

**Original empirical article**

## **THE SELF-ASSESSMENT OF PERSONAL COMPETENCES OF PHYSICAL EDUCATION TEACHERS**

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**Abstract.** *The aim of this paper is to investigate the assessment of the level of competence of physical education teachers when performing complex professional functions within their area of expertise. The determining of basic categories in this analysis is a result of modern pedagogical standpoints, recommendations and norms passed by government institutions in the area of education. Based on these starting points, an instrument has been constructed for the purpose of this research, which enabled the defining of the mentioned areas for over 23 items. For each area, the respondents conducted their own assessments of their competence based on a five-degree scale and the method of training in that area. The results have shown that the teachers, when observed as a whole, attribute a high value to their own competence or qualifications. Teachers have recognized the highest level of personal competence in those areas of activities that are closely related to the teaching process itself. Studying at the faculty and experience in teaching have been recognized as being most indicative in those areas that teachers see themselves as most competent in. In addition, the results have also shown that there are no significant differences in the self-assessment of teachers according to gender, the level at which they are teaching in or the years of work experience they have.*

**Key words:** *physical education, teacher, competences, professional development, self-assessment.*

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## INTRODUCTION

Teachers' competences are considered to be part of the more important segments and prerequisites providing an efficient teaching process and education system in general. The importance of physical education teachers is especially emphasized since the basic areas of personality development determined in pedagogical literature are presented in the following order: physical, intellectual, moral, aesthetic and working education (Krulj, Stojanović, and Krulj-Dražković, 2010).

Considering that the unity of knowledge, understanding as well as work and technical activity in modern pedagogical literature are related to the personality characteristics of teachers, a new term and concept is being used more frequently – competence (Radovanović, 1994; Ilić, 2006; Stojanović and Stanojević, 2011). Put into a wider perspective, competence denotes the integrity of commitment to a certain goal, while the term competent stands for the developed qualification (knowledge and skills) to perform certain tasks (Branković, 2011). Summing up the differences in understanding the content of this concept, the same author believes that the term competences can be defined based on the basis of three basic constructs: a) knowledge, b) skill, c) opinions and views. In addition to the abovementioned components of competences, the author also mentions: critical thinking, analytical thinking, creativity, tolerance, inventiveness, ability for teamwork, independence and self-initiative.

In this context, modern pedagogical literature cites the possible forms of a more complete system of contemporary training for teachers as it would encompass both old and new roles, such as 1) the teacher as a lecturer, 2) the teacher as an educator, 3) the scientific and educational role of the teacher, 4) the teacher as a diagnostician, 5) the teacher as an instructor of active teaching, 6) the teacher as a coordinator of new interpersonal relations, 7) the teacher as a builder of the emotional environment in the classroom and 8) the teacher in active target learning (Suzić, 2005: 600).

Apart from the abovementioned approaches in modern pedagogy, this study also includes the recommendations and norms of the official institutions in the area of education. The National Education Council of the Republic of Serbia (2011) released a document under the title Standards of Competences for the Teaching Profession and Their Professional Development. In it, four basic areas of teacher competences are listed:

- teaching area, subject matter and teaching methods,
- teaching and learning,
- support for student personality development,
- communication and cooperation.

Each of the mentioned areas is defined in accordance with the following levels: knowledge, planning, realization, evaluation and specialization.

Additionally, the introduction of the document outlines the standard guidelines for employees in institutions (teachers) and they represent both the pillar and the foundation for the self-assessment and personal orientation of teachers within the planning of their own professional development, which is, from the aspect of this work, very significant.

The aforementioned theoretical frameworks represent the basic starting points in the methodological design and realization of this research.

The main goal of this study is to question how physical education teachers estimate the level and the means of gaining competence in the mentioned areas of teaching activity, as well as their attitude towards the current state and the needs for professional specialization.

### THE METHOD

On the basis of the mentioned goals, the following research tasks have been created:

To rank the areas of the teaching activity which have been singled out based on the self-assessment of the level of competence of the teachers in those areas,

- To examine which means of gaining competences dominate in each specific item and within the entire instrument, as well as to determine the significance of the differences,
- To observe the results on the scale of competence according to the gender of the respondents, the level of education in which they are working in as well as of the extent of their experience,
- To investigate the key attitudes of physical education teachers according to the current state of professional specialization and offer proposals for its improvement.

