

A COMPARISON OF THE FUNCTIONS AND CONDITIONS OF PRESCHOOL EDUCATION IN STATE AND FOREST KINDERGARTENS DURING THE COVID-19 PANDEMIC IN THE CZECH REPUBLIC AND DENMARK

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ABSTRACT

This paper presents a part of a research study carried out under the project 'The effects of the COVID-19 pandemic on selected functions and conditions of preschool education in the context of children's preparation for starting compulsory education in selected European countries', conducted at the Faculty of Education, Palacký University Olomouc. The paper focuses on a comparison of the Czech Republic and Denmark in order to analyse and compare the impact of the anti-epidemic measures on the conditions and functions of preschool education in mainstream and forest kindergartens. The research method was a qualitative analysis of text content, semi-structured interviews with kindergartens teachers followed by open coding and formulation of analytical categories and their comparison according to the principles of comparative pedagogy. The results suggest that the impact of the anti-epidemic measures on preschool education and the development of preschool children, in both mainstream and forest kindergartens, varied in terms of achieving the functions of preschool education and the conditions under which forest kindergartens delivered education during the COVID 19 pandemic.

KEYWORDS:

preschool children, kindergartens teachers, functions and conditions of preschool education, mainstream kindergarten, forest kindergarten, anti-epidemic measures, COVID 19

INTRODUCTION

Introductory remarks

Preschool education is an important part of the education system in both European countries included in the research. In the Czech Republic (also referred to as CR) and Denmark, there are various preschool institutions that provide preschool education, including mainstream kindergartens and forest kindergartens. The operation of these institutions in both countries was affected by the COVID-19 pandemic. Kindergartens had to cope with new regulations and anti-epidemic measures that led to substantial changes in education and affected the fulfilment of the basic functions and conditions in preschool institutions. This paper presents a qualitative comparative study focusing on the impact of the anti-epidemic measures on mainstream and forest kindergartens in the Czech Republic and Denmark. It can be assumed that in the context of kindergarten types, the effects on their operation and fulfilment of the functions and conditions of preschool education differ. Denmark was selected for the comparative study because it underwent similar measurement compared with CR but the locations of the two countries differ. Moreover, the concept of forest kindergartens originated in Denmark.

Preschool education in the Czech Republic

Preschool education in CR is an integral part of the education system and is governed by relevant legislation, including the Acts No. 561/2004 Coll., 563/2004 Coll., 217/2021 Coll., etc., as last amended). Preschool education in CR is classified as ISCED 0.

According to the Act No. 561/2004 Coll., as last amended, preschool education is intended for children between 2 and usually 6 years of age and is implemented through kindergartens. Since September 2017, the last year of preschool education has been compulsory for children who reach five years of age by the 31st of August.

Kindergartens which are included in the Register of schools and educational establishments kept by the Ministry of Education of Youth and Sports (referred to as MEYS) are governed by the curricular document The Framework Education Programme for Preschool Education. The Register of schools and educational establishments kept by MEYS includes state, private, church and alternative schools.

Currently, there is a wide range of alternative kindergartens in the Czech Republic. In the context of this paper, we focused on forest kindergartens, in part because of the growing interest in this alternative education on the part of parents and the public.

A forest kindergarten is a preschool institution defined by the Education Act and relevant implementing regulations. A forest kindergarten is defined by the Education Act (561/2004 Coll., as last amended) as follows: “*A forest kindergarten is a kindergarten in which education is primarily conducted outdoors outside the facilities of the forest kindergarten, which are used only for occasional stay. The facilities of a forest kindergarten must not be a building construction*” (Section 34, Act No. 561/2004 Coll.) The operating conditions and equipment of forest kindergartens are described in detail in Section 9 of the Decree No. 410/2005 Coll., as last amended: The founders of forest kindergartens are usually non-profit organizations (associations). Nowadays, however, forest kindergartens are often established by municipalities. In municipal forest kindergartens, the fee paid by parents is the same as in mainstream kindergartens and their operation is supported by the municipal budget. Private forest kindergartens are mainly funded by resources collected from parents (Decree No. 410/2005 Coll., as last amended).

Education in forest kindergartens takes place in a natural environment, primarily within forests. Children learn through direct experience, observation, experimentation with natural materials, spontaneous play and experiential learning. It is important that children are offered deeper experiential values, that they adopt a sense of belonging to nature, and that they develop mutual respect and respect for their surroundings (Opravilová, 2016).

A forest kindergarten may provide compulsory preschool attendance only if the kindergarten is included in the Register of schools and educational establishments kept by MEYS. In order for a kindergarten to be officially called a *forest kindergarten*, it must comply with the applicable laws and regulations. The Czech Forest Kindergarten Association currently represents approximately 120 establishments (ALMŠ, 2021).

