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## THE BELIEFS OF PRESCHOOL TEACHERS ON SELF-REGULATED LEARNING IN THE PRESCHOOL

**Summary:** This paper presents a qualitative research which implements the Delphi method on a sample size of 25 preschool teachers and their assistants in Slovenian preschools regarding their beliefs on self-regulated learning in the preschool. The goal was to determine how preschool teachers and their assistants define their own self-regulated learning, which factors they recognize as important in the children's self-regulated learning in the preschool and how they assess the role of the preschool teacher in the process of enhancing self-regulated learning of children in the preschool. The research was conducted in two rounds using two questionnaires. The first round of research was done using an open ended questionnaire, the answers were coded and the relevant concepts were categorized. On the basis of the result analysis from the first round of the research the questionnaire for the second round was made, which enabled the analysis and comparison of the data from both rounds of research. From the analysis of the gathered data, most preschool teachers (72%) believe that for the development of self-regulated learning it is important for the children to learn by watching others and through real-life examples. Slightly more than half of the preschool teachers (52%) say that it is independent participation of the child, (48%) believe that incentive is important, and (36%) believe that guidance is key. Others (28%) mention observation and dialogue as an important approach for the development of self-regulated learning, (12%) believe that it is persistence. Challenges and attention from the preschool teacher were noted by (8%) of the preschool teachers while (4%) believe that the adequate environment and interesting topics were an important approach.

**Keywords:** child, preschool teacher, self-regulated learning, preschool.

### Theoretical concepts

Theoretical concepts for the promotion of development of self-regulated learning in the preschool have received their roots in the socio-cultural and postculturalism theories in the last decade (McKernan, 2008; MacNaughton, 2005; Pesic, 2004; Shonkoff and Philips, 2000). The mentioned theoretical orientations perceive the child as a self-evident value and social category. Early childhood is seen as an important and evident social category which receives great attention. Accepting the child in this way and the question of individual development are moved to the question of the socio-cultural construction of childhood. The status of the child as a social factor in the aforementioned context means that children are viewed as a valuable source of potential, active and competent participants in their lives and education (Delors,

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1996). These abilities are key and inseparable from the people for the process of coordination and transformation of pedagogical work with children at the preschool age (Marjanovic, 1987). Early literacy and calculation skills have long been recognized as an important aspect of preparing a child for school. There is a growing amount of proof that self-regulation has an important role in the preparedness of children for school. However, the precise connection between self-regulation and success in school is not completely clear. Furthermore, studies in this area differ in regards to the methodology and measures (La Paro i Pianta, 2000) used to explore the complex relation between self-regulation and different academic knowledge and skills. Encouragement of self-regulation before the start of school is a challenge and it can be researched, because self-regulation changes and develops with time, as a reaction to schooling. Therefore, self-regulated learning is considered to be a skill which can be encouraged and monitored in children from the preschool age (Bruder, 2005).

The concept of self-regulated learning appears in the second half of the 20<sup>th</sup> century with the changes of the didactic paradigm i.e. a different curriculum approach to education. In the preschool period the first steps are taken in the acquisition of academic skills important for success in self-regulated learning and integration in social surroundings. Therefore, children should be guided towards a higher level of independence through discovery learning in project activities, cooperation in group work, goal achieving strategies and information gathering. All of the above is meant to promote independence, responsibility and develop self-regulated learning skills. The theory of self-regulated learning presupposes that an individual can improve their learning ability if he/she masters the metacognitive and motivational learning strategies (Zimmerman, 2001.). The same author believes that self-regulation represents a proactive choice, structuring and creation of a suitable learning environment. This means that an individual has the ability to choose the amount and means of learning which is needed to gain the experience in a task or situation. Educational components are more directed towards the older children in the preschool period, while guidelines for cognitive and intellectual needs are common, rather the focus is placed on caring for and protecting preschool children. In most European countries there exists a recommendation for an adequate balance between the activities which are proposed by adults and the children (EACEA / Eurydice / Eurostat, 2014). In the curriculum for preschools (1999., page 10), among the common principles which are the basis for theoretical starting points and guidelines the following is written: “preschool learning is based on direct interaction with subjects and gaining concrete experiences with people, objects, thinking about activities and creating ideas together with preconception constructions based on the first generalizations, on internal motivation and solving specific problems and gaining social experience“(ibid.).

