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Evaluation of the PE Curriculum in the Higher Grades of Primary School

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Abstract

The aim of this paper was to evaluate the Physical Education (PE) Curriculum in the higher grades of primary school. The sample consisted of 89 PE teachers in primary schools of Osječko-Baranjska County. The Attitudes questionnaire was designed with satisfactory reliability. It consisted of two subgroups of features. The first subgroup, consisiting 18 items, assessed the features of the curriculum: modernity, interest, difficulty, comprehensiveness, usefulness, compatibility, feasibility, basic motor knowledge, implementation guidelines clarity, desired changes. The second subgroup of 5 items assessed the implementation of special programme tasks. The group of classification variables evaluated subjects' characteristics and work conditions. The stated classification variables have helped in finding the differences in teachers' assessment. Descriptive statistics, factor analysis, and unifactor variance analysis MANOVA with the univariate differences tests were implemented. Factor analysis of the first subgroup yielded three latent dimensions of the programme's features: comprehensiveness and modernity, desired changes, compatibility and programme's usefulness. In the other subgroup, one dimension was yielded, and it was the implementation of the special programme. Strong aspects of the curriculum are vertical compatibility, usefulness, modernity, clear implementation guidelines, choice and distribution of basic motor knowledge, and the implementation of school competitions and manifestations. Weaker aspects are comprehensiveness of the goals, tasks and contents; insufficient number of lessons and the implementation of the special programme (programme for students with weaker health; school trips and similar activities). Significant differences in teachers' assessment were found in regards to the criterion variables of work experience, expert information availability, and evaluation of the students' abilities. It is not possible to successfully

achieve comprehensive goals, tasks and contents of the current Curriculum with the prescribed number of lessons and current work conditions.

Key words: *assessment; attitudes; teachers.*

Introduction

In the processes of globalisation and economic growth, education goes through numerous changes and reforms. In the last decade, during the process of joining the European Union, the Republic of Croatia has begun to adjust its educational system which did not significantly change in the transitional period (Baranović, 2006). In the period between 2004 and 2010, the Ministry of Science, Education and Sports of the Republic of Croatia (MSES) has passed important laws and legislations: *Croatian National Educational Standard* (2005), *Education Development Plan 2005-2011, Primary Schools Curriculum (2006), Primary and Secondary Education Law (2008),* and in 2011, *National Framework Curriculum for Preschool Education and General Compulsory and Secondary Education* (in the further text NFC). By adopting the NFC, a real turn in the Croatian educational system occurred. It represents the starting point for designing the curricula for school subjects, based on the elaborated achievements of individual educational areas. The shift in curriculum development, from mediating knowledge towards gaining competencies, is a dominant trend of the development of education in the world today. Modern curriculum places the student and his/her achievements in the foreground, and not the curriculum or the teacher who teaches it. A teacher has become a moderator of the educational process. This requires additional and specific knowledge and skills which need to be developed for contemporary teaching.

The assessment of the present state and the definition of needs are very important in the course of making subjects curricula (Wiles & Bondi, 1988; Walker, 1990). Empirical analyses provide insight into strong and weak aspects of the current programme, including teachers, students and headmasters; and prepare them for the necessary changes (Baranović et al., 2006).

The year 1983 is important in the PE curriculum development in our country. That is when a unique curriculum was passed in the former Yugoslavia. The subject's name changed to Physical and Health Education. Unique goals and tasks, basic and differentiated organisational forms of work, programme contents and system of assessment and evaluation were designed. The concept did not significantly change until 2006 when the current Curriculum was introduced. Its changes were expressed in the subjects' objective which is now directed towards *the implementation of theoretical and motor knowledge* that allows independent physical practice, changing characteristics and ability development by which the promotion of health is ensured. For the first time, basic motor knowledge, key ideas and educational achievements for every primary school grade have been defined. Comprehensive programme contents have been freed from the topics which could not be realised due to modest material conditions. In the subjects teaching curriculum, programme contents mostly consist of simple and more complex kinesiological motor knowledge, structured

in eight teaching units, specially designed for male and for female students. In the curriculum, special programme tasks are defined as: *extracurricular activities, non-swimmers training, winter and summer camp* (*out-of-school* activities), and *programme for children with special needs* (impaired health) (MSES, 2006). In the period from 1999 to 2007, Hardman et al. (2008) conducted a most comprehensive research about the state and the status of physical education in the world. In the curricula of certain countries, they established the presence of insufficient number of PE lessons, teachers who lack the required competency or education, poor material conditions, groups too large for practice, and deterioration of physical abilities and fitness of young people. A discrepancy between the proclaimed and realised in practice is present. This concerning condition requires serious action, powerful political support and arguments confirming the usefulness of physical education. The given analysis was used in the making of the *Resolution on the Role of Sport in Education* which was passed by the European Parliament in 2007.

In 2003, Baranović et al. (2006) evaluated the current curricula in primary schools in the Republic of Croatia, from the perspective of generalist and subject teachers and eighth grade students. They used nine variables - features which represent the standard for curriculum evaluation in the European Union in the programme evaluation: modernity, comprehensiveness, interest, intelligibility, difficulty, vertical and horizontal compatibility, usefulness, importance, and requirement for programme changes. Teachers rated its importance and usefulness for students as the best characteristics of the general PE programme, while modernity and compatibility with other subjects were considered its weakest characteristics. Eighth-graders rated PE as the most interesting, the most intelligible and the easiest subject. Prskalo and Babin (2008) advocate the quality of material and staff conditions for PE classes, and the curriculum which will show more respect for students' needs and the requirements of the modern society. Programme contents of PE, and their efficiency in transforming characteristics and abilities, were the topics of numerous research studies (e.g. Žilić, 2005; Katić, Viskić-Štalec and Šumanović, 1998). Experimental programmes mostly concentrated on smaller number of programme units which were treated in a certain period. They proved themselves as more efficient and more attractive than the existing ones. Evaluating the general PE curriculum, Neljak (2002) has established that the tasks were too generalized. He suggested they should be determined separately for every grade, age and students' gender. In the analysis of students' achievements-competencies defined by the NFC, which are to be acquired at a certain level, Neljak et al. (2011) inferred that the National Curriculum Framework places greater requirements on the physical and health education area than the current general programme, and that these requirements cannot be realised without programme changes or enhancing the number of lessons.

Problems of the past PE curricula are mostly expressed in the comprehensiveness and generalisation of goals and tasks, and in the suitability of the teaching contents' frame which was hard to achieve with a small number of lessons and the existing quality of other implementation conditions. The novelty of the current Curriculum

is mostly found in the reduction of the programme contents, defining basic motor knowledge, key concepts and educational achievements for every grade, and defining special programme tasks. The basic problem of this paper is gaining feedback about the implementation of the programme on the empirical level. Evaluation from the perspective of teachers, who are directly involved in the implementation of the programme, gives large quantity of valuable information. Strong and weak aspects, as well as the conditions for greater efficiency have been observed. Also, the frame of guidelines for future curriculum development has been created. In the chosen model of programme evaluation, the previously mentioned features which are used in the world not only as a standard in curriculum development, but also in the process of its evaluation (Harland, 2002; Baranović et al., 2006) were used as the starting point. Basic motor knowledge, applicability of the programme in poor material conditions and the clarity of implementation guidelines were additionally tested. Solid organisation and regular application of differentiated forms of work show the quality of special programme tasks of the general curriculum.

The basic ***aim*** *of the paper* was *to evaluate the current PE Curriculum in higher grades of primary school in Osječko-Baranjska County.*

Research problems were:

- Establishing PE teachers' attitudes towards the current curriculum (*general features, implementation of special programme tasks);*
- Establishing PE teachers' attitudes about the conditions in which they implement the curriculum (*place and teaching equipment, availability of literature and other sources of information from this area, cooperation with other teachers who implement PE programme in school, average number of students in a class and general assessment of previous knowledge and students' ability to participate in the lessons);*
- Examining the differences in teachers' attitudes considering their socio-demographic characteristics (*gender, age, degree of education, work experience, sports experience)*;
- Examining the differences in teachers' attitudes in regards to the conditions in which they implement the curriculum;
- By means of logical analysis, establishing strong and weak points of the curriculum, and proposing changes.