Teachers' competences have been evaluated in the following areas: the knowledge of the teaching content, the method and form of their didactic abilities, the knowledge of students' psychophysical ages and individual characteristics, the area of preparing plans and programs, consultative educational work, cooperation with the local community, knowledge of the basic principles of inclusive education as well as methodological competence.

The mentioned areas have been defined based on 23 items according to a Likert scale (Likert scale, n.d) with five basic levels of correspondence. The respondents were given the opportunity to grade the contribution of several basic forms of education and professional specialization within each item (1 – studying at the university level, 2 – through experience in class, 3 – professional development, 4 – following professional literature, 5 – I am familiar with it). It should be pointed out that a high reliability of the instrument has been achieved as it was also evaluated based on Cronbach's Alpha Coefficient (Cronbach's Alpha 0.91; N of Items 23).

A total number of 92 physical education teachers was included in the study, all coming from elementary and secondary schools on the territory of Niš, Vranje, Zaječar, Knjaževac, Leskovac and Negotin. The structure of the samples according to the working experience and the level at which the respondents are teaching are shown in the following Table.

**Table 1.** The structure of the sample.

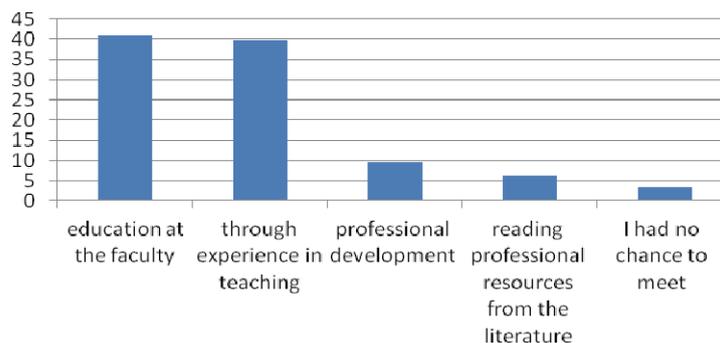
Teaching level	experience in teaching				Total
	5 years	5 to 10 years	10 to 20 years	over 20 years	
Elementary school	9	18	12	16	55
High school	7	8	7	15	37
Total	16	26	19	31	92

### RESULTS

The results of the research have been processed and grouped according to the research tasks. For each individual item in the instrument an index of scale value was calculated (or average value). On the basis of these values, each individual item and the frequency of methods of gaining competence in those areas were ranked accordingly.

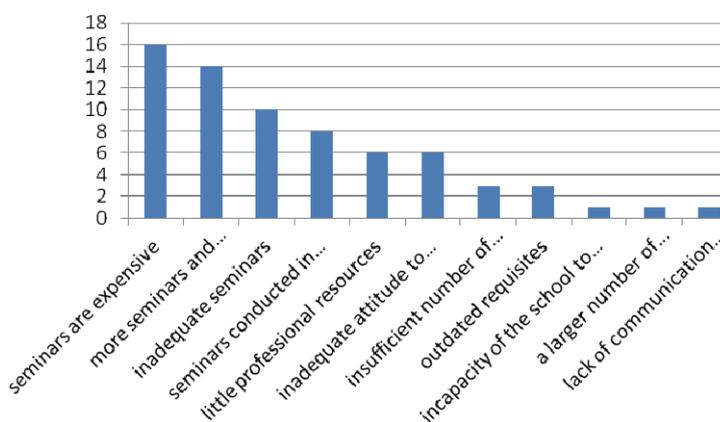


of the teachers' work, a significant difference in the way of developing abilities and acquiring competences could be identified ( $\text{sig}=0.01$ ). One of the aims of this research was to investigate which of the forms and ways of acquiring competences was dominant when observed as a whole in all of the mentioned areas of work of physical education teachers. In the following figure, the percentile and graphical representation of the dominant forms of acquiring competences among physical education teachers can be observed.