### **Metacognition and self-regulated learning**

There exist different views on the relationship between metacognition and self-regulated learning, including the subordinate or superior dynamic among them, which causes uncertainty in regards to these two terms. Studies show qualitative differences between younger and older children and their ability to participate in organizing and cognitive processing (Paris, Byrnes i Paris, 2001.; McCaslin i Hickey, 2001.). The factor connected to the self-regulated learning of younger children is connected to restrictions in metacognitive functioning (Flavell, 1979.). Younger children have fewer “executive control functions” which are responsible for the relations between attention and self-regulated behavior (Case, 1992.). In the last decade researchers Ryan and Deci gave many scientific contributions in the area of the theory of self-determination (Deci i Ryan, 1985., 1991.). When the theory of self-determination is used in education, it is primarily based on encouraging learners’ interests in learning, valuing education

developing trust in one's own abilities (Deci, Vallerand, Pelletier i Ryan, 1991). The author's definition of self-determination is as follows: the ability to choose and achieve what has been chosen, self-determination is more than an ability it is a need. Everyone has a basic, internal propensity to make their own choices, which leads the individual to interesting behaviors and actions (Deci i Ryan 1985: 38). Understanding the motivation of the learners is key. The theory of self-determination offers plenty of proof that children should be educated in such a way that they become independent and life-long learners (Ryan i Deci, 2017; Deci i Ryan, 2000).

We will perceive self-regulated learning as a process of directing behavior towards achieving set goals, and its core is contained within acknowledging feedback information which serves to lessen the dissonance between the desirable and current behavior (Loncaric, 2014). Loncaric also notes that it is a complex psychological process which involves cognitive, affective, motivational and behavioral components. Their task is to enable individuals to adapt their goal reaching activities to the changing conditions of their surroundings. Therefore, most other authors (Zeidner, Boekaerts i Pintrich, 2000) list the following as important characteristics of self-regulated learning: creating goals, management, using feedback information and self-evaluation. In all of this, the most prominent is the proactive approach to learning, as a self-directed process in which individuals transform their mental abilities into academic skills and direct their behavior towards achieving the planned goals. Individuals self-regulate their cognitive and other abilities by activating metacognitive and motivational abilities, directing their thoughts and emotions in a way which leads to goal achievement (Zimmerman i Martinez-Pons, 1986). According to Zimmerman (2001), this means independently setting goals, persevering towards ones goals and monitoring progress and adaptation skills.

### **Learning in the preschool**

Upbringing and care for preschool aged children is an important basis for latter learning, therefore governments of many European countries are starting to pay more attention to it. European Commission document Proposal for the Quality Framework for Preschool Education (2014) states that the quality of studies exploring preschool education practice is based on:

- i) the relationship between the educator of preschool aged children and their families;
- ii) the relationship between the educator and children, as well as the relationship between children;
- iii) the scope of comprehensive care, upbringing, education and daily pedagogical practice of employees in preschool education.

The educational and upbringing component is slightly more directed towards older preschool children. Guidelines for cognitive and intellectual needs are not common; the focus is placed on care and protection. In most European countries it is recommended for a balance to be achieved between the activities which are led by adults and those led by children (EACEA / Eurydice / Eurostat, 2014). In the Curriculum (1999) development of intellectual abilities is not the only goal, there are also the following: skill development, problem solving, confronting problems, discovering the meaning of things, finding, presenting and implementing possible alternatives, finding and organizing thoughts, thinking and communication, awareness of one's thoughts and emotions, self-awareness, awareness of others and the surroundings, having active beliefs and the readiness to change them, care for oneself and others and the environment, wish fulfillment, cooperation etc. (Vonta, 2009).

Self-regulation refers to many aspects of the children's ability to flexibly control and modify their behavior, attention and emotions. Differences in their ability to regulate attention,

behavior and emotions stem from their temperament. Two important components of temperament are self-regulation, reactivity and reactions to changes in the environment (Rothbart & Bates, 2006).

Tominey and McClland (2011) created games (rotation time) which are simple in the beginning, but which gradually become more complicated, which enables the children to practice their self-regulation abilities and increase their cognitive abilities.

Sezgin (2016), in her study, discovered that there exists a connection between the educational self-regulation program based on play and children's behavioral skills of self-regulation. The development of young children's self-regulation skills in learning should be supported through additional programs and further education of professionals (Sezgin, 2016). Key components for life-long learning (Europski okvir, 2007) are a combination of relevant knowledge, skills and beliefs. Key components are the ones which all individuals need for personal satisfaction and development, active citizenship, social involvement and employment. Among the eight competencies is "learn how to learn", which is defined as: "the ability to learn, the need to organize and guide one's own learning; for efficient time management and information management in leaning, both individually and in a group. It involves awareness of one's own needs in the learning process, the ability to recognize opportunities and to overcome hurdles to successful learning. At the same time, it indicates the ability to gain, process and inherit new knowledge and skills, as well as asking for and accepting help (page 8).

