

SMARTPHONE AND TABLET IN THE EVERYDAY LIFE OF PRESCHOOL CHILDREN. IMPACT AND EDUCATIONAL OPTIONS IN THE OPINION OF PARENTS AND TEACHERS OF KINDERGARTEN.

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Abstract

In the presented article, the author explains the need for reflection on the use of a smartphone or tablet by the youngest media users. It presents current research on the use and impact of mobile devices on children, as well as the destructive dimension of the consequences caused by their excessive use as well as the need and scope of education of media competence of preschoolers. The author also presents the results of her own research regarding parents' opinions on the role and impact of a smartphone / tablet in children's everyday life. It also presents the teachers' view on the role of educators in the process of acquiring media competence by children.

Keywords: smartphone, tablet, children, media competence, media education

Introduction

Technological progress in recent years has meant that modern man cannot imagine life without the presence of media and their use. We use new technologies with increasing commitment and smartphones and tablets are especially popular. These devices are not used, as a few years ago, only by adults and teenagers, but increasingly also by children - especially the youngest, in preschool. That is why on the streets, in restaurants, parks or in shopping centres you can see children glued to smartphones and tablets. Not without a reason, many psychologists, therapists and paediatricians call the smartphone the "21st century pacifier", because parents are increasingly reaching for the devices to calm down or distract their children.

As a result, the functioning of the youngest children in the family and society has changed. New forms of behaviour and communication have appeared in children. Often

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these are disturbing behaviours. We meet children who are able to efficiently slide their finger on the screen of a smartphone or tablet and who are unable to properly hold a pencil or build from blocks. Many preschoolers also struggle with poor word resources and emotional disorders resulting from the abuse of mobile devices. There are also reports of therapists that parents of the youngest media users are increasingly seeking help in their clinics.

Given the above premises, the subject of my interest in this article are preschool children and preschool teachers. The goal is to present parents' opinions on the role of a smartphone / tablet in everyday life and impact on the youngest users, as well as the role of preschool teachers in the process of acquiring media competence by children.

The research

"(...) whenever a medium is defined as a threat to young people, we can expect a campaign led by adults who will want to censor or restrict access to this medium. Later, there is a decrease in interest, until a new medium appears which will again chase the public debate and fuel the fire of moral panic." [Pyżalski, 2011, p. 150].

Research shows that young children are increasingly willing to use mobile devices. Over 40% of 1 and 2-year-old children use tablets and smartphones, 62% of 3 and 4 year-olds, 84% for 5 and 6 year-olds. 13% of one- and two-year-old children, 25% of three- and four-year-old children, 39% of five- and six-year-old children have their own device of this type. Children usually use their parents' smartphones or tablets, as many as 80% of guardians make the device available to children under six. [Bak 2015] Very often parents use a smartphone as an educational measure. 18% of parents treat the tablet as a tool to put the child to sleep and provide comfort. [Pawelec 2017]

According to prof. Edyta Gruszczyk-Kolczyńska's data on the use of a smartphone or tablet by children are appalling. According to her opinion, children devoting too much time to playing with mobile devices are developing worse; they are unable to operate in the real world. "(...) they are on a leash of mobile devices. Instead of the child's mind, the child's head creating the world – the child is led on this leash of flickering pictures on a cold, slippery screen." [Nowicka 2018]. The doctors from the American Medical Association go a step further in their research. They claim that children spending too much time in front of mobile device screens are at risk of brain damage. Underdevelopment of the white matter of the brain occurs, i.e. the area responsible for the development of language and cognitive functions. [Hutton, Dudley, Horowitz-Kraus 2019]

Consequences of smartphone and tablet abuse

The prolonged use of mobile devices too early in life is harmful to young children. As a consequence of these actions, we can observe:

- disturbed learning process - in the learning process, tactile, motor and visual experiences are necessary, as a result of which representations are formed in the child's mind. These are constructs, thinking tools, conclusions and comparisons. Children devoting too much time to activities related to mobile devices are deprived of the first two types of experiences. [Nowicka, 2018].
- problems with hyperactivity - emissions from screens may lead to abnormal development of the child's brain and contribute to the development of attention deficit hyperactivity disorder, i.e. ADHD. There may also be problems with concentration, self-control and creativity. [Bouggisaa, Kopcewicz 2016]
- physical problems - the most common consequences are motor and sensory deficits, posture defects, vision defects, wrist injury syndrome and obesity. On the other hand, the new deficit in this area is the "smartphone neck", i.e. a team manifested by neck, shoulder, head, inter-shoulder pain and numbness of the hands.

- interpersonal problems - as a result of spending too much time on mobile devices, the child withdraws from the relationship with the environment. Contact with the device substitutes contact with another person or is a replacement for meetings in a peer group. Consequently, relations with the environment are destroyed. [Więczkowska 2012]
- impaired verbal communication - is a consequence of excessive processing of sound and image stimuli by children and insufficient amounts of language stimuli. Children learn speech by imitation and contact with a living word. A child who abuses devices is deprived of contact with other people, has no opportunity to enrich vocabulary, and does not improve natural communication skills. [Hutton et al., 2019]
- deficit of creativity and imagination - the applications available on the tablet or smartphone used by the child are to help cope with boredom. However, they kill creativity and imagination in a child. Because the presented ready-made schemes of actions and behaviours take the child's space to create their own schemes and ideas for fun. [Spitzer 2013]
- addiction - in relation to telephones, referred to as "phonoholism". This is a behavioural addiction consisting of an uncontrollable desire to own a phone, not putting it down, and feeling severe discomfort in having to put down the device due to bad mood, crying, and anxiety or panic attacks. Young smartphone users and children are increasingly facing this consequence. [Barabas 2,018]

Presentation of the author's research

The research presented in the article was divided into two parts. The purpose of the first study was to learn the opinions of parents of preschool children about the use and impact of a smartphone / tablet on the youngest users. The subject of my research was the way the smartphone / tablet were used, the frequency and circumstances of their use as well as the impact on the child. In order to obtain answers to the research problems posed, in September 2019 I conducted a survey. Its location was a selected Private Kindergarten in Warsaw, attended by 108 children aged 2.5 to 6 years. I asked parents of the institution's pupils to complete an online survey. The questions formulated in it were closed. 91 parents took part in the study, which is 84.25% of the total.

For the first stage of research, I adopted the following research hypotheses:

- Children's use of mobile devices may affect a child's intellectual, physical and emotional development.
- Children using mobile devices without parental supervision tend to use them excessively. They prefer playing with a smartphone / tablet over other activities.