**Fig. 1.** The graphic representation of the frequency of the particular way of acquiring competences.

The figure shows that the particular type of initial education at the university level (40.9%) and the knowledge and qualification developed through experience in the process of teaching (39.8%) are dominant. Next comes professional development (9.5%) and reading the relevant literature (6.3%) in considerably smaller percentages. The answer I am not familiar with it in the instrument as a whole could be observed in 3.4% of the responses. At the end of the instrument, the respondents had the opportunity to briefly state their point of view as far as professional development in the area of physical education is concerned. Since this was an essay question, the respondents' replies were grouped into typical categories reflecting the particular type of answer based on contextual similarity or identical content.



**Fig. 2.** Typical respondents' answers related to the possibility of professional development.

The largest number of complaints among the respondents, within the part regarding professional development, could be identified in the area of seminars as an organized form of professional development for teachers (69.7%). All of the other complaints uttered by the respondents are related to financial problems, an inadequate attitude to the professional development of teachers, etc. The significance of the difference in the assessment of personal competence according to the gender of the respondents and the level at which they teach (elementary or secondary), their years of experience were tested by means of a t-test and the Analysis of Variance procedure (Petković, D., 2000). In that sense, the answers of each respondent were represented as a test score. Based on that, the average result for the entire sample and subsample could be calculated according to the variable that the importance of the difference was measured against.

**Table 4.** The difference in the competence assessment of teachers based on gender and the level at which they teach.

gender	N	Mean	Std. Dev.	Mean dif	t	Sig
male	74	97.49	12.755	2.957	1,087	.369
female	18	94.53	9.145			
type of school	N	Mean	Std. Dev.	Mean dif	t	Sig
elementary school	55	95.40	13.868	-3.878	1,63	.138
secondary school	37	99.28	8.657			
Total	92	96.93				

**Table 5.** The difference in the competence assessment of teachers based on their years of experience.

Years of work experience	N	Mean	Std. Dev.	F	Sig.
up to 5 years	16	94.38	13.261	.688	.562
from 5 to 10 years	26	95.77	11.978		
from 10 to 20 years	19	99.84	11.959		
more than 20 years	30	97.47	12.074		
Total	92	96.93	12.173		

The values t and F in the Tables above indicate that the differences in all the variances are of no statistical significance.

## DISCUSSION

The results of the average values in Table 2 may be grouped into several categories. If the criterion of high or complete competence is put within the range of 4.50 to 5 (similar to the grading system at school), areas that are directly related to the teaching process itself can be singled out, such as knowledge of the teaching content in the area of sport and physical education, physical and developmental characteristics of children as a necessary

