Received: 09.09.2024
Revised: 30.11.2024
Accepted: 12.12.2024
Published: 20.07.2024

Family literacy activities and their role in developing studens' critical thinking

Cosmina Simona LUNGOCI•, Diana Maria NIȚĂ••

Abstract

Literacy activities and critical thinking are two fundamental aspects in the growth and development of primary school students. Parents also play a vital role in children's lives, as they are considered their children's first educators. The time that family members spend together is invaluable and must be used to lead to the harmonious development of children. An interactive and creative example of making the most of their time together can be joint literacy activities, which can develop essential skills for integration into society. The present study aimed to identify a possible correlation between the time allocated to family literacy activities and the development of critical thinking in primary school students. To this end, 24 third-grade students and their parents were assessed using two instruments: a test administered to the students, divided into two sections (dialogical critical attitudes: statements and situations), which focused on aspects of critical thinking, and a questionnaire addressed to parents, which aimed to measure the frequency with which they carry out certain literacy activities with their children. The results obtained from the data collection confirm our hypothesis that there is a link between the time spent on literacy activities in the family and the development of critical thinking in students, with a positive and significant correlation. In addition to this, we tried to correlate each type of activity with the score obtained in the critical thinking test, and in three of the four cases we obtained a positive and significant result. The answers given by the students helped us to observe which dimensions of critical thinking are best developed (intellectual curiosity, creativity) and which ones need more attention in the future (intellectual autonomy).

Keywords: literacy; critical thinking; primary education

• Lecturer PhD, West University of Timisoara, Department of Educational Sciences, corresponding author, cosmina.lungoci@e-uvt.ro
•• Primary School Teacher, Școala Gimnazială Nr. 25, Timișoara, diana.nita99@e-uvt.ro

1. Introduction

The present we live in is a dynamic one, and the skills we need to continually develop are increasingly diverse and necessary to adapt and evolve. One of these skills is critical thinking, which is beginning to be at the heart of education, as the mere accumulation of knowledge is overshadowed by technological advances that give us access to information in mere seconds. The problem is the sheer amount of information we receive on a subject and the fact that some of it contradicts itself, and we need to have the ability to find the truth in this avalanche. Critical thinking is not yet within our grasp, and the ways in which we can form and develop it are not sufficiently known.

Another topic we hear more and more around us is parents' dissatisfaction with the time their children spend on reading. In many families, joint reading activities disappear as soon as the child learns to read on his or her own and it seems that the parents' goal has been achieved. Motivation is lacking among children, and the lack of active encouragement and role modeling from the family can create a number of problems in this respect. Reading them stories, reciting poems, singing to them, or making parent-child visits to the library or bookstore are all actions that can bring the two closer together, as well as bringing them closer to reading. Reading aloud to children and giving them the opportunity to ask questions helps to create a positive image of reading. Also, creating a dialog on the basis of the read text contributes both to the development of literacy and comprehension skills, and the influence of such an experience is significant in the third grade, according to experts (Saracho & Spodek, 2010). The free time of children at the beginning of schooling should not be wasted, but should be used in such a way that it contributes to their development. It is well known that literary texts are closely related to the development of critical thinking, as they are not mere words thrown on a piece of paper, but their comprehension involves reasoning (Aloqaili, 2012). Florea & Hurjui (2015) suggest that simply encountering the text does not at the same time represent the development of thinking skills. The context in which it takes place and the opportunities we provide for the child to express themselves are important, creating a transparent framework for learning and thus following the critical and analytical thought process. It is the duty of parents, as well as teachers, to provide students with learning activities that contribute to the development of their critical thinking.

We point out that studies have been conducted that show how important it is for parents to carry out literacy activities with their children during leisure time in order to develop their comprehension and language skills (Pfost & Heyne, 2023). One of the most common activities carried out in families is reading aloud to their children. The results are positive because it helps to develop literacy skills, but the effect is not very large. Sénéchal & Young (2008b) observed that parents need guidance from the school to think of ways of working that have a greater effect. Although this initiative involves more

human and material resources, it is a necessity for the implementation of a literacy program that is appropriate for students.

With these considerations in mind, we set out in our study to identify whether there is any relationship between the time devoted to literacy activities in the family and the development of critical thinking in third grade students. To this end, we administered a questionnaire to parents in order to measure the frequency with which they carry out certain literacy activities in the home environment. In order to measure children's critical thinking skills, we used two tests adapted to the sample we targeted. The test questions addressed six facets of critical thinking: intellectual curiosity, tolerance of uncertainty, open-mindedness, being reflective, creativity and intellectual autonomy.

2. Theoretical background

Family literacy activities can be both an interactive and educational way of spending time together. Niklas & Scnheider (2013) attempt to define such family-based activities as the environment that the family provides for the child to acquire literacy and spelling skills as well as language skills. According to the authors, the introduction of such activities into children's programs can lead to better development on many levels, not just emergent literacy. Children come into contact with written text before they actually start school, so the foundations of literacy are laid during the first years of life with the help of their parents.