As suggested by the above, forest kindergartens are finally becoming a full-fledged part of the Czech education system and thus complement the choice of preschool establishments for parents and their children who are inclined to this type of education. We believe that, given the increasingly deteriorating state of the environment, an equal status of forest kindergartens is more than desirable.

Preschool education in Denmark

Denmark offers preschool education in various institutions. However, this stage of education is not compulsory. Primary education is carried out at state primary schools, the so-called “folkeskolen”. These are unified schools that include ICSED 1 and ICSED 2 levels along with the zero year of preschool preparatory class, the so-called “børnehaveklasse” corresponding to ICSED 0 level. Danish preschool institutions are classified as follows:

- ICSED 0- 010: Day care centres, day care in private homes and age-integrated facilities (until the age of three),
- ICSED 0- 020 (from the age of three until the start of a primary school): Kindergarten and age-integrated facilities (Eurydice, 2023).

The Day Care Act (LBK No. 985 of 27/06/2022) states that all preschool institutions must have their own curriculum. The curriculum must describe how the educational environment is created. The document should also define the learning and development of children aged 0–6 years. Every preschool institution shall decide on the method of implementation of the curriculum (Eurydice, 2023).

Forest kindergartens have a rich tradition in Denmark. The first forest kindergarten was established in Denmark by Ella Flatau who spent time with children on regular trips to the forest. Due to the insufficient capacity in traditional kindergartens, this approach transformed into regular morning care for children. In 1954, this experience led to a citizens’ initiative bringing together supporters of this idea, with the first ever forest kindergarten being established (Miklitz, 2005).

Danish forest kindergartens are defined as establishments that provide regular outdoor education by qualified teachers. This type of education takes place in a natural and cultural landscape and supports learning in one or more school subjects, such as natural science, mathematics, social science, linguistic art and physical education (Bentsen, Mygind and Randrup, 2009). Children come to forest kindergartens with waterproof shoes, trousers and jacket. They spend time outdoors in all weather conditions and yet they are rarely sick. Even the smallest children use a saw, axe and a sharp knife and are led to absolute independence. Schools have almost no toys; children use dishes for outdoor play. In Denmark,

children play with natural products. Interestingly, one third of forest kindergarten employees in Denmark are men (Mikšová, 2022).

A comparison of the two countries shows that preschool education is part of the education systems in both countries, albeit with different structures. In Denmark, forest kindergartens have a tradition of almost 70 years and are embedded in the system of preschool education. Therefore, they have a long-standing support and a firm place in Danish society.

In contrast, efforts to establish forest kindergartens in the Czech Republic began to appear only in 2004 and until 2016 their functioning was based on the enthusiasm of individuals or associations without a clear legislative framework (<https://www.lesnims.cz/lesni-ms/historie-lesnich-ms.html>). It is only now that the forest kindergartens in the Czech Republic are finally gaining a full-fledged place in the Czech education system, and Czech society is beginning to accept them. This was strongly accelerated by the establishment of the Czech Forest Kindergarten Association.

Measures against the spread of COVID 19 in the Czech Republic during the pandemic

Society, as well as education, in the Czech Republic, was severely impacted by the COVID-19 pandemic. The same applied to Denmark, where preschool education was disrupted, leading to changes in its conditions. In the Czech Republic, measures were put in place to prevent contact between people, which disrupted the normal functioning of kindergartens. Due to government regulation, kindergartens were closed for 50 working days. The distance form of education was a novelty for kindergartens as well as elementary schools (MEYS, 2021b).

The first case of Covid-19 was reported on the 1st of March 2020. The government declared a state of emergency and a nationwide quarantine restricting free movement and international travel in order to limit the spread of the virus. A number of measures were introduced to support the population, jobs and businesses. Due to the strong increase in the number of people infected per day, which marked the second wave of the pandemic, restrictions had to be re-introduced at the turn of the summer and autumn of 2020. The restored state of emergency ended on the 11th of April 2021 (Bryndová et al., 2021). Compulsory measures included testing in schools and work, as well as the mandatory wearing of FFP2 masks or other equivalent masks. The government gradually introduced reopening measures

depending on the improvement of the pandemic situation. In April 2022, due to a substantial improvement in the epidemic situation, most of the national emergency measures imposed by the Ministry of Health were lifted. Partial measures remained in force in the health and social care segments (IMF, 2021a).

