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Effectiveness of Solution-Focused Brief Counselling in Dealing with Problems with Physical Education among Senior Students

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Abstract

Some scholars (Barr-Anderson et al., 2008; Cairney et al., 2012) have suggested that deficiencies in physical education (PE) classes are an important cause of the age-related decline in physical activity. The school PE curricula are ineffective and should be improved (Cairney et al., 2012). The purpose of this study was to determine the effectiveness of solution-focused brief counselling (SFBC) as a method of dealing with the problems faced by senior students during physical education classes with a view to developing interventions to increase students' physical activity.
ž Following SFBC, 66.3% of participants reported medium or major progress in dealing with a severe problem related to physical activity (F=164.30, p=.001 compared to control group) and physical education teachers observed positive changes in the students' behaviour during physical education classes (Communication problems: t=10.86, p < .001; Insufficient involvement in PE classes: t=8.43, p<.001). SFBC is suitable for counselling adolescents at school as it is a brief, well-structured and flexible approach that helps to improve the quality of physical education classes.

Key words: *physical education; senior students; solution-focused brief counselling.*

Introduction

Students' levels of physical activity decrease with age but as yet there are no convincing explanations of this upsetting trend (Brooks, Smeeton, Chester, Spencer, & Klemera, 2014). Some scholars (Barr-Anderson et al., 2008; Cairney et al., 2012; Lee

et al., 2007) have suggested that deficiencies in PE classes are an important cause of the age-related decline in physical activity. In school, all students are involved in PE classes and these classes directly or indirectly affect the quantity and quality of physical activity during education and in later life (Barr-Anderson et al., 2008; Shephard & Trudeau, 2000). The age-related decline in students' physical activity levels indicates that the school PE curricula are ineffective and should be improved (Cairney et al., 2012).

Instruction in PE is usually organized as such that little of the curriculum content and only a few elements of the classes satisfy students' expectations (Barr-Anderson et al., 2008; Cairney et al., 2012). In recent years PE provision in schools has been upgraded in a number of ways, e.g. by paying more attention to its integration with academic subjects (Trost, Fees, & Dzewaltowski, 2008) or by organizing classes based on health promotion (Barr-Anderson et al., 2008). Educational techniques have been improved by encouraging students to adhere to the principles of respect in line with recommendations by specialists in various disciplines including psychologists (Williams & Strean, 2005), social pedagogues and public health promoters (Franklin, Moore, & Hopson, 2008).

Research is needed to devise strategies for improving senior students' motivation for physical activity during PE classes. This is an important objective, partly because overall physical activity alters one's concept of the physical *self* and thus promotes further changes in personality, which are positively related to health-promoting behaviours in the future (Moreno & Cervelló, 2005).

The use of solution-focused brief counselling (SFBC) to increase levels of health-promoting behaviours or physical activity is a recent development (Lin et al., 2010). It has also been claimed that counselling may be effective in encouraging individuals to adopt a healthy lifestyle (Lin et al., 2010; Williams & Strean, 2005). It has been suggested that general practitioners could use SFBC to encourage sedentary patients to increase their overall level of physical activity (Williams & Strean, 2005), but there has been little research in this field (e.g. Breckon, Johnston, & Hutchison, 2008; Lin et al., 2010). The use of novel pedagogical techniques to promote a healthy lifestyle in the school environment is currently an active theoretical and practical research topic (Pourebrahim, Khoshkonesh, & Salehi, 2011). This raises the question of whether a structured conversation between a school-based psychologist and an adolescent is an effective means of stimulating interest in PE classes and thence increasing levels of physical activity in young people. We have already presented that counselling which is based on solution focused brief counselling is an efficient method of promoting physical activity among students (Dumčienė & Rakauskienė, 2014).

This study investigated the use of SFBC to deal with the issues faced by senior students during PE classes and to promote overall physical activity.

Methods

Sample of Participants

A total of 192 senior students (grades 9 to 12) participated in the research; they were assigned to either the impact group or the control group.

The impact group consisted of 92 students aged 15 to 19 years (average age 17.05±1.25); 51 (55.4%) were female and 41 (44.6%) were male. The average age of male students in the impact group was 17.25± .33 years; the average age of female students was 16.80±1.10 years. The female and male students of the impact group were homogeneous in terms of age (t=1.14; p=0.187).

The impact group was compared with the control group consisting of students who had indicated an urgent problem related to physical activity but did not receive counselling. The control group consisted of 100 students aged 15 to 19 years (average age 16.53±1.21); 57 (57.0%) were female and 43 (43.0%) were male. The average age of male students in the control group was 16.58±1.18 years and the average age of the female students in the control group was 16.49±1.24 years. The female and male students of the control group were homogeneous in terms of age (t=1.19; p=0.714).

The impact and control groups were similar in terms of participants' gender (x^2=6.12; p =0.653), average age (t=1.01; p=.106) and grade (x^2=3.17; p=.197).

Twelve PE teachers, seven (58.3%) women and five (41.7%) men, took part in the research. The age of the teachers ranged from 32 to 54 years (average age 39.14±5.2). The teachers evaluated the behaviour of all individuals counselled about communication problems or insufficient involvement in PE classes on two occasions, before and after SFBC.

Instruments

Participants completed questionnaires which required them to describe their most urgent, recent problem related to physical activity. Questionnaires were completed during PE classes. Four weeks after the completion of the first questionnaire students used a similar questionnaire to re-evaluate the severity of their original problem.