We hear more and more often how parents in today's society are becoming increasingly disenchanted with the time their children spend on literary activities, as they are more and more overwhelmed by all the technology that surrounds us and enters our lives. What most parents forget in this context is the fundamental role they play in their children's lives. In many families, children are being read to from the earliest years of their lives, even before they even speak, and Saçkes et al. (2015) also bring up the quality of these shared literacy activities within the family, looking for a way to motivate them. Why do some children enjoy literacy activities while others see it as a chore? The results showed that it is precisely parents' perceptions and beliefs about task involvement that are crucial in motivating children.

Literacy activities help children's development from a number of perspectives, even if the first thing that comes to mind is the role they play in the formation and development of language and vocabulary, one of the future skills that is essential in the world we live in is critical thinking. We tend to treat literacy activities in a superficial way, but Aloqaili (2012) reminds us that written text is not just trivial letters thrown on a sheet of paper. In understanding what is written we need to appeal to thinking, to reasoning. Analyzing the connection between the two concepts, it has been concluded that what helps us to understand a text is, in fact, critical thinking.

Critical thinking

The concept of critical thinking is becoming more and more topical, and in the last century it has received increased attention due to the changes we are witnessing every day. We increasingly need to acquire such a skill in this new and dynamic world. Florea & Hurjui (2015) note the complexity of the thinking process, which starts with the assimilation of new knowledge and ends with decision-making. The link between literacy activities (reading, writing, communication, receptivity) and the development of critical thinking is also very important. Here are a few points in line with the dimensions of critical thinking and literacy activities investigated in our research. Visits to the library arouse intellectual curiosity by discovering information resources in a variety of fields. Reading aloud enables active reading, during which the reader asks questions that stimulate the listener's interest, curiosity and reflection. Storytelling, necessarily followed by questions to check comprehension and to establish the main points relating to the moral dimension of the literary text, helps to develop empathy, tolerance and an open-minded nature of the children. At the same time, by expressing their own opinions on the action, characters and outcome, children reflect on the communicative contexts provided by the literary text, making value judgments in accordance with their own principles or under the guidance of adults, thus developing their intellectual autonomy. Imagination is stimulated during storytelling or reading aloud, by being able to capitalize on predictive reading. Post-reading, children can imagine a different outcome, they can insert other characters into the narrative to influence the course of events through creative writing activities. Exposing children to literary texts in which good and evil are symbolically confronted in a symbolic way, leads them to perceive reality in an appropriate way, helping them to pass the information they are exposed to in everyday life through the filter of critical thinking.

Being a complex and difficult subject to explain, critical thinking has over time received several definitions that have evolved and changed over time. Ennis (1962) asserted that critical thinking involves the correct evaluation of information, this concept later designating the practical reflective activity that aims at a reasonable belief or action as a goal (Ennis, 1987). Borzea (2017a) describes critical thinking as an essential trait for an educated person, as a necessity of the citizen belonging to a democratic society and, more recently, as an imperative skill to cope with the demands of the contemporary world, given that it involves several essential processes in everyday life: decision making, problem solving, analyzing arguments.

In our research, critical thinking was approached from the perspective of several aspects, which we will briefly explain below.

Intellectual curiosity

The focus in educational institutions falls on improving academic performance among students, and along with intelligence and effort, intellectual curiosity is the third basic pillar. Von Stumm et al. (2011) present intelligence as an integral part of intellectual curiosity. In terms of educational environment, intellectual curiosity is a significant variable of academic performance. Researchers recommend that schools should

encourage and reward equally those students who ask questions, not just those who put effort into getting results. They should also provide opportunities to induce and encourage their curiosity, as students and students who feel they are intellectually stimulated tend to enjoy and be more satisfied with the educational experience.

Uncertainty tolerance

Hillen et al. (2017) recognize the complexity of the phenomenon and the difficulty in outlining a concrete and comprehensive definition of the term. It refers to the entire set of positive or negative, psychological-level responses arising from an awareness of ignorance about various aspects of the world. Note that it includes several variables, such as ambiguity or probability and complexity, which can be sources that help to amplify uncertainty. Ambiguity is the lack of credibility of information, and is the main underlying cause of uncertainty. Probability refers to the vagueness of future events, while complexity suggests the many facets of a phenomenon, which make it difficult to understand its meaning.

Open-mindedness

In a world full of diversity, being tolerant and being open-minded seem to be two fundamental elements for the good development of today's society. We are confronted more often than ever with cultural, religious and ethnic diversity, we meet people with different values and principles, and openness to accept them is vital. Adler (2004) presents the concept of open-mindedness in an educational context, emphasizing its integration within the already existing subjects of study in schools. Within an educational system that aims to be democratic, open-mindedness means promoting a variety of values for students to critically evaluate. Advocating for open-mindedness is an essential part of the central mission in education, which aims to prepare students to inquire, to be self-critical and to learn from experience (Adler, 2004).

