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School Effectiveness from the Parents' Perspective in Croatia: Construction and Validation of the Questionnaire

Abstract: The aim of this paper was to construct and validate a questionnaire to measure parents' perceptions of an effective school, based on a representative sample of 2,245 parents whose children attend primary and secondary schools in the Republic of Croatia. The items of the questionnaire were created by analysing recent literature and existing research in the field. The final version of the questionnaire contained all the items from the initial analysis. Construct validity was tested using the component model of exploratory factor analysis, and internal validation was confirmed using the Cronbach's alpha. Four independent factors were identified: Encouragement of high achievement in school and student support; Discipline and safety; School equipment and interior; and Parental involvement in the school functioning. Differences in the parents' attitudes on the acquired subscales were also examined in relation to the sociodemographic variables (i.e. gender, age, working status, level of education, marital status, and their child(ren)'s grade level). The results confirmed the existence of the four identified independent constructs.

Keywords: construction and validation of the questionnaire, parent perception, school effectiveness.

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Introduction

Improving the relationship between parents and their child's school is a fundamental challenge faced by contemporary researchers, creators of education policies, and educators around the world. Numerous empirical studies and meta-analyses conducted in recent decades have provided evidence of a correlation between the involvement of parents in their children's education and student achievement (Desforges and Abouchaar 2003; Fan and Chen 2001; Fantuzzo et al. 2004; Harris et al. 2009; Jeynes 2005, Henderson and Berla 1994; Henderson and Mapp 2002), indicating that positive collaboration between parents and schools should be emphasised as a key factor in a school's effectiveness (Dunsworth and Billings 2009; James et al. 2006; Lezzote and Snyder 2011; Marzano 2003; MachBeath and Mortimore 2001; Sammons et al. 1995; Scheerens 2016; Shannon and Bylsma 2007). The importance of parental involvement in their children's schooling and the school's functioning is highlighted in relevant international policy documents (EC 2015; OECD 2011) and Croatian national legislation (the Family Act, no. 103/15; the Primary and Secondary School Education Act, no. 87/08).

In various discussions pertaining to the value of collaboration between schools and parents it has been emphasised that schools striving for progress should not remain solely a professional community for learning (Epstein and Salinas 2004); rather, the goal should be to develop school communities which would, along with the experts, involve other stakeholders in the school's functioning. Collaboration between teachers, school counsellors (Gregorčić Mrvar and Mažgon 2017), students, parents, and external stakeholders in a local community contributes to the better achievement of a school's goals and its progress in general, and brings 'schools, communities and families together' (Ibid., p. 27). In this context, informing parents about their children's academic achievement and involving them in school policy and the decision-making process are particularly important (Al Ahababi 2016; Harris et al. 2009; Hornby 2011; Lezzote and Snyder 2011; MacBeath and Mortimore 2001; Marzano 2003; Scheerens 2013, 2016). Similarly, Shannon and Bylsma (2007) explained that parental involvement goes beyond the school curriculum and should instead be understood as a way of thinking and acting which

recognises the central role of the family in children's education and the importance of joint actions. As one of the features of effective schools, the authors emphasise the intentional correlation between the strategies for parental involvement in a school's overall functioning and its students' educational achievements. Accordingly, parental involvement is becoming part of school improvement plans, along with the establishment of collaborations between teachers and parents, while families participate in the definition and development of those school programs which include parents. It is therefore essential to introduce the theoretical framework which has emerged from the research results obtained in pre-, primary and secondary schools, which outlines six types of parental involvement in children's education and serves as a foundation for numerous studies and the development of partner programs of parents and schools (Simon and Epstein 2001). Incorporating the practices and activities conducted by schools designed to improve collaboration with parents includes the following six practices: assistance in parenting, encouraging communication, providing volunteering opportunities, supporting parents' efforts to engage in learning at home, involving parents in the decision-making process and promoting collaboration with the community. More specifically, the collaboration between schools and parents could be improved through various forms of parental participation in classes, parental meetings, informative interviews, organised and professionally guided pedagogical workshops for parents and students, and lectures for parents given by experts in specific fields.

