

# Application Efficiency of Experimental Program on Parental Instruction to Children

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## **Abstract**

Privacy can be defined as areas which are peculiar to an individual not to public or society. The concept of privacy is mentioned with the concepts of confidentiality and security of personal information and private areas. While the governments create electronic tools and environment to watch and make observation to provide the citizens more secure and an environment to live, it might cause an individual's private area to shrink.

Parental instructions as a helping tool in children are learning process is highly important. For that reason this paper focuses on theoretical and empirical issues within this topic. The theoretical segment defines parental instruction and its significance for child's success, as well as the different forms of parental instruction, and child's openness to that form of assistance.

The starting point of this paper is testing the level of parents' capability to instruct children in learning processes. An experimental method (an experiment with initial and final testing within a single group) is utilized. The instrument of parental instruction to children is used in order to test the influence of the experimental treatment.

The obtained data has answered significant questions. A positive effect of the experimental process is determined in five out of seven subtests: complexity reduction of the school matter being studied, parents paying significance to the instruction, instruction frequency, monitoring child's improvement, parents' instruction level and capability. A positive level of the experimental program has not been recognized in metacognitive context of the instructions and parents' emotional support to their children. The data stemming from the research suggests that parents coming from urban communities attach more significance to the instruction than parents from rural or suburban communities. These findings lead to the conclusion that parental instruction in children's learning processes can be improved by the parental education.

**Keywords:** parental instruction, parents, children,

## **Introduction**

How well a child adapts depends on the environment by which they are surrounded. School and family are a significant part of that environment. There is no doubt that the family is the basic and the most significant institution in any given society. It is equally

significant both for the development of the society, and the individuals within that society. Children's experiences within the family greatly determine future ability to adapt to life and working environment. The role of the family is education and upbringing, as well as creating an environment for child's continuous development as a cognitive, emotional, social and functional human being in accordance to their affinities and capabilities.

Parent-child relations begin with a moment of birth; they develop throughout child's stay in parent's house, and continue throughout the life. The quality of the parent-child relationship depends on parents' interpersonal relationship, their attitude towards the children, as well as the relationship of all the family members and their attitude towards the children.

Family relations significantly affect children's success at school. Parents who attach more significance to parental instruction will largely assistance their children to master the school matters, than those parents who do not view parental instruction as an important part of the learning process.

Family and school represent a changing socio-historical category, and with the development of society, science and technology, their role changes, and also becomes more significant to a certain extent. Therefore, the collaboration between school and family in children's education and upbringing is crucial.

### **The definition of parenting instruction**

In order to discuss parenting instruction, first we need to clarify the meaning of the word 'instruction'. It stems from the Latin word 'instruction' and means 'to teach, to educate, to direct, to order.' (Anić, Klaić and Domović, 2007, pp. 609). The meaning of the word tells us that its essence is to direct on how something should be done. Therefore, parental instruction stands for parents giving their children directions on the easiest way to absorb the school matter. This raises the question of how much significance parents attach to parental instruction. According to pedagogical theory and practice, the level of parental instruction is unsatisfactory. The reasons for it can be the parents themselves, as well as their inadequate ability to instruct. Namely, our patriarchal society which views the mothers as the main caregivers to children, together with the fact that mothers are overwhelmed with housework and other obligations, leaves little room for parental instruction on school matters. On the other hand, the schools' lack of collaboration with the parents, leaves the parents ill equipped to successfully assistance their children, seeing that they simply are neither aware of the learning methods, nor the school syllabuses. The result is children's poor results at school, as well as their 'unfamiliarity with effective learning methods, as a result of children left on their own, overexposed to television, video games or the streets.' (Suzić, 2005, pp. 384). This situation is unacceptable and steps should be undertaken to provide improvement. A good starting point is to inform ourselves in how is Western European countries dealing with this issue? 'In Western countries it has become a norm for parents to be involved in school education of their children, to monitor their progress at school, and to frequently consult with teachers on ways how to assistance their children in learning process' (ibid. pp. 384). What is obvious is that parental instruction would assistance the children in their learning process. The question is how open are the children for this form of assistance. They can accept it or not. If children are not open to this form of assistance, it can lead to them feeling overwhelmed and lost. If children are open to parental instruction, they also start to value it and recognize its significance.

Parental instruction needs to be unobtrusive in order for children to be open to it, it needs to take into consideration child's initial antagonism and offer easy and clear guidelines. Unfortunately the reason for the lack of this form of assistance sometimes lies in parents, when they feel that they are not competent enough to provide this kind of pedagogical communication. In order to help the parents shake off the feeling of incompetence, the schools should organize trainings aimed to enable the parents to help their children in learning process. The parents will be able to annul the feeling of incompetence through workshops and lectures, and also to acquire certain pedagogical competences which will help them alleviate the learning process. The basic question which imposes itself is : How to help a child in the learning process? The desire for success at school, as well as its significance in modern society drives the parents to take an active role in their children's education. Their help consists of parents explaining how to approach the matter at hand, as well as why it is important for the child to learn it. The purpose of learning is often left unexplained, which leads to children withdrawing because they were not instructed on importance of the learning process. Parents are expected to explain the purpose of learning to their children through everyday communication, in order for a child to grasp the importance of learning and be motivated to master the school matter. Parents should also entice and encourage their children to persist in given tasks on a daily basis, which will help develop their character, determination and confidence. Parents should entice and encourage their children even in moments of setbacks, when that support is needed the most.