Table No. 1 Characteristics of the studied parent population

Source: the author's research

	respondents		Women		Men		Total	
			L.	%	L.	%	L.	%
1	Sex		75	82.41	16	17.58	91	100.00
2	Age	20-25	0	0.00	3	3.29	3	3.29
		26-39	64	70.32	6	6.59	70	76.92
		40 and more	11	12.08	7	7.69	18	19.78
3	EDUCATION:	professional	0	0.00	0	0.00	0	0.00
		high school	0	0.00	4	4.39	4	4.39
		Higher, professional	7	7.69	3	3.29	10	10.98
		Higher, master	68	74.72	9	9.89	77	84.61

	respondents		Women		Men		Total	
			L.	%	L.	%	L.	%
4	place of residence	village	0	0.00	0	0.00	0	0.00
		city below 50 thousand	0	0.00	0	0.00	0	0.00
		city above 50 thousand	75	82.41	16	17.58	91	100.00

Among the surveyed parents, 82.41% were women, 17.58% were men. 3.29% of men are 20-25 years old, 70.32% women and 6.59% of men are between 26-39 years old, and 19.78% of parents are 40 years old and older. 4.39% graduated from high school, 7.69% women and 3.29% men declare higher vocational education. 74.72% of women and 9.89% of men have a master's degree. All parents live in a city of over 50,000 inhabitants.

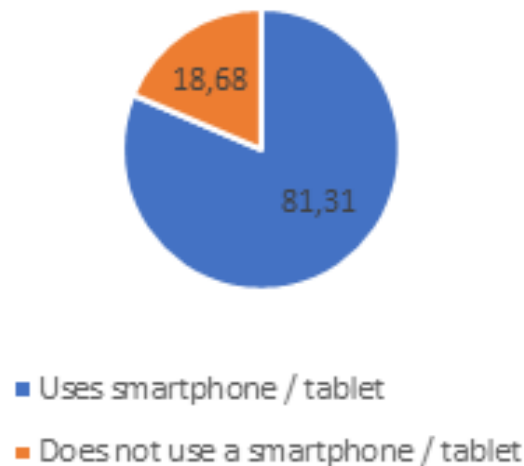


Chart 1. Using smartphone / tablet mobile devices
Source: the author's research

The above data shows that most children use a smartphone / tablet. 81.31% of parents declare that their children use a smartphone / tablet, while the remaining group, i.e. 18.68 say they do not.

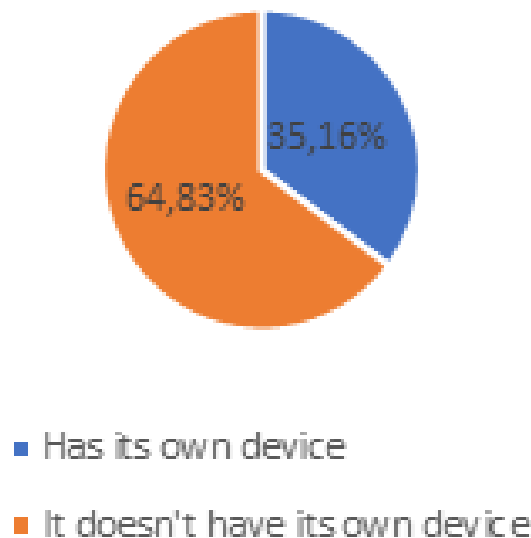


Chart 2. The child has their own smartphone / tablet
Source: the author's research

35.16% of children have their own mobile device - a tablet. However, 64.83% of children use the devices of their parents, older siblings or other household members.

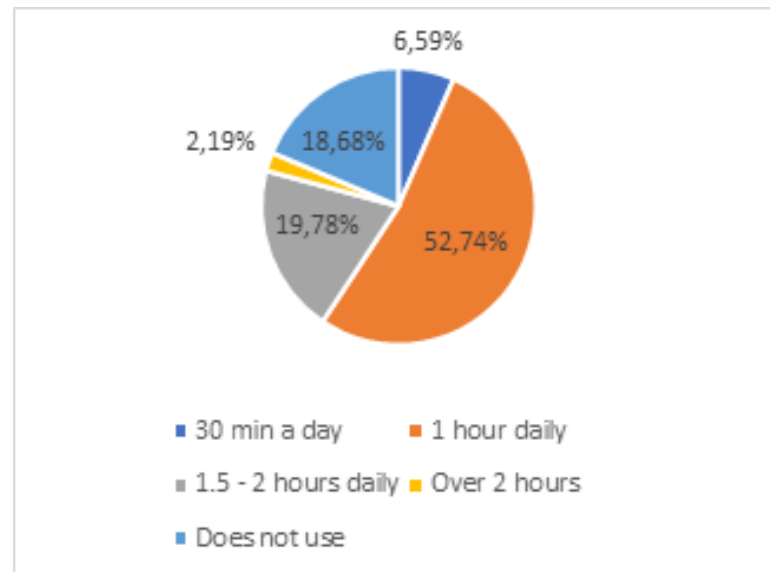


Chart 3. How often the child uses the smartphone / tablet

Source: the author's research

The above data indicates that 52.74% of preschool children use mobile devices 1 hour a day. 19.78% use their smartphone / tablet for 1.5 - 2 hours a day. 6.59% of children spend 30 minutes a day on mobile devices and 2.19% of respondents over 2 hours a day. 18.68% did not specify the frequency of use of the devices by their children because they do not use them.

The surveyed parents were asked to answer the question of whether they set out the rules for using the smartphone / tablet by the child.

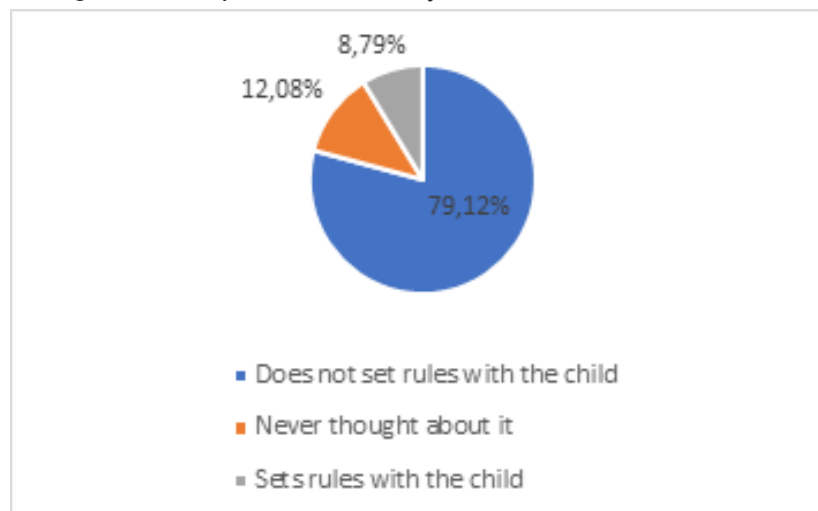


Chart 4. Rules for using a smartphone / tablet by a child

Source: the author's research

79.12% of parents surveyed declare that they do not set rules regarding the use of a telephone or tablet with a child. 12.08% of respondents claim that they never thought about it, and 8.79% of respondents confirm that they introduced such rules.

When introducing the rules, consistency is essential. That's why I asked the parents

about enforcing children's media usage rules.