Methods

Sample

The sample consisted of 89 teachers who implement physical education teaching from 5th to 8th grades of primary schools in Osječko-Baranjska County, out of which 31 were female and 58 male. 82% of subjects in the sample have a university degree.

Research Instrument

Diversity of the research problem has conditioned the construction of a 33 items Attitudes questionnaire. For the assessment of the general curriculum, two subgroups

of items were determined. *The first* evaluated the quality of the features of the general curriculum. Teachers assessed the features of the programme according to 18 items using a 5-point Likert-type scale (1-I strongly disagree, 2- I mostly disagree, 3 – I'm not sure, 4- I mostly agree, and 5 – I strongly agree) – *modernity, comprehensiveness, difficulty, interest, compatibility, usefulness, number of lessons, implementation guidelines clarity, basic theoretical and motor knowledge, feasibility, and the demand for the programme change.* The other subgroup had 5 items used to assess special programme tasks which determine the frame of differentiated organisational forms of work – *sporting events, non-swimmers training, classes for students with special needs, trips, hiking and other activities, competitions within the school sports association.* With the help of the described Likert-type scale, teachers assessed their good organisation and regular implementation of the stated activities.

Special part of the questionnaire related to two groups of nominal-classification variables. The first group of 5 variables was used to assess the subjects' socio-demographic characteristics: *gender, age, degree of professional education, work experience and sports experience.* With the other group of 5 nominal variables teachers assessed, on a 3-point scale (bad, good, very good), *working conditions* in which they execute their teaching. These conditions are: *place and equipment, availability of literature and other sources of information from this area, cooperation with other teachers who teach PE in school, average number of students in class, and general assessment of students' previous knowledge and abilities for participating in the lessons.* The questionnaire has a satisfactory reliability which is, for the first subgroup, Cronbach (α) = 0.85, and for the other subgroup Cronbach (α) = 0.77. According to DeVellis (2003), Cronbach (α) values above 0.70 are of a satisfactory level.

Data Analysis Methods

Basic descriptive indicators of the subgroups results and the percentages of answers have been calculated in order to present the results in a more quality way. Cronbach (α) coefficient was used for checking the metric characteristics. Factor analysis of every subgroup has been done using the analysis component and "Plum Brandy" (PB) criterion of extraction. V*arimax* transformation was used in the first subgroup. The defined dimensions in the first and the second subgroup of the questionnaire, except for the curriculum assessment, served also as variables for establishing the differences between the assessment by the subjects divided into categories of nominal variables. Multivariate analysis of variance (MANOVA) was done to establish the differences between groups of subjects (according to classification variables), and in certain dimensions derived through factor analysis. Variance analysis (ANOVA) was used for establishing the differences between groups of subject in a particular dimension. The level of inference error was p=0.01.

Results

The results of descriptive and factor analysis, and differences analysis are shown in the following tables.

In the first subgroup of the Attitudes questionnaire, teachers assessed 18 characteristics of the general-prescribed Curriculum, on the 5-point scale. Descriptive analysis and the percentages (Table 1) show that teachers mostly agree that the curriculum demands greater number of lessons for the realisation of the proclaimed goals and tasks; it is too comprehensive in contents; it is vertically compatible (with the programme of previous and following grade); and gives clear working guidelines. Basic motor knowledge is well chosen and distributed. Their attitudes differ when it comes to programme difficulty and interest, its feasibility in bad material conditions, and its compatibility with the programmes of other subjects of the same grade.

Table 1. *Basic parameters and percentages of answers in the attitudes categories for the assessment of the general curriculum: arithmetic mean (Mean) standard deviation (SD), and percentages for answers by categories (%)*

				%	%	%	%	%
		Mean	SD	I strongly disagree 1	I mostly disagree 2	I'm not sure 3	I mostly agree 4	I strongly agree 5
1	Modern in conception.	3.6	1.0	2.2	13.5	20.2	51.7	12.4
2	Modern in contents.	3.6	0.9	0.0	16.9	24.8	45.0	13.5
3	Comprehensive in goals and tasks.	3.9	0.9	1.1	6.7	15.7	54.0	22.5
4	Comprehensive in contents.	3.8	0.9	0.0	11.2	18.0	49.4	21.3
5	Difficult for students.	3.0	1.1	7.9	29.2	31.5	20.2	11.2
6	Interesting for students.	3.4	0.9	2.2	16.9	30.3	43.8	6.7
7	Compatible with other subject of the same grade.	3.1	1.1	7.9	19.1	34.8	28.1	10.1
8	Compatible with the previous and the following year programme.	3.9	0.8	0.0	7.9	14.6	58.4	19.1
9	Useful for students' current lives.	3.8	1.0	2.2	9.0	20.2	47.2	21.3
10	Useful for students' future lives.	3.7	0.9	1.1	9.0	21.3	51.7	16.9
11	Compatible with students' abilities and previous knowledge.	3.4	1.1	6.7	13.5	27.0	37.1	14.6
12	Feasible even in bad material conditions.	3.1	1.1	6.7	27.0	22.5	36.0	7.9
13	Gives the teacher clear implementation guidelines.	3.9	0.8	1.1	5.7	19.1	53.9	20.2
14	Demands greater number of lessons for the realisation of the proclaimed goals.	4.4	0.9	1.1	3.4	10.1	24.7	60.7
15	Basic motor knowledge is well chosen and distributed across grades.	3.8	0.8	1.1	5.6	22.5	52.8	18.0
16	Teaching about basic theoretical knowledge should be separated from practical teaching.	3.7	1.2	7.9	9.0	21.3	30.3	31.5
17	Framework curriculum demands a change of contents.	3.6	1.0	5.6	3.4	28.1	47.2	15.7
18	Framework curriculum demands a change in goals which should be realised in practice.	3.6	1.1	5.6	6.7	30.3	38.2	19.1

Table 2. *Teachers' attitudes about the general features of the curriculum: analysis of the measuring instrument's reliability*

Number of items	18
Average correlation	0.16
Spearman-Brown	0.76
Cronbach (α)	0.85

Table 3. *Teachers' attitudes about general features of the curriculum: variance values, proportions and cumulative proportions of the explained variances - dimensions*

	F_1	F_2	F_3
Explained variance (λ)	5.11	2.59	1.54
Proportion of the explained variance	0.28	0.14	0.09
Cumulative proportion	0.28	0.42	0.51

Although the average correlation between the items is low (Table 2), a satisfactory reliability of Cronbach (α) = 0.85 was found. Factor analysis with PB criterion for the extraction of latent dimensions (Table 3) has given, within the space of 51% of common variance, three reliable dimensions by which it is possible to assess the general features of the PE Curriculum.

Table 4. *Teachers' attitudes about the general features of the curriculum: correlation of the items with isolated varimax latent dimensions (F1, F2 and F3), and multiple correlations (SMC) of each item with the group of the remaining items*

		F_1	F_2	F_3	SMC
1	Modern in conception.	0.59	-0.26	0.47	0.73
2	Modern in contents.	0.74	-0.17	0.43	0.80
3	Comprehensive in goals and tasks.	0.72	0.29	-0.10	0.56
4	Comprehensive in contents.	0.80	0.30	0.06	0.61
5	Difficult for students.	0.39	0.63	-0.35	0.58
6	Interesting for students.	0.51	-0.15	0.34	0.38
7	Compatible with other subjects of the same grade.	0.02	0.01	0.61	0.40
8	Compatible with the previous and the following year programme.	0.13	0.15	0.53	0.37
9	Useful for students' current lives.	0.43	-0.08	0.59	0.54
10	Useful for students' future lives.	0.06	-0.06	0.70	0.42
11	Compatible with students' abilities and previous knowledge.	0.23	-0.23	0.72	0.63
12	Feasible even in bad material conditions.	0.10	-0.16	0.56	0.43
13	Gives the teacher clear implementation guidelines.	0.42	-0.14	0.45	0.49
14	Demands greater number of lessons for the realisation of the proclaimed goals.	-0.02	0.34	0.33	0.35
15	Basic motor knowledge is well chosen and distributed across grades.	0.67	-0.22	0.11	0.41
16	Teaching about basic theoretical knowledge should be divided from practical teaching.	0.06	0.56	0.03	0.25
17	Framework curriculum demands a change in contents.	-0.23	0.79	-0.16	0.62
18	Framework curriculum demands a change in goals which should be realised in praxis.	-0.11	0.76	-0.09	0.52

The first latent dimension (Table 2) is mostly defined by items 4 and 2 which assess the comprehensiveness and modernity of the curriculum in contents, goals and tasks (item 3). Arithmetic means of the stated items indicate a high positive direction of teachers' assessment. So, the first dimension could be defined as *comprehensiveness and modernity* of the curriculum. In *the second* dimension, the greatest projections were of the items initially intended for assessing demands for general curriculum change (in contents, goals, number of lessons, and difficulty and special treatment of theoretical content). Values of the arithmetic means of these items' assessments are somewhat lower than those which define the programme's comprehensiveness. Most teachers agreed that the curriculum demands change in the stated characteristics. In accordance with the obtained results, *the second* factor was interpreted as *desirable changes* of the general curriculum. *The third* dimension was mostly defined by items of compatibility of the general curriculum with the students' abilities, with other subjects of the same grade, and its usefulness for students' current and future lives. Most teachers felt that the curriculum is useful for students. It is vertically compatible the best (with the programme of the previous and the following grade), while even 40% of the teachers felt that it is not compatible with students' abilities and previous knowledge. The third dimension is interpreted as *compatibility and usefulness* of the general curriculum.