Students' self-evaluations. We used a commonly used eleven-point scale to evaluate the effectiveness of counselling (more about this SFBC core technique in Iveson, 2002). A change of 1 to 3 points in the ten-point scale between the first and final counselling sessions is traditionally considered a minor positive change; a change of more than 3 points is considered a major change (Biggs & Fletts, 2005). We used the scale to assess the efficacy of counselling, students rated the severity of their problem, and changes in the severity rating (i.e. the progress) were categorised as follows: *no positive change* (change≥0); *minor positive change* (change of -1 or -2); *medium positive change* (change of -3 or -4); *major positive change* (change of -5 to -9). Students were given the opportunity to evaluate the change in their success in dealing with their problem at every counselling session; this also acted as a form of feedback (Biggs & Fletts, 2005) as it provided them with an opportunity to measure their progress towards dealing with their problem.

Teachers' behavioural evaluations. Teachers evaluated student behaviour before and after the SFBC sessions using an eleven-point scale ranging from 0- *excellent behaviour during PE classes; no problems* to 10- *extremely troublesome; numerous problems during PE classes*.

Students' self-rated motivation. Students evaluated their motivation to solve the problem, i.e. their willingness to change something to solve the problem (Fleming, 2004), on an eleven-point scale ranging from 0- *not inclined to do anything to solve the problem* to 10- *determined to do whatever it takes to change the situation*.

Procedure

The research took place between 2012 and 2015 in three randomly selected general education schools in Lithuania with the cooperation of PE teachers. SFBC sessions were conducted by three psychologists. SFBC was used to promote physical activity among senior students and to deal with the issues related to participation in PE classes. SFBC was developed by the American psychotherapists Berg and de Shazer (Simon & Berg, 1999). The philosophy underlying SFBC is that individuals have strengths which can be tapped during counselling, and that these strengths enable the individual to change him or herself including altering lifestyle.

The participants voluntarily participated in the research with full knowledge of the purpose of the research, expected procedures, rights to withdraw from the research once it has started, research benefits and confidentiality. The Republic of Lithuania considers a person of 18 years and older to be an adult and therefore one who can provide consent without parental permission. If the participant was under 18 years of age, his/her parents were informed and assented.

Students hardly ever seek specialist help to deal with problems related to their overall level of physical activity and so we used a procedure intended to encourage them to do so. Senior students received a non-traditional PE class during which the benefits of physical activity were discussed. At the end of the class, students were encouraged to talk to the psychologist about any problems they had with physical activity. Fifty-seven students (61.9% of the students who underwent counselling) contacted the psychologist on their own initiative to seek counselling and an additional 35 students (38.1% of the students who underwent counselling) were instructed to seek counselling by their PE teachers.

Ninety-two senior students received counselling based on SFBC techniques. All the counselled students received between 1 and 6 counselling sessions (average 2.70±.99); which lasted approximately 50 to 60 minutes.

Data Analysis

Data from control group participants were excluded from the analysis if the student failed to indicate an urgent problem related to physical activity. Data from control participants who described different problems in the two feedback documents

(comparing completed questionnaires during PE classes the first and the second time) were also excluded from the analysis. The control group enabled us to evaluate spontaneous changes in problem severity.

Baseline group differences were tested by using two-way mixed ANOVA (thus comparing the control group and the impact group for the pre-post-control design) and the paired samples t test (comparing student evaluations during the first, second and third sessions as well as the evaluations of students issued by PE teachers concerning the students' behaviour before and after SFBC in the impact group. The distribution of problems related to PE classes by age category and gender was tested by using chi-square (X^2).

Results

Ninety-two senior grade students were counselled about problems related to PE classes. Three categories of problems were distinguished: poor communication with PE teachers; insufficient involvement in PE classes and lack of physical activity. The distribution of problem categories by gender and grade is presented in Table 1. In the impact group the distribution of problems did not differ between gender (χ^2=3.01; p=0.222) or age categories (9th and 10th grades vs. 11th and 12th grades: χ^2=0.806; p=0.668).

Table 1

Distribution of problems related to PE classes by age category and gender

Problem	Entire sample *n* (per cent)	Male students *n* (per cent)	Female students *n* (per cent)*	Grades 9 and 10 *n* (per cent)	Grades 11 and 12 *n* (per cent)**
Poor communication with PE teachers	27 (29.3)	12 (30.8)	14 (28.6)	13 (33.3)	13 (26.5)
Insufficient involvement in PE classes	29 (31.5)	8 (20.5)	18 (36.7)	12 (30.8)	14 (28.6)
Lack of physical activity	36 (39.1)	19 (48.7)	17 (34.7)	14 (35.9)	22 (44.9)

Notes. *Comparison of male and female students: χ^2 = 3.01; p = 0.222; **Comparison of age categories: χ^2=0.806; p=0.668.

The composition of the impact group was determined partly by the PE teachers involved in the study. During PE classes, the teachers told their students about the physical and mental health benefits of physical activity and encouraged students to contact the school psychologist about problems related to physical activity. Certain students were advised to seek counselling; all the students who underwent counselling were categorised as having a problem related to insufficient involvement in PE classes and 11 out of 27 students (40.8%) of those categorised as having a problem with communication with the PE teacher had been instructed to seek counselling. Attendance at counselling sessions was voluntary.