Apart from emphasising the importance of involving parents in schools' functioning, the significance of evaluating any collaboration program with parents and parents' satisfaction with their child(ren)'s school must also be stressed (Lezzote and Snyder 2011; Scheerens 2016). To be able to improve the quality of collaborative programs with parents, schools need feedback and parents' opinions of positive and negative aspects of the collaboration. To confirm this finding, Sheldon and Van Voorhis (2004) analysed data on the efforts of more than 300 schools in the United States to develop high-quality collaborative programs with families and communities. They concluded that the evaluation process is one of the most important characteristics influencing the quality of such programs. In other words, the use of evaluation results to improve plans and collaborative activities appeared to be highly significant. In accordance with the evaluation's significance, numerous studies have focused on examining parental perceptions of and opinions on different factors of school effectiveness, while researchers have developed various instruments for assessing the level of satisfaction with schools, which are, apart from the teachers, administrators or students, intended specifically for parents (Dusewicz and Beyer 1988; Burgees and Dixon 2012; Albert-Green 2005; McBeath and Mortimore 2001). When parents' satisfaction with their children's schools are examined, various socio-demographic variables of the parents are taken into consideration, such as gender, age, education level and marital status (Friedman et al. 2006; Friedman et al. 2007; Raty et al. 2004; Epstein 1984). For instance, Friedman et al. (2006) proposed a conceptual model of parental satisfaction with schools which emphasised that parents evaluate schools based on various factors, including teachers, administrators, facilities, equipment, curriculum quality, fin-

ances, communication, inclusiveness, student achievement, etc. Although Friedman et al. (2006) have concluded that these variables could affect parents' satisfaction with schools, the importance parents attribute to each particular variable can also vary among parents belonging to different ethnic minorities. Friedman et al. (2007) sought to identify those factors which described parents' satisfaction with schools and the predictors of overall parental satisfaction with their children's schools. They also sought to determine which demographic characteristics of parents could predict those parents' overall satisfaction with schools, such as being a minority, their gender or their education. The results indicated the existence of three factors which significantly predict parents' overall satisfaction with school: communication and parental involvement, the appropriateness of school resources and the effectiveness of school leadership. It has also been shown that variables related to gender and education level contribute to the variance of overall parental satisfaction with a school. Raty et al. (2004) showed that both parents' gender and their education level impact their satisfaction with the first year of their children's schooling. Highly educated parents tended to express greater satisfaction with their child(ren)'s school than those with only secondary education, and significant differences were found relating to parents' evaluation of students' assessment, honesty and achievement. Highly educated parents also reported slightly fewer negative school-related events. There is also a difference when it comes to gender: mothers tend to report greater satisfaction with teachers, teaching and the quality of teaching than fathers, although mothers also point out problems and negative school-related events more often than fathers. In addition, fathers who had completed secondary school were the least involved in the functioning of their child(ren)'s school. The data obtained indicate that mothers are still more dominant and active in children's education.

Various instruments developed by researchers on the basis of theoretical knowledge and previously conducted empirical research were used to evaluate parental satisfaction with school. Dusewicz and Beyer (1988) developed the *Dimensional Excellence Scale* (DOE) for school staff (administrators, teachers, non-teaching staff and school board members) to collect data on key dimensions associated with effective schools. The authors emphasised that each of the eight dimensions is based on a previously proven correlation with student achievements, while the indicators of each dimension were selected on the basis of numerous studies conducted on the school effectiveness. The parent scale contains 71 items and examines the parents' perceptions of school according to the dimensions of school climate, leadership, teachers' behaviour, curriculum, monitoring and assessment, discipline and behaviour at school, staff development and parental involvement in the school functioning. Each of these dimensions is thoroughly elaborated and evaluated on the basis of more indicators. Albert-Green (2005) conducted a survey to examine the perceptions of teachers, parents and students related to the effectiveness of two Texas city schools with respect to the eleven selected characteristics of effective schools. The questionnaire for parents contained questions related to the characteristics of effective school leadership, a clear and focused school mission and a safe and organised school climate; it also emphasised basic skills and high achievement expectations, the frequency of assessing and monitoring student achievement, the provision of