The quality of upbringing and education of preschool children greatly depends on effectiveness of the learning and teaching process (EACEA / Eurydice / Eurostat, 2014.). Social and emotional competencies along with self-regulation, intrinsic motivation for learning and the ability to cooperate with other children can help a child when a need for self-regulated learning, problem solving or group work occurs. Therefore, one of the main challenges of pedagogical upbringing is the creation and implementation of a curriculum which equally develops the aforementioned skills and competencies (Lesman, 2009).

### **The role of the preschool teacher**

The latest research in the field of preschool teacher education highlights the importance of professionalism and competencies for versatility and the new role as a teacher (Ljubetic, 2012; Lepicnik Vodopivec i Hmelak, 2018; Persson, 2006; Schleicher, 2013; Slunjski, Sagud, i Brajsa-Zganec, 2006; Taylor i Nolen, 2004). The preschool teachers' task in the teaching process is to provide the optimal conditions for children's learning and indirect support in various activities in the learning process (Slunjski, 2011).

Environmental conditions and equipment in the preschool are essential for the successful learning of preschool children (Lepicnik Vodopivec i Hmelak, 2016). Children actively learn (explore) and cooperate with other children and adults (Cohen, 1996), hence environmental conditions and equipment must be well conceptualized and have educational potential. Organization of the environment significantly influences the quality of interaction amongst children and between children and adults.

In the process of teaching children, the preschool teacher enables the children gain awareness of their thinking and learning, thus discovering ways for gaining new knowledge (Bruner, 2000). Awareness of the self-learning process enables the children to take responsibility and control over the process (Kinsler, Gamble, 2001). Different ways in which preschool teachers

provide their support to the children in their discovery learning, in the literature, is often called a process of exchange and dialogue (Barth, 2004) which is based on open and encouraging questions regarding the problem being studied. Thought out work of the preschool teacher on promoting self-regulation in early childhood helps children develop key skills such as strategies for control, strategies for problem solving, care for the environment or emotional experiences. There are four simple strategies which preschool teachers can use to help children develop this critical ability. Preschool teachers should focus on all of the children in the group, not only on the ones who exhibit problems; teach children to follow rules and how to use them in new situations; provide children with visible and concrete reminders of self-regulation. Games and playing should be an important part of the curriculum (Bodrova i Leong, 2015, str. 57).

By using simple questions, gestures and touches, preschool teachers offer children valuable signs of how and when they should regulate their emotions, attention and behavior. Preschool teachers can help children direct their attention in a few ways, by highlighting the importance of viewing a certain situation, picture, word, object or example (Florez, 2011).

Parents have the key role in encouraging interest in research and providing support to children, right after them are preschool teachers (Ljubetic, 2012). Kramarski and Kohen (2017.) discovered that teachers have a two pronged role in the process of self-regulated learning. They stated that teachers themselves should master self-regulated learning and learn how and in what way to teach it, within the terminology better known as self-regulated teaching. They also note that studies done thus far have not paid much attention to the expertise and support of the teachers, so that they may gain the knowledge needed for encouraging self-regulated learning.

### **Defining the problem and research goal**

Very few studies on the role of preschool teachers for the encouragement of self-regulated learning in preschool children exist. Results of relevant studies show that 4 years old and older children are capable of self-regulated learning with the adequate support from the adults. By researching this phenomenon, we are the first in the Slovenian social area who have explored the role of preschool teachers in the encouragement of self-regulated learning in 5 and 6 years old preschool children in the preschool institution. From birth to their sixth year, children develop faster than they ever will. This is a period of vulnerability and simultaneously great possibility. From their second year of life, children show a wish for independence and decision making. Self-regulation as a concept is used from birth. We focused on the role of the preschool teacher in encouraging self-regulated learning in preschool institutions. The main tasks of the preschool teacher in the process of teaching preschool children are creating learning conditions and providing indirect support in various activities in the learning process, in which authority over the activity is not taken away from the children (Slunjski, 2011, str. 225).

By exploring professional and scientific literature we concluded that there exists number of open questions regarding self-regulation and self-regulated learning in the preschool.

### **Goals and the research question**

The goals of the quantitative research were to find out:

- how preschool teachers assess their role in the process of encouraging self-regulated learning of children in the preschool;
- how preschool teachers assess their own self-regulated learning at the workplace;

- which factors preschool teachers considered to be key for the development of self-regulated learning in preschool children.