From the aspect of factor analysis, the position of items 13 and 14 of this subgroup is interesting. Both have significant and low correlations with two given factors. Item 13, which is used to assess the implementation guidelines clarity, has influence on the assessment of the curriculum comprehensiveness and modernity, but also on its compatibility and usefulness assessment. Item 14, which is intended for the assessment of the number of lessons during which the programme should be realised, definitely affects the teachers' decision about desirable programme changes, but also about its compatibility and usefulness.

The second subgroup of the questionnaire evaluated special programme tasks of the Curriculum.

Table 5. *Basic parameters and percentages of teachers' attitudes about the implementation of special programme tasks of the curriculum: arithmetic mean (Mean), standard deviation (SD), and percentages for answers by categories (%)*

				%	%	%	%	%
		Mean	SD	I strongly disagree 1	I mostly disagree 2	I'm not sure 3	I mostly agree 4	I strongly agree 5
1	School sporting events	3.8	1.1	6.7	6.7	11.2	47.2	28.1
2	Non-swimmers' training	3.3	1.8	34.8	5.6	1.1	16.9	41.6
3	Programme for students with impaired health	3.0	1.5	24.7	15.7	13.5	28.1	18.0
4	Trips, hiking, biking, mountaineering and similar activities	3.1	1.5	23.6	14.6	13.5	28.1	20.2
5	Competitions in groups of school sports association	4.1	1.1	4.4	5.6	7.9	38.2	43.8

The analysis of descriptive parameters and percentages according to categories shows that most teachers agreed that school competitions and school events are well organised and regularly implemented in their schools. Around 40% of the schools do not execute quality non-swimmers' training, programmes for students with impaired health, trips, hiking and similar activities.

Table 6. *Attitudes about special curriculum tasks implementation: analysis of the measuring instrument's reliability*

Number of items	5
Average correlation	0.40
Spearman-Brown	0.76
Explained variance (λ_1)	2.59
Explained variance's proportion	0.52
Cronbach (α)	0.77

Although the average correlation between the items of the second subgroup (Table 6) is significantly greater, somewhat less satisfactory reliability of Cronbach (α) = 0.77 was found. The one found dimension explained the 52% of the common variance of the second subgroup in the questionnaire.

Table 7. *Teachers' attitudes about the implementation of the special programme tasks of the general curriculum: correlation of items with isolated latent dimension (F1) and multiple correlations (SMC) of each item with the group of remaining items*

		F_1	SMC
1	School sports events	-0.63	0.30
2	Non-swimmers' training	-0.69	0.38
3	Programme for students with impaired health	-0.83	0.49
4	Trips, hiking, biking, mountaineering and similar activities	-0.82	0.46
5	Competitions according to groups of school sporting association	-0.58	0.19

All the items in the subgroups have significant and one-way correlation with the obtained dimension. Teaching students with special needs, trips, hiking and similar activities (items 3 and 4, Table 4), which are, according to the data, organised and implemented in practice the least, have the greatest projections on the dimension which could be interpreted as *special programme tasks.*

Analysis of the socio-demographic features of the subjects indicates male dominant population of PE teachers in Osječko-Baranjska County (65%). According to the a*ge* variable the subjects are divided into three categories: 29% are 34 years old, 28% are 34-47 years old, and in the third category there are 43% of the teachers older than 47. According to the years of *in-service/work experience,* subjects are divided into three categories: 40% of the teachers are in the first category (up to 10 years of service), in the second (from 11-24) there are 29%, and 30% of the teachers are in the third category (more than 25). When it comes to teachers' education, 82% of the teachers have a university degree, and 18 have a college degree. Previous sports experience

was reported by 81% of the teachers, while 17% reported having recreational sports experience.

Conditions in which teaching is implemented are outer stimuli which, more or less, facilitate the teaching process, according to Pastuović (1999, p. 544). Work conditions in which teachers realise the general curriculum have been assessed by the second group of five nominal variables. In this research, 29% of the teachers rated space and equipment for teaching in their schools as bad, 35% as good, and 36% as very good. Availability of literature and other sources of information from the kinesiological area in their schools was rated as bad by 23% of the teachers, as good by 58%, and as very good by 19% of the teachers. *41% of the teachers* cooperate *very well* with the other PE teachers in the school, 51% rated the cooperation as good, and 8% as bad. When it comes to the number of students per class, 37% of the classes in primary schools in Slavonija and Baranja had more than 25 students in average, while the number of students in the rest of the classes was between 12 and 24. Students' general previous knowledge and abilities were rated as bad by 40% of the teachers, as good by 52%, and as very good by only 8%.

A special interest of this paper was to establish whether teachers' assessments regarding their division into categories of described nominal variables differ. Significant differences were found only in regards to the following nominal variables: *work experience, availability of literature and other sources of professional information, and general assessment of students' previous knowledge and abilities.*

Table 8. *Differences in teachers' attitudes according to general features of the curriculum, based on work experience: MANOVA*

	Wilks	F	df 2	df 2	p
Work experience	0.792	2.53	8	164	0.01

Legend: Wilks – Wilks' λ; F – F value; df – degrees of freedom; p – significance level

Multivariate analysis of the variance (Table 5) was executed on four isolated latent dimensions (execution of the special programme, comprehensiveness and modernity, desired changes, compatibility and usefulness). Teachers divided into categories of work experience significantly differed with the level of inference error at $p \leq 0.01$.

Table 9. *Differences in teachers' attitudess according to general features of the curriculum, based upon work experience: univariate differences tests*

	Up to 10 years of service		From 11 to 24 years of service		25 and more years of service		
	N = 35		N = 36		N = 27		
	Mean	StdErr	Mean	StdErr	Mean	StdErr	p
Comprehensiveness and modernity	-0.13	0.20	-0.04	0.18	0.21	0.14	0.38
Desirable changes	0.19	0.17	0.14	0.17	-0.38	0.20	0.05
Compatibility and usefulness	-0.14	0.17	-0.24	0.21	0.42	0.15	0.03
Special programme (*)	0.35	0.17	0.00	0.19	-0.43	0.18	0.01

Legend: (*) alongside the factor there is a sign for negatively scaled dimension, Mean – arithmetic mean of the group on each dimension, StdErr – standard error of the arithmetic mean, N – number of entities in the categories of criterion variable, p – significance level

Univariate differences tests (Table 6) have shown that they mostly refer to the dimension of *special programme tasks for p≤0.01*.