Being reflective

It was John Dewey who advocated the integration of reflective thinking in education, and Rodgers (2002) summarized his studies to better explain the concept. Reflection is defined as a systematic and rigorous way of thinking, being a process of observing and describing complexity, which integrates attitudes that lead to intellectual growth. This way of thinking can only be formed and developed through interaction with people in the community. In this way, the interconnected relationship between school and society is observed. In the teacher-student relationship, 'being reflective' means adapting to the group of students, recognizing diversity and change, adapting your teaching style to lead students towards knowledge, towards learning. A classroom where this skill is fostered and developed is a vibrant space where silence is not encouraged, teacher and students communicate and interact.

Intellectual autonomy

Pritchard (2016) draws attention to how intellectual autonomy has been misinterpreted from the perspective of meaning to totally ignore other people's testimonies. What intellectual autonomy entails is taking responsibility, accessing one's

own cognitive resources in order to position oneself in relation to a subject, in order to understand in depth, the phenomenon in question. A free society wants its citizens to be able to critically assess the situations in which they find themselves, to filter the information they receive through the filter of thought and not to allow themselves to be influenced in their decision-making, i.e. not to allow themselves to be manipulated.

Creativity

Plucker et al. (2004) define creativity as the interaction between skills, process and environment, whereby an individual or group produces a perceivable, novel and useful product. Ruiz-Del-Pino et al. (2022) present creativity as an important skill for the century in which we live, given the changes in the social environment that comes with the continuous development of technology. The term creativity is beginning to receive increased attention, within several fields, and is no longer associated only with the artistic side. The generation of multiple and varied ideas leads to problem solving and is an important means of training and developing critical thinking.

The role of school in developing critical thinking

From the earliest years of life until the end of adolescence, much of our time is spent in the educational environment, at school. The key competences that we need to acquire at the end of our schooling cannot be achieved using only traditional teaching methods, but starting from these, we try to find ways for the teacher to reach the student, managing to stimulate them. Santos (2017) notes the change that teachers who think critically and creatively bring to education, through their ability to manage to look at a situation from multiple perspectives. Such teachers want students in the classroom who ask questions, engage in discussion and debate, are not afraid to think and share ideas. We mention two pedagogical methods that are effective in stimulating critical thinking: *Evocation-Realization of Meaning-Reflection* and *Five Steps to Critical Thinking*.

The *Evocation-Realization of Meaning-Reflection* method involves three stages in the development of a learning process aimed at developing critical thinking in students (Szabo, 2020). Evocation makes reference to the reactualization of knowledge previously acquired by the learner, knowledge that underpins the appropriation of new content. Realization of meaning is the stage in which the learner confronts the new content, trying to understand its meaning. Reflection refers to the critical analysis of the new content, where students have the opportunity to explore and integrate it in concrete contexts, linking it to what they already know. Each stage of the method draws on a wider range of cognitive processes, depending on its purpose. (Dulamă, 2008)

The Five Steps for Critical Thinking method is inductive and promotes the teaching of new content from practice (reality) to theory (abstract). The first step, determining the goals of the lesson, includes lesson preparation, with the teacher determining the behavior he/she wants the students to achieve. Teaching by questioning is the stage in which the teacher uses the conversational method of questioning. These are intended to stimulate students to think critically, challenging them to search for and find answers to the problems and phenomena being addressed. The third step, Pre-assessment practice,

challenges students to be actively involved in their own learning. The Review and Improvement step is where the teacher receives feedback from the students, summarizing what they have learned and monitoring how the children have engaged in the activities. Giving feedback and assessing learning is when the teacher gives feedback to the students. This last stage is actually the starting point in the design of the next lessons, giving the method a circular form. (Sâmihăian, 2014)

There is a wealth of previous research that has demonstrated the importance of family literacy activities on students' motivation to read, the development of literacy competence, and the development of critical thinking.

Van Der Kleij et al. (2022) conducted a study in which they set out to investigate whether there is any correlation between children's leisure reading, vocabulary development and reading comprehension. The study involved a sample of 598 students, aged between 10 and 12. The research measured four variables: reading efficiency, leisure reading, vocabulary and reading comprehension. The analysis of the data provided several conclusions: leisure reading contributes to the development of vocabulary as well as to the cultivation of students' motivation for reading. It is emphasized that children need support from adults in literacy activities, through which they receive help in text comprehension and become motivated to continue the work individually.