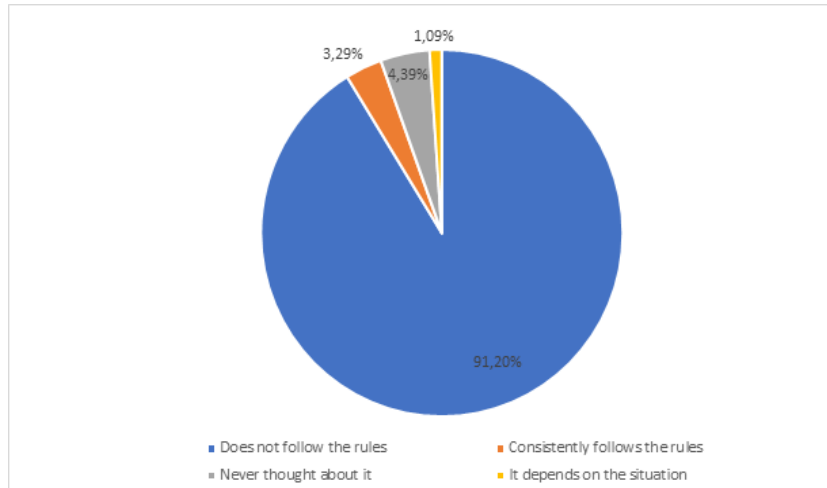


Chart 5. Consistency of parents in complying with the rules agreed with the children
Source: the author's research

91.20% of respondents say that they do not stick to consistent rules regarding the use of mobile devices. It is noteworthy that this figure increased by 12.08% compared to the previous chart. This means that parents declaring the introduction of rules for using mobile devices can be inconsistent. 3.29% of parents believe that they are consistent in implementing arrangements with children, 4.39% of respondents have never thought about it, and 1.09% say that the enforcement of arrangements with children depends on the situation.

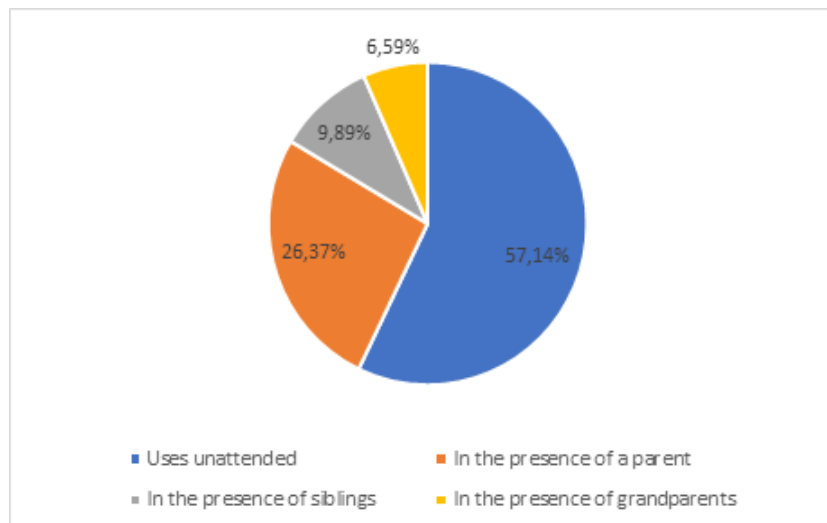


Chart 6. Accompanying your child while using a smartphone / tablet
Source: the author's research

The above data shows that as much as 57.14% of children use a smartphone / tablet without supervision. 26.37% of children are accompanied by a parent, 9.89% older siblings and 6.59% grandparents.

I also asked my parents about the activities most often chosen by children. Parents in this question could choose more than one answer.

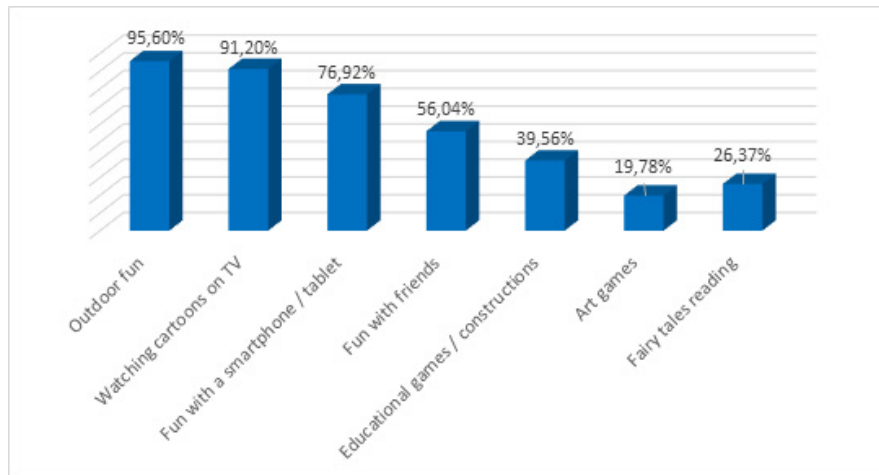


Chart 7. Activities most often chosen by preschool children

Source: the author's research

The vast majority of children, 95.60% prefer to play outdoors. Cartoon watching on TV is also very popular, as indicated by 91.20% of parents and playing with a smartphone / tablet, which is declared by 76.92% of respondents. Children at this age are happy to play with their friends - 56.04% say so, they play educational games, build from blocks, 39.56% of respondents said so. Artistic games enjoy less interest among children, 19.78% of children like them and reading fairy tales, 26.37% of preschoolers choose them.

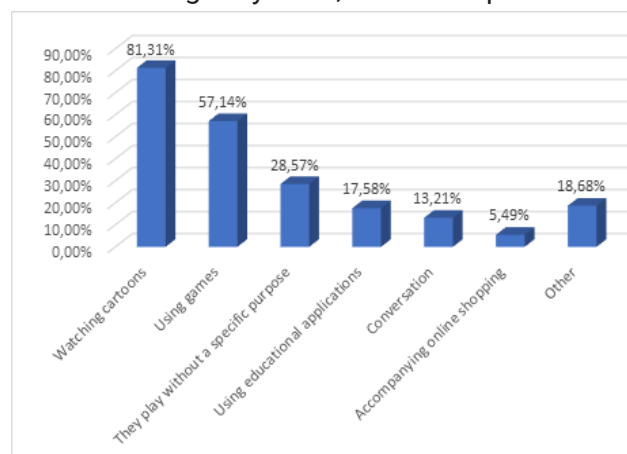


Chart 8. Activities performed by preschool children on a smartphone / tablet

Source: the author's research

As parents declare - 81.31% of children most often use a smartphone or tablet to watch cartoons or use games installed on devices, as indicated by 57.14% of respondents. 28.57% of respondents say that their children play with mobile devices without a specific purpose and 17.58% of children use the educational applications available on them. 13.21% of preschoolers talk with their loved ones via smartphone and 5.49% of children accompany their parents in online shopping. 18.68% of respondents gave a different answer.