Table 10. *Differences in teachers' attitudes about general features of the curriculum, on the basis of professional information availability: MANOVA*

	Wilks	F	df 2	df 2	p
Professional information availability	0.754	3.11	8	164	0.00

Legend: Wilks – Wilks' λ; F – F value; df – degrees of freedom; p – significance level

Table 11. *Differences in teachers' attitudes in regards to general curriculum features, based on the availability of professional information sources: univariate differences tests*

	Bad		Good		Very good		
	N = 19		N = 52		N = 17		
	Mean	StdErr	Mean	StdErr	Mean	StdErr	p
Special programme (*)	0.69	0.23	-0.10	0.12	-0.42	0.25	0.00
Comprehensiveness and modernity	-0.50	0.27	-0.05	0.12	0.71	0.20	0.00
Desirable changes	0.23	0.16	-0.08	0.14	-0.03	0.30	0.49
Compatibility and usefulness	-0.29	0.23	0.03	0.13	0.23	0.25	0.27

Legend: (*) alongside the factor, there is a sign for negatively scaled dimension, Mean – arithmetic mean of the group on each dimension, StdErr –standard error of the arithmetic mean, N – number of entities in the categories of criterion variable, p – significance level

The availability of literature and other sources of professional information in schools were rated on a 3-point scale: bad, good and very good. MANOVA (Table 7) shows significant differences in teachers' assessments. Univariate tests (Table 8) direct the differences onto the dimensions of *programme comprehensiveness and modernity* and *special programme tasks.* The greatest, and significant difference (more than one standard deviation), was determined in categories very good and bad. Teachers who were informed the best evaluated the programme as modern, did not think of it as comprehensive, and they regularly implemented its special tasks and organised them well.

Table 12. *Differences in teachers' attitudes according to general curriculum features, on the basis of the general assessment of students' previous knowledge and abilities: MANOVA*

	Wilks	F	df 2	df 2	p
General assessment of students' previous knowledge and abilities	0.779	2.71	8	164	0.01

Legend: Wilks – Wilks' λ; F – F value; df – degrees of freedom; p – significance level

Table 13. *Differences in teachers' attitudes according to general curriculum features on the basis of the general assessment of students' previous knowledge and abilities: univariate differences tests*

	Bad		Good		Very good		
	N = 35		N = 46		N = 7		
	Mean	StdErr	Mean	StdErr	Mean	StdErr	p
Special programmes (*)	0.32	0.16	-0.16	0.14	-0.49	0.49	0.04
Comprehensiveness and modernity	0.05	0.19	-0.10	0.14	0.39	0.35	0.44
Desirable changes	0.12	0.19	-0.09	0.13	-0.05	0.43	0.64
Compatibility and usefulness	-0.35	0.17	0.10	0.13	1.13	0.39	0.00

Legend: (*) alongside the factor, there is a marking for negatively scaled dimension, Mean – group's arithmetic mean on each dimension, StdErr –standard error of the arithmetic mean, N – number of entities in the in the categories of criterion variable, p – significance level

Teachers significantly differ in their assessments of the curriculum, in regards to their division in the categories of the assessment of students' previous knowledge and abilities for participating in the lessons' MANOVA (Table 9). The differences mostly relate to (univariate tests, Table 10) the dimension of *compatibility and usefulness* of the general curriculum. The category of teachers, whose students have very good previous knowledge and abilities, manages to adjust the programme and make it useful for students more than others.

Only three of ten classification variables significantly differentiated teachers' assessment of the curriculum. More experienced teachers organise and implement special programme tasks well. Well informed teachers, besides successfully implementing special programme tasks, consider the curriculum modern and do not think of it as comprehensive. The teachers who assess their students' previous knowledge and abilities as good and very good have a more expressed positive attitude towards the curriculum compatibility and usefulness.

Discussion

The constructed questionnaire was used to evaluate the PE Curriculum with two subgroups of items of satisfactory reliability. The aforementioned subgroups can be used as separate questionnaires if the need should arise. Three latent dimensions were isolated by the factor analysis of the first subgroup. They enable the assessment of the general features of the curriculum. The first factor assessed its *comprehensiveness and modernity.* Most teachers of Osječko-Baranjska County assessed the programme as modern and particularly comprehensive in goals, tasks and contents which, thus defined, demand larger number of lessons. Significantly higher values of assessment were found with teachers to whom professional information is more available. The second dimension assessed *the desirable changes* expected by the teachers. It is not surprising that precisely those relate to the comprehensiveness of goals, tasks and contents, according to most teachers' ratings. Assessment of the subject's difficulty divided the teachers the most. Although every teacher should adjust the general curriculum to material conditions and students' abilities, one third of the teachers in this study obviously did not succeed in doing so. Found dimensions explain the greatest quantity of common variance. Hence, they also point to the most important feature of the current curriculum. According to teachers' opinions, it is not possible to successfully realise the modern curriculum in the existing working conditions, and there is a need for a change.

The third dimension evaluated *compatibility and usefulness* of the curriculum. Most teachers assessed the curriculum as useful for students. Curriculum compatibility with other subjects of the same grade had the lowest rating. Compatibility and usefulness were rated significantly lower by those teachers who rated their students' abilities as bad. Baranović (2003) evaluated the primary school curricula from the teachers' perspective (Baranović et al. 2006, p. 164). Subject teachers assigned the highest grades

for the general features of the curriculum to usefulness and importance for students, and its interest. Subject's difficulty, comprehensiveness, modernity and compatibility with other subjects of the same grade got a lower rating. Although it is not possible to fully compare the results, due to the differences in the measuring instruments, it is obvious that the New and current Curriculum shows similar weaknesses as the previous one.

Special programme tasks were assessed by the second subgroup of the questionnaire which has shown satisfactory reliability and factor validity. Teachers organise and regularly implement school competitions and sporting events the best. Only half of the teachers implement trips and similar activities well, as well as the programme for students with impaired health.

Significant differences in teachers' assessment mostly relate precisely to *the special programme implementation.* It was found that only teachers with more years in service, and with better access to professional information sources, successfully implement special programme tasks.

By observing the obtained results as a whole, it is possible to infer that they are in compliance with the ratings of the state and status of PE in the world (Hardman et al., 2008), in the part which relates to the discrepancy between the proclaimed and realised.

Although the general curriculum in the research was evaluated by teachers of Osječko-Baranjska County, it is possible to generalise the results to Slavonian Region, at least. It is due to the fact that The Croatian Education and Teacher Training Agency organises joint regional and national expert teacher meetings where teachers discuss, analyse and agree upon optimal solutions and gain unique instructions for PE Curriculum implementation.

The contribution of this research can be seen in: the construction of a measuring instrument of satisfactory reliability which should be developed further and used for similar research in the area; the obtained latent dimensions which should be developed further to gain satisfactory criteria, i.e. features which would enable evaluation of the curricula in the area of kinesiological education in the future. The limitation of the research is evident in the sample size, which is nevertheless representative for PE curriculum evaluation in the higher grades of primary school.

Conclusion

Research results direct us, by logical analysis, towards the conclusion that it is not possible to fully realise the set goal and tasks of the curriculum. *Comprehensiveness* is the most pronounced feature in the teachers' assessment. Valuable novelty which embellishes the current Curriculum has not brought about the desired improvements. Previous weaknesses of the prescribed curricula are still present.

Making of the future curriculum, based on the outcomes which students should acquire at a certain level, radically changes the conception of the previous subject

curricula. It is necessary to provide appropriate conditions for the PE educational area to satisfy students' needs and the requirements of the society. This mainly refers to the increase in the number of lessons (at least three, as before 1983), and the applicable curriculum which would additionally motivate teachers to adjust it to the possibilities and interests of their students in gaining optimal achievements.

References

Baranović, B., et al. (2006). *Nacionalni kurikulum za obvezno obrazovanje u Hrvatskoj: različite perspektive*. Zagreb: Znanost i društvo.

DeVellis, R.F. (2003). *Scale Development; Theory and Application (2nd Edition*). Thousand Oaks, California: Sage.

Hardman, K. (2008). Physical Education in schools. Global perspective. *Kinesiology*, 40(1), 5-28

Harland, J., Moor, H., Kinderand, M., & Ashworth, K. (2002). *Is the curriculum working?* Northen Ireland: NFER.

Katić, R., Viskić-Štalec, N., & Šumanović, M. (1998). Utjecaj posebno programirane nastave tjelesnog odgoja na morfološki i motorički razvoj dječaka. *Sport u teoriji i praksi*, 3(2), 13-19.

Neljak, B. (2002). *Validacija planova i programa nastave tjelesne i zdravstvene kulture.* (Unpublished doctoral dissertation, University in Zagreb), Zagreb: Kineziološki fakultet Sveučilišta u Zagrebu.