Recently, Paakkari et al. (2024) published a study that aimed to identify factors in the home environment that lead to the development of critical reading skills, involving a group of Finnish researchers. The aim of such a study arose from the realization that there is a growing need to develop critical thinking skills and to implement activities to support their development from early childhood. The instrument used by the researchers was the *Delphi Method*, which collected the opinions of several experts on specific factors in the home environment that support or hinder the development of children's critical reading skills. As a result of the analysis, 13 factors positively influencing literacy development and 9 negatively influencing factors were identified. The most important factor in the development of critical reading skills was found to be: *In family discussions, the child is given the opportunity to reflect, ask questions and be listened to*. In opposition to this, the factor found to most hinder the development of critical thinking was: *The family follows strong ideologies that do not allow different views or ideas*. The importance of discussions within the family is emphasized, especially if the topics being discussed are of interest to the child, as the child feels listened to and included in decision-making.

The school and the family should form a close partnership in terms of educating students, and Murphy et al. (2014) have sought to identify ways in which critical-analytical thinking can be developed in children through the input of both parties. School is the formal environment in which students develop these skills, but their promotion is best to start in the family. The study has two central aims: how home and kindergarten activities, such as play and dialoguing, can stimulate critical-analytical thinking, and to highlight how school practices and actions can promote this skill. Following the

experimental intervention carried out, the researchers found that critical-analytical thinking skills can be fostered through dialogic thinking in the context of mathematics and literacy. The authors suggest that there is a need to organize training programs to train teachers to promote ways of developing analytical thinking.

3. Methodology

Specific hypotheses

The present study focused on finding an answer to the following general research question: "Is there a relationship between the frequency of literacy activities carried out in the home and the development of students' critical thinking?". The main research hypotheses were:

I. There is a correlation between the frequency of family literacy activities, such as learning poetry, rhymes and songs, and the development of critical thinking.

II. There is a correlation between the frequency of family literacy activities, such as library visits, and the development of critical thinking.

III. There is a correlation between the frequency of family literacy activities such as reading aloud and the development of critical thinking.

IV. There is a correlation between the frequency of family literacy activities, such as telling stories/stories invented or told, and the development of critical thinking.

Research design

The research carried out was non-experimental, cross-sectional, correlational, considering two main variables: the independent variable, represented by the frequency of literacy activities carried out in the family, and the dependent variable, represented by critical thinking, from the perspective of the following dimensions: intellectual curiosity, tolerance of uncertainty, open-mindedness, being reflective/reflexivity, creativity and intellectual autonomy.

Participants

The research involved 48 participants, including 24 third grade students, 13 (54.16%) male and 11 (45.84%) female, and their parents.

Tools used for data collection

Literacy activities

To measure the frequency with which parents or other family members engage in literacy activities with their children, we administered a questionnaire comprising four questions. The activities targeted were learning poems, rhymes or songs, visits to the library, reading aloud and telling invented or re-told stories/fairy tales. Parents' answers were collected using an eight-point Likert scale (1 = several times a day, 2 = once a day, 3 = several times a week, 4 = once a week, 5 = several times a month, 6 = once a month, 7 =

less frequently, 8 = never). The questions were drawn from *Starting Cohort 2 - Kindergarten, From Kindergarten to Elementary School* coordinated by the National Educational Panel Study (NEPS) with the support of the Leibniz Institute for Educational Trajectories (FDZ-LIfBi, 2020). The NEPS was created to describe and explain the lifelong development of individual skills by providing longitudinal information about educational trajectories. An important role in the development of competences is played by learning environments such as formal, informal and family learning environments, and several instruments have been developed that examine the mediators of school learning environments. Language and literacy skills are receiving particular attention, leading to a survey of children's support in language learning and development (Artelt & Sixt, 2023).

Critical thinking

Measuring critical thinking required the search for an instrument that would be age-appropriate for the children in our sample. Based on standardized tests already existing in the literature, Auriac & Daniel (2008) developed the ACDS test ("le test d'Attitudes Critiques Dialogiques en Situations"), which complements the previous tests. In order to provide more validity to the test, Auriac-Slusarczyk et al. (2011) applied and compared the CM3 ("California Measure of Mental Motivation Scale") and ACDS tests. While the CM3 measures dimensions of critical thinking, such as creative problem solving, learning orientation, mental focus or cognitive integrity, with a school-space orientation, the ACDS focuses more on the social intelligence dimension, proposing out-of-school situations. The proposed situations aim to achieve and measure the following facets of critical thinking: intellectual curiosity, tolerance of uncertainty, open-mindedness, being reflective, creativity and intellectual autonomy.

In the version provided by the authors of the ACDS test, which they made available to us for the present study, it is divided into two complementary tests: Dialogic Critical Attitudes and Statements and Critical dialogic attitudes. Situations. The first test is composed of 12 items (two items for each dimension analyzed) and challenges the students to position themselves in relation to the statements offered, with two response options: True or False (E.g. "I am curious. I really like to discover new things.", "I don't feel comfortable when I don't know which game to choose.", "I don't mind when others have different tastes from mine.", "When I write a greeting card, I don't think about what to write beforehand.", "In the schoolyard, I am more afraid of other people's ideas.", "I like to invent things."). The second test gives the children 6 situations (one for each dimension of critical thinking) and 3 possible answers in each case, with the students choosing the reaction that best suits them:

E.g. During a visit to the zoo, I saw an animal I didn't know.