precondition for their realization, the form of the physical education teaching process as well as the preparing of plans and programs for the teaching process. Most areas of the teachers' work fall into the category of general qualifications (the answer being: I generally have, with an average value of 3.50 to 4.49). What this refers to is their qualification to apply adequate teaching methods, prepare plans and programs for curricular and extra-curricular activities, working with students, cooperation with parents and colleagues. This category could also include the methodology and qualification regardless of the mean value of 4.00. Yet, this range of values includes respondents who labeled themselves as incompetent in these areas of teacher work. The areas of work in which no teachers regarding themselves as incompetent include the qualifications to apply adequate teaching forms, the ability to evaluate students, the ability to bring individualization into the physical education teaching processes, the knowledge and application of specific didactic elements in the physical education teaching process as well as consultancy work with students. The only value below average could be identified in the area of knowing basic principles and methodology of inclusion related to students with special requirements in the physical education teaching process. This result (partial qualification) can be attributed to the fact that the concept of inclusive education is relatively new in our country whereby the Law of Basic Education Systems recognized it as late as 2009. The results in the first two columns in Table 2 indicate that the teachers are most secure in those areas of work which they have acquired formal qualifications in during their professional tertiary education. Similarly, a high frequency of experience in acquiring competences and a lower percentage of organized (institutionalized) forms of professional development can be noticed. The highest frequency of negative answers (I am not familiar with it) is evident in the area of inclusion, cooperation with the local community, methodology qualifications and cooperation with parents (5.3%) following professional resources in the area of physical education and the teaching process as one of its aspects. As far as professional development is concerned, the largest percentage of respondents (23.3%) believe that attending seminars is expensive, (20.3%) believe that it is necessary to organize more seminars, while 14.5% believe that the content of current seminars is inadequate. A certain number of respondents (11.6%) mentioned the necessity for seminars to be conducted in smaller towns as well. The same number of responses (8.7%) could be noticed regarding an inadequate attitude to professional development in the workplace of the teachers and the lack of professional resources. Some answers could be grouped into categories not directly related to the professional development of teachers. 4.3% of the respondents mentioned the lack of resources for students in the area of physical education (workbooks and textbooks) as well as outdated sports requisites. The same percentage of answers (1.4%) is related to the problem of the lack of communication with colleagues from abroad and the inability of the school to finance teachers in the area of professional development. An interesting fact is that the same number of respondents mentioned the necessity of getting journals from Croatian publishers. As far as the difference in competence based on the gender of the respondents, the level at which they are teaching (elementary and secondary) and their work experience is concerned, the results in the tables indicate that men consider themselves more competent than women ( $97.49 > 94.53$ ) and so do secondary school teachers in comparison to their fellow elementary school teachers ( $99.28 > 95.40$ ). Similarly, the degree of competence assessment of teachers increases in accordance with the years of work experience. Yet, in all of the mentioned cases, the identified difference is of no statistical significance as presented by the respective *f* and *F* values.

## CONCLUDING REMARKS

Based on the aforementioned results in this paper, several basic implications can be derived. The first ones are related to the initial education of the students at faculties of sport and physical education whereas the second ones are related to the problem of professional development of physical education teachers.

First, the curricula implemented at faculties of sport and physical education within the framework of the pedagogical qualification of the students, more attention is devoted to the realization of the content of the methodology of teaching and consulting in the work with students than the role of the teacher as a class teacher. Within the same or similar groups of courses, students should be trained to carry out action research, at least at the level of their bachelor studies. Due to the legal obligation to implement inclusive education, students at faculties of sport and physical education should be familiarized with the possibility of including children with special demands into the physical education teaching process.

Second, within the professional development of physical education teachers, and this is the opinion of the teachers themselves, contents that are related more to the teaching process itself should be realized more than the contents of the different sport disciplines. Furthermore, seminars, as the most present form of professional development of teachers, should become more accessible both in a financial and a regional sense. Apart from that, certain forms of exchange of experience and resources with colleagues from neighboring countries should be enabled.

One of the implications that might be the subject of some further research would be to evaluate the necessities, possibilities as well as didactic and methodological justifications for the introduction of certain sources of knowledge for physical education students.

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## **SAMOPROCENA LIČNIH KOMPETENCIJA NASTAVNIKA FIZIČKOG VASPITANJA**

**Siniša Stojanović, Danijela Zdravković**

*Rad se bavi ispitivanjem procene stepena kompetentnosti nastavnika fizičkog vaspitanja za obavljanje složenih profesionalnih funkcija u okviru svoje delatnosti. Istraživanjem je bilo obuhvaćeno 92 nastavnika fizičkog vaspitanja u osnovnim i srednjim školama na teritoriji Niša, Vranja, Zaječara, Knjaževca, Leskovca i Negotina. Rezultati istraživanja su pokazali da nastavnici fizičkog vaspitanja, posmatrani u celini, visoko vrednuju svoju kompetentnost ili osposobljenost. Najveći stepen lične osposobljenosti nastavnici prepoznaju u delu onih aktivnosti koje su neposredno vezane za sam nastavni proces. Studiranje na fakultetu i iskustvo u nastavi su oblasti za koje nastavnici smatraju da su najkompetentniji. Pored toga, rezultati istraživanja su pokazali da nema značajne razlike u samoproceni kompetencija u odnosu na pol, vrsti škole u kojoj nastavnici rade i godine radnog iskustva nastavnika.*

*Ključne reči: fizičko vaspitanje, nastavnik, kompetencije, stručno usavršavanje, samoprocena.*