Neljak, B., Markuš, D., Trstenjak, B. & Visković, S. (2011). Kompetencije u tjelesnom i zdravstvenom odgojno obrazovnom području: učenička procjena važnosti. In I. Prskalo & D. Novak (Ed.), *Tjelesna i zdravstvena kultura u 21. stoljeću – kompetencije učenika* (pp. 345-353). Zagreb: Hrvatski kineziološki savez.

Prskalo, I., & Babin, J. (2008). Stanje i perspektive razvoja u području edukacije. In V. Findak (Ed.), *Zbornik radova 17. ljetne škole kineziologa RH* (pp. 30-41), Rovinj, Zagreb: Hrvatski kineziološki savez.

Republika Hrvatska (2006). *Nastavni plan i program za osnovnu školu*. Zagreb:Ministarstvo znanosti obrazovanja i športa RH.

Republika Hrvatska (2008). *Zakon o odgoju i obrazovanju u osnovnoj i srednjoj školi*. Zagreb, Ministarstvo znanosti obrazovanja i športa RH.

Republika Hrvatska (2011). *Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje te opće obvezno i srednjoškolsko obrazovanje*. Zagreb: Ministarstvo znanosti, obrazovanja i športa RH.

Stelcer, J.M., Fenster, M.J., & Langford, G. (2004). Attitudes towards physical education: A study from four countries: Austria, Czech Republic, England and USA. *College Student Journal*, 38, 171-178.

Štalec, J., Momirović K., (1971). Ukupna količina valjane varijance kao osnov kriterija za određivanje broja značajnih glavnih komponenata. *Kineziologija,* 1, 79-81.

Šumanović, M. (2012). *Evaluacija provedbe nastave tjelesne i zdravstvene kulture u osnovnoj školi*. (Unpublished doctoral dissertation, University in Zagreb), Zagreb: Kineziološki fakultet Sveučilišta u Zagrebu.

Viskić-Štalec, N. (1991). *Elementi faktorske analize*. Zagreb: Fakultet za fizičku kulturu Sveučilišta u Zagrebu.

Wiles, J. & Bondi, J. (1988). *Curriculum development*. A Guide to Practice. Prentice – Hall, Inc.

Žilić, V. (2005). *Promjene i povezanosti antropoloških obilježja pod utjecajem različitih kineziološkim tretmana*. (Unpublished master's thesis), Zagreb: Kineziološki fakultet Sveučilišta u Zagrebu.

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Vrednovanje nastavnog plana i programa tjelesne i zdravstvene kulture za više razrede osnovne škole

Sažetak

Cilj rada bio je vrednovati Nastavni plan i program tjelesne i zdravstvene kulture u višim razredima osnovne škole. Uzorak ispitanika obuhvatio je 89 učitelja tjelesne i zdravstvene kulture osnovnih škola Osječko-baranjske županije. Konstruiran je Upitnik stavova sa dva podskupa obilježja zadovoljavajuće pouzdanosti. Prvi je podskup s 18 čestica tvrdnji procijenio obilježja nastavnog plana i programa: suvremenost, zanimljivost, težina, opsežnost, korisnost, usklađenost, provedivost, temeljna motorička znanja, jasnoća smjernica za provedbu, poželjne promjene. Drugi je podskup s 5 čestica procijenio provedbu posebnih programskih zadaća. Skup klasifikacijskih varijabli procijenio je obilježja ispitanika i uvjete rada. Razlike u procjenama učitelja učinjene su s pomoću kategorija navedenih klasifikacijskih varijabli. Primijenjena je deskriptivna statistika, faktorska analiza i jednofaktorska analiza varijance MANOVA s univarijatnim testovima razlika. Faktorskom analizom prvoga podskupa dobivene su tri latentne dimenzije obilježja programa: opsežnost i suvremenost, poželjne promjene, usklađenost i korisnost programa. Na drugom podskupu dobivena je jedna dimenzija provedba posebnog programa. Dobre su strane plana i programa vertikalna usklađenost, korisnost, suvremenost, jasne smjernice za provedbu, odabir i distribucija temeljnih motoričkih znanja te provedba školskih natjecanja i priredbi. Slabije strane su opsežnost ciljeva, zadaća i sadržaja; nedovoljan fond sati nastave te provedba posebnog programa (program za učenike oštećena zdravlja; izlete i slične aktivnosti). Značajne razlike u procjenama učitelja dobivene su s obzirom na kriterijske varijable: radno iskustvo, dostupnost stručnih informacija i procjene mogućnosti učenika. Opsežne ciljeve, zadaće i sadržaje aktualnog Nastavnog plana i programa nije moguće uspješno ostvariti u propisanoj satnici i postojećim uvjetima rada.

Ključne riječi: *procjene; stavovi; učitelji.*

Uvod

Odgoj i obrazovanje u procesima globalizacije i ekonomskog razvoja doživljava brojne promjene i reforme. Republika Hrvatska je pristupajući Europskoj uniji, u posljednjem desetljeću počela prilagođavati svoj odgojno-obrazovni sustav koji se nije značajnije mijenjao tijekom tranzicijskoga razdoblja (Baranović, 2006). Ministarstvo znanosti, obrazovanja i športa RH donijelo je, u razdoblju od 2004. – 2010. važne zakone i propise: *Hrvatski nacionalni obrazovni standard* (2005), *Plan razvoja odgoja i obrazovanja 2005 – 2011, Nastavni plan i program za osnovne škole (2006), Zakon o odgoju i obrazovanju u osnovnoj i srednjoj školi (2008)* i 20011. godine *Nacionalni okvirni kurikulum za predškolski odgoj i obrazovanje te opće obvezno i srednjoškolsko obrazovanje (*u daljnjem tekstu *NOK).* Usvajanjem NOK-a događa se stvarni zaokret u odgojno-obrazovnom sustavu RH. On predstavlja polazište za izradu nastavnih planova i predmetnih kurikula utemeljenih na razrađenim postignućima pojedinih odgojno-obrazovnih područja. Pomak u razvoju kurikula s prenošenja znanja prema stjecanju kompetencija danas je dominantan trend razvoja odgoja i obrazovanja u svijetu. Suvremeni kurikul u prvi plan stavlja učenika i njegova postignuća, a ne nastavni program i učitelja koji ga realizira. Učitelj postaje moderator odgojno-obrazovnog procesa što zahtijeva dodatna, specifična znanja i umijeća koja trebaju razvijati i prilagođavait suvremenoj nastavi.

Na putu izrade predmetnih kurikula vrlo je važna procjena aktualnoga stanja i definiranje potreba (Wiles & Bondi, 1988; Walker, 1990). Empirijske analize pružaju uvid u dobre i slabe strane aktualnoga programa, uključuju učitelje, učenike i ravnatelje i pripremaju ih za potrebne promjene (Baranović i sur. 2006).

U razvoju nastavnog plana i programa tjelesne i zdravstvene kulture u našoj zemlji važna je 1983. godina. Tada je u bivšoj državi Jugoslaviji donesen jedinstveni nastavni plan i program. Naziv predmeta promijenio se u Tjelesna i zdravstvena kultura. Definirani su jedinstveni: ciljevi i zadaće, osnovni i diferencirani organizacijski oblici rada, programski sadržaji i sustav praćenja i vrednovanja. Koncepcija se nije značajnije mijenjala do 2006. godine kad je uveden danas aktualni Nastavni plan i program. Njegove su promjene izražene u cilju predmeta koji je sada usmjeren na *primjenu teorijskih i motoričkih znanja* koja omogućuju samostalno tjelesno vježbanje, mijenjanje osobina i razvoj sposobnosti, čime se osigurava promicanje zdravlja. Po prvi su put definirana temeljna motorička znanja, ključni pojmovi i obrazovna postignuća za svaki razred osnovne škole. Okvirni su programski sadržaji rasterećeni osobito onih tema koje se zbog skromnih materijalnih uvjeta nisu mogle realizirati. U programu predmetne nastave programske sadržaje pretežno čine jednostavna i složenija kineziološka motorička znanja, strukturirana u osam nastavnih cjelina (osim u šestom razredu devet). Dio nastavnih tema, dijelova nastavnih cjelina, posebno je određen za učenike i posebno za učenice. U nastavnom planu i programu definirane su posebne programske zadaće koje obuhvaćaju: *izvannastavne aktivnosti*, *obuku neplivača*, *zimovanja i ljetovanja* (izvanškolske aktivnosti) i *program za djecu s posebnim potrebama*

(oštećena zdravlja) (MZOŠ, 2006). Hardman i sur. (2008) su u razdoblju od 1999. do 2007. godine izvršili najopsežnije istraživanje o stanju i statusu *tjelesne i zdravstvene kulture (physical education)* u svijetu. Utvrđuju kako su u planovima i programima pojedinih zemalja prisutni: nedovoljan broj sati tjelesnoga odgoja, inferioran status predmeta, nedovoljno kompetentni ili obrazovani nastavnici, loši materijalni uvjeti, prevelike grupe za vježbanje, opadanje tjelesnih sposobnosti i fitnesa mladih. Prisutan je raskorak između proklamiranog i onog što se ostvaruje u praksi. Zabrinjavajuće stanje zahtijeva ozbiljno djelovanje, snažnu političku potporu i argumente u korist tjelesnoga odgoja. Dobivena je analiza poslužila izradi *Rezolucije o sportu i tjelovježbi* koju je 2007. godine donio Europski parlament.