learning opportunities and the involvement of parents and communities in the school functioning. The results showed that teachers, parents and students agree on five characteristics of effective schools: a safe, well-regulated school environment and climate, high expectations of achievement, frequent student assessment and monitoring of achievements and basic skills. It has been also shown that parents and students had similar attitudes towards parental involvement in the school functioning, while teachers were not certain whether their schools encouraged the involvement of parents and communities sufficiently.

In the Croatian national context, a number of studies have examined parental satisfaction with some dimensions which could be associated with school effectiveness (Jurić 1995; Kranželić and Ferić Šlehan 2008; Pahić et al. 2010). For instance, Kranželić et al. (2008) surveyed the parents of primary and secondary school students to examine the differences in the two populations' perceptions of a school environment's quality. Analyses have shown that there are statistically significant differences in the perceptions of these parents with respect to the quality of school environment, student behaviour, material conditions at school and parental involvement in children's education. That being said, the parents of primary school students assessed the material conditions in schools, provision of information related to students' overall achievement, and student behaviour more negatively than the parents of secondary school students. However, they assessed the quality of school environment better and were more involved in their children's education. Pahić et al. (2010) showed that parents were generally very interested in all forms of collaboration with schools and considered the schools to be useful for their children. Hence, it can be noted that the conducted studies on parental satisfaction in the national context emphasise the need for greater investment in schools' material conditions, the support provided by non-teaching school staff and the establishment of better communication and collaboration with parents. This could be achieved especially through the organisation of various programmes which foster parental involvement in school functioning and through raising awareness of how important parental involvement is in students' academic achievement.

The principal goal of the research project "Investigating School Leadership From a Distributed Perspective in Croatian Schools" (IScLEAD) was to determine the nature of the correlation between the development level of distributed leadership and the effectiveness of Croatian schools. Numerous studies have identified parents having a positive opinion of school as an essential element of the complex construct of the school effectiveness. In that context, and on the basis of analysed literature, the operationalisation and examination of parents' attitudes towards schools were carried out¹.

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Methodology

Research aim

This paper presents the procedure used to create and validate the Questionnaire on Parents' Perception of an Effective School and presents the results of the examination. In order to evaluate the validity of the obtained subscales, the differences were tested with regard to the independent socio-demographic variables of the parents.

Population and sample

The participants were parents of students attending all of the central primary and secondary schools in the Republic of Croatia, from which a study sample of 113 primary schools and 50 secondary schools was generated using random selection. In the end, 59 primary and 35 secondary schools participated in the survey. From each school a total of 30 parents was randomly selected, approximately proportional to the number of parents of junior and senior students enrolled.

Finally, the examination, intended to validate the questionnaire, included 1,438 parents of students attending primary school and 807 parents of students attending secondary school. With respect to gender, 23,3 % of the participants were male and 76,6 % were female. Moreover, 5,8 % of the parents had completed primary school (or less), 58,4 % had completed secondary school, 12,55 % had obtained a bachelor's degree, 20,2 % had obtained a master's degree, while 3 % had an MSc or doctoral degree. The participants were predominantly married (86,9 %) and most had two (51,1 %) or three children (22,5 %).

Instrument

This research employed the Questionnaire on Parents' Perception of an Effective School (answered using Likert scales), which was created and validated for this study by the project's research team. The starting points of the questionnaire's design process were the expert operationalisation of a theoretical construct and the templates from the questionnaires used in similar studies which were used to examine parents' attitudes towards school. The instrument contained 30 items, each being evaluated by the participants on a scale from 1 to 5, where 1 meant *strongly disagree* and 5 meant *strongly agree*.