In addition to the activities undertaken by the youngest users of mobile devices, it is important in which situations they most often reach for them. In response to this question, respondents could choose more than one answer.

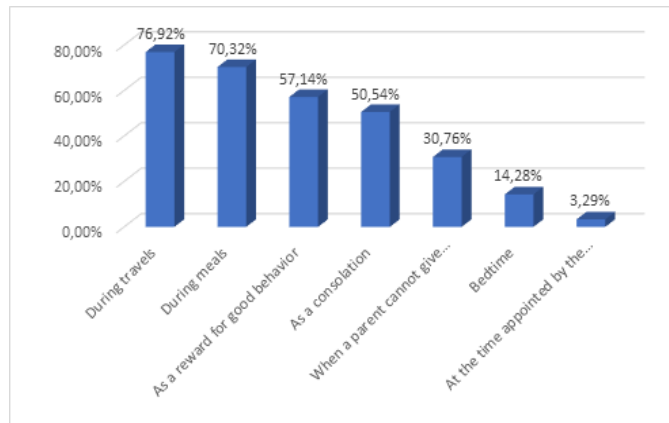


Chart 9. Situations in which a child most often uses a smartphone / tablet

Source: the author's research

According to parents, 76.92% of children most often reach for a mobile device during travel and during meals - 70.32% of respondents declare this. 57.14% of respondents give children a smartphone or tablet as a reward for good behaviour; 50.54% of parents use these devices as a "comforter" when the child is sad or irritable. 30.76% of children play with the device when a parent cannot pay attention to it, 14.28% of preschoolers reach for it before bedtime and 3.29% of children use it at the time designated by the parent.

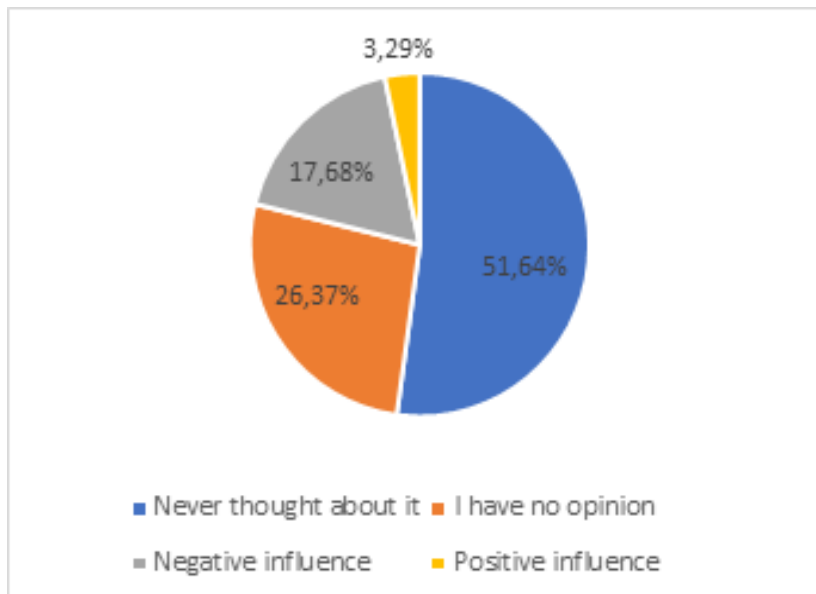


Chart 10. Parents' opinion on the impact of a smartphone / tablet on the behaviour of preschool children

Source: the author's research

Most parents, which is 51.64%, declare that they have never thought about the impact of mobile devices on the behaviour of children, and 26.37% of respondents have no opinion in this regard. 17.68% of respondents believe that mobile devices have a negative impact on their children's behaviour, and 3.29% of respondents think the opposite.

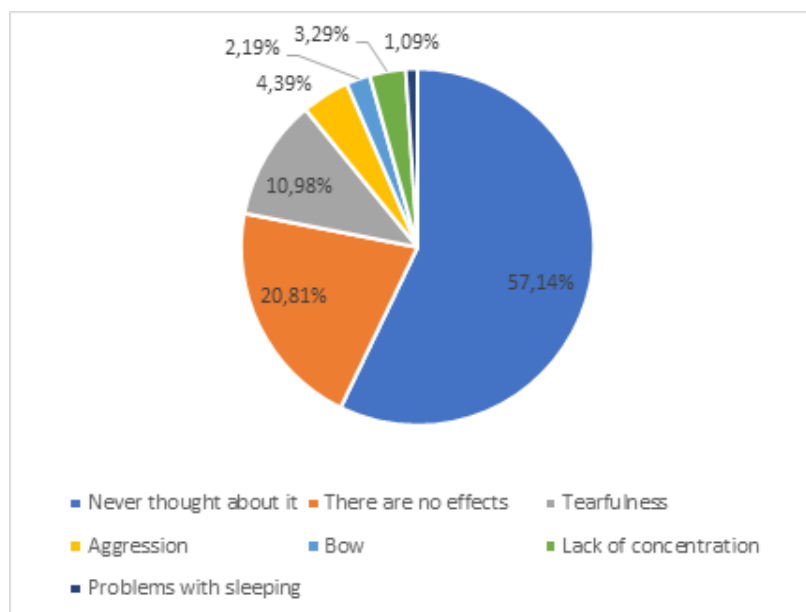


Chart 11. The effects of excessive use of the smartphone / tablet by preschool children
Source: the author's research

As in the previous question, 57.14% of parents declare that they have never thought about the consequences of excessive use of a smartphone or tablet by children. 20.81% of respondents believe that they have no effects. Whereas 10.98% of parents notice that their children are becoming tearful, aggressive - 4.39%, anxious - 2.19%. The consequence is also a concentration barrack in children - 3.29% and sleep problems - 1.09%.

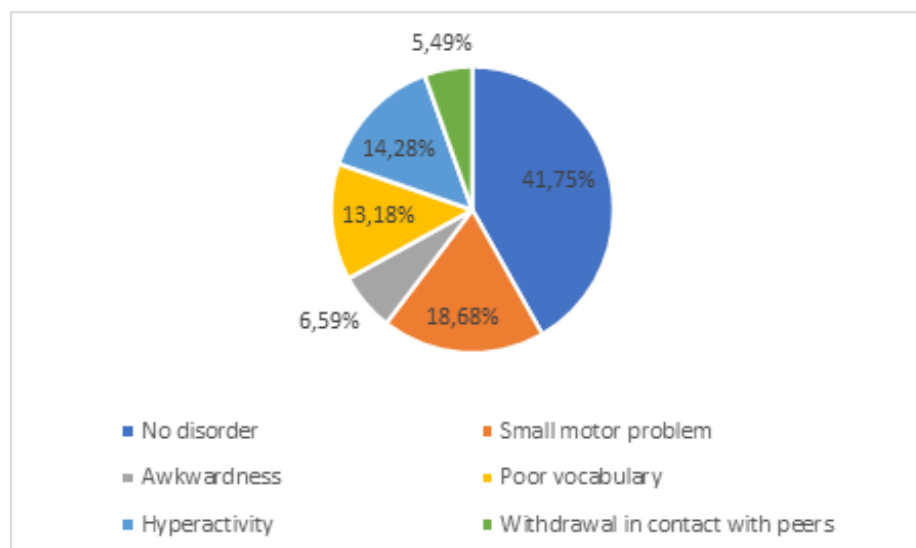


Chart 12. Disorders in the development of preschool children resulting from excessive use of the smartphone / tablet
Source: the author's research