Finally, parents' love should also be pointed out as a foundation of parent-child relationship, and a crucial ingredient for future success. Parents' empathy as an amalgam of all of the above instigates the emotional and rational understanding, ingredients which are crucial for a child to become a physically and mentally balanced adult.

There are various forms of parental instruction, and this paper focuses on the following: Metacognitive instruction context, Task complexity reduction, Attaching significance to the instruction, Emotional support to a child, Instruction frequency, Child's improvement monitoring and Parent's instruction capability level.

## **Our research**

### *Hypotheses*

The starting points for this research are four hypotheses:

1. Experimental process has a positive effect on parental instruction in child's learning process;
2. Experimental process has a positive effect on parental instruction in child's learning process with regards to the environment by which the school is surrounded;
3. Experimental process has a positive effect on correlation between parental instructions and parents' education and financial status;
4. Experimental process has a positive effect on correlation between parental instructions and parents' age.

### ***Testing sample***

Research testing sample are the of 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> grade primary school pupils from Tuzla, Zvornik, Simin Han and Sapna.

The testing sample consists of 125 parents. The parents are divided into the following age categories: 25 to 29 - 27 parents (21,6%), 30 to 34 - 34 parents(27,2%), 35 to 39 - 38 (30,4%), 40 to 44 - 22 (17,6%) and 45- 49 - 4 parents (3,2%).

Education categories are: 20 parents (16,0%) with four years of primary school education, 35 (28,0%) with eight years of primary school education, 48 (38,4%) with secondary education, 10 (8,0%) with college education and 12 (9,6%) with university education.

Social categories are: 17 parents (13,6%) without any income, 3 (2,4%) with income up to 100 BAM, 12 (9,6) with income between 100 and 300 BAM, 27 (21,6) with income between 300 and 500 BAM and 66 (52,8%) with income above 500 KM.

### ***The Instrument***

The instrument used in the research is *RID- Parental instruction to children* (Suzić, 2005, pp. 909).

The instrument uses Likert type assessment scale which consists of the five-level list of possible answers, two of which are agreement levels, one is neutral, and two are disagreement.

The parents used this scale to express their agreement, neutrality or disagreement with the information provided.

*RID - Parental instruction to children* is an instrument taken from the 21<sup>st</sup> Century Pedagogy, (Suzić 2005, pp. 909).

It consists of seven subtests: Metacognitive instruction context (6 items), Task complexity reduction (5 items), Attaching significance to the instruction (7 items), Emotional support (7 items), Instruction frequency (5 items), Improvement monitoring (5 items), and Parent's instruction capability level (7 items).

The subtests are summary so we reached an overall RID score: The questions are answered using the Likert scale as follows: 1 (none, never), 2 (to a certain extent, occasionally), 3 (medium or 50%), 4 (mostly, often) and 5 (completely, always).

Instrument's reliability is determined by Alpha- Cronbach coefficient which is ( $\alpha = 0,85$ ).

### **Study Results**

The first hypothesis of this study states that experimental treatment has beneficial effect on parental instructions to children in relation to acquiring school curriculum.

Confirmation of this hypothesis can be seen in the Table 1.

Overall, it is evident that application of the experimental treatment has positive effect on parental instructions to children.

Table 1: Differences between parental instructions to children

<i>Parameter</i>	<i>No of subjects</i>	<i>M</i>	<i>SD</i>	<i>Diff. M</i>	<i>t-time.</i>	<i>Level of freedom</i>	<i>Signif.</i>
MKI 01i-06i	125	22,63	4,30	- 0,34	-	124	0,467
MKI 01f-06f		22,97	3,06		0,729		
RKZ 07i-11i	125	18,45	3,82	- 1,60	- 4,255	124	0,000
RKZ 07f-11f		20,05	1,98				
PZI 12i-18i	125	29,41	3,52	- 0,25	- 2,149	124	0,034
PZI 12f-18f		30,14	2,22				
EPD 19i-25i	125	28,54	3,63	- 0,74	- 1,707	124	0,090
EPD 19f-25f		29,50	2,41				
FID 26i-30i	125	17,82	2,58	- 0,66	- 2,148	124	0,034
FID 26f-30f		18,36	1,56				
PND 31i-35i	125	18,66	2,79	- 0,54	- 5,937	124	0,000
PND 31f-35f		20,35	1,74				
NOR 36i-42i	125	19,33	5,27	- 1,69	- 20,251	124	0,000
NOR 36f-42f		29,72	2,92				
RID SUM i $\Sigma$	125	150,79	18,17	- 20,00	- 11,341	124	0,000
RID SUM f $\Sigma$		170,79	10,11				