It doesn't matter that I don't know what it's called.	I'd like to know what it's called.	I'll look it up on the internet or in my books.
□	□	□

The scoring of the tests is done by giving a score between 1 and 3, depending on how students choose to position themselves in the cases offered.

Research procedure

For the present study we involved primary school students, enrolled in third grade, in an educational institution in Timisoara. After obtaining consent for participation in the study from both parents and their own children, the questionnaires were administered in physical format. For the students, during the test, each statement was read aloud, and after circling the answer, the statement was read again. Students were given the opportunity to ask questions when aspects were unclear and explanations were provided.

4. Research results

Presentation of descriptive data

The descriptive information obtained at the end of the data collection provides us with an overview of the study participants and their results. The table below provides information on the mean scores, maximum score, minimum score and standard deviation for each dimension of critical thinking measured.

Table 1

Descriptive data for the results obtained by participants (N = 24)

Variable	M	SD	Min.	Max.
Intellectual curiosity	8,87	0,33	8	9
Tolerance of uncertainty	7,37	1,31	5	9
Open mind	8,12	0,85	7	9
Reflexivity	8,08	1,55	5	9
Creativity	8,25	1,29	5	9
Intellectual autonomy	6,12	1,42	3	9
Total	46,83	3,78	38	51

Note: N = number of participants; M = mean; SD = standard deviation; Min. = minimum score; Max. = maximum score.

As can be seen, for each dimension, the minimum score obtained was 3 points and the maximum score was 9 points. The variable with the highest average score is intellectual curiosity (8.87 points), which is close to the maximum score, the difference between the highest and the lowest score being only 1 point. Although high averages were also obtained for the other variables, the differences between the minimum and the

maximum are higher (2 points for open-mindedness and 4 points for tolerance of uncertainty, reflexivity and creativity). The lowest score was obtained for intellectual autonomy, being the only dimension where the lowest possible score was recorded and where only one student scored the highest, with an average of only 6.12.

Presentation of results in relation to specific hypotheses

Hypothesis 1: There is a correlation between the frequency of family literacy activities, such as learning poetry, verses and songs, and the development of critical thinking.

From the table below (Table 2), there is a significant correlation between learning poetry, verses and songs in the home environment and students' critical thinking development, $r(22)=0.622$, $p<0.001$, which means that students who learn poetry, verses and songs more often in the home environment have higher critical thinking score. Since r is an expression for effect size, the relationship between the two variables is very strong. The coefficient of determination is obtained by $R2 = 0.38$, which means that for 38% of the variance of the variable learning poems, verses and songs is explained by the critical thinking variable.

Table 2

Spearman's analysis of the correlation between learning poetry, verses and songs and critical thinking. (N=24)

Variable	Critical thinking score
Learning poems, verses and songs	.622**

Hypothesis 2: There is a correlation between the frequency of family literacy activities, such as library visits, and the development of critical thinking.

The table below (Table 3) shows that there is a non-significant correlation between visiting the library with the family and students' critical thinking development, $r(22)=0.112$, $p<0.603$, which means that students who go to the library more often do not have higher critical thinking scores.

Table 3

Spearman's analysis of the correlation between library visits and critical thinking. (N=24)

Variable	Critical thinking score
Library visits	.112**

Hypothesis 3: There is a correlation between the frequency of family literacy activities such as reading aloud and the development of critical thinking.

From the table below (Table 4), there is a positive correlation between reading aloud in the home environment and students' critical thinking development, r(22)=0.449, p<0.028, which means that students who are read aloud in the home environment have higher critical thinking scores. Since r is an expression for effect size, the relationship between the two variables is very strong. The coefficient of determination is obtained by R2 = 0.20, which means that for 20% of the variation in the read aloud variable is explained by the critical thinking variable.

Table 4

Spearman analysis of the correlation between reading aloud and critical thinking. (N=24)

Variable	Critical thinking score
Reading aloud	.449**

Hypothesis 4: There is a correlation between the frequency of family literacy activities, such as telling invented or re-told stories/fairy tales, and the development of critical thinking.

The table below (Table 5) shows that there is a positive correlation between telling invented or re-told stories/fairy tales in the home environment and the development of critical thinking of students, r(22)=0.476, p<0.019, which means that students in families where invented or re-told stories/fairy tales are told have a higher critical thinking score. Since r is an expression for effect size, the relationship between the two variables is very strong. The coefficient of determination is obtained by R2 = 0.22, which means that for 22% of the variance of the variable invented or re-told stories/stories is explained by the critical thinking variable.

