest ranked apparatus in the process of teaching is horizontal bar. Male teachers, just like female teachers, devote most of the time to floor exercise, followed by vault. The least popular and least used apparatus in the physical education process the horizontal bar and rings. Both groups of teachers prefer to work on floor exercise. This fact is influenced certainly by the purchase of gymnastic equipment. They donate to floor exercises up to 55% of time given to the basics of gymnastic sports.

Which equipment do you use most often in teaching?

Female and male teachers both most often use following gymnastic equipment for teaching: mats, springboard, foam vaulting box, vaulting leather goat and acrobatic carpet track. They agreed that they most frequently used mats (100%), an acrobatic carpet track and a foam-vaulting box (91%), as well as a springboard (82%). The least used were foam beam (36%), rings (18%) and trampoline (9%).

Which gymnastics exercises do you prefer to teach?

According to female teachers, the most popular are acrobatic elements (51%) and vaults (38%), and among the least popular were the elements on the horizontal bar. According to the teachers, the most popular are coordination exercises and tuck vaults (46%) and less popular were hangs, hip circles and balance exercises.

If you do not fulfill the content of gymnastics in your classes as recommended by the State educational program, it is because:

According to 71% of female teachers, the safety reasons are the most problematic. Two teachers see that pupils are not interested in gymnastics (9%) and two teachers (9%) indicated insufficient material safety. The most common reasons given by male teachers were safety reasons (46%). Three teachers (27%) saw lack of interest in pupils and two teachers (18%) indicated insufficient material safety. One teacher marked his own disinterest as a reason why not to fulfill the content of gymnastics (9%).

Which gymnastic equipment that you do not have at your school do you need to improve the teaching process?

Most female teachers (57%) considers the equipment, which is available, as sufficient. The remaining 43% of teachers are missing small trampolines or springboard to improve their teaching. Majority of asked male teachers (64%) indicated that the equipment in their school was sufficient. Other teachers said they miss trampoline (16%), parallel bars and rings (9%).

Have you appreciated the activity of the city, which provided your school by new innovative equipment – gymnastic set?

More than half of the female teachers responded positively, claiming that secure equipment helped to increase safety during gymnastic exercises and 21% of respondents said they would open a gymnastic afterschool activity. The remaining 15% were positive about the city's initiative, but said they were unable to use the gymnastic equipment they received. All eleven male teachers (100%) stated that the new equipment helped the most in increasing the safety of the teaching process PE lessons.

Do you participate in a school competition organized by SAŠŠ – Gymnastic all-around competition?

Five (50%) of the questioned schools are actively involved in these school competitions, namely Ďumbierska, Golianova, J.G Tajovsky, Spojova and Sitnianska. The remaining 50% of schools do not participate in this activity. One of the female teachers said they were planning to join the gymnastic all-around competition next year. Sadly, the teachers of the remaining 4 elementary schools do not plan to participate in this only gymnastics event for elementary schools in Slovakia in the future. We agree with the recommendation of Antala et al. (2014) that if there is existence of great interest in the activity, the school could cooperate with sport federations and coaches to set up a sports club at the school. Students could attend it but also it could work for children living in the close area of the school.

Conclusion and discussion

The responses of teachers from Banská Bystrica elementary schools showed that 55% of female teachers and 35% of male teachers had a positive attitude towards teaching gymnastics. In contrast, 30% of female teachers and 1 male teacher (9%) expressed a negative attitude. The remaining 36% of female and 35% of male teachers have an indifferent attitude towards teaching gymnastics. More than half of the female teachers (57%) teach gymnastics with pleasure. For the rest (43%), gymnastics is taught because they have to. It is different with male teachers. Ten of the eleven teachers (91%) said they were happy to teach gymnastics. One teacher (9%) teaches gymnastics only because he has to. We are pleased that after purchasing an innovative gymnastics equipment, none of the teachers said they were reluctant to teach gymnastics or did not teach it at all. 24 out of 25 teachers think that gymnastics is one of the sports that builds a suitable basics and general fitness for other sports. Vaculíková, P. (2011) presents similar results, according to which the development of functional gymnastic preparation is a basic precondition for faster and more effective training of other physical activities. We agree with Kalistová et al. (2010) that gymnastic strengthening exercises should be included into scholastic physical and sports education because of their influence on the complex effect on the neuromuscular system.