*Note:* MKI (01-06) - Metacognitive instruction context  
 RKZ (07-11) - Task complexity reduction  
 PZI (12-18) - Attaching significance to the instruction  
 EPD (19-25) - Emotional support to a child  
 FID (26-30) - Instruction frequency  
 PND (31-35) - Child's improvement monitoring  
 NOR (36-42) - Parent's instruction capability level  
 RID (01-42) - Parental instruction to children (summarily)

Establishing the significance of the difference between *the initial and final states* of parental instructions to child (RID) *Metacognitive instruction context MKI 01-06 (IF)* – the very first parameter of Table 1 demonstrates that there are no statistically significant differences (at  $p < 0.05$ ) in all six components of parental instruction to child, with a statistically insignificant correlation of 0.05 between both sets before and after the experimental treatment. The effect of the experimental treatment did not yield any significant results in terms of metacognitive competence in parents-children relationship. The reasons for these results are to be found in the fact that the development of metacognition in parents was unsuccessful i.e. development of awareness of their own cognition failed. The reasons for this are hard to explain but it is a fact that some parents tend to analyze their own actions while others are mainly engaged in specific activities. Determining the significance of the difference between the initial and final states of parental instructions to child (RID) *Reduction of the tasks' complexity RKZ 07-11 (IF)* - the second parameter of Table 1 shows that there are statistically significant differences (at  $p < 0.01$ ) in all five components of parental instructions to child, with a statistically insignificant correlation of 0.06 between both sets before and after the experimental treatment. The effect of experimental treatments yielded significant results in terms of reduction of the tasks' complexity at the parents to children instructions. Based on the analysis of the findings it can be concluded that the parents acquired certain knowledge through workshops, knowledge regarding reduction of tasks' complexity, i.e. they managed to understand the importance of adjusting instructions to the needs of their children. Understanding the specific ways of learning certain subject matters resulted in

learning how the same matter can be learnt more easily than when applying the method used before the experiment.

Determining the significance of the difference between the initial and final states of parental instruction to child (RID) *Attributing significance to instruction* PZI 12-18 (IF) - the third parameter, Table 1 shows that there are statistically significant differences (at  $p < 0.05$ ) in all seven components of parental instructions to child, with a statistically insignificant correlation of 0.17 between both sets before and after the experimental treatment. The effect of the experimental treatment yielded tangible results in terms of the importance that parents attribute to instructions. The effect of knowledge that parents acquired through workshops and relating to the instructions, motivated parents to attribute greater importance to instructions to their children in mastering the curriculum content in terms of time needed for instructions and personal engagement in the success. The fact that they were involved in the experiment contributed to motivating parents, as well as the desire for new knowledge about instructions which parents showed even during the experimental treatment by reading additional literature.

Determining the significance of the difference between the initial and final states of parental instructions to child (RID) *Emotional support to the child* EPD 19-25 (IF) - the fourth parameter, Table 1 shows that there are no statistically significant differences (at  $p < 0.05$ ) in all seven components of parental instructions to child, with a statistically insignificant correlation of 0.03 between both sets of before and after the experimental treatment. The effect of the experimental treatment did not yield significant results in terms of emotional support from the parents to the child.

The lack of statistical significance in the emotional support to children points to the fact that parents, during the instructions, paid more attention to the adoption of specific teaching content ignoring the emotional support, which can be interpreted by different levels of aspirations of children and parents where parents focused only on acquiring knowledge while children needed emotional support as well. This also points to the interconnectedness of metacognition which also did not show statistically significant improvement in terms of emotional self-regulation of the parents.

Determining the significance of the difference between the initial and final states of parental instructions to child (RID) *Frequency of instructions to child* FID 26-30 (IF) - the fifth parameter, Table 1 shows that there are statistically significant differences (at  $p < 0.05$ ) in all five components of parental instructions to child, with a statistically insignificant correlation of 0.16 between both sets of before and after the experimental treatment. The effect of experimental treatments yielded significant results in terms of frequency of parental instructions. Parents started to help their children more often, to talk more about the school and school related topics and to share parental concerns with spouses. This last finding is rather interesting because the majority of parents in the initial stage of the study indicated that solely they care about helping children in school activities and they considered it to be justified, but under the influence of all that they have experienced in the workshops their attitude changed and they began to include spouses and considered them to be an equal collaborators/partners.

Determining the significance of the difference between the initial and final states of parental instructions to child (RID) *Monitoring progress of the child* PND 31-35 (IF) - the sixth parameter of Table 1 shows that there are statistically significant differences (at  $p$

<0.01) in all five components of parental instructions to child, with a statistically insignificant correlation of 0.07 between both sets before and after the experimental treatment. Progress in this subtest came as a result of greater concern showed by parents for the success of their child, as well as by creating a better, trusting relationship with their children, dosing instructions to the needs of their children and monitoring the success of instructions. All this came as a result of experimental treatment.