Measures against the spread of COVID 19 in Denmark during the pandemic

Denmark reported the first confirmed cases of Covid-19 a few days before the Czech Republic on the 27th of February 2020. A number of measures were introduced in March to limit the spread of Covid-19 and to support the population, jobs and businesses. The measures included closure of all borders, ban on events with more than 10 people, closure of schools, universities and day centres and other facilities, and an appeal to all private businesses to leave their employees at home if possible (IMF, 2021b).

In mid-April 2020, primary schools and preschool facilities were reopened. Secondary schools and some businesses reopened in May 2020. On the 1st of July, the borders with selected non-EU countries were reopened and the ban on gathering was increased from 50 to 100 people. This gradual reopening was supported by a comprehensive testing strategy. Authorities offered foreign visitors to undertake COVID-19 tests. Due to the increasing level of infection, authorities decided not to increase the number of people on the gathering ban (IMF, 2021b).

Due to the increasing level of infection, the ban on gathering was decreased to only 10 people in October 2020. The targeted *lockdown* which originally applied to 38 of the 98 municipalities was extended to all municipalities, while kindergartens and primary schools remained open. The complete *lockdown* was declared from the 25th of December 2020 to the 3rd of January 2021 and subsequently extended until the end of January and then until the end of February 2021. At the beginning of May 2021, elementary schools and universities were reopened. Denmark introduced one of the fastest vaccinations in the European Union. On the 10th of June, an agreement was reached on a gradual lifting of all restrictions introduced under Covid-19 before September 2021 (IMF, 2021b).

Both countries responded to the need of rapidly addressing the epidemiological situation, which required the implementation of measures and communication with the public. The anti-epidemic measures were similar; we describe and compare them in detail in the following chapters.

Anti-epidemic measures in preschool education in the Czech Republic

Preschool institutions in CR were closed during the pandemic only if they were quarantined or if decided by the director. MEYS issued instructions that preschool institutions were supposed to follow. However, the situation deteriorated in 2021 and the Czech government was forced to declare a lockdown from the 27th of February 2021 to the 10th of May 2021 (Bryndová et al., 2021). On the 1st of April 2021, MEYS issued a guideline on the first stage of school reopening. Kindergartens opened only for children in the last compulsory year of preschool education. The maximum number of children in a group was 15. Children were no longer obliged to wear respirators but they had to be tested once a week. Staff had to wear a respirator and were tested twice a week using an antigen test or once a week by a PCR test. From the 10th of May 2021, kindergartens were opened to all children without testing (MEYS, 2021d).

MEYS regularly issued manuals on the operation of kindergartens. The manuals included recommendations such as: carry out most activities outdoors, provide enough soap, disinfection and disposable wipes in toilets, and ensure frequent ventilation in classrooms. Other instructions were specified to increase hygiene. If a child was ill with Covid-19, they had to be at home at least 14 days before returning to kindergarten (MEYS, 2021a).

Anti-epidemic measures in preschool education in Denmark

The attitude to the pandemic in Denmark was different and preschool institutions were closed for only 3 weeks. Subsequently, hygiene and organizational measures were implemented, which disrupted the usual functioning of kindergartens. Reopening of schools and preschool institutions remained the priority after the restrictions in the area of public health were reduced. Denmark used the “Test to Stay” strategy according to which people in contact with a person positive for Covid-19 could return to school if they had no symptoms and their rapid test was negative without being isolated (MCHRI, 2021). Parents were not allowed to accompany their children to the door and schools coordinated the arrival of children to avoid gathering of more people. Large formal meetings of children were not allowed. The Danish Health Authority recommended that child care establishments had a floor area for each child of 4 to 6 square meters (Sundhedsstyrelsen, 2022).

After reopening in mid-April 2020, the following key steps defined by the Danish Health Authority were taken in preschool institutions:

- **Adjustment of measures:** all objects which could be a source of virus, or could pose a problem in everyday cleaning, were removed from classrooms and playrooms,
- **Distribution of children:** groups of three for children younger than 3 or groups of five to six children for children aged 3 to 6 years, with one adult supervising each group,
- **Delimitation of indoor space:** striped plastic tape was used to break up indoor space and outdoor playgrounds into smaller and better manageable areas to help control how many children gathered at a single moment (Hathaway, 2020),
- **Stock management:** liquid soap, hand sanitizer, disinfectant and latex gloves provided throughout the whole period of operation,
- **Signs and posters:** information posters on reducing the risk of infection. (Sundhedsstyrelsen, 2022).

The Ministry of Health in Denmark issued detailed manuals on how to proceed with the reopening of ECEC. For example, the manual specified the procedure for cleaning of premises and toilets, washing of laundry, care for toys, hand washing procedure, etc. (Sundhedsstyrelsen, 2022).