Research questions are the following:

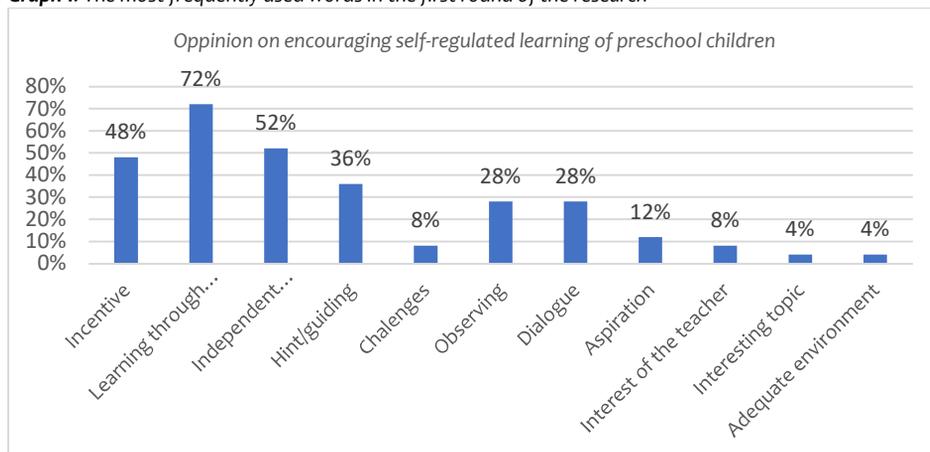
- a. What beliefs do preschool teachers have regarding the encouragement of self-regulated learning in preschool children?
- b. How do you define your own self-regulated learning in the workplace?
- c. Which factors do preschool teachers recognize as key for encouraging self-regulated learning in preschool children?

### **Methodology**

For this research we used the Delphi method (Delphi or ETE - Estimate - Talk - Estimate) through which we systematically collected and consolidated the opinions of experts, in our case preschool teachers. The goal of the Delphi method is to establish a unanimous opinion of the group. It is one of the most widely spread and well developed methods among the ones which is implemented in the research of the future (Dubovicki, 2017). The Delphi method helps educators develop curriculums and prepare children, pupils and students for the future and develop their skills for future knowledge (Green, 2014). The usage of the Delphi method in pedagogy is not directed only towards decision making, it is also used for comprehensive understanding of the subject of the research, exchange of expert opinions, development of success, previous approaches, predicting possible changes, gaining insight into different views on the subject matter (Viskovic, 2016). The advantage of the method is that it stops one opinion or the opinion of one individual or individuals to become dominant (Okoli, Pawlowski 2004, pp. 16; Pecjak 2001, pp. 148). The research was conducted in two steps and two questionnaires were used. The first was a written questionnaire with open questions (word document). The questionnaire consisted of 12 questions and additional inquiries. The first four questions referred to demographic information, employment, years of work experience and educational level. There were three research questions and five questions dealing with self-regulation and self-regulated learning in general. In the second phase of the research, we prepared a questionnaire based on coding in which options from one to five could be chosen. We chose the shortest words which we got through coding in the first questionnaire. The word order was randomly selected, not on the basis of frequency. The second questionnaire consisted of seven questions.

### **Results and interpretation**

Below we present a graph with the words which preschool teachers choose in the first research question and highlighted as significant for encouraging self-regulated learning of preschool children.

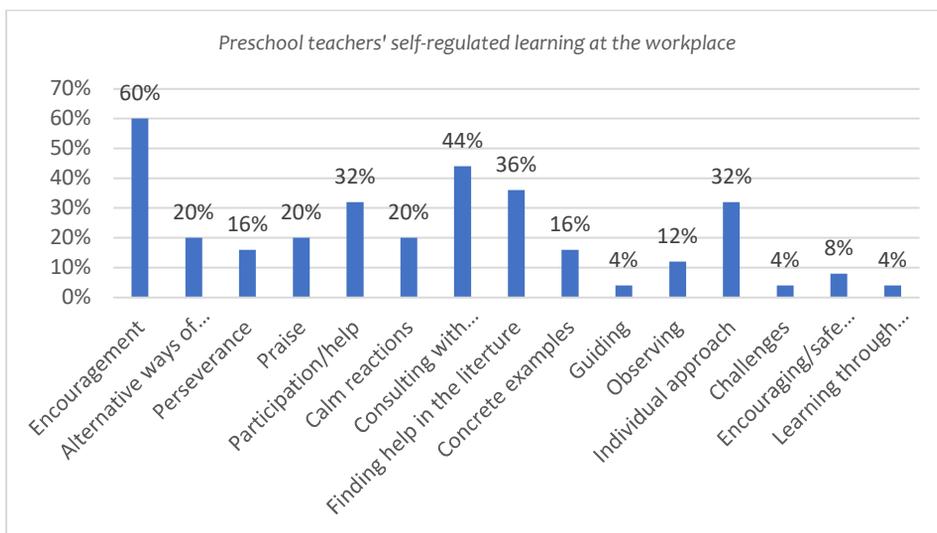
**Graph 1:** The most frequently used words in the first round of the research