Due to the intensive development of preschool children and the newly developing nervous system of preschoolers, it is imperative to detect as soon as possible any developmental abnormalities to eliminate them and take all therapeutic measures. That is why I asked in turn if the parents notice any irregularities in the development of children. In reply, 41.75% of parents think their children have no developmental abnormalities. 18.68% of respondents see problems with small motor skills in children and 6.59% with

general motor clumsiness. Other disorders mentioned by the respondents were: poor vocabulary - 13.18%, hyperactivity - 14.28 and withdrawal in contacts with peers - 5.49%.

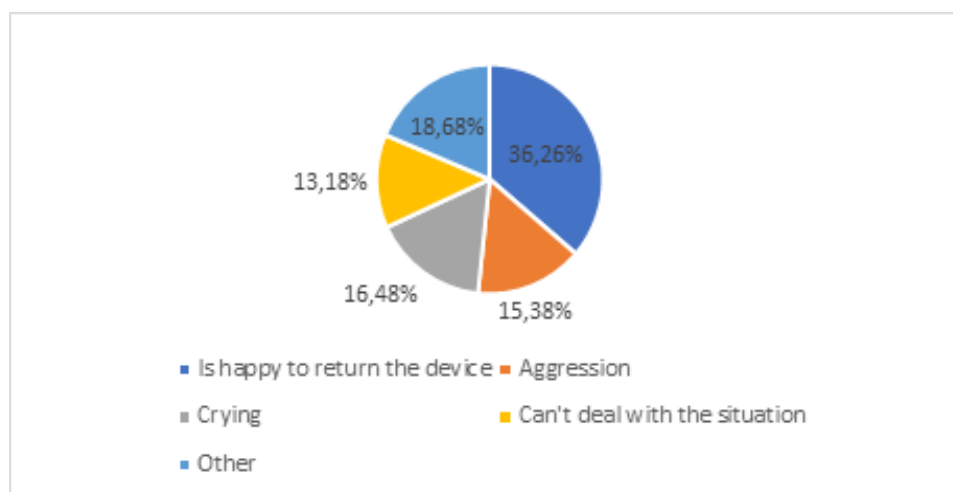


Chart 13. Behaviour of the child when requesting the return of a smartphone / tablet.
Source: the author's research

For me, particularly important, while collecting parents' opinions on children's behaviour in relation to the smartphone and tablet, was the parent's declaration about the moment when the child is asked to return the device. This is important because it gives the first possible signals about the child's excessive attachment to these objects and even these may be symptoms that indicate the user's dependence on this medium. Just over a third of parents - 36.26% declare that the child is happy to return the device. 15.38% of respondents note that the child is becoming aggressive and 16.48% of children are crying. 13.18% of children cannot cope with this situation. Other parents - 18.68% ticked "other" - they do not use these devices.

The second research stage

Skills acquired in kindergarten are among the most important and the most spectacular in a child's life. The most significant achievements of this time will undoubtedly include the child's mastery of the ability to communicate effectively and sometimes also the ability to read and write. It is also the right time to implement children in the process of acquiring media competence, i.e. in the necessary media education consisting of teaching and developing media literacy.

Hence, the goal of the second stage of the study was to find out the opinions of preschoolers teachers about the importance, methods and ways of preparing children to acquire media competence as well as teachers' competence in the field of media education. The subject of my research was teachers working in a Private Kindergarten in Warsaw, attended by children of parents asked for opinions in the first stage of this research. The questionnaire in the form of open questions was completed by 14 teachers, i.e. 100% of pre-school teachers working in this institution.

Searching for answers to the research problems formulated above, I put the following hypotheses:

- During playing, properly selected educational activities and occasional events are taking place in the kindergarten, the teacher can prepare the child to acquire media-related competences appropriate for age.
- Thanks to appropriately selected working methods, the teacher prepares children to acquiring age-appropriate media competences.

- I suppose that educational activities enabling children to acquire media competencies are implemented to a negligible extent and the teachers themselves do not have any education in this field.

	respondents		Women		Men		Total	
			L.	%	L.	%	L.	%
1	Age	20-25	4	28.57	0	0.0	4	28.57
		26-39	7	50	0	0.0	7	50
		40 and more	3	21.42	0	0.0	3	21.42
2	Education:	average	0	0.0	0	0.0	0	0.0
		high. professional	5	35.71	0	0.0	5	35.71
		high. MA	9	64.28	0	0.0	9	64.28
3	Work experience	0-5 years	6	42.85	0	0.0	6	42.85
		6-10 years old	3	21.42	0	0.0	3	21.42
		10 years and more	5	35.71	0	0.0	5	35.71
4	place of residence	village	0	0.0	0	0.0	0	0.0
		city below 50 thousand	0	0.0	0	0.0	0	0.0
		city above 50 thousand	14	100.0	0	0.0	14	100.0

The interviewed teaching staff are only women; half of them are aged 30-40. Most women, accounting for 64.28%, have a master's degree, 35.71% of the staff have a higher vocational education. Most teachers, which constitute 42.85%, work in this kindergarten for less than 5 years. 35.71% of teachers have experience longer than 10 years, while 21.42% work in this institution from 6 to 10 years. All teachers live in a city with more than 50,000 inhabitants.

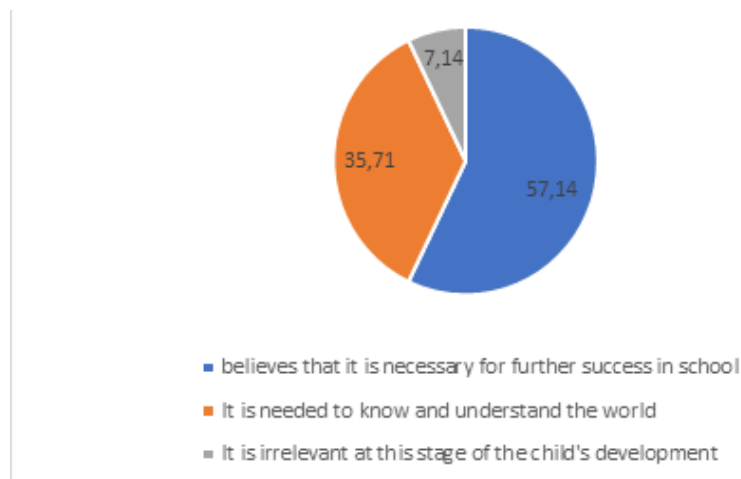


Chart 1. The importance of preparing children for media literacy in the opinion of the kindergarten teachers surveyed

Source: the author's research

Most teachers declared that preparing children for skilful use of the media is a very important task. Eight of these teachers, accounting for 57.14%, believe that acquiring appropriate media competences affects future school successes, and lack of sufficient preparation can negatively affect further education at school. Five teachers, 35.71%

sees a necessity in media skills acquired by children for a better understanding of

the world and a more complete functioning in it. In their statements, they emphasize "(...) particularly important in today's world - in which children spend a huge amount of time with a tablet and a phone using just a thumb instead of crayons and paper or in free-play - it is to teach children how to use the media."