Table 5

Spearman's analysis of the correlation between the telling of invented or re-told stories/fairy tales and critical thinking. (N=24)

Variable	**Critical thinking score**
Telling of invented or re-told stories/fairy tales	.476**

Research Question: Is there a link between the frequency of literacy activities in the family and the development of critical thinking skills of students?

From the table below (Table 6) it can be observed that there is a positive correlation between the frequency of literacy activities and the development of critical thinking of students, r(22)=0.543, p<0.006, which means that students in families with different literacy activities have higher critical thinking score. Since r is an expression for effect

size, the relationship between the two variables is very strong. The coefficient of determination is obtained by R2 = 0.29, which means that for 29% of the variance in the variable family literacy activities is explained by the variable critical thinking.

Table 6.

Spearman analysis of the correlation between literacy activities and critical thinking. (N=24)

Variable	Critical thinking score
Literacy activities	.543**

5. Discussion

The main purpose of our study was to identify the existence of a possible correlation between the development of literacy activities in the home environment and the development of critical thinking in primary school students (3rd grade). The results obtained by applying the questionnaire addressed to parents to determine the frequency with which they carry out certain literacy activities with their children and the test addressed to students to measure critical thinking, showed a significant positive correlation between the two variables. The questions in the questionnaire completed by the parents helped us to identify four types of literacy activities in relation to which the research hypotheses were formulated: learning poems, verses and songs, reading aloud, visits to the library, and retelling invented or re-told stories/fairy tales. The frequency of each type of activity in relation to the students' scores on the critical thinking test led us to identify three positive correlations, which we will present below.

The first related literacy activity, learning poems, verses and songs within the family, is carried out in almost all families in the sample, less frequently or several times a week, with two parents ticking the 'never' option and in only one case the activity is carried out daily. The correlation between the two variables was positive and significant. We also noted that for the children who scored the highest on the test, the family literacy activity was highly frequent (several times a week or once a day).

The activity of reading aloud by the family to the children is the activity that is carried out with the highest frequency compared to the other three activities brought up. In all families this type of interaction occurs less frequently or several times a day. In this situation too, we could notice that in the case of the students who obtained the best result in the test, the frequency of the activity was high. We found a positive and significant correlation between reading aloud and the level of critical thinking. A similar correlation was found between retelling stories/stories invented or re-told within the family and critical thinking. In this case, the frequency of such activity varied from 'never' to 'several times a day'.

Our results thus follow on from previous studies, which have focused on the importance of developing critical thinking and parental involvement in literacy activities as central themes. While our study measured the frequency with which parents or other family members engage in literacy activities, Saçkes et al. (2015) have at the center of their research the perceptions and beliefs of parents about their children's interests in reading. The study was prompted by the realization of the need for parental involvement in literacy activities that lead to the development of emergent literacy, so important for later academic futures in later learners. Pfost & Heyne (2023) emphasize the long-term importance of developing literacy skills, which contribute to the economic and cultural evolution of the society in which we live and will aid in our understanding of all the other academic concepts we encounter throughout the park of life. The authors wished to emphasize how the occasion of literacy activities (including visits to the library) encourages closeness to books. Prawira et al. (2023) argue that literacy can no longer be seen as simply the ability to read and write. The century in which we live, where technological development is booming, requires the acquisition of skills to understand, interpret, create and communicate in diverse contexts. Seen from this perspective, literacy activities also have an influence on key future skills such as critical thinking and communication. This was also the direction of the research undertaken by Wibowo et al. (2024) who emphasized the importance of supporting children in the formation and development of literacy skills. Given the dynamic context in which we find ourselves, according to the authors of the study, these skills contribute to people's adaptation in society as they include the ability to understand complex content, evaluate information and think critically. School, family and community must work together to form an environment that encourages literacy development. Children's first educators are their parents themselves, and partnerships with them should be promoted and supported, believes Mudzielwana (2014), in a qualitative study investigating the role of parents in the development of young children's literacy skills. The study mentions how interactions with books not only help to develop reading or writing skills, but also the development of critical thinking, which involves higher order reasoning on the part of the reader.

6. Conclusions

Our study emphasizes the importance of literacy activities in the home environment for the development of critical thinking in students. Parents should be aware of the importance of spending quality time with their children. Even if the reality in which we live increasingly limits our time resources, we must not neglect the essential aspects of life. Students need to be prepared for the future, and even if that future seems increasingly uncertain, we must not neglect the training of skills that will facilitate their integration into society. Literacy activities can be a fun way for parents and children to interact with each other, while at the same time helping to develop communication skills, creativity, tolerance of ambiguity, intellectual curiosity or reflexivity.

The present research can represent a starting point towards the implementation of tests measuring critical thinking both for research purposes and for their usefulness in the classroom by teachers. The results obtained may also lead to the integration of new practices in teaching that will increasingly stimulate and motivate students. Parents can also be encouraged to become more frequently involved in their children's education, assuming the crucial role they play in their children's harmonious development. However, for more representativeness and relevance, a larger number of subjects would be recommended.