Just over one third (37.1%, n=10) of students counselled about a communication problem with the PE teachers stated that the problem was caused by their behaviour,

but over half (62.9%, n = 17) claimed that the teachers' behaviour was the source of the problem. During SFBC it was established that female students were more likely than male students to be negatively affected by PE teachers' behaviour. Among female participants the most common problem with teachers' behaviour, reported by over half (52.2%) was being humiliated by PE teachers e.g. by making remarks about their looks, laziness etc., which could be overheard by other students. Among male students the most common problem, reported by over half of the participants (62.5%) was experiencing hostility from PE teachers, e.g. the student believed that his teacher disliked him and was hypercritical, rarely praising the student and informing the supervisor of the class or grade about the student's misbeh

aviour.

The most common problems related to insufficient involvement in PE classes were truanting from PE classes, lack of engagement during class (more common among female students; 69.2% of cases in this sub-category) and contradicting or arguing with PE teachers (more common among male students; 83.3% of cases). Students were capable of perceiving problems with their own behaviour which could affect their overall level of physical activity.

During SFBC problem severity decreased gradually whilst motivation increased. During the first and second counselling sessions, students' evaluated their problems as more severe than during the third counselling session; there was also a decrease in student-rated problem severity between the first and second sessions (Table 2).

Motivation to deal with the problem also improved during counselling. During the first counselling session, students saw their motivation as weaker than in the second and the third sessions; they also rated their motivation lower in the second session than the third.

Table 2

Change in self-rated problem severity during counselling in the impact group (n = 92)

Student self-evaluations	*M* (*SD*)	1*2		1*3		2*3	
		t	*p*	*t*	*p*	*t*	*p*
Problem Severity							
Counselling session 1	7.93 (1.49)						
Counselling session 2	5.42 (1.82)	14.14	**0.0001**	18.10	**0.0001**	12.40	**0.0001**
Counselling session 3	2.91 (2.25)						
Motivation							
Counselling session 1	6.53 (1.76)						
Counselling session 2	7.90 (1.52)	–13.43	**0.0001**	–16.05	**0.0001**	–9.53	**0.0001**
Counselling session 3	8.46 (1.35)						

Notes. 1*2 Comparison of means of counselling sessions 1 and 2; 1*3 Comparison of means of counselling sessions 1 and 3; 2*3 Comparison of means of counselling sessions 2 and 3.

Table 3 provides a comparison of changes in self-rated problem severity across the impact and control groups.

Table 3

Subjective evaluation of the severity of the issue of physical activity provided by students of impact and control groups

Student evaluation of problem severity	Control group *n* = 100		Impact group *n* = 92		*F*	*p*
	M	SD	M	SD		
Counselling session 1	–	–	7.93	1.47	164.30	**0.0001**
Evaluation 1	7.71	1.51	–	–		
Counselling session 3	–	–	2.91	2.25		
Evaluation 2	7.55	1.77	–	–		

Notes. Greenhouse-Geisser

The recruitment procedure was designed to ensure that the initial evaluations of problem severity would be similar in the impact and control groups (pre-test scores were equivalent, Box's M=5.01, *p*=.179; t=–1.04, *p*=.299). The second evaluation enabled us to compare spontaneous changes in the control group with the changes associated with SFBC in the impact group; by the time of this second evaluation self-rated problem severity was lower for the impact group, who had received SFBC, than for the control group, who had not received any intervention (Table 3).

We also investigated teachers' perceptions of student behaviour before and after SFBC (Table 4).

Table 4

Teachers' evaluations of student behaviour during PE classes before and after SFBC

Evaluation by teacher	*M* (*SD*)	1*2; 3*4		1*3		2*4	
		t	*p*	*t*	*p*	t	p
Communication problems *n* = 26		1*2					
1. Before SFBC	8.38 (0.89)	10.86	**0.0001**	–1.13	0.263	2.50	**0.015**
2. After SFBC	6.27 (1.07)						
Insufficient involvement in PE classes *n* = 27		3*4					
3. Before SFBC	8.70 (1.13)	8.43	**0.0001**				
4. After SFBC	5.26 (1.99)						

Teachers evaluated students' behaviour as more troublesome before SFBC than after SFBC (Table 4). Teachers evaluated that the change in behaviour was smaller for students counselled for a communication problem than for students counselled for insufficient engagement in PE classes.

Most students in the impact group reported a positive change in the severity of their problem following SFBC. Almost half the group (44.6%) reported a major change and about one fifth (21.7%) reported a medium change. The overwhelming majority (96.0%) of students in the control group reported no changes in the severity of their physical activity problem during the four-week period between the first and second evaluations. The differences of the positive change evaluation provided by the impact

and control group students were statistically significant (χ^2=83.17; p=0.0001).

Discussion

Counselling has only recently begun to be used to promote healthy behaviours, including physical activity (Dumčienė & Rakauskienė, 2014; Lin et al., 2010; Peterson, 2005; Petrella & Lattanzio, 2002). The results presented here show that SFBC was effective in promoting physical activity and behaviour during PE classes among senior school students. This finding provides support for the opinion that counselling can be an effective way of tackling problems with levels of physical activity (Lin et al., 2010; Williams & Strean, 2005).

The effectiveness of SFBC in addressing problems related to school PE classes is dependent on several factors, including student motivation, the type of problem, etc. The counselled student must therefore be prepared to accept that the counselling intervention may not prove helpful. It has, however, been suggested that even minor positive changes in the behaviour or emotions of a counselling client may lead to major changes later on (Frels, Leggett, & Larocca, 2009).