According to the SEP, the recommended time for the thematic unit basics of gymnastics is 15%. The female teachers' answers show that 66% of respondents fulfil this time and 34% do not fulfil the recommended time. The male teachers all fulfil the recommended time. 36% of female teachers and 64% of male teachers think that teaching gymnastics is not more challenging than other thematic units are. 64% of female teachers and 36% of male teachers do not share this view, claiming that gymnastics is the unit that is difficult to teach. The reasons are mainly safety, possible injury and lack of general fitness of pupils. In order to reduce the risk of injury we recommend using safe innovative tools in the teaching. According to Kyselovičová (2009), various innovative tools and equipment are the factors that influence the physical education process, increase its efficiency, attractiveness and emotionality.

The analysis of the teachers' answers revealed that most of the time (55%) of teaching gymnastics is devoted to floor exercises, followed by vaulting and the least the rings and horizontal bar. They most often use mats, an acrobatic carpet track, and a foam-vaulting box, a foam beam and a springboard. The least used equipment were rings, horizontal bar and trampoline. We were surprised they do not use a 6-meter inflatable mat in all schools. In our opinion, it is the most attractive piece of equipment that is part of a purchased gymnastic set. The study of Bakx et al. (2015), investigated the pupils'

perceptions of teachers' qualities. The interesting fact is that right after the personality of teacher the pupils consider teacher's didactic skills as second most important. The similar study in Spain shows that one group of teachers taught gymnastics but did not feel fully prepared to do so, which made them anxious and insecure, and the other group did not teach gymnastics at all because they lacked the necessary conditions and resources (Ramos, Molina, 2016). Therefore, we suggest systematic training for teachers of physical and sports education in the form of workshops and methodological materials for the procedures and exercises of specific exercises on this gymnastic set. We agree with opinion of Devrilmez et al. (2018), who sees importance of ongoing monitoring of teacher knowledge in gymnastics. The authors investigated 240 Turkish teachers using questionnaire about their knowledge in field of basic teaching techniques in gymnastics. The questionnaire and the results can be used in initial teacher education and continuing professional development of the teachers.

The elementary schools in Banská Bystrica have currently sufficient material for teaching gymnastics according to 57% of female teachers and 64% of male teachers. All teachers welcomed the activity of the city of Banská Bystrica, which provided innovative and safe gymnastic equipment for all state elementary schools. The teachers said that new equipment helped mostly in increasing the safety of the teaching process at PE lessons. The foreign research shows the need of purchasing new safe equipment but that it is also necessary to build PE – related facilities. The teachers in Texas (USA) consider the new equipment and tools as a matter of course, while 68,6% (57 secondary school PE teachers (M(age) = 48.84 years; SD = 1.39) of participating teachers suggested to refurbish or expand PE-related facilities (Kretschmann, 2015). Devecioglu at al. (2012) states that the safety should be on the first place and it is influenced by several factors. One of the factors is paying attention to the management of sports equipment which should be safe and certified. According to Ningthoujam, Nongthombam (2017) the equipment is one of the backbones of PE classes. In PE classes, it should be age-appropriate and safe to use for the child.

Based on the answers of the teachers, we would like to recommend following suggestions for improving the teaching process of physical and sports education in Banská Bystrica:

- Increase the number of physical education and sports lessons by demanding to use available lessons for the benefit of sport from school administration. For example, in Poland, they have 4 hours of physical and sports education per week Slovenia has increased the number of PE lessons from two to three per week. In France, there are five PE lessons per week and in Hungary, in the first four grades they are teaching physical and sports education every day!
- 2. Increase the interest of pupils not only in physical and sports lessons, but also in afterschool activities, extracurricular trainings and competitions. Motivate them with several gymnastic activities in competitive form, obstacle races and gymnastic games.
- 3. Explain to pupils the positive contribution of sport and especially gymnastics in their lives: impact on motor skills, development of imagination and its presentation, overcoming obstacles, correcting of body posture, general preparation and others.
- 4. Apart from the popularity of individual gymnastic disciplines of pupils or teachers it is important to teach all disciplines.
- 5. Participate in the school gymnastic competition Gymnastic all around, which has its progress to the Slovak Championship.
- 6. Use digital support for teaching. Video-record pupils through special software. Explain right in class what mistakes they make in their exercise demonstration.
- 7. Motivate the teachers for further education and use of safe, modern and attractive equipment.