The instrument used in our research to measure critical thinking is quite different compared to other existing ones, as it targets aspects of everyday life. Auriac-Slusarczyk et al. (2011) observed a certain rigor of critical thinking tests, which are more aimed at students' academic training. Thus, the ACDS test comes with a social perspective on critical thinking and represents a necessary continuity from previous tests. Students are put in the position of making decisions and weighing up the options they have, so it is good that they are aware from an early age of the 'decision-making power' they possess. Students need to be reflective, creative, open-minded, but retain their intellectual autonomy, intellectual curiosity and a tolerance of uncertainty.

Parents need to be increasingly motivated to get involved in the development of critical thinking in their children, because the need for this skill is so precious today. They need to be as well informed as possible about the needs that people will have in the future, i.e. the demands that society will place on their children. In this sense, the school-family-community partnership is extremely important for raising awareness of the development of a family environment that represents a continuity of what happens in the educational environment. Teachers need the support of parents to ensure that students' education is continuous and does not only take place in the school, within the educational institution, but also outside it. The attitude of adults towards school is transmitted and reflected in the behavior of students. The motivation to learn is formed in the family and developed at school.

The practical implications of our research point in the direction of implementing a program to guide parents and provide them with concrete information on how to carry out certain literacy activities with their children. At the same time, we notice that the score obtained by the students on the questions specific to the variable intellectual autonomy were the lowest, located at a rather high distance compared to the other variables. On the basis of this problematic factor, it is possible to analyze the types of activities or interactions that can help to form and develop literacy competence. As Carter (2017) notes, intellectual autonomy is the ability to think independently. The author notes Kant's perception of this ability. The philosopher believes that those who do not use their own intelligence and allow themselves to be guided by those around them or by external things, show "intellectual cowardice". The importance of acquiring intellectual autonomy is necessary in the formation of critical thinking, as it involves analyzing the

information we come into contact with and helps to prevent manipulation. This aspect is sometimes vital in the reality we live in, so uncertain at times.

We wished that through the research topic and the results obtained we could bring an informative addition to the specialized literature. We tried to approach a new theme that would capture the current needs of students and encompass the importance of parental involvement in the training and development of children.

References

Adler, J. M. (2004). Reconciling Open-Mindedness and Belief. *Theory and Research in Education (Print)*, *2*(2), 127–142. https://doi.org/10.1177/1477878504043440

Aloqaili, A. S. (2012). The relationship between reading comprehension and critical thinking: A theoretical study. *Journal of King Saud University - Languages and Translation*, *24*(1), 35–41. https://doi.org/10.1016/j.jksult.2011.01.001

Artelt, C., Sixt, M. (2023). The National Educational Panel Study (NEPS)—framework, design, and research potential. *Zeitschrift Für Erziehungswissenschaft, 26*(2), 277–298. https://doi.org/10.1007/s11618-023-01156-w

Auriac-Slusarczyk, E., Adami, J., & Daniel, M. F. (2011). Tester les prédispositions à l'esprit critique au primaire. *ResearchGate*. https://www.researchgate.net/publication/281983523

Borzea, A. P. (2017a). *Integrarea curriculară și dezvoltarea capacităților cognitive*. Iași: Polirom.

Carter, J. A. (2017). Intellectual autonomy, epistemic dependence and cognitive enhancement. *Synthese*, *197*(7), 2937–2961. https://doi.org/10.1007/s11229-017-1549-y

Dewey, J. (1910). *How we think. Lexington*, MA: DC Heath.

Dulamă, M. E., Maria, M. D., Bucilă, F., Ilovan, O. R. (2008), Studiu comparativ al unor modele constructiviste de structurare a lecţiilor. *Contemporary trends in teaching and learning geography*, *6*, 95-104.

Ennis, R. H. (1962). A concept of critical thinking. în *Harvard Educational Review*, *32*(1), 81–111. http://psycnet.apa.org/record/1963-00458-001

Ennis, R. H. (1987). A taxonomy of critical thinking dispositions and abilities. *Teaching Thinking Skills: Theory and Practice*, 9–26. https://ci.nii.ac.jp/naid/10025989370

Florea, N., & Hurjui, E. (2015). Critical thinking in elementary school children. *Procedia - Social and Behavioral Sciences*, *180*, 565–572. https://doi.org/10.1016/j.sbspro.2015.02.161

Hillen, M. A., Gutheil, C., Strout, T. D., Smets, E. M. A., & Han, P. (2017). Tolerance of uncertainty: Conceptual analysis, integrative model, and implications for healthcare. *Social Science & Medicine*, *180*, 62–75. https://doi.org/10.1016/j.socscimed.2017.03.024

Mudzielwana, N. P. (2014). The role of parents in developing reading skills of their children in the foundation phase. *Journal of Social Sciences*, *41*(2), 253–264. https://doi.org/10.1080/09718923.2014.11893361