Determining the significance of the difference between the initial and final states of parental instructions to child (RID) *Competence level of parents for instructions* NOR 36-42 (IF) - the seventh parameter of Table 1 shows that there are statistically significant differences (at  $p < 0.01$ ) in all five components of parental instructions to child, with a statistically insignificant correlation of 0.11 between both sets before and after the experimental treatment. Certainly the biggest improvement of all subtests was made with respect to the level of competence of the parents which can be seen from the arithmetic mean. Parents have entered experimental treatment with a very modest knowledge of instructions as a way to help children learning. Active participation in all workshops enabled them to get acquainted with all that is needed for their children to achieve better results. Motivated by the desire to find out everything needed to successfully work with children, parents have improved their instructions to children and it yielded statistical significance compared to the initial test.

Determining the significance of the difference between the *initial and final states* of parental instructions to child (RID) - *Summary* Table 1 shows that there are *statistically significant differences in general* (at  $p < 0.01$ ) in all components of *parental instructions to child*, with a statistically insignificant correlation of 0.12 between both sets before and after the experimental treatment.

The effect of the experimental treatment was felt in the aggregate findings of the instruments of parental instructions to children, which confirmed that parents were actively involved in the experimental program and that they had gained considerable knowledge and experience in order to better and improve success rate of instruction for their children in learning process.

The second hypothesis of this study is that the experimental treatment has positive influence on parental instructions to children in relation to school children attend. The findings indicate that there are significant differences in terms of parental instructions to the child with respect to school children attend. The results confirming this hypothesis are shown in Table 2

Table 2: Differences between parental instructions to the child with respect to school children attend

<i>Parameter</i>	<i>School</i>	<i>Subjects tested</i>	<i>M</i>	<i>SD</i>	<i>Diff. M</i>	<i>F</i>	<i>Signif.</i>	<i>t-time.</i>	<i>Signif.</i>
MKI 01-06 (I)	urban-	50	23,42	4,23	0,90	0,166	0,685	0,826	0,411
	suburban	25	22,52	4,86					
	urban-	50	23,42	4,23	1,52	0,317	0,575	1,840	0,069
	rural	50	21,90	4,03					
	suburban	25	22,52	4,86					
MKI 01-06 (F)	rural	50	21,90	4,03	0,62	0,001	0,970	0,586	0,560
	urban-	50	22,86	3,29					
	suburban	25	23,04	2,26	0,18	2,700	0,105	-0,245	0,807
	urban-	50	22,86	3,29					
	rural	50	23,00	3,20					

	suburban	25	23,04	2,26	0,04	3,005	0,101	0,231	0,926
	rural	50	23,00	3,20					
RKZ 07-11 (I)	urban-	50	19,36	4,12	1,60	0,307	0,581	1,611	0,111
	suburban	25	17,76	3,91					
	urban-	50	19,36	4,12	1,48	2,231	0,139	1,976	0,051
	rural	50	17,88	3,32					
	suburban	25	17,76	3,91	–	0,397	0,531	–0,139	0,890
	rural	50	17,88	3,32	0,12				
RKZ 07-11 (F)	urban-	50	20,76	2,11	1,20	9,573	0,003	2,589	0,012*
	suburban	25	19,56	1,32					
	urban-	50	20,76	2,11	1,18	0,407	0,525	2,908	0,004**
	rural	50	19,58	1,94					
	suburban	25	19,56	1,32	–	7,835	0,007	–0,046	0,963
	rural	50	19,58	1,94	0,02				
PZI 12-18 (I)	urban-	50	30,76	2,37	1,44	5,466	0,022	2,106	0,039*
	suburban	25	29,32	3,50					
	urban-	50	30,76	2,37	2,66	8,007	0,006	4,037	0,000**
	rural	50	28,10	4,01					
	suburban	25	29,32	3,50	1,22	0,166	0,685	1,294	0,200
	rural	50	28,10	4,01					
PZI 12-18 (F)	urban-	50	30,56	1,79	–	1,532	0,220	–1,364	0,177
	suburban	25	31,12	1,42	0,56				
	urban-	50	30,56	1,79	1,32	6,871	0,010	2,959	0,004**
	rural	50	29,24	2,60					
	suburban	25	31,12	1,42	1,88	9,618	0,003	3,365	0,001**
	rural	50	29,24	2,60					
EPD 19-25 (I)	urban-	50	29,96	3,42	1,32	0,039	0,845	1,620	0,110
	suburban	25	28,64	3,12					
	urban-	50	29,96	3,42	2,88	0,686	0,409	4,123	0,000**
	rural	50	27,08	3,56					
	suburban	25	28,64	3,12	1,56	0,907	0,344	1,860	0,067
	rural	50	27,08	3,56					
EPD 19-25 (F)	urban-	50	29,30	2,56	0,62	5,602	0,021	1,107	0,272
	suburban	25	28,68	1,60					
	urban-	50	29,30	2,56	–	0,023	0,880	–0,116	0,908
	rural	50	29,36	2,59	0,06				
	suburban	25	28,68	1,60	–	4,191	0,044	–1,120	0,234
	rural	50	29,36	2,59	0,68				
FID 26-30 (I)	urban-	50	18,52	2,51	1,24	0,036	0,850	1,939	0,056
	suburban	25	17,28	2,81					
	urban-	50	18,52	2,51	1,12	0,001	0,982	2,266	0,026*
	rural	50	17,40	2,43					
	suburban	25	17,28	2,81	–0,12	0,014	0,829	–0,191	0,849
	rural	50	17,40	2,43					
FID 26-30 (F)	urban-	50	18,68	1,45	0,72	1,323	0,254	2,187	0,032*
	suburban	25	17,96	1,10					
	urban-	50	18,68	1,45	0,44	3,647	0,059	1,346	0,182
	rural	50	18,24	1,80					
	suburban	25	17,96	1,10	–	7,390	0,008	–0,712	0,479
	rural	50	18,24	1,80	0,28				
PND 31-35 (I)	urban-	50	19,60	2,35	1,96	2,679	0,106	3,058	0,003**
	suburban	25	17,64	3,09					
	urban-	50	19,60	2,35	1,36	1,488	0,225	2,626	0,010**
	rural	50	18,24	2,81					
	suburban	25	17,64	3,09	–	0,340	0,562	–0,843	0,402
	rural	50	18,24	2,81	0,60				
PND 31-35 (F)	urban-	50	20,62	1,94	0,50	3,355	0,071	1,149	0,254
	suburban	25	20,12	1,39					
	urban-	50	20,62	1,94	0,42	1,278	0,261	1,155	0,251
	rural	50	20,20	1,69					