One of the respondents, i.e. 7.14%, thinks that it is not essential to prepare children for the conscious use of the media at this stage of development "(...) they have time for it, let them devote to having fun, learning to read and write."

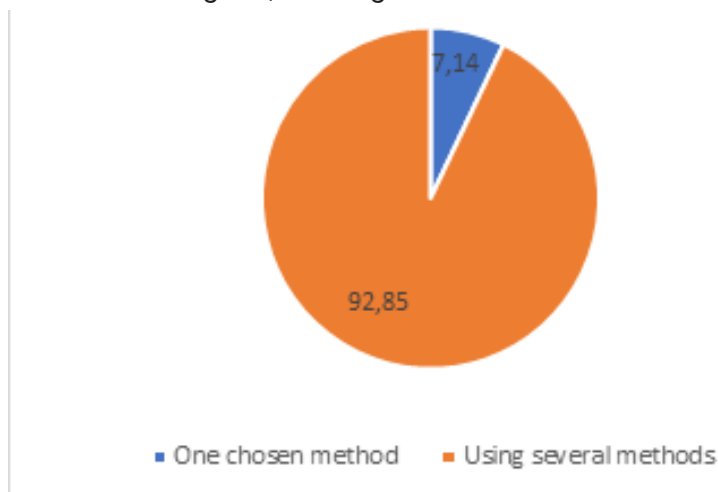


Chart 2. Methods of acquiring media competence by children used by the surveyed teachers

Source: the author's research

One of the teachers, which constitutes 7.14% of the respondents, declares that in working with children, to consolidate selected concepts in the field of media education, they use one - the chosen verbal method used when listening to and combining various types of literary works. In this way, it primarily shapes children's readiness to learn to read and write, i.e. a set of media competences in which a child leaving kindergarten should be interested in books.

Other teachers, i.e. 92.85 respondents, use several methods during the classes. At work, they use methods: active, verbal, and visual, deriving from them imitative games, observation and demonstration, sharing art and literary works, games encouraging independent experiments, exercises developing visual perception and phonemic hearing.

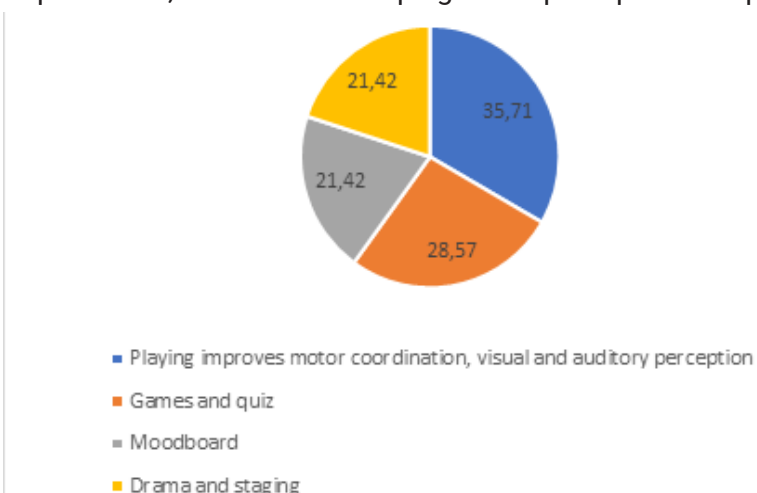


Chart 3. Educational games important for children in preparation for acquiring media competences in the opinion of the kindergarten teachers surveyed.

Source: the author's research

In the group of respondents, there were five teachers, which constitutes 35.71%, who considered the games that improve eye-hand coordination, dexterity and auditory perception e.g. (radio plays, nursery rhymes, songs) as well as visual perception to be of the highest importance. They argue their opinion by saying "(...) that this is the right time to develop these skills. Properly educated visual and auditory perception will make a child find himself in the world of media language and understand the differences between direct conversation and communication through the media. They will know that there are different ways of writing and transmitting words, images and sounds. "Four of the respondents, representing 28.57%, value games and quiz with elements of competition as particularly valuable, and 21.42% also mention drama and staging. "(...) Through drama in which children do not play their learned roles, and do not fall in, we develop in our pupils the awareness of relationships in various environments, including in the media environment. Thanks to this, children, among others, can indicate their elementary needs and emotions concerning the media. "The other two teachers, which constitute 21.42%, consider the most valuable in shaping media competence to play moodboard, i.e. classes involving the creation of a mood and educational collage. According to the teachers, preschoolers are very happy to create posters of this type. It is not only great fun for them, in which using various drawings, newspaper clippings, photos and all available art materials create beautiful artistic works (while developing small motor skills), but also present their thoughts, ideas and emotions regarding, for example: a film/fairy-tale watched or a radio play heard, etc.

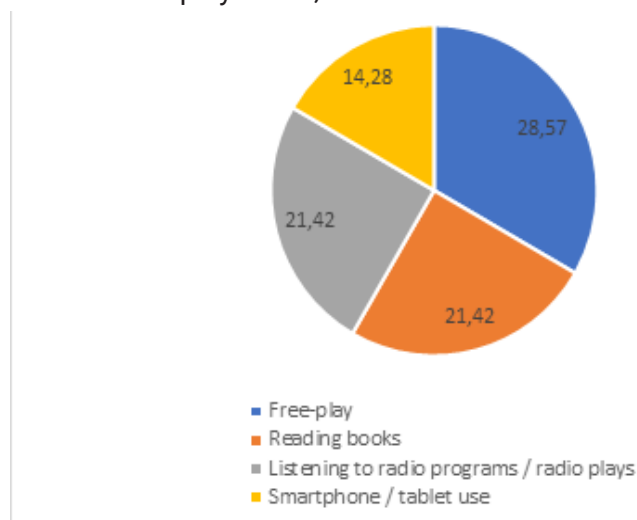


Chart 4. Methods and games used by the kindergarten teachers surveyed to motivate children to acquire media competence.