Murphy, P. K., Rowe, M. L., Ramani, G. B., & Silverman, R. D. (2014). Promoting Critical-Analytic Thinking in children and adolescents at home and in school. *Educational Psychology Review*, *26*(4), 561–578. https://doi.org/10.1007/s10648-014-9281-3

Niklas, F., & Schneider, W. (2013). Home Literacy Environment and the beginning of reading and spelling. *Contemporary Educational Psychology*, *38*(1), 40–50. https://doi.org/10.1016/j.cedpsych.2012.10.001

OECD. (2019b). An OECD Learning Framework 2030. In *Arts, research, innovation and society* (pp. 23–35). https://doi.org/10.1007/978-3-030-26068-2_3

Paakkari, L., Ruotsalainen, J., Lahti, H., Kulmala, M., Kendeou, P., Raittila, T., Manu, M., Salminen, J., & Torppa, M. (2024). The role of the home in children's critical reading skills development. *Humanities and Social Sciences Communications*, *11*(1). https://doi.org/10.1057/s41599-024-02843-7

Pfost, M., & Heyne, N. (2023). Joint book reading, library visits and letter teaching in families: relations to parent education and children's reading behavior. *Reading and Writing*, *36*(10), 2627–2647. https://doi.org/10.1007/s11145-022-10389-w

Plucker, J. A., Beghetto, R. A., & Dow, G. T. (2004). Why isn't creativity more important to educational psychologists? Potentials, pitfalls, and future Directions in creativity research. *Educational Psychologist*, *39*(2), 83–96. https://doi.org/10.1207/s15326985ep3902_1

Prawira, N. N. P., Artini, L. P., Marsakawati, N. P. E., Padmadewi, N. N., Ratminingsih, N. M., & Utami, I. G. a. L. P. (2023). The implementation of literacy activities in primary school. *Jurnal Imiah Pendidikan Dan Pembelajaran*, *7*(1), 150–156. https://doi.org/10.23887/jipp.v7i1.56108

Pritchard, D. (2016). Seeing it for oneself: perceptual knowledge, understanding, and intellectual autonomy. *Episteme*, *13*(1), 29–42. https://doi.org/10.1017/epi.2015.59

Rodgers, C. R. (2002). Defining reflection: Another look at John Dewey and reflective thinking. *Teachers College Record (1970)*, *104*(4), 842–866. https://doi.org/10.1111/1467-9620.00181

Ruiz-Del-Pino, B., Martín, F. D. F., & Arco-Tirado, J. L. (2022). Creativity training programs in primary education: A systematic review and meta-analysis. *Thinking Skills and Creativity (Print)*, *46*, 101172. https://doi.org/10.1016/j.tsc.2022.101172

Saçkes, M., Işıtan, S., Avcı, K., & Justice, L. M. (2015). Parents' perceptions of children's literacy motivation and their home-literacy practices: what's the connection? *European Early Childhood Education Research Journal*, *24*(6), 857–872. https://doi.org/10.1080/1350293x.2014.996422

Santos, L. F. D. (2017). The role of critical thinking in science education. *Journal of Education and Practice*, *8*(20), 160–173. http://files.eric.ed.gov/fulltext/ED575667.pdf

Saracho, O. N., & Spodek, B. (2010). Parents and children engaging in storybook reading. *Early Child Development and Care*, *180*(10), 1379–1389. https://doi.org/10.1080/03004430903135605

Sâmihăian, F. (2014). *O didactică a limbii şi literaturii române: provocări actuale pentru profesor şi elev*. Bucureşti: Art.

Sénéchal, M., & Young, L. (2008b). The Effect of family Literacy interventions on Children's acquisition of reading from kindergarten to Grade 3: A Meta-Analytic Review. *Review of Educational Research*, *78*(4), 880–907. https://doi.org/10.3102/0034654308320319

Szabo, R. G. (2020). Dobândirea abilităţilor de viaţă şi gândire critică. *Revista electronică de resurse educaţionale*, 32-35.

Van Der Kleij, S. W., Burgess, A., Ricketts, J., & Shapiro, L. (2022). From Bibliophile to Sesquipedalian: Modeling the role of reading experience in vocabulary and reading comprehension. *Scientific Studies of Reading*, *26*(6), 514–526. https://doi.org/10.1080/10888438.2022.2068418

Von Stumm, S., Hell, B., & Chamorro-Premuzic, T. (2011). The hungry mind. *Perspectives on Psychological Science*, *6*(6), 574–588. https://doi.org/10.1177/1745691611421204

Wibowo, A., Gularso, D., & Purwaningsih, O. (2024). The importance of social capital in developing students' literacy skills in elementary schools. *Indonesian Journal of Educational Research and Review*, *7*(1), 116–127. https://doi.org/10.23887/ijerr.v7i1.68144