The anti-epidemic measures adopted in kindergartens in the Czech Republic and Denmark concerned primarily hygiene and organization. For better clarity of differences, the information on the measures in preschool institutions is specified in Table 1.

TABLE 1. Comparison of the measures to prevent the spread of Covid-19 in kindergartens in 2019/2020 and 2020/2021 in CR and Denmark¹

ANTI-EPIDEMIC MEASURES	CZECH REPUBLIC	DENMARK
Closure of kindergartens	50 days	15 days
Children in smaller groups	15 children	3–6 children
Parents not allowed to enter the premises of kindergarten	NO (entry restriction only)	YES (for the whole period)
Hygiene measures (disinfection, disposable wipes, daily disinfection of toys and washing of bed clothes...)	YES	YES
Wearing of respirators	YES	NO
Mandatory testing	YES	YES (<i>Test to Stay</i> method)

References: (MEYS, 2021a; MEYS, 2021b; MEYS, 2021c; Sundhedsstyrelsen, 2022).

Functions and conditions of preschool education

A comparison was performed of selected functions and conditions of preschool education, which we find universal for both countries.

The kindergarten is a place where children socialize and are prepared for personal, occupational and civil life. Of the monitored functions (Šmelová, 2006), we focused on the educational and socialization functions as these two seemed to be most affected (see Gajdová, Srbená, 2021; Srbená, Gajdová, 2021). The educational function entails the harmonious development of the child, the child's personality and learning, ensuring the preconditions for further education, whereas the socialization function entails secondary socialization closely linked to family education.

In order to fulfil the functions of preschool education, it is essential to respect and observe specific educational conditions. They are defined by the relevant legal standards in both countries. Forest kindergartens are obliged to ensure the same conditions, unless provided otherwise (FEP PE, 2021).

¹ The comparison shows that both countries introduced similar measures with minor differences in the length of closure of kindergartens, numbers of children in groups, wearing of respirators and parents' access to kindergartens. Measures in the Czech Republic were stricter in terms of the length of closure of kindergartens and wearing of respirators. In Denmark, measures were stricter in terms of the number of children in groups and parents' access to kindergartens.

The present research focuses on: *material* conditions that concern the generally appropriate material environment of the kindergarten, *psychosocial* conditions that primarily relate to the school climate and classroom atmosphere, but also *organizational, human resource and educational* conditions, *parental participation*, and *regimen measures*, including the provision of a rich and balanced diet, sufficient physical activity, rest and sufficient time spent outdoors. Generally speaking, children's healthy lifestyle is supported (FEP PE 2021). These conditions were selected deliberately on the basis of the previous phase of the research, as they were found to be most vulnerable to anti-epidemic measures (see Gajdová, Srbená, 2021; Srbená, Gajdová, 2021).

METHOD

Research problem: The impact of the anti-epidemic measures on selected conditions and functions of preschool education in mainstream and forest kindergartens in the Czech Republic and Denmark.

Main objective: To analyse, compare, and assess the impact of the anti-epidemic measures on the functions and conditions of preschool education in forest and mainstream kindergartens in the Czech Republic and Denmark.

For the purposes of the research study, forest kindergartens and mainstream kindergartens were selected. Mainstream kindergartens are those that do not follow an alternative concept and are usually established by the state.

Research questions

The research questions are based on the research problem and the research objective:

RQ1: Are the functions fulfilled in mainstream and forest kindergartens in CR and Denmark despite the anti-epidemic measures?

RQ2: How do the anti-epidemic measures affect the conditions of preschool education in mainstream and forest kindergartens in CR and Denmark?

RQ3: Are there any differences between mainstream and forest kindergartens in fulfilling and respecting the functions and conditions of preschool education in CR and Denmark?

Research method

A qualitative sequential method triangulation was selected: a content text analysis which was based on the documents provided by the state administration and government, ministries of health and education in both countries, as well as the applicable legal documents and papers. The other strategy was a semi-structured interview with teachers in state and forest kindergartens in both countries. Interviews were conducted with four people. Interviews with participants in Denmark were conducted online via the Zoom platform. At the beginning of the interview, participants were informed that the interview would be recorded for the purposes of further data processing. Data analysis was performed by means of open coding.