Our analysis showed that among senior students, SFBC was an effective method of resolving problems related to physical activity, as well as other problems, as there was a reduction in students' ratings of problem severity between the first and third counselling sessions. Almost two thirds (65.6%) of the students in the impact group reported a medium or major positive change in the problem investigated; this degree of change is in line with previous research (Murphy, 1994; Niemi & Tiuraniemi, 2010).

Most of the impact group were counselled for problems related to poor communication with their PE teachers. Previous research has found that teachers use threats, insults and bans on certain behaviours during PE classes (Hassandra, Bekiari, & Sakellariou, 2007); these data corroborate this earlier research. Our sample of senior students reported that their PE teachers humiliated them in the presence of others, were hostile and hypercritical, praised them only infrequently yet were quick to report them to the class or grade supervisor for bad behaviour etc. Students also reported certain aspects of their own behaviour which contributed to problems, such as truanting from PE classes, lack of engagement and involvement during PE classes, and objecting to or arguing with the teacher's instructions. It is clear that dealing with problems related to PE in schools will require using supplementary pedagogical techniques and general improvements in pedagogy in this field.

According to students' evaluations, SFBC was most effective in increasing overall physical activity and least effective in addressing problems related to communication with PE teachers. This is indicative of students' motivation to tackle the problems they have with physical activity.

Education focuses on the academic and social development of students. Through counselling, PE teachers and other educational specialists also focus on personal competences. SFBC provides an alternative to long term counselling as it focuses on

finding a solution to the problem rather than on the student's accusations or previous failures and inappropriate behaviours, which helps to promote a cooperative working relationship between counsellor and student. The tenets of SFBC include some of the prerequisites for work with adolescents, for example, empathy with the counselling client's view of the world, making use of the strengths and internal powers of the counselling client, development of a cooperative relationship between client and counsellor and the setting of specific objectives (Frels et al., 2009). These principles mean that it is the student rather than the counsellor who is responsible for the effectiveness of the technique (Williamson, 2008); SFBC thus makes adolescents active partners in their personal development.

Limitations

A psychologist using brief solution-focused counselling with adolescents in a school setting should have appropriate levels of professional solution-focused counselling practice, and should be supervised by another experienced and trained psychologist. It was hard to determine whether or not the counsellors in our study had had enough practice with solution-focused brief counselling. We must consider certain aspects peculiar to research on counselling, i.e. the insufficient number of cases selected for the research study, the differences in gender of the research subjects and singling out the necessary contingency of the research.

Conclusion

SFBC has been found to be an effective method of addressing senior students' problems with PE in schools or other institutions. Approximately two thirds of students reported medium or major progress in dealing with a severe problem related to physical activity following SFBC, and PE teachers reported positive changes in the students' behaviour during PE classes.

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Učinkovitost kratkog savjetovanja usmjerenog na rješavanje problema (SFBC) koje srednjoškolci imaju u nastavi tjelesne kulture

Sažetak

Neki znanstvenici (Barr-Anderson i sur., 2008; Cairney i sur., 2012;) smatrali su da su nedostaci u nastavi tjelesne kulture (TK) važni razlozi smanjene fizičke aktivnost koja je dobno vezana. Kurikul iz TK je neučinkovit te ga je potrebno poboljšati (Cairney i sur., 2012). Svrha ovoga istraživanja bila je odrediti učinkovitost kratkog savjetovanja usmjerenoga na rješenje problema (SFBC) kao metode kojom se mogu riješiti problemi s kojima se suočavaju srednjoškolci za vrijeme nastave TK s ciljem razvoja intervencije koje bi povećale učeničku fizičku aktivnost.

Nakon SFBC-a, 66,3% sudionika izvijestilo je o srednjem ili većem napredovanju u suočavanju s teškim problemima vezanima uz fizičku aktivnost (F=164,30, p=,001 u usporedbi s kontrolnom skupinom), a nastavnici TK opazili su pozitivne promjene kod ponašanja učenika za vrijeme nastave iz TK (t, p<,001). SFBC je odgovarajuća metoda za savjetovanje adolescenata u školi s obzirom na to da je kratka, dobro strukturirana i fleksibilna metoda koja pomaže u poboljšanju kvalitete nastave TK.

Ključne riječi: *kratko savjetovanje orijentirano na rješavanje problema; stariji učenici; tjelesna kultura.*

Uvod

Razine fizičke aktivnosti kod učenika smanjuju se s njihovom dobi, ali još uvijek nemamo dovoljno uvjerljiva objašnjenja za taj prilično ozbiljan trend (Brooks, Smeeton, Chester, Spencer, i Klemera, 2014). Neki znanstvenici (Barr-Anderson i sur., 2008; Cairney i sur., 2012; Lee i sur., 2007) upućuju na to da su nedostaci u

nastavi TK važni razlozi za dobno povezano smanjenje fizičke aktivnosti. U školama su svi učenici uključeni u nastavu TK, a ta nastava direktno ili indirektno utječe na kvantitetu i kvalitetu fizičke aktivnosti tijekom obrazovanja, pa i kasnije u životu (Barr-Anderson i sur., 2008; Shephard i Trudeau, 2000). Dobno povezano smanjenje razina učeničke fizičke aktivnosti upućuje na to da je kurikul TK neučinkovit te ga je potrebno poboljšati (Cairney i sur., 2012).