Baranović i sur. (2006) evaluirali su 2003. godine tada aktualne nastavne programe u osnovnoj školi u RH iz perspektive razrednih i predmetnih učitelja i učenika osmih razreda. Za procjenu programa koristili su devet varijabli-obilježja koji predstavljaju standard za evaluaciju kurikula u Europskoj uniji: suvremenost, opsežnost, zanimljivost, razumljivost, težina, vertikalna i horizontalna usklađenost, korisnost, važnost i zahtjev za promjenama programa. Najboljim su karakteristikama općeg programa tjelesne i zdravstvene kulture predmetni nastavnici ocijenili njegovu važnost i korisnost za učenike, a najslabijim usklađenost s drugim predmetima istoga razreda i suvremenost. Učenici osmih razreda tjelesnu i zdravstvenu kulturu ocjenjuju najzanimljivijim, najrazumljivijim i najlakšim predmetom. Prskalo i Babin (2008) zagovaraju kvalitetu materijalnih i kadrovskih uvjeta za nastavu tjelesne i zdravstvene kulture, i nastavni program koji će u većoj mjeri respektirati učeničke potrebe, kao i zahtjeve suvremenog društva. Programski sadržaji tjelesne i zdravstvene kulture i njihova učinkovitost u pretvorbi osobina i sposobnosti bili su tema brojnih istraživanja (npr. Žilić, 2005; Katić, Viskić-Štalec i Šumanović, 1998). Eksperimentalni su se programi najčešće koncentrirali na manji broj programskih cjelina koje su obrađivane u određenom razdoblju. Pokazali su se uspješnijima i atraktivnijima od postojećih. Neljak (2002) je u vrednovanju općeg nastavnog plana i programa tjelesne i zdravstvene kulture utvrdio preopćenite zadatke pa predlaže da ih treba odrediti posebno za svaki razred, dob i spol učenika. U analizi NOK-om definiranih postignuća –kompetencija učenika koje se trebaju steći na određenoj razini, Neljak i sur. (2011) zaključuju da Nacionalni okvirni kurikulum pred tjelesno i zdravstveno odgojno-obrazovno područje postavlja veće zahtjeve od aktualnog općeg programa, koji se neće moći realizirati bez promjena u programu i povećanja broj sati nastave.

Problemi dosadašnjih općih nastavnih planova i programa tjelesne i zdravstvene kulture najviše su izraženi u opsežnosti i uopćenosti cilja i zadaća te primjerenosti okvira nastavnih sadržaja koje je bilo teško realizirati u maloj satnici nastave i kvaliteti ostalih uvjeta provedbe. Novine aktualnog Nastavnog plana i programa najviše se odnose na redukciju programskih sadržaja, definiranje temeljnih motoričkih znanja, ključnih pojmova i obrazovnih postignuća za svaki razred te definiranje posebnih programskih zadaća. Dobiti povratne informacije o provedbi programa na empirijskoj

razini, osnovni je problem ovoga rada. Vrednovanje iz perspektive učitelja, koji program neposredno provode, daje brojne vrijedne informacije. Uočavaju se dobre i slabe strane, uvjeti za veću učinkovitost, i stvara okvir smjernica za budući razvoj kurikula. U odabranom modelu vrednovanja programa pošlo se od prethodno navedenih obilježja, koja se u svijetu koriste ne samo kao standard u izradi kurikula nego i u procesu njegova vrednovanja (Harland, 2002; Baranović i sur., 2006). Dodatno su se provjeravala temeljna motorička znanja, provedivost programa u lošim materijalnim uvjetima i jasnoća smjernica za provedbu. Dobra organizacija i redovita provedba diferenciranih organizacijskih oblika rada ukazuje na kvalitetu posebnih programskih zadaća općega nastavnog plana i programa.

Osnovni ***cilj*** *rada bio* je *vrednovati aktualni Nastavni plan i program tjelesne i zdravstvene kulture u višim razredima osnovne škole Osječko-baranjske županije.*

Problemi istraživanja bili su:

- Utvrditi stavove učitelja tjelesne i zdravstvene kulture prema aktualnom planu i programu (*opća obilježja, provedba posebnih programskih zadaća*);
- Utvrditi stavove učitelja tjelesne i zdravstvene kulture o uvjetima u kojima provode nastavni plan i program (*prostor i oprema za nastavu, dostupnost literature i ostalih izvora informacija iz toga područja, suradnja s ostalim nastavnicima koji provode program TZK u školi, prosječan broj učenika u razrednom odjelu i opća procjena predznanja i sposobnosti učenika za praćenje nastave*);
- Ispitati razlike u stavovima učitelja s obzirom na njihova socio-demografska obilježja (*spol, dob, stručna sprema, radno iskustvo, sportsko iskustvo*);
- Ispitati razlike u stavovima učitelja s obzirom na uvjete u kojima provode nastavni plan i program;
- Logičkom analizom utvrditi dobre i slabe strane nastavnog plana i programa te dati prijedloge za promjene.

Metode

Uzorak ispitanika

Uzorak ispitanika obuhvatio je 89 učitelja koji provode nastavu tjelesne i zdravstvene kulture od 5. do 8. razreda u osnovnim školama Osječko-baranjske županije, od kojih je 31 žena i 58 muškaraca. 82% ispitanika u uzorku ima visoku stručnu spremu.

Mjerni instrument

Raznolikost problematike istraživanja uvjetovala je konstrukciju Upitnika stavova od 33 čestice. Za procjenu općeg plana i programa određena su dva podskupa čestica. *Prvi* je procijenio kvalitetu obilježja općega plana i programa. Nastavnici su s 18 čestica tvrdnji na Likertovoj skali od 5 stupnjeva (1 - potpuno se ne slažem, 2 - uglavnom se ne slažem, 3 - nisam siguran, 4 - uglavnom se slažem, 5 - potpuno se slažem) procijenila obilježja programa - *suvremenost, opsežnost, težina, zanimljivost, usklađenost, korisnost, fond sati, jasnoća smjernica za provedbu, temeljna teorijska*

i motorička znanja, provedivost i zahtjev za promjenom programa. Drugi je podskup s 5 čestica procijenio posebne programske zadaće, koje određuju okvir diferenciranih organizacijskih oblika rada: *sportske priredbe, obuka neplivača, nastava za učenike s posebnim potrebama, izleti, pješačenja i ostale aktivnosti, natjecanja u okviru školskoga sportskog društva.* Nastavnici su procijenili uz pomoć opisane Likertove skale njihovu dobru organizaciju i redovitu provedbu navedenih aktivnosti.

Poseban se dio upitnika odnosio na dvije skupine nominalnih – klasifikacijskih varijabli. S prvom skupinom od 5 varijabli procijenjena su socio-demografska obilježja ispitanika: *spol, dob, stručna sprema, radno iskustvo* i *sportsko iskustvo*. S drugom skupinom od 5 nominalnih varijabli nastavnici su na skali od tri stupnja (loši, dobri, vrlo dobri) procijenili *uvjete rada* u kojima izvode nastavu. To su: *prostor i oprema, dostupnost literature i ostalih izvora informacija iz toga područja, suradnja s ostalim nastavnicima koji izvode nastavu tjelesne i zdravstvene kulture u školi, prosječan broj učenika u razrednom odjelu i opća procjena predznanja i sposobnosti učenika za praćenje nastave*. Upitnik ima zadovoljavajuću pouzdanost koja za prvi podskup iznosi Cronbach (α) = 0,85, a za drugi podskup Cronbach (α) = 0,77. Prema DeVellis (2003) vrijednosti Cronbach (α) iznad 0,70 su zadovoljavajuće razine.