	suburban	25	20,12	1,39	–	0,860	0,357	– 0,204	0,839
	rural	50	20,20	1,69	0,08				
NOR 36-42 (I)	urban-	50	21,04	6,23	3,48	13,93	0,000	2,625	0,011*
	suburban	25	17,56	3,12					
	urban-	50	21,04	6,23	2,54	6,779	0,011	2,316	0,023*
	rural	50	18,50	4,61					
	suburban	25	17,56	3,12	–	2,654	0,108	– 0,918	0,362
	rural	50	18,50	4,61	0,94				
NOR 36-42 (F)	urban-	50	31,04	1,95	0,20	3,532	0,064	0,478	0,634
	suburban	25	30,84	1,07					
	urban-	50	31,04	1,95	3,20	3,583	0,061	5,836	0,000**
	rural	50	27,84	3,35					
	suburban	25	30,84	1,07	3,00	6,442	0,013	4,352	0,000**
	rural	50	27,84	3,35					
RID 01-42 (I)	urban-	50	157,8	19,7	11,8	3,259	0,075	2,606	0,011*
	suburban	25	146,0	15,6					
	urban-	50	157,8	19,7	11,6	3,281	0,073	3,271	0,001**
	rural	50	146,2	15,7					
	suburban	25	146,0	15,6	–	0,209	0,649	– 0,031	0,975
	rural	50	146,2	15,7	0,12				
RID 01-42 (F)	urban-	50	173,8	10,2	2,50	1,627	0,206	1,097	0,276
	suburban	25	171,3	6,99					
	urban-	50	173,8	10,2	6,32	0,098	0,755	3,053	0,003**
	rural	50	167,5	10,4					
	suburban	25	171,3	6,99	3,82	0,773	0,382	1,650	0,103
	rural	50	167,5	10,4					

Note: RID (01-42) – parental instructions to the child

\*\* - level of significance of 0,01

\* - level of significance of 0,05

Determining the significance of difference between the *parental instructions to child*, with respect to school children attend (urban, rural and suburban, i.e. educational institution location) Table 2 shows that there are significant differences of the initial condition related to attributing significance to instructions to child, emotional support for the child, the frequency of instructions to the child, the level of competence of the parents for instructions and parental instruction to the child (cumulative) before the experimental treatment, in favor of the city (urban) schools, compared to suburban and rural schools

Also, it was found that there were statistically significant differences in the final condition for reducing the complexity of the task, attributing importance to instructions to child, frequency of instructions to a child, the level of competence of the parents for instructions and parental instruction to the child (cumulative) before the experimental treatment, in favor of the city (urban) schools, compared to suburban and rural schools.

This significance is not present in the context of metacognitive instructions which shows that parents do not differ significantly in this subtest. Significance can be found in reducing the complexity of the tasks in the favor of the city (urban) schools, and the reasons for this are related to better understanding and understanding of these issues by parents living in the urban areas as opposed to the parents from the country. Analysis of the arithmetic means shows that there has also been progress with parents in suburban and rural schools, but it is not statistically significant.