Source: the author's research

According to four teachers, which constitutes 28.57% of the respondents, the most important in acquiring media competence is free-play and creating natural situations enabling children to explore the world. They emphasize that "children are full of curiosity about the world and what surrounds them. They willingly undertake various activities themselves, they should not be disturbed. " Three teachers, accounting for 21.42%, considered reading fairy tales, asking and answering questions for the text, reading books close to the child and chosen by the child as very important. The texts selected by the child, characters, relations and examples of their behaviour are examples for children. This is particularly important because children at this age learn just by modelling. The other three teachers, i.e. 21.42%, considered listening to radio programs / radio plays very important. Thanks to them, children develop imagination, memory, shape thinking, and enrich the language. Two teachers, i.e. 14.28% of the respondents, use a smart-

phone / tablet to motivate children to learn how to use content proposed by the media selectively. In this way, teachers show children various sources of information, show how to use them, shape in pupils the need for adult help when the information obtained raises anxiety or doubt. In contrast, two other teachers indicated that in the process of acquiring any skills, the best motivation for a child is a pleasant atmosphere during classes and full acceptance of the pupil.

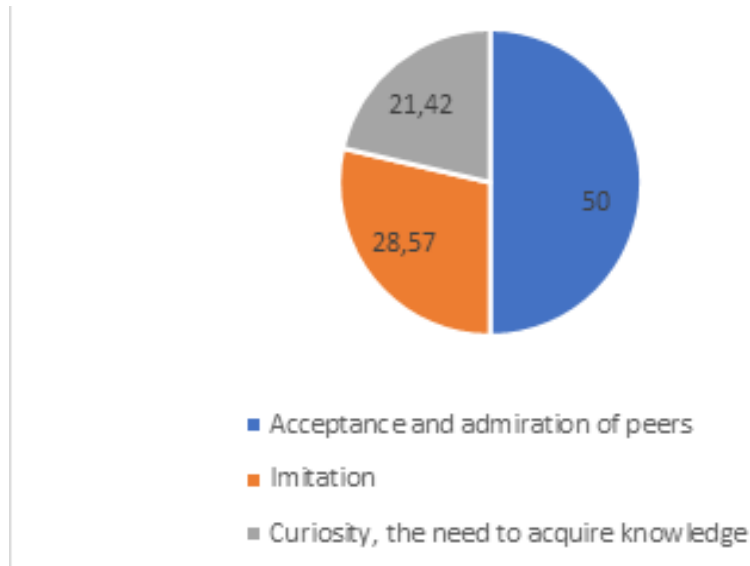


Chart 5. Factors affecting the motivation to acquire media competence in children in the opinion of the kindergarten teachers surveyed

Source: the author's research

Seven teachers, which constitute 50%, said that the child sees the acceptance and admiration of peers in the skill of efficient smartphone / tablet use. "Quick use of a smartphone / tablet, efficient reading of commands in mobile applications or the ability to call, for example, the emergency number dialled makes children see their independence. It gives a sense of self-confidence, peer acceptance, and often admiration. "Four teachers, representing 28.57%, note that imitation is a factor in the willingness to acquire media skills for children. The child, seeing every day their loved ones using, e.g. a tablet / smartphone, also wants to use these devices. This activity becomes entirely natural for the child. In turn, 21.42% of respondents think that the decisive factor motivating children to acquire new skills is children's curiosity about the world and the need to acquire knowledge.

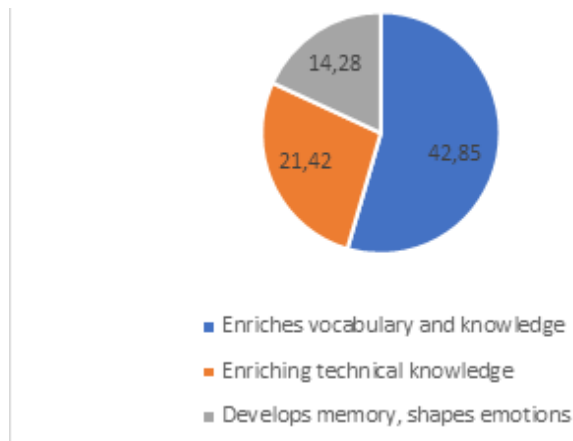


Chart 6. The impact of meetings with media representatives organised in kindergarten on the motivation of children to acquire media competence in the opinion of the teachers surveyed

Source: the author's research

All teachers confirmed that theatres organised in kindergarten, meetings with media representatives awaken in children the need to acquire media competence. Six teachers, or 42.85% of respondents, believe that such meetings enrich children's vocabulary and knowledge about the world. Three of the teachers surveyed, or 21.42%, indicate that children, thanks to such meetings, increase technical knowledge about the construction and operation of the media. Other three respondents see in such meetings opportunities to arouse children's interest in the media and shape the right attitudes towards them. In turn, two, or 14.28% of the surveyed teachers say that meetings with actors or journalists develop memory in children and shape emotions. "(...) these meetings are unique because of their unusualness, affect the emotional commitment of children, and give a chance to arouse various activities of children."

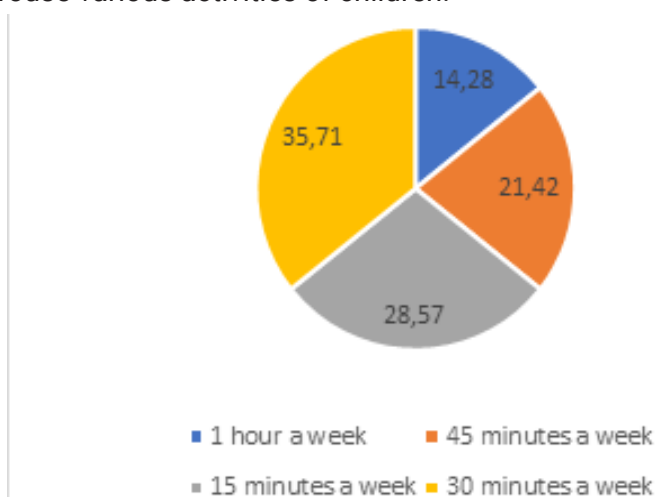


Chart 7. Weekly time spent by the kindergarten teachers surveyed regarding classes developing children's media competence

Source: the author's research

Two teachers, representing 14.28%, devote about 1 hour a week to developing media competence in children. Three teachers, or 21.42%, declare that they devote 45 minutes a week, and five, or 35.71% of the respondents - 30 minutes a week. Four respondents, or 28.57%, declare that they devote up to 15 minutes a week to this type of activity. All respondents emphasised that this is a declared time and implemented depending on the ability and predisposition of children in each week of classes.