Data collection

Data were collected from October 2016 to February 2017. The collection process comprised non-teaching staff contacting parents to request that they participate

in the survey. It was expected that an average of 30 parents per each school would be take part in the survey. The research was approved by the Ethics Committee for Scientific Research of the Faculty of Humanities and Social Sciences, The University of Rijeka, and was carried out with the consent of the Ministry of Science and Education of the Republic of Croatia.

Results

Factor analysis and reliability of the Parents' Perspective of an Effective School questionnaire

In order to determine the nature of parents' attitudes towards effective school dimensions, an exploratory factor analysis was carried out using a component model. As the Kaiser-Meyer-Olkin (KMO) test was valued 0,969 and Bartlett's test of sphericity was statistically significant ($\chi^2 = 35\,773,236$; $df = 435$, $N = 2245$, $P < 0,001$), the basic preconditions were met² and the factor analysis could be continued. Four factors were extracted, which were retained as statistically significant based on the Guttman-Kaiser criterion for the restriction of factor extraction (greater than 1) and the scree test. The basic solution was transformed into an orthogonal varimax position, and the obtained factors explained 61,15 % of the total variance. Specifically, the first factor explained 47,34 %, the second factor explained 5,05 %, the third explained 4,96 %, and the fourth factor explained 3,8 % of the total variance. All items were retained in the final instrument. No items had a low factor saturation ($< ,3$).

	Factor Saturation			
	Factor 1	Factor 2	Factor 3	Factor 4
ES_08 The school provides support to children who achieve high results.	0,766			
ES_04 The school encourages students to learn and achieve good results.	0,747			
ES_06 The school takes care of the quality of lessons and teaching methods.	0,741			
ES_05 The school recognises and awards good achievements.	0,669			
ES_07 The school provides support for children with learning difficulties.	0,646			
ES_09 Students are free to seek help and support for their needs.	0,632			

² Bartlett's test of sphericity 'examines whether a variance-covariance matrix is proportional to an identity matrix' (Field, 2009., pp 788). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy represents the ratio of the squared correlation between variables to the squared partial correlation between variables. It varies between 0 and 1: a value of 0 indicates that the sum of partial correlations is large relative to the sum of correlations, indicating diffusion in the pattern of correlations (hence, factor analysis is likely to be inappropriate); a value close to 1 indicates that patterns of correlations are relatively compact and so factor analysis should yield distinct and reliable factors. Values between .5 and .7 are mediocre, values between .7 and .8 are good, values between .8 and .9 are great and values above .9 are superb (ibid, pp 788).

	Factor Saturation			
	Factor 1	Factor 2	Factor 3	Factor 4
ES_01 The priority of the school my child attends is the high achievement of all students.	0,547			
ES_10 As a parent, I am satisfied with this school.	0,476	0,31		
ES_13 The school has a good reputation and the status of a high-quality institution.	0,402			
ES_17 There is rarely disorder or breaches of discipline at school.		0,801		
ES_19 My child feels safe and protected at school.		0,734		
ES_20 When my child is at school, I do not worry.		0,721		
ES_18 Disorder and breaches of discipline are resolved effectively and fairly.		0,675		
ES_16 The school maintains order and appropriate discipline.		0,665		
ES_21 There is an insignificant number of severe breaches of order and discipline at school.		0,499		
ES_15 At school, everyone performs their duties and there is a working atmosphere.	0,397	0,429		
ES_11 My child has a positive attitude and goes to school happily.		0,411		
ES_14 Social and cultural differences are respected at school.		0,393		
ES_22 The school space is satisfactory with regard to size and functionality.			0,848	
ES_24 The school is well-equipped with the necessary equipment and teaching aids.			0,84	
ES_23 The school is neat and has clean and well-decorated rooms and environment.			0,72	
ES_29 As a parent, I actively participate in various school activities.				0,78
ES_27 Parents are encouraged to participate in school activities.				0,703
ES_28 The school plans parental involvement in school programmes.				0,692
ES_30 As a parent, I regularly come and participate in parents' meetings.				0,614
ES_03 All parents are encouraged to engage in and collaborate with the school.	0,366			0,558
ES_25 As a parent, I am well-informed about all important issues relating to the school.				0,521
ES_02 As a parent, I am informed about school goals and programmes.	0,362			0,473
ES_26 As a parent, I am well-informed about my child's needs and progress.				0,434
Eigenvalue	14,2	1,51	1,49	1,14
Cronbach's α	0,925	0,888	0,781	0,888
M	4,24	3,93	4,14	4,06
SD	0,709	0,904	0,689	0,748