As for the subtests *Attributing significance to the instructions* it shows a statistically significant difference between parents from urban area versus those from rural ones in both

initial and final study, which means that the parents from urban areas attribute greater importance to instruction in relation to the parents from the rural areas. The reason for this lies in the fact that the parents from the urban areas are more motivated for their child to succeed than parents from the rural areas. The lack of statistically significant differences between the parents from urban and rural areas (regardless of location of the school) with regard to the emotional support to a child can be explained by the fact that parents still value cognitive achievement of children above all other competencies, even emotional ones.

Frequency of instructions was also present with parents of all schools and there were no statistically significant differences except between urban and rural parents in the initial study, and urban and suburban parents in final study. Regarding monitoring progress there is no statistically significant change from the initial to the final state of the study which suggests that parents of all schools paid great attention to this aspect of helping children learning. The biggest statistical difference was between parents of urban and rural schools in the subtest *Parents' instruction capability level*. This shift indicates that parents in urban schools are on the more advanced level in relation to the parents of suburban and rural schools. The reasons behind this are greater motivation to learn demonstrated by parents from urban schools.

The analysis of parental instruction to children in general shows a statistically significant difference in the initial study of the parents from urban areas as compared to parents from suburban and rural areas, and in the final study between parents from urban and rural areas which suggests that parents from urban areas invest more and are more willing to help their children learning.

The third hypothesis is that there is a positive correlation between parental instructions to educational and economic status of the parents. Results are given in Tables 3 and 4. The results show that the experimental treatment did not have positive effect on the association of parental instructions to child and their level of education, as well as economic status of parents, compared before and after the experimental treatment.

Analysis of the results of linear regression Table 3, *prior to the experimental treatment*, indicates that the overall regression is statistically significant at the 0.01 level (Sig). It was demonstrated by univariate analysis of variance (ANOVA short). The only conclusion that can be drawn is that we should reject the basic hypothesis, i.e. the assumption that the differences between parental instructions to child and educational status of parents does not exist. The coefficient of determination ( $R^2$ ) and multiple correlations ( $R$ ) show that the variance of parental instructions to child (before experimental treatment) is possible to explain by 24 percent by educational status of their parents, because their correlation is 0.49. Therefore, it can be argued that *parental instructions to child* can be predict based on *educational status of parents*. Only one regression (before experimental treatment) was statistically significant for the parent's instructions to child and to Parent's instruction capability level, given the educational status of the parents. *Parental instructions to child* (RID-summary) in the initial state confirm that it is in general *statistically significant* in explaining the educational status of parents.

Table 3: Correlation between parental instructions to a child with their educational status before and after the experimental treatment

$R_i = 0,49$ - $R_f = 0,40$	$R^2_i = 0,24$ - $R^2_f = 0,16$	F-ratio = 5,15/3,20	Significance F = 0,00/0,01
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Br.	Parameters	Beta	B	t-time	Signif. t
1.	Metacognitive instruction context (i)	0,02	0,01	0,149	0,882
	Metacognitive instruction context (f)	-0,01	-0,01	-0,131	0,896
2.	Task complexity reduction (i)	-0,04	-0,01	-0,284	0,777
	Task complexity reduction (f)	0,22	0,13	2,083	0,039*
3.	Attaching significance to the instruction (i)	0,14	0,05	1,498	0,137
	Attaching significance to the instruction (f)	-0,07	-0,04	-0,680	0,498
4.	Emotional support to a child (i)	0,05	0,02	0,481	0,632
	Emotional support to a child (f)	-0,31	-0,15	-2,628	0,010**
5.	Instruction frequency (i)	0,01	0,01	0,107	0,915
	Instruction frequency (f)	0,03	0,02	0,315	0,754
6.	Child's improvement monitoring (i)	0,04	0,02	0,419	0,676
	Child's improvement monitoring (f)	0,07	0,04	0,682	0,497
7.	Parents' instruction capability level (i)	0,39	0,08	4,236	0,000**
	Parents' instruction capability level (f)	0,32	0,13	3,029	0,003**
Σ	Parental instruction to child (sum-i)	0,41	0,05	4,925	0,000**
	Parental instruction to child (sum-f)	0,14	0,01	1,539	0,126

Note: \*\* - level of significance from 0,01

\* - level of significance from 0,05

Analysis of the results of linear regression Table 3, *after the experimental treatment*, indicates that the overall regression is statistically significant at the 0.01 level (Sig). It was demonstrated by univariate analysis of variance (ANOVA Short), and the only conclusion that can be drawn is that we should reject the basic hypothesis, i.e. the assumption that the differences between parental instructions to child and educational status of parents does not exist. The coefficient of determination (R<sup>2</sup>) and multiple correlations (R) show that the variance of parental instructions to child (before experimental treatment) is possible to explain by 24 percent by educational status of their parents, because their correlation is 0.40. Therefore, it can be argued that *parental instructions to child* can be predicted based on *educational status of parents*. Three regressions are (after experimental treatment) determined to be statistically significant for parental instructions to child: *Parent's instruction capability level* and *Task complexity reduction*, with respect to the educational status of parents whereas emotional support to a child bears negative value. This negative value indicates the fact that we are dealing with tendencies of opposite directions, which means that when one tendency is growing (educational status of parents) the other decreases (Emotional support to a child), and vice versa. *Parental instructions to child* (RID-summary) in the final state confirm the fact that it is *not generally statistically significant* in explaining the educational status of parents.