Nastava TK obično je organizirana na način da vrlo malo sadržaja i tek nekoliko elemenata iz te nastave zadovoljava očekivanja učenika (Barr-Anderson i sur., 2008; Cairney i sur., 2012). Posljednjih je godina planiranje za TK u školama poboljšano u nekoliko segmenata, npr. pridavanje pažnje integraciji s ostalim obrazovnim predmetima (Trost, Fees, i Dzewaltowski, 2008) ili organiziranjem nastave koja promiče zdravlje (Barr-Anderson i sur., 2008). Pedagoške metode poboljšane su motiviranjem učenika da se pridržavaju principa poštovanja, što je u skladu s preporukama stručnjaka različitih disciplina, uključujući i psihologe (Williams i Strean, 2005), socijalne pedagoge i zagovornike javnog zdravstva (Franklin, Moore, i Hopson, 2008).

Potrebna su daljnja istraživanja kako bi se razvile strategije za poticanje motivacije starijih učenika za fizičku aktivnost za vrijeme nastave TK. To je vrlo bitan cilj, dijelom jer sveobuhvatna fizička aktivnost mijenja koncept fizičkog *sebe* i time promiče daljnje promjene u osobnosti koje su pozitivno povezane s promicanjem zdravog ponašanja u budućnosti (Moreno i Cervelló, 2005).

Upotreba metode kratkog savjetovanja usmjerenoga na rješavanje problema (SFBC) kako bi se povećale razine ponašanja koje promiču zdravo ponašanje ili fizičku aktivnost zaživjela je tek nedavno (Lin i sur., 2010). Također se tvrdilo da savjetovanje može biti učinkovito u poticanju pojedinaca na usvajanje zdravog načina života (Lin i sur., 2010; Williams i Strean, 2005). Predloženo je da liječnici opće prakse pokušaju primijeniti SFBC kako bi potaknuli „sjedeće" pacijente da povećaju razinu fizičke aktivnosti (Williams i Strean, 2005), međutim oskudna su istraživanja na tom polju (npr. Breckon, Johnston, i Hutchison, 2008; Lin i sur., 2010). Primjena nove pedagoške metode za promicanje zdravog življenja u školskom okruženju trenutno je aktivna tema istraživanja u teoriji i praksi (Pourebrahim, Khoshkonesh, i Salehi, 2011). To povlači pitanje jesu li strukturirani razgovori između školskog psihologa i adolescenta učinkovit načini poticanja interesa za nastavu TK i povećanja razine fizičke aktivnosti mladih osoba. Već smo pokazali da je savjetovanje usmjereno na rješavanje problema učinkovita metoda promicanja fizičke aktivnosti među studentima (Dumciene i Rakauskiene, 2014).

Ovo istraživanje bavi se upotrebom SFBC-a kako bi se pomoglo u rješavanju problema na koje stariji učenici nailaze za vrijeme nastave TK i u promoviranju opće fizičke aktivnosti.

Metode

Uzorak ispitanika

Ukupno 192 srednjoškolska učenika (9. – 12. razred) sudjelovala su u istraživanju u kojemu su pridruženi eksperimentalnoj ili kontrolnoj skupini.

Eksperimentalnu skupinu činila su 92 učenika u dobi od 15 do 19 godina (prosječna dob 17,05±1,25); 51 (55,4%) učenica i 41 (44,6%) učenik. Prosječna dob učenika u eksperimentalnoj skupini bila je 17,25±,33 godina; prosječna dob učenica 16,80±1,10 godina. Učenice i učenici u eksperimentalnoj skupini bili su homogeni s obzirom na dob (t=1,14; p=0,187).

Eksperimentalna skupina uspoređena je s kontrolnom skupinom učenika koji su ukazali na bitan problem vezan uz fizičku aktivnost, ali nisu bili podvrgnuti savjetovanju. Kontrolnu skupinu činilo je 100 učenika u dobi od 15 do 19 godina (prosječna dob 16,53±1,21); bilo je 57 (57,0%) učenica i 43 (43,0%) učenika. Prosječna dob učenika u kontrolnoj skupini bila je 16,58±1,18 godina, a prosječna dob učenica u kontrolnoj skupini 16,49±1,24 godina. Učenice i učenici u kontrolnoj skupini bili su homogeni s obzirom na dob (t=1,19; p=0,714).

Eksperimentalna i kontrolna skupina bile su slične s obzirom na spol ispitanika ($c^{2=}$6,12; p = 0,653), prosječna dob (t=1,01; p=,106) i ocjenu (c^2=3,17; p=,197).

Dvanaest nastavnika TK od kojih sedam (58,3%) žena i pet (41,7%) muškaraca sudjelovalo je u istraživanju. Dob nastavnika bila je između 32 i 54 godine (prosječna dob 39,14±5,2). Nastavnici su procijenili ponašanje svih savjetovanih pojedinaca o problemima u komunikaciji ili nedovoljnom uključivanju u nastavu TK u dva navrata, prije i nakon SFBC-a.

Instrumenti

Ispitanici su ispunili upitnike u kojima su opisali svoje najaktualnije, nedavne probleme vezane uz fizičku aktivnost. Upitnici su ispunjeni za vrijeme sata TK. Četiri tjedna nakon ispunjavanja prvoga upitnika, učenici su ispunili sličan upitnik kako bi ponovno procijenili važnost prvotnoga problema.