From Graph 1 we can see the beliefs of the participants regarding what is the most important for encouraging children's self-regulated learning (behavior in the preschool). The great majority of the participants (72%) believe that learning through examples is important (imitating others). Slightly more than half of the subjects say that independent participation of the children is central, (48%) believe that encouragement is important, while (36%) consider hints i.e. guiding to be significant. Observing and dialogue were selected by 28% of the participants while 12% opted for aspiration. A smaller number of participants (8%) selected challenges and interest of the teacher, while only 4% of the participants noted that an adequate environment and interesting topics were important.

Here we present the answer of one of the participants to the first question: *"I believe that self-regulated learning is useful, primarily because it incorporates feedback, because it means that the preschool teacher constantly monitors the child's learning, but also because the child independently reaches the goal/new knowledge. The preschool teacher is a role model for the children, who observe and imitate him/her. Hence, it is very important how the preschool teacher learns and how he/she reacts to success and failure."*

For the second research question regarding how preschool teachers define their own self-regulated learning at the workplace the following data were gathered:

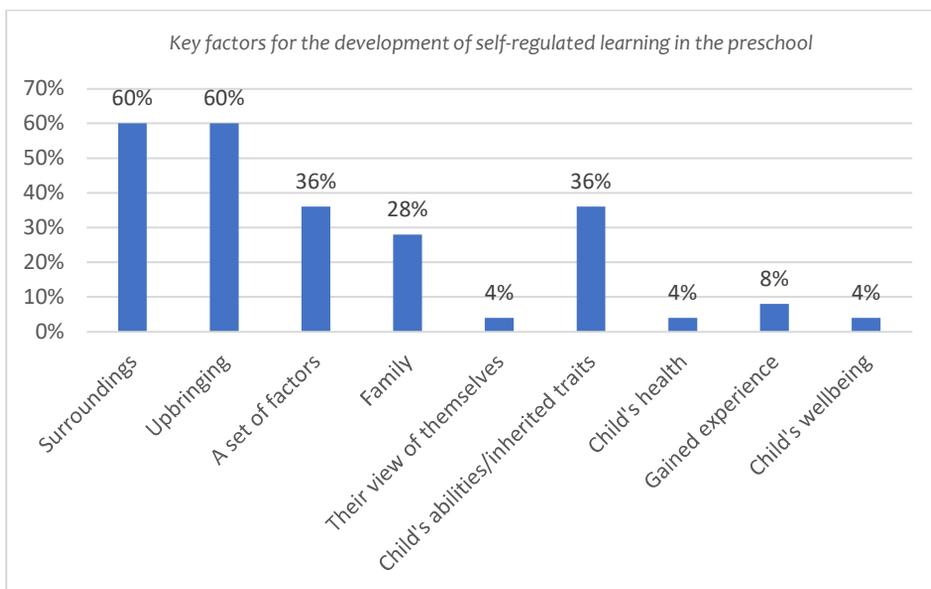
Graph 2 shows the most frequently used words which define the preschool teachers' self-regulated learning at the workplace.



From Graph 2 we can see the most frequently used words with which the preschool teachers defined their own self-regulated learning at the workplace and how they react when they are faced with problems during self-regulated learning. Most participants (60%) face difficulties in self-regulated learning through different incentives, (44%) consult with their colleagues or friends, (36%) searches for help in the literature. Another 32% of participants solve their problems through cooperation with colleagues or the individual approach. Alternative ways of motivation, praise and calm reactions are used by 20% of the participants. For 16% of the participants problems are solved through persistence while 12% indicate giving concrete examples as the solution. The research indicates that 8% of participants note an encouraging and safe environment while only 4% of the participants mentioned guidelines, challenges, examples, help of the children in the group and notes.