Analysis of the results of linear regression Table 4 (prior to the experimental treatment) indicates that the overall regression is not statistically significant at the level of 0.05 (Sig). It is demonstrated by univariate analysis of variance (ANOVA Short), with the only conclusion that that we cannot reject the basic hypothesis, i.e. the assumption that the differences between parental instructions to child and economic status of parents does not exist. The coefficient of determination (R<sup>2</sup>) and multiple correlations (R) show that the variance of parental instructions to child (before experimental treatment) is possible to explain by only 10 percent by the economic status of parents, because their correlation is 0.32. Therefore, it cannot be argued that parental instructions to child can be predicted based on economic status of the parents. Only one regression (before experimental treatment) was statistically significant for the Parental instructions to child and to Parent's instruction capability level, given the economic status of the parents. Parental instructions to child (RID-summary) in the initial state indicate that it is in general statistically significant in explaining the economic status of the parents.

Table 4: Correlation between parental instructions to a child with their economic status before and after the experimental treatment

$R_i=0,32$ - $R_f=0,20$		$R^2_i=0,10$ - $R^2_f=0,04$		$F\text{-ratio}=1,93/0,69$		$\text{Signif. } F=0,07/0,68$	
<i>Br.</i>	<i>Parameters</i>	<i>Beta</i>	<i>B</i>	<i>t-time</i>	<i>Signif. t</i>		
1.	Metacognitive instruction context (i)	0,02	0,01	0,172	0,863		
	Metacognitive instruction context (f)	0,01	0,00	0,083	0,934		
2.	Task complexity reduction (i)	-0,03	-0,01	-0,242	0,809		
	Task complexity reduction (f)	0,03	0,02	0,274	0,784		
3.	Attaching significance to the instruction (i)	-0,14	-0,05	-1,333	0,185		
	Attaching significance to the instruction (f)	-0,11	-0,07	-1,034	0,303		
4.	Emotional support to a child (i)	0,19	0,07	1,724	0,087		
	Emotional support to a child (f)	0,15	0,09	1,173	0,243		
5.	Instruction frequency (i)	-0,20	-0,11	-1,934	0,055		
	Instruction frequency (f)	-0,07	-0,06	-0,698	0,487		
6.	Child's improvement monitoring (i)	0,07	0,03	0,646	0,520		
	Child's improvement monitoring (f)	-0,03	-0,02	-0,285	0,776		
7.	Parents' instruction capability level (i)	0,23	0,06	2,290	0,024*		
	Parents' instruction capability level (f)	0,12	0,06	1,035	0,303		
$\Sigma$	Parental instruction to child (sum-i)	0,18	0,01	2,087	0,039*		
	Parental instruction to child (sum-f)	0,11	0,01	1,230	0,221		

Note: \*\* - level of significance from 0,01

\* - level of significance from 0,05

Analysis of the results of linear regression Table 4 (prior to the experimental treatment) indicates that the overall regression is not statistically significant at the level of 0.05 (Sig). It is demonstrated by univariate analysis of variance (ANOVA Short), with the only conclusion that that we cannot reject the basic hypothesis, i.e. the assumption that the differences between parental instructions to child and economic status of parents does not exist. The coefficient of determination ( $R^2$ ) and multiple correlations ( $R$ ) show that the variance of parental instructions to child (after experimental treatment) is possible to explain by only 4 percent by the economic status of parents, because their correlation is 0.20. Therefore, it can be argued that parental instructions to child cannot be predicted based on economic status of the parents. Not a single regression (after experimental treatment) was statistically significant for the Parental instructions to child and to Parent's instruction capability level, given the economic status of the parents. *Parental instructions to child* (RID-summary) in the initial state indicate that it is not in general statistically significant in explaining the economic status of the parents.

The fourth hypothesis is that there is a correlation between parental instructions to child and age of parents. The findings relevant to this correlation association are given in Table 5. They demonstrate partial correlation between parental instructions to child and parents' age, as a result of the influence of experimental treatment.