Description of participants

When it comes to kindergartens, the criterion for the selection was the compliance of all kindergartens with applicable national curricular documents. Subsequently, kindergartens in each country were randomly addressed. When it comes to interviewees, we describe them as follows:

- Participant 1 (P1): female teacher in a Danish forest kindergarten, 35 years of age, university degree, and 15 years of experience (kindergarten capacity 12 children, 5 teachers + 2 teaching assistants, established by an association of parents)
- Participant 2 (P2): male teacher in a Danish mainstream kindergarten, 30 years of age, university degree, and 5 years of experience, (kindergarten capacity 140 children, 30 teachers, established by the municipality)
- Participant 3 (P3): female teacher in a Czech forest kindergarten, 51 years of age, university degree in preschool education, and 20 years of experience (kindergarten capacity 15 children, one heterogeneous class, 4 teachers + one teaching assistant, established by a registered association)
- Participant 4 (P4): female teacher in a Czech mainstream kindergarten, 48 years of age, secondary education with school leaving qualification, and 28 years of experience, (kindergarten capacity 99 children, 4 heterogeneous classes, 8 teachers + 1 teaching assistant, established by the municipality)

*Analysis of the functions and conditions of preschool education***TABLE 2.** Juxtaposition of the functions of preschool education in the context of the anti-epidemic measures in both countries

SELECTED CRITERIA	CZECH REPUBLIC	DENMARK
Educational function	Risk of non-holistic child development Distance education for a period of 50 days	Risk of non-holistic child development Distance education for a period of 15 days
Socialization function	Significant restriction of physical contact Isolated groups of 15 children	Significant restriction of physical contact Isolated groups of 3–6 children

Educational function

The fulfilment of the educational function was affected in both countries but with certain differences. In the Czech Republic, this primarily concerned the way in which education was conducted, i.e., it was most affected in terms of the transition from full-time education to distance education. Moreover, education was partially transferred to parents for a period of 50 working days. In Denmark, distance education was shorter, which might have had a smaller effect on the education function compared with CR. In both countries, a great effort was made to continuously inform parents about the methods of substitute education by means of manuals, websites and electronic communication.

Socialization function

Due to the lockdown, the fulfilment of the socialization function was disrupted in both countries. One of the important factors was the length of kindergarten closure in the context of additional anti-epidemic measures that mainly affected the organization of kindergartens. Children were deprived of social contact and did not have the opportunity to interact with their peers and teachers. In the Czech Republic, classes were limited to 15 children, while in Denmark, groups of children younger than 3 years had a maximum of 3 children, while children aged 3 to 6 years formed groups of a maximum of 6 children, which could have led to a more significant limitation of this function compared with the Czech Republic. A challenging aspect in both countries was the socialization of the smallest chil-

dren, who, due to the pandemic, did not undergo the natural adaptation process to the kindergarten environment.

TABLE 3. Juxtaposition of the conditions of preschool education in the context of the anti-epidemic measures in both countries

SELECTED CRITERIA	CZECH REPUBLIC	DENMARK
Material conditions	<i>Distancing</i> Hygiene aids <i>Wearing of respirators</i> Testing	<i>Structuring of space</i> Hygiene aids <i>No respirators</i> Testing (<i>Test to Stay method</i>)
Psychosocial conditions	Mental stress on children Mental stress on teachers	Mental stress on children Mental stress on teachers
Organizational conditions	<i>Changes in the implementation of education (groups of 15 children)</i>	<i>Changes in the implementation of education (groups of 3 or up to 6 children depending on age)</i>
Staffing and pedagogical conditions	Teachers absent	Teachers absent
Parental involvement	Changes in communication and cooperation with parents	Changes in communication and cooperation with parents
Daily regimen	Outdoor activities preferred, promotion of a healthy lifestyle	Outdoor activities preferred Promotion of a healthy lifestyle

Material conditions

The material conditions in both countries changed. Greater distances between desks and chairs had to be maintained and the educational environment had to be adjusted so that children were prevented from gathering. Moreover, hand disinfection, furniture cleaning chemicals and disposable wipes had to be provided. Toys had to be disinfected on a daily basis and those that were difficult to clean had to be put away as a precautionary measure.

Psychosocial conditions

In the Czech Republic, the disruption of the psychosocial conditions was caused by the mandatory testing of teachers and children, obligation to wear a respirator

for employees and parents, preparation and implementation of distance education and changes in school-family communication. All of this had an impact on the mental stress on children, parents and teachers. In Denmark, teachers were not obliged to wear respirators when working with children; testing was carried out according to the *Test to Stay* principle. The following was similar to CR: changes in school-family communication and transition to distance education.

Organizational conditions

The pandemic brought significant organizational changes in preschool education, such as changes in handover of children, adjustment of premises, transition to distance education, etc. In CR, the maximum number of children in a group was 15. In Denmark, groups of children younger than 3 years had a maximum of 3 children, while children aged 3 to 6 formed groups of a maximum of 6 children.

Staffing and pedagogical conditions

Both countries faced a shortage of teachers due to frequent sickness absence. Substitute teachers were recruited among teacher training students, babysitters, school assistants or teaching assistants. According to the Danish legislation (Sundhedstyrelsen, 2022), one teacher looked after 3 to 6 children, which made it difficult to find adequate cover teachers for those who were absent.