Here we present the answer of one of the participants to the second question: *“I most often deal with problems in a way that my intuition indicates. In all of my years of work I have rarely ‘made a mistake’ in my reaction to a behavior. When I found myself in a new situation, when I did not know where I stood, I searched for help in the literature. If I did not know in which literature to search for help, I asked my colleagues and preschool director for help and in that way got the needed information. Above all else it is important to know the child well so that I know how to help him/her, maybe they need more encouragement or more time because I know that they will find the solution in their own way. Always individually.”*

Graph 3 shows us the most frequently used words which the preschool teachers defined as important factors for the development of self-regulated learning in the preschool.



In Graph 3 we can see which words the preschool teachers used as key factors for the development of self-regulated learning in preschool aged children. The largest percentage of preschool teachers (60%) believe that the key factors are the environment and upbringing. Two smaller factors of equal size (36%) answered that it was a set of factors and that the development of self-regulated learning depended on the child's abilities and inherited traits. A yet smaller percentage of participants (28%) believe that family is the key factor while 8% of the participants believe that it is the child's experience. The child's self-respect, health and wellbeing were listed as factors by 4% of the participants.

Here we put forward the answer of one of the participants to the third research question: *"It is difficult for me to determine which is the most important because it depends on a number of factors. I think it is individual for each child. I believe that they are all important, starting from the inherited traits, the influence of the family is extremely important regarding the type of encouragement that they give to the child from birth. The preschool, peers and preschool teachers also have a big influence. However, I believe that the environment in which the child functions has the greatest influence. In every group of children there are those who need less encouragement and those who need a lot of reassurance. As preschool teachers, or teacher assistants, we are the ones who, by getting to know the child, need to assess how much encouragement he/she will need."*

For the second stage of the research we prepared a questionnaire based on the codification of the posed questions with the assessment of the positions from one to five. We selected the most frequent words which we got through the codification from the first questionnaire. The order of the words is random, and not on the basis of the most frequent answers. The questionnaire contained seven questions.

In the following section we present the results of the second phase of the research:

**Table 1:** Which approaches are the most useful to you for the encouragement of self-regulated learning of preschool children?

We have shown the most frequent answers regarding the approaches for developing/encouraging self-regulated learning (behavior) of preschool children								
	Strongly disagree	Disagree	Partially agree	Agree	Strongly agree	Total	AS	SO
Hint/guidance	1	1	2	17	4	25	3,9	0,88
	4%	4%	8%	68%	16%	100%		
Independent participation of the child	0	0	1	13	11	25	4,4	0,58
	0%	0%	4%	52%	44%	100%		
Encouragement	0	0	1	11	13	25	4,5	0,59
	0%	0%	4%	44%	52%	100%		
Learning through examples	0	0	0	8	17	25	4,7	0,48
	0%	0%	0%	32%	68%	100%		
Observing	0	0	2	12	10	24	4,3	0,64
	0%	0%	8%	50%	42%	100%		
Dialogue	0	0	4	9	12	25	4,3	0,75
	0%	0%	16%	36%	48%	100%		

Table 1 presents the approaches which the participants considered to be important for the development and promotion of self-regulated learning, on the basis of the questions posed in the first phase of the research. Their answers were measured on a scale from 1 to 5, in which 1 means strongly disagree and 5 means strongly agree. The participants strongly agree that learning through examples (through observation) (AS = 4,7; SO = 0,48) and encouragement (AS = 4,5; SO = 0,59) are important for the development and promotion of self-regulated learning. The participants agree that independent participation of the child (AS = 4,4; SO = 0,58), dialogue (AS = 4,3; SO = 0,75), observing (AS = 4, 3; SO = 0,64) and hint/guidance (AS = 3,9; SO = 0,88) are important for the development and promotion of self-regulated learning. We compared the results gathered in the first phase of the research through the interview and the second gathered through the questionnaire. In the first phase we only gave the frequency and percentages of the answers, in the second phase we measured agreement with the frequency of matches from the first phase on a scale of 5 points, where 1 meant strongly disagree and 5 meant strongly agree. For the best comparison of the results we used frequencies and percentages of the answers from the category completely agree. In the first stage of the research, 36% of participants said that the presence of hints or guidance was important for the development of self-regulated learning while in the second stage of the research only 16% of the participants indicated the same. In the first stage of the research slightly more than half of the participants (52%) selected independent participation of the children as an important approach, while slightly less than half of the participants (44%) selected in in the second stage. In the first stage slightly less than half of the participants (48%) selected encouragement as an important approach, while it was selected in the second round by slightly more than half of the participants (52%). In the first stage 72% of the participants notes encouragement with an “example”, and in the second stage 68% selected the same. In the first stage 28% of the participants noted that observation was an adequate approach for encouraging self-regulated learning, while 42% of the participants selected it in the second stage. Discussion as a viable approach for encouraging self-regulated learning was selected by 28% of the participants in the first stage of the research and by 48% of the participants in the second.