Učeničke samoprocjene. Koristili smo se uobičajenom skalom od 11 bodova kako bismo procijenili učinkovitost savjetovanja (više o toj osnovnoj tehnici SFBC-a u Iveson, 2002). Promjena od 1 do 3 boda na skali od 10 bodova između prvog i posljednjeg savjetovanja tradicionalno se smatra manjom pozitivnom promjenom; promjena više od 3 boda smatra se značajnom promjenom (Biggs i Fletts, 2005). Koristili smo se skalama kako bismo procijenili učinkovitost savjetovanja, a učenici su procijenili važnost svoga problema i promjene u procjeni važnosti (tj. napredak) kategorizirane su kako slijedi: *bez pozitivne promjene* (promjena ≥ 0); *manja pozitivna promjena* (promjena od -1 ili -2); *srednja pozitivna promjena* (promjena od -3 ili -4); *značajna pozitivna promjena* (promjena od -5 do -9). Učenici su dobili priliku procijeniti promjenu u vlastitom napretku u suočavanju s problemom na svakom od savjetovanja; to je poslužilo kao svojevrsna povratna informacija (Biggs i Fletts,

2005) s obzirom na to da im je to bila prilika da izmjere vlastiti napredak u rješavanju problema.

Nastavnička procjena ponašanja. Nastavnici su procjenjivali ponašanje učenika prije i nakon SFBC-a koristeći se skalom od 11 bodova u rasponu od 0 „izvrsno ponašanje za vrijeme TK nastave; nema problema" do 10 „izrazito problematičan; brojni problemi za vrijeme nastave TK".

Učenička samoprocjena motivacije. Učenici su procijenili vlastitu motivaciju za rješavanjem problema, tj. njihovu spremnost da nešto promijene ili da riješe problem (Fleming, 2004), na skali od 11 bodova u rasponu od 0 „nisam sklon činiti išta da bih riješio problem" do 10 „odlučan sam učiniti sve kako bih promijenio situaciju".

Postupak

Istraživanje je provođeno nasumično od 2012. do 2015. godine u tri škole općeg obrazovanja u Litvi, u suradnji s nastavnicima TK. Savjetovanja (SFBC) su provodila tri psihologa. Primijenjen je SFBC kako bi se promovirala fizička aktivnost među srednjoškolcima i kako bi se pomoglo kod rješavanja pitanja sudjelovanja u nastavi TK. SFBC su razvili američki psihoterapeuti Berg i de Shazer (Simon i Berg, 1999). Filozofija koja je u pozadini SFBC-a jest da pojedinci imaju sposobnosti (vrline) koje se mogu uočiti tijekom savjetovanja i upravo te sposobnosti (vrline) mogu omogućiti pojedincu da se promijeni, kao i da promijeni životni stil.

Ispitanici koji su samovoljno sudjelovali u istraživanju bili su upoznati sa svrhom istraživanja, s očekivanim procedurama, mogućnošću povlačenja iz istraživanja, dobiti od istraživanja i povjerljivosti. U Republici Litvi osoba koja ima 18 ili više godina smatra se odraslom osobom te se može upustiti u istraživanje bez roditeljske suglasnosti. Ispitanici s manje od 18 godina moraju zatražiti i dobiti suglasnost od roditelja za sudjelovanje u istraživanju.

Učenici rijetko traže pomoć od stručnjaka kada imaju problem s razinom fizičke aktivnosti pa smo se koristili ovom procedurom koja bi ih na to potaknula. Srednjoškolci su bili podvrgnuti netradicionalnom satu TK za vrijeme kojega su raspravljali o korisnosti bavljenja fizičkom aktivnošću. Na kraju sata učenici su bili potaknuti na razgovor s psihologom o problemima koje imaju kada je riječ o fizičkoj aktivnosti. Pedeset i sedam učenika (61,9% učenika koji su bili podvrgnuti savjetovanju) stupilo je u kontakt s psihologom na svoju inicijativu kako bi se savjetovali, a ostalih 35 učenika (38,1% učenika koji su bili podvrgnuti savjetovanju) bilo je upućeno od svojih nastavnika TK da se savjetuju.

Devedeset i dva učenika bila su na savjetovanju na kojem se koristila metoda SFBC. Svi učenici koji su savjetovani imali su između jedne i šest savjetodavnih sesija (prosjek 2,70± ,99); a savjetodavna sesija trajala je od 50 do 60 minuta.

Analiza podataka

Podaci iz kontrolne skupine izostavljeni su ako učenik nije ukazao na važan problem povezan s fizičkom aktivnošću. Podaci iz kontrolne skupine u kojoj su ispitanici opisali

različite probleme u dva obrasca za povratnu informaciju (usporedba ispunjenih obrazaca za vrijeme nastave TK prvi i drugi put) također su izostavljeni iz analize. Kontrolna skupina omogućila nam je da procijenimo spontane promjene u važnosti problema.

Osnovne razlike među grupama testirane su s pomoću dvosmjerne mješovite analize varijance (ANOVA) (uspoređujući kontrolnu skupinu i eksperimentalnu skupinu u pred- i post-kontrolnom dizajnu) i upareni t-test (koji uspoređuje procjene učenika za vrijeme prve, druge i treće sesije, kao i procjene učenika koje su dali nastavnici TK vezane uz učeničko ponašanje prije i nakon SFBC-a u eksperimentalnoj skupini). Distribucija problema vezanih uz nastavu TK s obzirom na dob i spol provjerena je s pomoću hi-kvadrat testa (χ^2).