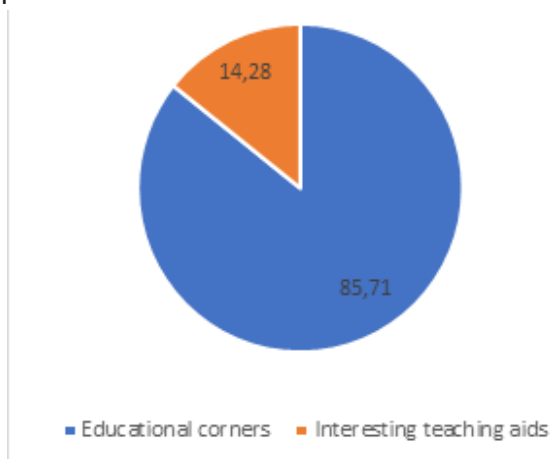


Chart 8. Kindergarten equipment as a factor supporting the motivation to acquire media competence in the opinion of the teachers surveyed

Source: the author's research

A very important factor for proper educational conditions is equipping the educational corner. It must meet the basic educational and developmental needs of children as well as arouse the child's natural curiosity. Twelve teachers, or 85.71%, think that educational corners enabling children to have free or thematic fun and creative work are crucial. In contrast, two respondents, i.e. 14.28% of respondents, believe that equipping the room with exciting teaching aids, original toys, interactive boards, tablet, projector and free access to books releases enormous amounts of curiosity in children. "It awakens in children the need to know what surrounds them. I give a huge educational opportunity."

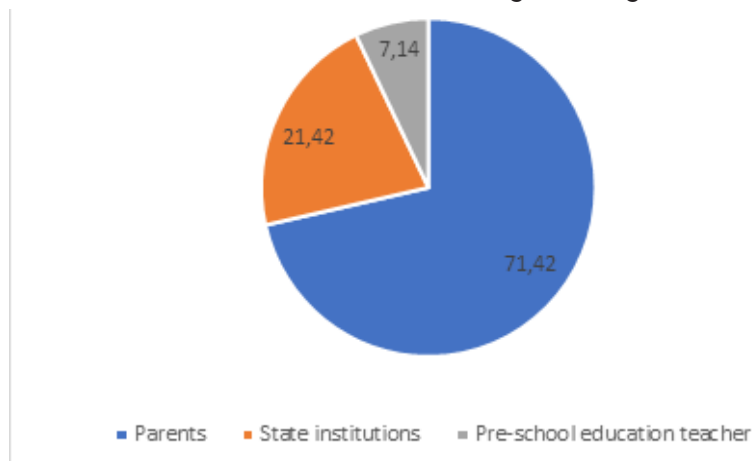


Chart 9. Subjective assessment of kindergarten teachers as to the entity responsible for developing children's media competence

Source: the author's research

In the opinion of kindergarten teachers, the majority - 71.42% indicated that the obligation to educate children in the field of media competence should rest with parents. "The method of using the media, the time devoted to them depends on the parents of the children. Children imitate their parents, they are the first teachers in the media world, and they provide role models to children. „According to three respondents, i.e. 21.42%, this obligation should rest on state institutions, e.g. cultural centres, libraries. One of the respondents, i.e. 7.14%, believes that this obligation rests with teachers, especially those working in kindergarten. "Children spend most of the day with us. We are their educators and teachers, and therefore we should ensure their comprehensive development. Media competences acquired at this stage are just as important as readiness to learn to read and write.

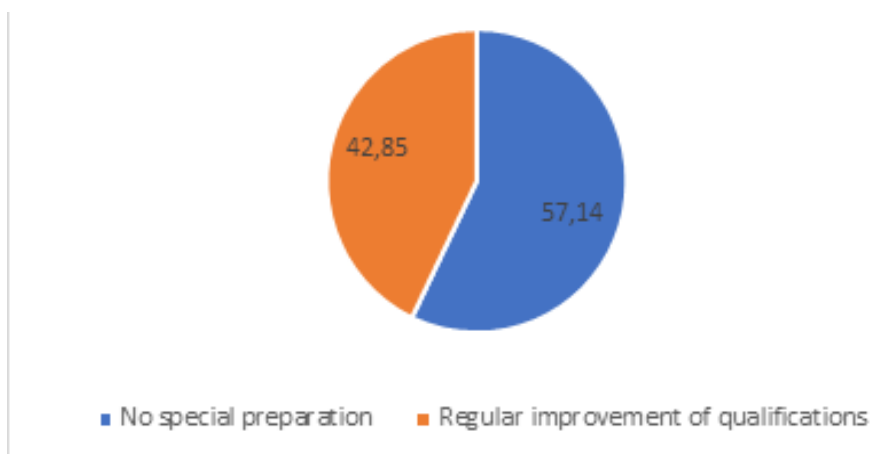


Chart 10. Preparation of preschool education teachers to conduct classes in media education.

Source: the author's research

Eight teachers or 57.14% of respondents claim that they have no special preparation in the field of media education. During their studies, they did not have any classes in this field, nor did they undergo any training. They have acquired the knowledge they have about the media competence of children mainly through publications on the subject on the Internet. In contrast, six teachers, or 42.85%, declare to regularly improve their qualifications in media education by participating in various types of training, workshops or post-graduate studies.

Conclusions from the research

1. Preschoolers are happy to use new technologies. Most use a tablet or a smartphone shared with a parent.

2. Children spend too much time on activities related to the tablet or smartphone. One hour a day declared by most parents is inconsistent with the recommendations of the Polish Paediatric Association, which suggests that the total time spent by children of this age on all media should be 15 to 30 minutes a day.

3. Most parents do not agree on the use of mobile devices with their children, nor do they accompany their child during use. Of those who declare such arrangements, only a few people consistently follow them.

4. Playing on a smartphone or tablet is the third most-chosen activity by children. These devices are used to watch cartoons and play games. This choice is worrying because all the content that the child assimilates in this way can have a strong modelling effect.

5. Preschoolers most often use a smartphone or tablet during travel or meals. It happens that these devices serve as a reward for good behaviour or as a comforter. As a result of these behaviours, the way the child functions in the family and society is disturbed.

6. Most parents have never thought about the impact and consequences of excessive use of mobile devices. Parents notice problems with small motor skills, hyperactivity or poor vocabulary of their children, but are reluctant to admit that this may be a consequence of excessive use of a smartphone or tablet.

7. The first symptoms of excessive use of mobile devices, i.e. crying, aggression are noticeable in preschoolers, which may lead to addiction in the future.

8. Pre-primary education teachers are aware of the importance of preparing children for the proper use of the media. To this end, they usually suggest educational games by using several methods. The most effective when acquiring media competence by children are games that improve motor coordination, visual and auditory perception as well as games and quizzes.

9. To motivate children to gain media competence, teachers most often use free-style games and reading books. In this way, they strengthen children's creativity and imagination. They also organise meetings with representatives of the media, where children through a strong need to imitate and curiosity about the world themselves seek to acquire media competence.

10. Pre-primary education teachers spend too little time on activities related to media education of children. Usually, it is 30 minutes a week, which is not enough time for children to acquire all media competence. Teachers also do not have specialist training in this field. Their knowledge is based on their own research and reading materials, scenarios of Internet classes. According to most teachers, parents should be required to educate children in media education.

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