**Table 2:** The display of answers from the second stage of the research regarding the preschool teachers' own self-regulated learning at the workplace.

Most frequent answers regarding the preschool teachers' self-regulated learning at the workplace								
	Strongly disagree	Disagree	Partially agree	Agree	Strongly agree	Total	AS	SO
Asking colleagues/friends for advice	0	0	4	14	7	25	4,1	0,67
	0%	0%	16%	56%	28%	100%		
Consulting the literature	0	0	5	12	8	25	4,1	0,73
	0%	0%	20%	48%	32%	100%		
Encouragement	0	0	1	13	11	25	4,4	0,58
	0%	0%	4%	52%	44%	100%		
Cooperation	0	0	1	10	14	25	4,5	0,59
	0%	0%	4%	40%	56%	100%		
Calm reactions	0	0	2	12	11	25	4,4	0,64
	0%	0%	8%	48%	44%	100%		
Alternative ways of motivation	0	1	5	11	8	25	4,0	0,84
	0%	4%	20%	44%	32%	100%		

Table 2 shows the factors which are, according to the beliefs of the preschool teachers, key for the development of self-regulated learning. Their answers were measured on a 1 to 5 scale in which 1 means strongly disagree and 5 means strongly agree. The participants agree that a set of factors is important for the development of self-regulated learning (AS = 4,4; SO = 1,00). They also agree that key factors for the development of self-regulated learning are the following: the environment (AS = 4,4; SO = 0,58), upbringing (AS = 4,3; SO = 0,69), gained experience (AS = 4,1; SO = 0,93), family (AS = 4,0; SO = 0,89), the child's abilities and inherited traits (AS = 3,6; SO = 1,15).

We compared the results gathered with interviews in the first stage of the research to the results gathered in the data gathered with a questionnaire in the second stage of the research. Their answers were measured on a scale from 1 to 5, in which 1 means strongly disagree and 5 means strongly agree. For the best comparison of the results we used frequencies and percentages of the answers from the category completely agree. In the first stage 44% of the participants said that they deal with self-regulated learning and problems at the workplace by consulting friends and colleagues, while only a quarter (28%) of the participants made the same statement in the second stage of the research. Help was sought in the literature by 36% of the participants in the first stage and 32% in the second stage of the study. In the first stage 60% of the participants noted encouragement as a way of learning and problem solving in the workplace, while 44% noted the same in the second stage. In the first stage of the study 32% of the participants noted participation as a way of learning and solving potential problems in self-regulated learning at the workplace, while slightly more than half of the participants 56% noted the same in the second phase of the study. Calm reactions were noted as a way of learning and solving potential problems in self-regulated learning at the workplace by a fifth of the participants in the first stage of the study and in the second stage by 44% of the participants. In the first stage of the study a fifth of the participants noted alternative ways of motivation as a way of learning and solving potential problems in self-regulated learning, while a third (32%) of the participants noted the same in the second stage of the study.

**Table 3:** Display of answers form the second phase of the research – key factors for the development of self-regulated learning of preschool children

The most frequent answers, which factors in your opinion are key to the development of preschool children's self-regulated learning								
	Strongly disagree	Disagree	Partially agree	Agree	Strongly agree	Total	AS	SO
Child's abilities/inherited traits	2	2	5	11	5	25	3,6	1,15
	8%	8%	20%	44%	20%	100%		
Environment	0	0	1	12	12	25	4,4	0,58
	0%	0%	4%	48%	48%	100%		
Upbringing	0	0	3	11	11	25	4,3	0,69
	0%	0%	12%	44%	44%	100%		
Family	1	0	4	14	6	25	4,0	0,89
	4%	0%	16%	56%	24%	100%		
Set of factors	1	0	3	5	16	25	4,4	1,00
	4%	0%	12%	20%	64%	100%		
Gained experience	1	0	3	12	9	25	4,1	0,93
	4%	0%	12%	48%	36%	100%		

Table 3 presents factors which are key for the development of self-regulated learning, according to the opinions of the participants. Their answerers were measured on a scale from 1 to 5, in which 1 means strongly disagree and 5 means strongly agree. For the best comparison of the results we used frequencies and percentages of the answers from the category completely agree. Participants agree that a set of factors is key for the development of self-regulated learning (AS = 4,4; SO = 1,00). Participants also agree that the following factors are very important for the development of self-regulated learning: environment (AS = 4,4; SO = 0,58), upbringing (AS = 4,3; SO = 0,69), gained experience (AS = 4,1; SO = 0,93), family (AS = 4,0; SO = 0,89), child's abilities and inherited traits (AS = 3,6; SO = 1,15).