Metode obrade podataka

Radi kvalitetnijeg prezentiranja rezultata izračunati su osnovni deskriptivni pokazatelji rezultata podskupova Upitnika i postotci odgovora. Za provjeru metrijskih karakteristika korišten je Cronbach (α) koeficijent. Učinjena je faktorska analiza svakog podskupa korištenjem komponentne analize i PB kriterijem ekstrakcije. U prvom je podskupu primijenjena *varimax* transformacija. Definirane su dimenzije u prvom i drugom podskupu Upitnika, osim za procjenu plana i programa, koje su poslužile i kao varijable za utvrđivanje razlika u procjenama ispitanika podijeljenih u kategorije nominalnih varijabli. Provedena je multivarijatna analiza varijance (MANOVA) za utvrđivanje razlika između skupina ispitanika (prema klasifikacijskim varijablama) koje su u pojedinim dimenzijama dobivene faktorskom analizom. Za utvrđivanje razlika između grupa ispitanika u pojedinoj dimenziji korištena je analiza varijance (ANOVA). Razina pogreške zaključivanja bila je p=0,01.

Rezultati

Rezultati deskriptivne i faktorske analize, kao i analize razlika prikazani su u sljedećim tablicama.

Nastavnici su u ovome prvom podskupu Upitnika stavova, na skali od pet stupnjeva, procijenili 18 obilježja općega – propisanoga Nastavnog plana i programa. Deskriptivna analiza i postotci odgovora (tablica 1) ukazuju na to da se nastavnici najviše slažu kako plan i program zahtijeva veći fond sati za realizaciju proklamiranih ciljeva i zadaća; sadržajno je (pre)opsežan; vertikalno je usklađen (s programom prethodnog i sljedećeg razreda); te daje jasne smjernice za rad. Temeljna su mu motorička znanja

dobro odabrana i raspoređena. Podijeljenih su stavova prema težini i zanimljivosti programa, provedivosti u lošim materijalnim uvjetima te usklađenosti s programima drugih predmeta istoga razreda.

Tablica 1. – 3.

Iako je prosječna korelacija među česticama niska (tablica 2), dobivena je zadovoljavajuća pouzdanost od Cronbach (α) = 0,85. Faktorska je analiza s PB kriterijem za ekstrakciju latentnih dimenzija (tablica 3) dala u prostoru od 51% zajedničke varijance tri pouzdane dimenzije kojima je moguće procijeniti opća obilježja Nastavnog plana i programa tjelesne i zdravstvene kulture.

Tablica 4.

Prvu latentnu dimenziju (tablica 2) najviše definiraju čestice 4 i 2 koje procjenjuju opsežnost i suvremenost plana i programa u sadržajima, ciljevima i zadaćama (čestica 3). Aritmetičke sredine navedenih čestica ukazuju na visok pozitivni smjer procjene učitelja. Stoga je prvu dimenziju bilo moguće definirati kao *opsežnost i suvremenost* plana i programa. Na *drugoj* su dimenziji najveće projekcije čestica inicijalno namijenjenih procjeni zahtjeva za promjenama općeg plana i programa (u sadržajima, ciljevima, fondu sati, težini i posebnoj obradi teorijskih sadržaja). Vrijednosti aritmetičkih sredina procjene navedenih čestica nešto su niže od onih koje definiraju opsežnost programa. Većina se učitelja slaže s tim kako plan i program traži promjene u navedenim karakteristikama. U skladu s dobivenim rezultatima *drugi* se faktor interpretirao kao *poželjne promjene* općeg plana i programa. *Treću* dimenziju najviše definiraju čestice usklađenosti općeg plana i programa s mogućnostima učenika, s drugim predmetima istoga razreda, i njegove korisnosti za sadašnji i budući život učenika. Većina učitelja smatraju kako je plan i program učenicima koristan. Najbolje je vertikalno usklađen (s programom prethodnog i sljedećeg razreda), dok njih čak 40% smatra da nije usklađen sa sposobnostima i predznanjima učenika. Treća je dimenzija interpretirana kao *usklađenost i korisnost* općeg plana i programa.

S aspekta faktorske analize zanimljiva je pozicija čestica 13 i 14 ovoga podskupa. Obje imaju značajne i niske korelacije s dva dobivena faktora. Čestica 13, kojom se procjenjuje jasnoća smjernica za provedbu programa, ima utjecaja na procjenu opsežnosti i suvremenosti plana i programa, ali isto tako i na procjenu njegove usklađenosti i korisnosti. Čestica 14, koja je namijenjena procjeni satnice u kojoj program treba realizirati, svakako utječe na odluku učitelja o poželjnim promjenama programa, ali i o njegovoj usklađenosti i korisnosti.

Drugi podskup Upitnika vrednovao je posebne programske zadaće Nastavnoga plana i programa.

Tablica 5.

Analiza deskriptivnih parametara i postotci po kategorijama procjene govore o tome da se većina učitelja najviše slažu kako se školska natjecanja i sportske priredbe

u njihovim školama dobro organiziraju i redovito provode. Oko 40% škola ne provodi kvalitetno obuku neplivača, program za učenike oštećena zdravlja, izlete, pješačenja i sl. aktivnosti.

Tablica 6.

Iako je prosječna korelacija među česticama drugoga podskupa (tablica 6) znatno veća, dobivena je nešto niža zadovoljavajuća pouzdanost od Cronbach (α) = 0,77. Dobivena dimenzija objasnila je 52% zajedničke varijance tog drugog podskupa Upitnika.

Tablica 7.

Sve čestice podskupa imaju značajnu i jednosmjernu korelaciju s dobivenom dimenzijom. Provedba nastave za učenike s posebnim potrebama, zatim izleti, pješačenja i sl. aktivnosti (čestice 3 i 4, tablica 4), koje se prema podatcima najslabije organiziraju i provode u praksi, imaju najveće projekcije na dimenziju koju je bilo moguće interpretirati kao *posebne programske zadaće.*

Analiza rezultata socio-demografskih obilježja ispitanika ukazuje na to da u populaciji učitelja tjelesne i zdravstvene kulture Osječko-baranjske županije dominiraju muškarci (65%). Varijabla *dob* podijelila je ispitanike u tri kategorije. Njih 29% je u dobi do 34 godine, 28% od 34 – 47 godina, a u trećoj je kategoriji 43% učitelja starijih od 47 godina. Prema godinama *staža/radnog iskustva* ispitanici su podijeljeni u tri kategorije. U prvoj (do 10 godina staža je 40% učitelja, u drugoj (od 11-24) je 29%, a u trećoj (više od 25) je 30% učitelja. Visoku stručnu spremi ima 82% učitelja, a višu 18%. Sa sportskim iskustvom je 81% učitelja, a 17% ih ima rekreativno sportsko iskustvo.

Uvjeti u kojima se odvija poučavanje, vanjski su podražaji koji u većoj ili manjoj mjeri olakšavaju nastavni proces, smatra Pastuović (1999: 544). Uvjeti rada u kojima nastavnici realiziraju opći plan i program procijenjeni su s drugom skupinom od pet nominalnih varijabli. Prostor i opremu za nastavu 29% učitelja su u svojim školama ocijenili lošima, 35% dobrima i 36% vrlo dobrima. Dostupnost literature i ostalih izvora informacija iz kineziološkog područja 23% učitelja ocjenjuje u svojim školama lošom, 58% dobrom, a 19% vrlo dobrom. *41% učitelja vrlo dobro s*uređuje s ostalim nastavnicima koji u školi provode tjelesnu i zdravstvenu kulturu. 51% ih ocjenjuje dobrom, a 8% lošom. U 37 % razrednih odjela osnovnih škola Slavonije i Baranje u prosjeku je više od 25 učenika, dok je u ostalima odjelima njih između 12 i 24. Opća predznanja i sposobnosti svojih učenika za praćenje programa 40% učitelja procjenjuje lošima, 52% dobrima, a samo 8% vrlo dobrima.