Table 1: Matrix form after the orthogonal varimax rotation of axis for the four-factor solution, reliability coefficients and descriptive statistics

The four obtained subscales of the instrument/questionnaire have shown satisfactory high internal consistency (Cronbach's $\alpha = 0,781-0,925$).

Although it is recommended that a stricter criterion be used to select items in the design phase of the measuring instrument—i.e. saturation equal or greater than 0,40, because it ensures a similar structure in other samples and repeated measurements (Nunnally and Bernstein 1994)—two items were retained in this design. Item 14, *Social and cultural differences are respected at school*, was retained due to the attractiveness of the item's content—that is, the fact that it is a part of the factor dominantly saturated by the items related to the maintenance of discipline and safe atmosphere at school. Additionally, an examination of the content's validity showed that the reliability did not significantly change (by omitting the item, Cronbach's α would slightly increase, from 0,888 to 0,908), so this item was retained. There is a similar situation regarding the item 30 *As a parent, I regularly come and participate in parents' meetings*. The content's validity was checked and it was determined that the Cronbach's α would only slightly increase (from 0,888 to 0,896), so this item was also retained. Item 15 *At school, everyone performs their duties, and there is a working atmosphere* had similar saturation on the first and second factor. Therefore, adding it to the factor based on the content matching is recommended and allowed (Ibid, 1994).

The absolute value of the correlation between the factors based on the component correlation matrix ranged from a minimum of 0,390 to a maximum of 0,528, providing an additional justification for the use of an orthogonal varimax rotation. In other words, it could be assumed that these are the distinctive factors, i.e. independent constructs.

The first factor was saturated by 10 items and explained 47,35 % of the total variance. The saturating factors were items related to the school's orientation towards student achievement (e.g. *The school provides support to children who achieve high results; The school encourages students to learn and achieve good results; The priority of the school my child attends is the high achievement of all students*) and providing students with support (e.g. *The school provides support to children with learning difficulties; Students are free to seek help and support for their needs*). Therefore, the first factor was called *Encouragement of high achievement in school and student support*.

The second factor was saturated by nine items and explained 5,05 % of the total variance. The items saturating this factor referred to the maintenance of discipline (for example, *There is rarely disorder or breaches of discipline at school; Disorder and breaches of discipline are solved effectively and fairly; The school maintains order and appropriate discipline*) and safety in school (e.g. *My child feels safe and protected at school; When my child is at school, I do not worry; My child has a positive attitude and goes to school happily*). The second factor was therefore called *Discipline and safety*.

The third factor was saturated by three items and explained 4,96 % of the total variance. The items saturating this factor related to school equipment (e.g. *The school is well equipped with the necessary equipment and teaching aids*) and its interior and environment (e.g. *The school is neat and has clean and well-decorated rooms*

and environment). Therefore, this factor was called *School equipment and interior*.

The fourth factor was saturated by eight items and explained 3,8 % of the total variance. The items saturating this factor relate to the parental involvement in the school functioning (e.g. *As a parent, I actively participate in various school activities; As a parent, I am well-informed about all important issues related to the school*) and encouraging parents to collaborate with the school (e.g. *Parents are encouraged to participate in school activities; The school plans parental involvement in school programs*). This factor was therefore called *Parental involvement in school functioning*.