Parental involvement

Parental involvement in school events and their presence in school buildings was restricted. Due to distance education, parents from both countries were involved. However, even after reopening of schools, cooperation with parents remained very limited in order to prevent another spread of the disease.

Daily regimen

A healthy lifestyle was supported in both countries, such as strict observation of hygiene habits, outdoor activities, consumption of vitamins, sports, etc. When it comes to the type of kindergarten, the difference between mainstream and forest kindergartens was that no changes had to be adopted in forest kindergartens.

This implies that both the functions and conditions of preschool education were affected in a similar way in both countries. However, the impact differed in specific sub-areas in the context of the anti-epidemic measures adopted and in relation to the type of kindergarten. This is analysed in detail in the following chapter.

Discussion

On the basis of the data and juxtapositions, analytical categories were created in the context of the kindergarten type.

The analytical categories were created using open coding, as part of which the codes relevant to the aims of the research were clustered into smaller subcategories and then into final categories. Tables 4 and 5 below show the final categories and subcategories.

TABLE 4. Analytical categories for mainstream kindergartens created on the basis of interviews in both countries

RESULTING ANALYTICAL CATEGORIES			
RESTRICTED CONTACT WITH PARENTS	DISTANCE EDUCATION	ORGANIZATION AND OPERATION OF KINDERGARTEN	RESTRICTION OF THE FUNCTIONS OF PRESCHOOL EDUCATION
<ul style="list-style-type: none"> - <i>No entry</i> - <i>Changes in child pickup</i> - <i>Limited communication</i> 	<ul style="list-style-type: none"> - <i>Digital technology</i> - <i>Methodological guidance</i> - <i>Home education</i> 	<ul style="list-style-type: none"> - <i>Different operation of kindergarten</i> - <i>Organizational changes</i> - <i>Limited culture</i> 	<ul style="list-style-type: none"> - <i>Limited education</i> - <i>Anti-epidemic measures</i> - <i>Socialization</i>

Restricted contact with parents

Contact with parents in mainstream kindergartens was significantly restricted in both countries. In Denmark, parents were strictly prohibited from entering kindergartens, which was an effective prevention of the virus transmission. Another measure was collecting children by only one parent; grandparents or older siblings were not allowed to pick up children. In CR, parents were allowed to enter kindergartens but only the changing room, where they collected their child and immediately left. When collecting their children, parents had to wear a res-

pirator and have their hands thoroughly disinfected. According to participant 4, communication with parents during the pandemic took place only through e-mail and joint events with parents were cancelled.

P2: *“Also parents could not drop off the kids inside of the institution, they had to stay outside, and they could only send one parent to drop off and pick up their children.”*

P4: *“During the pandemic, communication with parents took place via email, communication was quite good. Now we prefer an individual interview, communication is good and sufficient.” “...adults had to use hand disinfection and wear a respirator when entering the building, the number of entering people was limited.”*

Distance education

Distance education was implemented in both countries when kindergartens were closed. Czech mainstream kindergartens were closed for 50 working days. Parents received resources and information on how to work with their children and develop their skills. This form of education was only a partial substitute (MEYS, 2021b). According to participant 4, this may have been caused by a lack of interest on the part of parents, leading to non-holistic development of children.

In Denmark, distance education was in place only for 3 weeks (Hathaway, 2020). According to participant 2, it was in the interest of the state to reopen preschool institutions as soon as possible. During the lockdown, the situation was similar to CR and information and resources were distributed electronically.

P4: *“We sent materials to parents every week via email but we received feedback only from some of them. I think because of the situation at the time, many of them did not have enough resources and energy to work with their children.”*

P2: *“Politicians they made sure that kindergartens were open, because it’s one of the most important institutions, so there was a really short time when kids were homeschooled. Preschool teachers gave some materials for the parents to work with their kids.”*

Organization and operation of kindergartens

Due to the measures adopted, it was impossible for teachers to ensure the operation of kindergartens under normal conditions. Participant 4 believes that despite the constant organizational changes, the life of the school calmed down because events were cancelled, children could not go to the theatre, etc. and spent time outdoors or in smaller groups indoors.

In Denmark, it was also recommended to move as much education as possible to nature which was supported by a significant organizational change. After reopening of kindergartens, children were divided into small groups of 3–6 children. For the whole day, children were in contact with a single adult. As a result, each kindergarten knew the child's contacts in the case of infection.