Poseban je interes u ovom radu bio utvrditi razlikuju li se procjene učitelja s obzirom na njihovu podjelu u kategorije opisanih nominalnih varijabli. Značajne razlike dobivene su samo prema sljedećim nominalnim varijablama: *radno iskustvo, dostupnost literature i ostalih izvora stručnih informacija te opća procjena predznanja i sposobnosti učenika.*

Tablica 8.

Multivarijatna je analiza varijance (tablica 5) provedena na četiri izolirane latentne dimenzije (provedba posebnoga programa, opsežnost i suvremenost, poželjne promjene, usklađenost i korisnost). Nastavnici podijeljeni u kategorije radnoga iskustva značajno se razlikuju na razini pogreške zaključivanja od $p \leq 0,01$.

Tablica 9.

Univarijatni testovi razlika (tablica 6) pokazali su da se one uglavnom odnose na dimenziju *posebne programske zadaće za* $p \leq 0,01$.

Tablica 10. i 11.

Dostupnost literature i ostalih izvora stručnih informacija u školama procijenjena je na skali od tri stupnja: loša, dobra i vrlo dobra. MANOVA (tablica 7) pokazuje značajne razlike u procjenama učitelja. Univarijatni testovi (tablica 8) usmjeravaju razlike na dimenzije *opsežnost i suvremenost programa* te *posebne programske zadaće*. Najveća je, i značajna razlika (više od jedne standardne devijacije), izražena u kategorijama vrlo dobra i loša. Najbolje informirani nastavnici program procjenjuju kao suvremen, ne smatraju ga opsežnim i dobro organiziraju i redovito provode njegove posebne zadaće.

Tablica 12. i 13.

Nastavnici se značajno razlikuju u procjenama plana i programa, s obzirom na njihovu podjelu u kategorije procjene predznanja i sposobnosti učenika za praćenje nastave MANOVA (tablica 9). Razlike se najviše odnose (univarijatnih testovi, tablica 10) na dimenziju *usklađenost* i *korisnost* općeg plana i programa. Kategorija učitelja čiji učenici imaju vrlo dobra predznanja i sposobnosti uspijeva više od ostalih prilagoditi program i učiniti ga učenicima korisnim.

Samo tri od deset klasifikacijskih varijabli značajno razlikuju nastavničke procjene plana i programa. Iskusniji nastavnici dobro organiziraju i provode posebne programske zadaće. Dobro informirani nastavnici, osim što uspješno provode posebne programske zadaće, plan i program smatraju suvremenim i ne smatraju ga opsežnim. Nastavnici koji predznanja i sposobnosti svojih učenika ocjenjuju kao dobra i vrlo dobra, imaju više izražen pozitivan stav prema usklađenosti i korisnosti plana i programa.

Rasprava

Konstruiranim je Upitnikom procijenjen Nastavni plan i program tjelesne i zdravstvene kulture s dva podskupa čestica zadovoljavajuće pouzdanosti, koji se prema potrebi mogu koristiti i kao zasebni upitnici. Faktorskom su analizom prvoga podskupa izolirane tri latentne dimenzije kojima je moguće procijeniti opća obilježja nastavnog plana i programa. Prvi faktor procjenjuje njegovu *opsežnost i suvremenost*. Većina učitelja Osječko-baranjske županije program ocjenjuje suvremenim i osobito

opsežnim u ciljevima, zadaćama i sadržajima koji, tako definirani, zahtijevaju veći fond sati nastave. Značajno više vrijednosti procjene tog obilježja imaju nastavnici kojima su dostupnije stručne informacije. Druga dimenzija procjenjuje *poželjne promjene* koje nastavnici očekuju. Ne iznenađuje da se one upravo i odnose na opsežnost ciljeva, zadaća i sadržaja prema ocjeni većine učitelja. Procjena težine predmeta najviše je podijelila učitelje. Iako bi opći program svaki učitelj trebao prilagoditi materijalnim uvjetima i mogućnostima učenika, trećini učitelja očito to ne uspijeva. Dobivene dimenzije objašnjavaju najveću količinu zajedničke varijance. Stoga i upućuju na najvažnije obilježje aktualnog plana i programa. Suvremeni plan i program, prema mišljenjima učitelja, nije moguće uspješno realizirati u postojećim uvjetima rada i traži promjenu.

Treća dimenzija ocjenjuje *usklađenost i korisnost* plana i programa. Većina učitelja ocjenjuju plan i program korisnim za učenike. Najslabije je ocijenjena usklađenost programa s ostalim predmetima istoga razreda. Usklađenost i korisnost značajno lošije ocjenjuju oni nastavnici koji mogućnosti svojih učenika procjenjuju lošima. Baranović je 2003. evaluirala nastavne programe osnovne škole iz perspektive učitelja (Baranović i sur. 2006:164). Najviše ocjene općih obilježja programa tjelesne i zdravstvene kulture predmetni su nastavnici dali korisnosti i važnosti programa za učenike i njegovoj zanimljivosti. Slabije su procijenili težinu predmeta, opsežnost, suvremenost i usklađenost s drugim predmetima istoga razreda. Iako rezultate, zbog razlika u mjernim instrumentima, nije moguće u potpunosti uspoređivati, očito je kako aktualni Nastavni plan i program pokazuje slične slabosti kao i prethodni.

Posebne programske zadaće procjenjivane su s drugim podskupom Upitnika koji je zadovoljavajuće pouzdanosti i faktorske valjanosti. Nastavnici najbolje organiziraju i redovito provode školska natjecanja i sportske školske priredbe. Izlete i slične aktivnosti, kao i program za učenike oštećena zdravlja, dobro provodi samo pola učitelja.

Značajne razlike u nastavničkim procjenama najviše se odnose upravo na *provedbu posebnog programa.* Samo *n*astavnici s više godina staža, i oni kojima su dostupniji izvori stručnih informacija, uspješno provode posebne programske zadaće.

Promatrajući dobivene rezultate u cjelini, moguće je zaključiti kako su u skladu s ocjenama stanja i sa statusom tjelesnog odgoja u svijetu (Hardman i sur., 2008) u dijelu koji se odnosi na raskorak između proklamiranog i realiziranog.

Premda su u istraživanju opći plan i program vrednovali nastavnici Osječko-baranjske županije, rezultate je moguće generalizirati najmanje na slavonsku regiju. To je stoga što Agencija za odgoj i obrazovanje organizira zajedničke regionalne i državne stručne skupove učitelja koji zajedno raspravljaju, analiziraju i dogovaraju optimalna rješenja i dobivaju jedinstvene upute za provedbu Nastavnog plana i programa tjelesne i zdravstvene kulture.

Doprinos ovoga istraživanja ogleda se u: konstrukciji mjernoga instrumenta zadovoljavajuće pouzdanosti koji se treba dalje razvijati i koristiti za slična istraživanja u

ovom području; dobivenim latentnim dimenzijama koje se dalje trebaju razvijat kako bi se dobili pouzdani kriteriji, odnosno obilježja kojima je moguće u budućnosti vrednovati planove i programe u području kineziološke edukacije. Ograničenje istraživanja ogleda se u veličini uzorka, koji je ipak reprezentativan za vrednovanje nastavnog plana i programa tjelesne i zdravstvene kulture u višim razredima osnovne škole.

Zaključak

Rezultati istraživanja logičkom analizom upućuju na zaključak kako nije moguće u potpunosti ostvariti propisani cilj i zadaće plana i programa. *Opsežnost* je najizraženije obilježje učiteljske procjene. Vrijedne novine koje krase aktualni Nastavni plan i program nisu dovele do željenih pomaka. Prethodne slabosti propisanih planova i programa i dalje su prisutne.

Izrada budućeg kurikula, utemeljena na ishodima koje učenici na određenoj razini trebaju usvojiti, radikalno mijenja koncepciju dosadašnjih predmetnih programa. Da bi tjelesno i zdravstveno odgojno-obrazovno područje zadovoljilo potrebe učenika i zahtjeve društva, potrebno mu je dati primjerene uvjete. To se najviše odnosi na veći fond sati (barem tri, koja su postojala do 1983. godine) i provediv nastavni plan i program koji će dodatno motivirati učitelje da ga usklade s mogućnostima i interesima svojih učenika u postizanju optimalnih postignuća.