On the basis of the obtained factors, linear composites (i.e. the subscales) were created, after which the Pearson correlation coefficients of the obtained subscales were calculated. The results indicate that there is a statistically significant positive correlation between subscales obtained in such a manner; the relatively highest correlation was obtained between the subscale *Encouragement of high achievement in school and student support* and the subscales *Discipline and safety* ($r = ,778$; $P < ,01$) and *Parental involvement in school functioning* ($r = ,777$; $P < ,01$). A relatively lower correlation was obtained between subscales *Parental involvement in school functioning* and *Discipline and safety* ($r = ,697$; $P < ,01$), while the relatively lowest correlation was obtained between *School equipment and interior* and the subscales *Encouragement of high achievement in school and student support* ($r = ,529$; $P < ,01$), *Discipline and safety* ($r = ,511$; $P < ,01$) and *Parental involvement in school functioning* ($r = ,517$; $P < ,01$).

Parents' perception of an effective school and socio-demographic variables

In order to examine the validity of the obtained subscales, differences were tested with regard to the independent socio-demographic variables of the parents.

Due to the variable *school level* (primary/secondary school), differences on all four subscales were detected with a *t*-test for independent samples. Accordingly, participants whose children attend primary school showed a higher level of agreement on all subscales than the parents of children attending secondary school (Table 2).

		M	SD	t	df	P																													
1.	Encouragement of high achievement in school and student support	PS	4,29	0,689	4,364	1383	,000																												
		SS	4,14	0,735				2.	Discipline and safety	PS	4,19	0,671	4,313	1423	,000	SS	4,05	0,713	3.	School equipment and interior	PS	3,99	0,874	3,801	1469	,000	SS	3,83	0,948	4.	Parental involvement in the school functioning	PS	4,16	0,704	7,906
2.	Discipline and safety	PS	4,19	0,671	4,313	1423	,000																												
		SS	4,05	0,713				3.	School equipment and interior	PS	3,99	0,874	3,801	1469	,000	SS	3,83	0,948	4.	Parental involvement in the school functioning	PS	4,16	0,704	7,906	1360	,000	SS	3,89	0,791						
3.	School equipment and interior	PS	3,99	0,874	3,801	1469	,000																												
		SS	3,83	0,948				4.	Parental involvement in the school functioning	PS	4,16	0,704	7,906	1360	,000	SS	3,89	0,791																	
4.	Parental involvement in the school functioning	PS	4,16	0,704	7,906	1360	,000																												
		SS	3,89	0,791																															

Table 2: *Subscale differences with respect to the variable children's school level*

With regard to gender, a difference on the subscale *Parental involvement in school functioning* was identified by the *t*-test for independent samples: female participants tended to show a greater level of agreement than male participants. No other subscales revealed any differences (Table 3).

		M	SD	t	df	P
1.	Encouragement of high achievement in school and student support	M	4,19	-1,693	2033	,091
		F	4,26			
2.	Discipline and safety	M	4,11	-1,139	2035	,255
		F	4,15			
3.	School equipment and interior	M	3,91	-,546	2124	,585
		F	3,94			
4.	Parental involvement in school functioning	M	3,97	-3,178	2049	,002
		F	4,10			
			0,738			

Table 3: Subscale differences with respect to gender

With respect to the variable *Parents' education level*, a difference on one subscale was identified using a one-way analysis of variance (ANOVA) for independent samples. More specifically, parents who had completed primary school showed a lower level of agreement on the subscale *Discipline and safety* than those who had obtained an MSc or doctoral degree, as well as the parents who have completed secondary school in comparison to parents how have obtained master's degree (Table 4). There are no differences between other groups, as well as on other subscales.