Analysis of the results of linear regression Table 5 (prior to the experimental treatment) indicates that the overall regression is not statistically significant at the level of 0.05 (Sig). It is demonstrated by univariate analysis of variance (ANOVA Short), with the only conclusion that that we cannot reject the basic hypothesis, i.e. the assumption that the differences between parental instructions to child and age of parents does not exist. The coefficient of determination ( $R^2$ ) and multiple correlations ( $R$ ) show that the variance of parental instructions to child (before experimental treatment) is possible to explain by 6 percent by the economic status of parents, because their correlation is 0.24. Therefore, it

cannot be argued that parental instructions to child can be predicted based on the age of the parents. Not a single regression (before experimental treatment) was statistically significant for the Parental instructions to child, given the age of the parents. *Parental instructions to child* (RID-summary) in the initial state indicate that it is not in general statistically significant in explaining the age of the parents.

## Conclusion

Parental instruction in learning process significantly affects the overall success a child achieves at school. This form of assistance depends on the parents, as well as the children. Their motivation is a key factor for instructions to be successful.

The process of parental instruction can be implemented by using various methods, usually by empathy, helping children to reduce the amount of effort and energy needed to master the matter, emotional support, supervising what is being learned as well as how, and creating the environment to raise child's awareness or metacognition on what is being learned. These are all the methods that are largely unknown to parents. The workshops that were organized from September to December 2008 sparked the interest of the parents, and also enabled them to acquire basic pedagogical tools on how to help their children.

The results of the research show that there is statistically significant difference in parental instruction in five out of seven subtests: complexity reduction of the school matter being studied, parents paying significance to the instruction, instruction frequency, monitoring child's improvement, parents' instruction level and capability. A positive level of the experimental program has not been recognized in metacognitive context of the instructions and parents' emotional support to their children. The experimental program has not given positive results in all of the subtests with regards to the school environment, although the parents from city schools achieved a certain progress compared to parents from suburban or rural schools.

The conclusion that can be reached from the results obtained is that an improvement in parental instruction in learning process can be achieved by working with parents. Emotional support and metacognition require more time, seeing that the former clashes with the traditional communication which does not recognize emotions, while the latter is something which is largely unknown to the parents and requires more time to be improved.

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## Reference

- Anić, Š., Klaić, N., Domović, Ž. (2007). *Riječnik stranih riječi*. Zagreb: Sani-plus.
- Bakovljević, M. (1995). *Statistika u pedagoškim istraživanjima*. Beograd: Naučna knjiga CURO, Učiteljski fakultet.
- Brkić, M. i Kundačina, M. (2003). *Statistika u istraživanju vaspitanja i obrazovanja*. Mostar-Sarajevo: Educa d.o.o. Sarajevo.

- Brown, A. L. (1987): Metacognition, executive control, self-regulation and other more mysterious mechanisms. Weinert, F. E. & Kluwe, R. H. (Eds) Distributed cognitions: Psychological and educational considerations, Cambridge University Press, pp. 188-227.
- Demirović, M. i Kukić, S. (2003). Metodologija naučnoistraživačkog rada društvenih nauka. Bihać- Mostar: Pravni fakultet univerziteta u Bihaću i Ekonomski fakultetsveučilišta uMostaru.
- Došen-Dobud, A. ( 2001). Predškola. Vodič za voditelje i roditelje. Zagreb: Alinea.
- Flavell, J. (1979). Metacognition and cognitive monitoring, a new area of cognitive developmental inquiry, American Psychologist, Vol. 34, No. 10, 906–911.
- Flavell, J. H. (1976). Metacognition Aspects of Problem Solving. In Resnick, L. (Ed.), The Nature of Intelligence (str. 231-236). Hillsdale, W.: Lawrence Erlbaum Associates.
- Fortunato, I., Hecht, D., Tittle, C., Alvarez, L. (1991). Metacognition and problem solving, Arithmetic Teacher, 39(4), pp. 38-40.
- Handrin– Goakin, S. (1999). Roditeljstvo za neupućene. Beograd: Mikro knjiga i IDG Books Worldwide Inc.
- Ljubetić, M. (1998). Samoprocjena kompetentnosti roditelja za roditeljsku ulogu. Napredak br. 139, str. 290–297
- Mandić, P.(1980). Saradnja porodice i škole. Sarajevo: Svjetlost.
- Mužić, V.(2004). Uvod u metodologiju istraživanja i obrazovanja. Zagreb: Educa.
- Raboteg-Šarić, Z. (1993). Empatija, moralno rasuđivanje i različiti oblici prosocijalnog ponašanja. Zagreb: Sveučilište u Zagrebu-Filozofski fakultet.
- Suzić, N. (2006). Traženje pomoći kao kognitivna strategija učenika. Nastava i vaspitanje br. 3, str. 239-257. Na sajtu: <http://www.suzicnenad.com/knjige.html>. Očitano: 24.10.2008.
- Suzić, N.(2005). Pedagogija za XXI vijek. Banja Luka: TT–Centar Republike Srpske i UNICEF Kancelarija u Banjaluci.
- Termiz, Dž. (2003). Metodologija društvenih nauka. Sarajevo: Svjetlost.