Rezultati

Devedeset dva učenika bila su savjetovana o problemima vezanima uz nastavu TK. Uočene su tri kategorije problema: loša komunikacija s nastavnicima TK; nedovoljna uključenost u nastavu TK i nedostatak tjelesne aktivnosti. Distribucija kategorija prema spolu i dobi prikazana je u tablici 1. U eksperimentalnoj skupini distribucija problema nije se značajno razlikovala s obzirom na spol ($\chi^{2=}3{,}01$; $p=0{,}222$) ili dob (9. i 10. razredi u odnosu na 11. i 12. razrede: $\chi^{2=}0{,}806$; $p=0{,}668$).

Tablica 1

O sastavu eksperimentalne skupine uglavnom su odlučili nastavnici TK koji su bili uključeni u istraživanje. Za vrijeme nastave TK nastavnici su prenijeli učenicima informacije o fizičkim i mentalnim prednostima fizičke aktivnosti za zdravlje te su učenike potaknuli na to da razgovaraju sa školskim psihologom o problemima vezanima uz fizičku aktivnost. Nekim je učenicima rečeno da odu na savjetovanje; svi učenici koji su bili podvrgnuti savjetovanju kategorizirani su kao učenici s problemom vezanim uz nedovoljnu uključenost u nastavu TK, a 11 od 27 učenika (40,8%) kategorizirani su kao učenici s problemom u komunikaciji s nastavnikom TK te su bili upućeni na savjetovanje. Prisutnost u savjetodavnim sesijama bila je dobrovoljna.

Nešto više od trećine (37,1%, $n=10$) učenika koji su savjetovani o komunikacijskom problemu s nastavnikom TK izjavilo je da je njihov problem vezan uz vlastito ponašanje, ali više od polovine (62,9%, $n=17$) tvrdilo je da je ponašanje nastavnika uzrok problemu. Za vrijeme SFBC-a utvrđeno je da na učenice puno negativnije djeluje ponašanje nastavnika TK, nego na učenike. Najčešći problem s ponašanjem nastavnika TK među učenicama, što je izjavilo više od polovine učenica (52,2%), bilo je ponižavanje od nastavnika TK, primjerice davanjem primjedbi o njihovu izgledu, lijenosti itd., a mogli su ih čuti i ostali učenici. Među učenicima je najčešći problem, koji je izdvojilo više od polovine ispitanika (62,5%), doživljaj agresivnosti od nastavnika TK, primjerice učenik osjeća averziju kod nastavnika, nastavnik je previše kritičan, nastavnik rijetko pohvali učenika, ali redovno izvještava nadređene ili razrednike o lošem ponašanju učenika.

Najčešći oblik nedovoljnog sudjelovanja u nastavi TK bio je izbivanje s nastave TK, nedovoljno sudjelovanje u satima TK (što je češće kod učenica; 69,2% u toj potkategoriji) i suprotstavljanje ili raspravljanje s nastavnicima TK (što je češće kod učenika; 83,3% slučajeva). Učenici su bili sposobni uvidjeti probleme s vlastitim ponašanjem koje je moglo utjecati na njihovu razinu fizičke aktivnosti.

Za vrijeme SFBC-a, kod samoprocjene, uočeno je smanjenje važnosti problema u eksperimentalnoj skupini (Tablica 2.).

Za vrijeme SFBC-a važnost problema postupno se smanjila, a motivacija je porasla. Za vrijeme prve i druge sesije savjetovanja učenici su svoje probleme procijenili kao puno ozbiljnije nego u trećoj sesiji savjetovanja; također je uočeno smanjenje u učeničkoj samoprocjeni ozbiljnosti problema između prve i druge sesije (Tablica 2.).

Motiviranost za suočavanje s problemom također se popravila za vrijeme savjetovanja. Za vrijeme prvoga savjetovanja učenici su uvidjeli da im je motivacija slabija nego u drugoj i trećoj sesiji; također su svoju motivaciju procijenili nižom u drugoj nego u trećoj sesiji.

Tablica 2

Tablica 3 daje uvid u usporedbu promjena u samoprocjenama ozbiljnosti problema u eksperimentalnoj i kontrolnoj skupini.

Tablica 3

Proces regrutiranja kreiran je tako da osigura da inicijalne procjene ozbiljnosti problema budu slične u eksperimentalnoj i kontrolnoj skupini (rezultati na predtestovima su jednaki, Box's M=5,01, p=,179; t=−1,04, p=,299). Druga procjena omogućila je usporedbu spontanih promjena u kontrolnoj skupini s promjenama vezanim uz SFBC u eksperimentalnoj skupini; u vrijeme druge samoprocjene ozbiljnost problema je u eksperimentalnoj skupini, koja je imala SFBC, već bila niža za razliku od kontrolne skupine koja nije bila podvrgnuta intervenciji (Tablica 3.).

Također smo proučili percepciju nastavnika o ponašanju učenika prije i nakon SFBC-a (Tablica 4.).

Tablica 4

Nastavnici su procijenili ponašanje učenika prije SFBC-a problematičnijim nego nakon SFBC-a (Tablica 4.). Oni su također procijenili kako su promjene u ponašanju manje kod učenika koji su savjetovani zbog problema u komunikaciji nego kod učenika koji su savjetovani zbog nedovoljnog angažmana u nastavi TK.