	Group ³	M	SD	F/F _w	df, df	P	Group Differences
1.	1	4,35	0,977	1,447	5, 2036	,204	
	2	4,24	0,792				
	3	4,27	0,705				
	4	4,18	0,683				
	5	4,18	0,704				
	6	4,29	0,707				
2.	1	4,22	0,875	3,610	5, 76,156	,006	2 < 5,6 3 < 5
	2	3,99	0,737				
	3	4,12	0,700				
	4	4,12	0,691				
	5	4,23	0,647				
	6	4,32	0,598				
3.	1	4,26	1,299	1,974	5, 2128	,079	
	2	4,02	0,860				
	3	3,96	0,920				
	4	3,84	0,917				
	5	3,88	0,846				
	6	3,78	0,892				

		Group ³	M	SD	F/F _w	df, df	P	Group Differences
4.	Parental involvement in the school functioning	1	4,54	0,586	1,955	5, 2053	,082	
		2	3,96	0,845				
		3	4,07	0,750				
		4	4,00	0,740				
		5	4,09	0,731				
		6	4,18	0,651				

Table 4: Subscale differences with respect to the variable parents' education level³

Given the *age* variable, which was recoded into four categories, by using a one-way ANOVA for independent samples, a difference was detected not only on the subscale *Discipline and safety* (Table 5) but also on *Encouragement of high achievement in school and student support*. Namely, participants aged 18–29 and 30–39 years agreed more frequently than those aged 40–49 and 50+ years. On the subscales *School equipment and interior* and *Parental involvement in school functioning*, parents aged 30–39 years agreed more frequently than parents aged 40–49 and those 50+ years.

		Age Group (years)	M	SD	F _w	df, df	P	Group Differences
1.	Encouragement of high achievement in school and student support	18–29	4,45	0,631	8,302	3, 210,100	,000	1, 2 > 3, 4
		30–39	4,33	0,667				
		40–49	4,20	0,718				
		50+	4,15	0,755				
2.	Discipline and safety	18–29	4,20	0,638	2,161	3, 185,592	,094	
		30–39	4,18	0,663				
		40–49	4,14	0,700				
		50+	4,05	0,708				
3.	School equipment and interior	18–29	3,86	0,940	3,595	3, 213,828	,014	2 > 3, 4
		30–39	4,01	0,851				
		40–49	3,89	0,944				
		50+	3,86	0,857				
4.	Parental involvement in school functioning	18–29	4,18	0,772	12,280	3, 203,183	,000	2 > 3, 4
		30–39	4,18	0,693				
		40–49	4,03	0,763				
		50+	3,89	0,762				

Table 5: Subscale differences with respect to age

³ 1= primary school incompleteness, 2= primary school completion, 3= secondary school completion, 4= obtained bachelor's degree, 5= obtained master's degree, 6= obtained MSc or doctoral degree

With regard to the independent variable *Employment status*, a difference on a subscale *Encouragement of high achievement in school and student support* was identified using one-way ANOVAs. However, multiple tests of comparisons did not detect any differences between the groups.⁴ Similarly, the socio-demographic variable of marital status did not prove to be statistically significant for any of the subscales.⁵

Conclusion and Discussion

The items for the assessment of school effectiveness from the parents' perspective were created for this study based on the analysis of the relevant literature and existing studies. Using the component model of exploratory factor analysis, four independent constructs were identified: *Encouragement of high achievement in school and student support*, *Discipline and safety*, *School equipment and interior*, and *Parental involvement in school functioning*. The results of indicate that parents of students attending primary schools assess school effectiveness as better in all examined dimensions than parents of secondary school students. It can be noted that these results were quite expected, given the lower degree of autonomy of primary school students, as well as the greater need for the parental involvement in the education process. Moreover, these results partially confirm the results of some previously conducted studies in the national context, which noted statistically significant differences between the perceptions of parents of primary and secondary school students. These differences related to the quality of the school environment, student behaviour, material conditions in schools and parental involvement in children's education. That being said, the parents of primary school students had a higher opinion of their school's quality than the parents of secondary school students, and at the same time felt that they were more involved in their children's education (Kranzelić et al. 2008). Furthermore, the results of this research indicate gender-related differences in how parents perceived their involvement with their child(ren)'s school and how they were encouraged to participate in school functioning, as female participants reported greater involvement in school functioning than the male participants. These findings support the traditional view of the mother's role in the family, according to which mothers are still predominantly involved in their children's education, which, based on previous studies, remains pervasive in both the international and national contexts (Raty et al. 2004; Vrkić Dimić et al. 2017). There was also a difference in the perception of school effectiveness among parents with different degrees of educational attainment. More specifically, parents with less education perceived a lower level of discipline and safety at school than those with more education. Finally, it was demonstrated that younger parents were more likely to agree in all examined dimensions than those who belonged to older age groups.