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References

Antala, B. et al. 2014. *Telesná a športová výchova a súčasná škola.* Bratislava : NŠC, FTVŠ UK v Bratislave. p. 343

Bakx, A., Koopman, M., Kruijf, J., & Brok, P. 2015. Primary school pupils' views of characteristics of good primary school teachers: an exploratory, open approach for investigating pupils' perceptions. In *Journal Teachers and Teaching theory and practice*. Volume 21, 2015 - Issue 5. p. 543–564

Bartík, P. 2009. Postoje žiakov základných škôl k telesnej výchove a športu a úroveň ich teoretických vedomostí z telesnej výchovy v intenciách vzdelávacieho štandardu. Banská Bystrica: UMB FF. p. 132

Devecioglu, S., Sahan, H., Tekinc, M, Yildiz, M. 2012. Development of innovation strategies for sports education. In *Procedia - Social and Behavioral Sciences* 46 p. 445–449

Devrilmez, E., Dervent, F., Ward, P., Ince, M.,L. 2018. A test of common content knowledge for gymnastics: A Rasch analysis. In *European Physical Education Review* Volume: 25 issue: 2, page(s): 512–523

Gumbo, S., Magonde, S., Nhamo, E. 2017. Teaching Strategies Employed by Physical Education Teachers in Gokwe North Primary Schools. In *International Journal of Sport, Exercise and Health*; Volume 1 Issue 2 p. 61–65

Chrudimský, J. 2011. Gymnastika pro všechny pomúže oživit školní tělesnou výchovu. In *Tělesná výchova a sport mládeže*. ISSN 1210-7689, 2011, ročník 77, 1/2011. str. 31–33

ISCED 2 [citované 20.5.2018] dostupne na: http://www.statpedu.sk/sk/svp/statny-vzdelavaci-program/

Kalistová P. et al. 2010. TV1. *Didaktika gymnastiky. Specializované gymnastické průpravy* [online]. [citované 20.9.2018] dostupne na: http://tv1.ktv-plzen.cz/didaktika-gymnastiky/specializovanegymnasticke-prupravy.html

Kretschmann, R. 2015. Physical education teachers' subjective theories about integrating information and communication technology (ICT) into physical education In *The Turkish Online Journal of Educational Technology*. volume 14 issue 1. p. 68–96

Kyselovičová, O. 2009. Využitie balančného náčinia v hodinách aerobiku. In *Škola v pohybe. Metodická príručka zo seminára Škola v pohybe 2009*. Univerzita Komenského v Bratislave, FTVŠ p. 72–76

Ningthoujam, R., Nongthombam B. 2017. Moirangthem Sunderchand Innovative Teaching Methods in Physical Education for Better Learning. In *Int J Cur Res Rev* Vol 9 Issue 16. p. 6–11

Perečínska, K., Jankura M. 2018. Postoje študentov osemročných gymnázii ku gymnastickým činnostiam In *Acta Facultatis exercitationis corporis universitatis Presoviensis.* No. 1, 2018, Prešov: Vydavateľstvo Prešovskej univerzity p. 82–87

Ramos M.A.A., Ruiz M.A.M., Molina G.M. 2016. Gymnastics dispositions and skills: a case study listening to the voices of teachers In *Science of Gymnastics Journal* Vol. 8 Issue 1: p. 57–70

Sližik, M. 2008. Záujem žiakov a stav aplikácie úpolov s využitím prvkov karate na hodinách telesnej výchovy na II. stupni základnej. In *Sport a kvalita života 2008*: sborník příspěvků mezinárodní konference. Brno: Masarykova univerzita, 2008. p. 938–946.

Vaculíková, P. 2011 Nebojme se gymnastiky: textová opora ke kurzu. 1. vyd. Brno: Masarykova univerzita

Wan, Z. 2014. Theoretical and practical study on P.E teaching methods with the innovative education concept. In *Bio technology An Indian Jurnal*. Volume 10 Issue 13, p. 7575–7582

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