P4: *“When our school opened, we tried to spend most of our time outdoors where we did controlled activities. But the weather wasn't always good...”*

“There were constant organizational changes but overall, we agreed with fellow teachers that thanks to the pandemic the rush and everyday pressure disappeared and everything was suddenly calm, because we didn't have to prepare events, performances, exhibitions, etc.”

P2: *“...and then in each group we made smaller groups like social bubbles so they were only together with the same 4 kids every day. Each group had a regular staff, so there were 3–6 kids and one adult.”*

Restrictions of the functions of preschool education

The educational function was limited due to distance education and again after kindergartens were reopened. The measures adopted prevented the implementation of education plans. Both participants from mainstream kindergartens agree that the priority was to meet the children's basic needs. The participants also agree that socialization was the most affected function. At the same time, participant 2 observed a significant improvement in fine and gross motor skills in most children because they spent more time outdoors and had more physical activity.

P2: *“Our ambition level dropped and we focused more on basic needs.” ... “We saw an increase in motor skills, because we were so much outside, in the woods, so the kids were exposed to a lot more training in terms of motor skills.”*

TABLE 5. Analytical categories for forest kindergartens created on the basis of interviews in both countries

RESULTING ANALYTICAL CATEGORIES FOR FOREST KINDERGARTENS		
COOPERATION WITH PARENTS	BETTER IMMUNITY	ORGANIZATION AND OPERATION OF KINDERGARTENS
<ul style="list-style-type: none"> - <i>Cooperation not disrupted</i> - <i>Communication retained</i> 	<ul style="list-style-type: none"> - <i>Lower sickness rate</i> - <i>Outdoor activities</i> 	<ul style="list-style-type: none"> - <i>Meeting of parents suspended</i> - <i>Limited consultations</i>

Cooperation with parents

In both countries, the founder of the forest kindergarten is a registered association, which also means that the cooperation between the school and the family is required for proper functioning of the entire institution. According to the participants, this cooperation was slightly limited as a result of the measures adopted, but the limitation was not significant except in the lockdown period.

P1: *“Parents did a good job. If one of the parents was infected, it was assumed that the children were also sick and stayed at home with their parents.”*

P3: *“We tried to keep distances with parents, but communication was similar to normal conditions.”*

Better immunity

Both participants agree that the immunity of children in forest kindergartens is better compared with children in mainstream kindergartens. According to participant 1, the sickness rate of teachers was not a serious issue as in other schools.

P1: *“Children were often in the fresh air. The percentage of sickness is 3 %, which is half of that in other public schools. Our children are more immune. Even the teachers were not positive for 2 years, and then they got sick with omicron. If the teachers were sick, the parents helped, but gradually a lot of parents also got infected, some were very sick, some had no symptoms and were at home for 4 days.”*

P3: *“They probably spent more screen time, which surely didn't help. However, children adapt quickly and we soon restored the original regimen. Although we spend all of our time outdoors in all weather conditions, children rarely get sick.”*

Organization and operation of kindergartens

According to both participants, the pandemic did not cause any significant changes in organization. Participant 1 believes that organization was disrupted mainly due to the partial interruption of cooperation with parents.

P1: *“There were not so many changes in the organisation of our school. The biggest change was the restriction of meeting with parents. Parents have working days at our school when they come to us and do the necessary work. However, due to the changes caused by Covid, this was impossible.”*

P3: *“The organization and operation of kindergartens did not change, we just adapted to the current situation with the help of the Czech Forest Kindergarten Association and now we continue our previous work.”*

RESULTS SUMMARY

Below is a summary of the results structured according to the research questions.

RQ1: Are the functions fulfilled in mainstream and forest kindergartens in CR and Denmark despite the anti-epidemic measures?

It can be assumed that the educational function was more affected in CR than in Denmark because of the longer closure of preschool institutions. The socialization function was significantly affected in both countries, but more so in Denmark due to the completely isolated groups of 3–6 children.

RQ2: How do the anti-epidemic measures affect the conditions of preschool education in mainstream and forest kindergartens in CR and Denmark?

In the Czech Republic and Denmark, the changes in these conditions were similar. The psychosocial conditions were affected as well. The organizational conditions were more affected in Denmark due to the strictly isolated groups of children. Cooperation with parents was weakened in mainstream kindergartens in both countries, while in forest kindergartens, cooperation with parents remained almost unaffected.

RQ3: Are there any differences between mainstream and forest kindergartens in fulfilling and respecting the functions and conditions of preschool education in CR and Denmark?

The above implies that, despite the anti-epidemic measures and lockdown in both countries, it was easier for forest kindergartens to deal with the situation, which was probably due to outdoor education. In this way, forest kindergartens automatically fulfilled the recommendation to carry out education outdoors and, thanks to the better immunity of children and teachers, they did not have to face a high sickness rate and the related disruption of organization of education.