⁴ $F_{\text{encouragement of achievement}}(7,2029) = 2,094, P = ,041$; $F_{\text{discipline and safety}}(7,2032) = 1, P = ,429$; $F_{\text{equipment and interior}}(7,2123) = 1,012, P = ,421$; $F_{\text{parental involvement in school functioning}}(7,2047) = 1,227, P = ,284$.
⁵ $F_{\text{encouragement of achievement}}(4,2038) = 0,793, P = ,530$; $F_{\text{discipline and safety}}(4,2042) = 1,241, P = ,291$; $F_{\text{equipment and interior}}(4,2131) = 0,699, P = ,592$; $F_{\text{parental involvement in school functioning}}(4,2056) = 1,582, P = ,176$.

Finally, it should be emphasised that the analysis of the results demonstrated that parents' perceptions of school effectiveness can be examined using the constructed questionnaire, particularly to elucidate different dimensions of their opinions. It is particularly suitable for use in school self-evaluations and studies on school effectiveness, as one of the important indicators of school effectiveness is parental attitudes; parental satisfaction with school. In this context, it would be desirable to consider additional dimensions related to ways of achieving collaboration between parents and schools, such as the examining the frequency and form of collaboration with parents, parental involvement in decision-making processes at the school level, school leadership effectiveness and satisfaction with assessing and monitoring student achievement (Albert-Green 2015; Dusewicz and Beyer 1988; Friedman et al. 2007; Simon and Epstein 2001).

With regard to further research, it is recommended that special attention be paid to ensuring the anonymity of survey participants in the process of collecting and testing data to avoid an undesirable reactive effect of the method, i.e. an increase of positive estimates (negative asymmetry), which can happen due to the sensitivity of the testing content.

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UČINKOVITOST ŠOLE NA HRVAŠKEM S PERSPEKTIVE STARŠEV: ZASNOVA IN VELJAVNOST VPRAŠALNIKA

Povzetek: V prispevku predstavljamo zasnovno in validacijo vprašalnika, s katerim je mogoče ugotavljati, kako starši dojemajo učinkovito šolo. Vprašalnik je bil preizkušen na vzorcu 2245 staršev, katerih otroci so bili vključeni v osnovno ali srednjo šolo na Hrvaškem. Trditve na vprašalniku smo zasnovali na podlagi analize sodobnejše literature in obstoječih raziskav na tem področju. V končni različici vprašalnika smo ohranili vse trditve, ki smo jih vključili že v začetno različico. Veljavnost vprašalnika smo preverili s pomočjo eksploratorne faktorjske analize, notranjo veljavnost pa smo potrdili s pomočjo Cronbachovega koeficienta alfa. Identificirali smo štiri neodvisne faktorje: (i) spodbujanje visokih dosežkov v šoli in podpora učencem, (ii) disciplina in varnost, (iii) zunanja in notranja opremljenost šole ter (iv) vključenost staršev v delovanje šole. Preučevali smo tudi razlike med stališči staršev na posameznih podlestvicah glede na sociodemografske spremenljivke (tj. spol, starost, zaposlitveni status, stopnja izobrazbe, zakonski status in stopnja izobraževanja, v katero so vključeni njihovi otroci). Z rezultati smo lahko potrdili obstoj štirih neodvisnih konstruktov.

Ključne besede: učinkovitost šole, dojetanje staršev, zasnovna vprašalnika, veljavnost vprašalnika

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