We compared the results gathered with interviews in the first stage of the research to the results gathered in the data gathered with a questionnaire in the second stage of the research. Their answerers were measured on a scale from 1 to 5, in which 1 means strongly disagree and 5 means strongly agree. For the best comparison of the results we used frequencies and percentages of the answers from the category completely agree. Children's abilities and inherited traits were considered key for the development of self-regulated learning by 36% of the participants in the first stage of the study, while 25% of the participants considered them key in the second phase of the study. In the first phase 60% of the participants noted upbringing as a key factor for the development of self-regulated learning, while in the second phase the same was noted by 44% of the participants. Family was noted as a key factor for the development of self-regulated learning by 36% of participants in the first phase and 64% of participants in the second stage of the study. A third of the participants (36%) from the first phase and a bit less than two thirds of participants (64%) in the second phase consider a set of factors to be decisive for the development of self-regulated learning. In the first phase 8% of the participants selected gained experience as a key factor for the development of self-regulated learning, while in the second phase 36% of the participants did the same.

### Conclusion

From the analysis of the gathered data, most preschool teachers believe that for the development of self-regulated learning it is important for the children to learn by observing

others and through practical examples. Imitative learning is learning through mimicry and observation of people in the environment, who we are in direct contact with starting from infancy. Imitative learning is the most common way of learning of toddlers and children. In this way they learn to express their emotions, to speak, most household tasks, motor skills and social behaviors (Bergant, 2014). High frequency of the independent participation of the child, tells us that preschool teachers believe that children will master self-regulated learning and behavior if they manage their activities independently. Researchers Bodrova i Leong (2007) encouraged preschool children to plan their own activities in play. They note that (self-) planning helps children develop and promote self-regulatory skills. Bastistic Zorec (2002), wrote that children learn the best when they are faced with problems which are important and meaningful to them. This means that children learn about self-regulation and self-regulated learning through activities which they control and through which they want to achieve a goal. Answers of the preschool teachers confirm that they understand the concept of self-regulated learning and the importance of encouraging preschool children in the process of self-regulated learning.

From the analysis of the data regarding their own self-regulated learning, how they define self-regulated learning and how they deal with potential problems which they might face, preschool teachers mostly noted encouragement, consulting with colleagues and friends and finding help in the literature. The relationship between the child and the adult is an important factor in the educational process (Psunder, 2011). For the preschool teacher it is important to know when the child needs help so that he/she may find ways in which to provide the needed help. In this way the preschool teacher demonstrates his/her self-regulation skills, and simultaneously supports the self-regulation skills of the child (Flores, 2011).

Answers to the third research question indicate that preschool teachers identified surroundings and upbringing as the most important factors which influence self-regulation and self-regulated learning in children. Self-regulation and self-regulated learning are certainly connected to interaction with the environment (family, preschool, community) and education. The construct of the Bronfenbrenner attention model helps explain how children learn and develop, the importance of their individual characteristics and the role of the social environment in which they live, as help for the chapping of their learning and adaptation to the environment (Taylor i Gebre, 2016). Competencies of the preschool teacher are also important for creating an environment in which every child can meet his/her needs. Active participation in the preschool is achieved when the preschool teacher purposefully uses approaches which ensure a higher level of child participation in the process of acquiring information and experiences, especially in the process of acquiring new knowledge, ideas and concepts (Jarh, 2014).

For the third research question we compared the results gathered through an interview in the first phase of the research to the results gathered with a questionnaire in the second phase of the research. In the second phase the preschool teachers assessed that the following factors are key for the development of self-regulated learning: a set of factors, surroundings, upbringing and gained experience. These factors were followed by: family, the child's abilities and inherited traits.

On the basis of the data gathered through the Delphi method, we can say that preschool teachers are familiar with the proposed issues, which is evident in their beliefs regarding the essence of the phenomena of self-regulation, which they believe starts by enabling the children for self-regulated learning at the earliest age. It is important to mention, although preschool

teachers are familiar with this, that early learning, encouragement and support are decisive and that children will never be able to make up for what is missed in this period. Zigler and colleagues (2021.) highlight that an individual perfects his/her learning abilities during learning and believes that through learning we can always learn more. With this research we paved a way for a more detailed research of self-regulated learning at the early and preschool age. We believe that this problem needs to receive more attention.

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