In the context of this research question, it should be mentioned that the participants from mainstream kindergartens observed a positive shift in children's development as a result of spending more time in nature. We believe this to be inspiring for mainstream kindergartens as the COVID-19 pandemic showed that even mainstream kindergartens can move part of their education to nature.

CONCLUSION

The text presents a part of a broader research study that analyses and compares the impacts of the measures against the spread of COVID-19 on preschool education in selected European countries. The paper focuses specifically on an analysis and comparison of the impact of the anti-epidemic measures on selected functions and conditions of preschool education in the Czech Republic and Denmark in the context of the type of kindergarten. The study suggests that the COVID-19 pandemic affected both countries in a similar way but there were certain differences, not only in the context of various measures adopted by the countries, but also in the context of the differences between forest and mainstream kindergartens.

In the context of the research questions, the following conclusions can be made (since the research questions overlap, the conclusions are presented for all three research questions):

Among these functions, both the educational and socialization functions were analysed and found to be significantly affected by the measures introduced to limit the spread of COVID-19. Educational conditions were affected similarly in both countries. Nevertheless, some differences were observed in the educational conditions, as discussed in Subchapter 3.

Distance education had an impact on both the educational and socialization functions in both countries, as it made direct interaction between children and teachers, as well as among children, impossible. As a result, social interaction was limited to daily contact between family members or to online meetings with teachers. In this context, the Danish government limited distance education to the shortest possible period amounting to 15 working days. In the Czech Republic, kindergartens were closed for 50 working days due to the development of the epidemic situation, which significantly increased the risk of non-holistic child development compared to the length of distance education in Denmark. The measures persisted in both countries even after the reopening of kindergartens; measures such as testing, smaller groups of children, spacing, wearing of masks in the Czech Republic, among others, continued to affect the fulfilment of the functions and optimal educational conditions. According to participants from mainstream kindergartens in both countries, after reopening, teachers focused mainly on meeting the basic needs of children and adhering to safety measures, sometimes at the expense of the educational function. Regarding the impact of distance education on both types of kindergartens, no differences were reported in this context. However, after reopening, it was easier for forest kindergartens to cope with the measures in the context of the monitored functions and conditions of education. We consider this finding to be logical as children, teachers and possibly parents participating in forest kindergartens spend most of the day outdoors and therefore, it was not necessary to introduce some of the measures.

Another beneficial finding of the study is that, according to one of the teachers from a mainstream kindergarten, shifting education outdoors facilitated the development of children's fine and gross motor skills.

In conclusion, it was somewhat easier for forest kindergartens to cope with the new situation during the COVID-19 pandemic due to the nature of their education, especially in upholding optimal conditions of education, which we perceive as indispensable for fulfilling the functions of preschool education.

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USPOREDBA FUNKCIJA I UVJETA ZA PREDŠKOLSKO OBRAZOVANJE U DRŽAVNIM I ŠUMSKIM VRTIĆIMA ZA VRIJEME PANDEMIJE KORONAVIRUSA U ČEŠKOJ REPUBLICI I DANSKOJ

SAŽETAK

U radu se predstavlja dio istraživanja provedenog u sklopu projekta „Posljedice pandemije koronavirusa za odabrane funkcije i uvjete u predškolskom obrazovanju u kontekstu pripreme djece za početak obveznog obrazovanja u odabranim europskim zemljama“ na Učiteljskom fakultetu Sveučilišta Palacký u Olomoucu. Rad se bavi usporedbom Češke Republika i Danske u svrhu analize i usporedbe utjecaja protuepidemijskih mjera na uvjete i funkcije predškolskog obrazovanja u konvencionalnim i šumskim vrtićima. U istraživanju je primijenjena metoda kvalitativne analize tekstualnog sadržaja i polustrukturiranih intervjua s odgojiteljima u vrtiću, nakon čega je slijedilo otvoreno kodiranje i formulacija analitičkih kategorija te njihova usporedba prema načelima komparativne pedagogije. Rezultati upućuju na to da je utjecaj protuepidemijskih mjera na predškolsko obrazovanje i razvoj predškolske djece u konvencionalnim i šumskim vrtićima varirao s obzirom na ostvarivanje funkcija predškolskog obrazovanja, kao i s obzirom na uvjete u kojima su šumski vrtići obrazovanje provodili za vrijeme pandemije koronavirusa.

KLJUČNE RIJEČI:

predškolska djeca, odgojitelji u vrtiću, funkcije i uvjeti za predškolsko obrazovanje, konvencionalni vrtić, šumski vrtić, protuepidemijske mjere, koronavirus