Većina učenika u eksperimentalnoj skupini izvijestila je o pozitivnoj promjeni u ozbiljnosti problema nakon SFBC-a. Gotovo polovina skupine (44,6%) izjasnila se o značajnoj promjeni, a oko jedna petina učenika (21,7%) izjasnila se kako je promjena bila osrednja. Velika većina učenika (97,0%) u kontrolnoj skupini nije iznijela podatke o promjeni u ozbiljnosti svog problema fizičke aktivnosti za vrijeme 4-tjednog razdoblja između prve i druge procjene. Razlike u pozitivnim promjenama

koje su dale eksperimentalna i kontrolna skupina učenika statistički su značajne (χ^2=83,17; p=0,0001).

Rasprava

Tek se u posljednje vrijeme savjetovanje koristilo kako bi se promoviralo zdravo ponašanje, uključujući fizičku aktivnost (Dumciene i Rakauskiene, 2014; Lin i sur., 2010; Peterson, 2005; Petrella i Lattanzio, 2002). Prikazani rezultati ukazuju na to da je SFBC učinkovit u promidžbi fizičke aktivnosti i ponašanja za vrijeme nastave TK među srednjoškolcima. Taj je rezultat podrška stavu da savjetovanje može biti učinkovit način za suočavanje s problemima vezanima uz razine fizičke aktivnosti (Lin i sur., 2010; Williams i Strean, 2005).

Učinkovitost SFBC-a u bavljenju problemima vezanima uz nastavu TK ovisi o nekoliko čimbenika, uključujući motivaciju učenika, vrstu problema itd. Učenik koji je bio podvrgnut savjetovanju mora biti spreman prihvatiti i mogućnost da intervencija u obliku savjetovanja možda neće biti uspješna. Međutim, predloženo je da čak i manje pozitivne promjene u ponašanju ili osjećaju klijenta mogu dovesti do velikih promjena u sljedećem razdoblju (Frels, Leggett, i Larocca, 2009).

Naša je analiza pokazala da je SFBC među srednjoškolcima učinkovita metoda rješavanja problema vezanih uz fizičku aktivnost, kao i drugih problema s obzirom na smanjenje učeničke samoprocjene ozbiljnosti problema između prve i treće seanse savjetovanja. Gotovo trećina učenika (65,6%) iz eksperimentalne skupine izvijestila je o srednjoj ili ovećoj pozitivnoj promjeni istraživanog problema; ta razina promjene u skladu je s prijašnjim istraživanjima (Niemi i Tiuraniemi, 2010; Murphy, 1994).

Većina učenika u eksperimentalnoj skupini savjetovana je u vezi s problemima vezanim uz slabu komunikaciju s nastavnicima TK. Prijašnja istraživanja ustanovila su da se nastavnici koriste prijetnjama, uvredama, zabranama vezanim uz određena ponašanja na satu TK (Hassandra, Bekiari, i Sakellariou, 2007); ti podaci potvrđeni su i u ovome istraživanju. Srednjoškolci u našem uzorku izjavili su da ih nastavnici TK omalovažavaju u prisustvu drugih, da su neprijateljski raspoloženi i prekritični, da ih rijetko hvale, ali da su zato vrlo odlučni u dojavljivanju lošeg ponašanja učenika njihovim razrednicima itd. Učenici su također dali izjave i o vlastitom ponašanju koje je doprinijelo problemima poput izostajanja s nastave TK, nedovoljnog sudjelovanja i angažiranja na satima TK, odbijanja ili raspravljanja o nastavnikovim uputama. Jasno je onda da se, kad se radi o problemima vezanima uz TK u školama, zahtijeva primjena dodatnih pedagoških metoda i općih poboljšanja u metodici ovoga područja. Prema procjenama učenika, SFBC metoda bila je najučinkovitija u povećanju fizičke aktivnosti, a najmanje učinkovita u rješavanju problema vezanih uz komunikaciju s nastavnicima TK. To upućuje na razinu učeničke motivacije da se suoče s problemom koji imaju s fizičkom aktivnošću.

Obrazovanje je usredotočeno na akademski i društveni razvoj učenika. Savjetovanjem, što je preduvjet rada s adolescentima, npr. empatijom s klijentovim

pogledom na svijet, iskorištavanjem vrlina i unutarnjih snaga klijenta, razvijanjem suradničkog odnosa između klijenta i savjetnika te uspostavljanjem specifičnih ciljeva (Frels i sur., 2009). Ti principi znače da je učenik, a ne savjetnik, odgovoran za učinkovitost metode (Williamson, 2008); stoga SFBC čini adolescenta aktivnim dionikom u vlastitom razvoju.

Ograničenja

Psiholog koji se koristi metodom SFBC s adolescentima u školskom okruženju morao bi imati odgovarajuće razine stručnoga usavršavanja u savjetodavnoj praksi te bi trebao biti nadgledan od drugoga, iskusnoga i kvalificiranoga psihologa. Bilo je teško odrediti jesu li savjetnici u ovome istraživanju imali dovoljno iskustva s SFBC metodom. Moramo uzeti u obzir i određene aspekte vezane uz ovo istraživanje o savjetovanju, tj. nedovoljan broj odabranih slučajeva za ovo istraživanje, razlike u spolu ispitanika i izdvajanje za potrebe istraživanja.

Zaključak

SFBC je učinkovita metoda koja se može primijeniti kod rješavanja problema koje srednjoškolci imaju s nastavom TK u školama ili drugim institucijama. Otprilike dvije trećine učenika izvijestilo je o srednjem ili značajnom napretku u rješavanju ozbiljnih problema vezanih uz fizičku aktivnosti nakon SFBC-a, a nastavnici TK detektirali su pozitivne promjene u ponašanju učenika za vrijeme nastave TK.