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Educational Quality of Early Childhood Education in Bosnia and Herzegovina

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Abstract: This paper analyzes the key determinants of the quality of preschool education in Bosnia and Herzegovina. Based on the analysis of recent data, the paper indicates the status and development trends in this regard in the last decade. Although preschool education in Bosnia and Herzegovina has a long tradition, it is facing a number of challenges, mostly arising from the arrangement of the state system and post-war transition processes which have significantly impoverished this level of education. Therefore, the main goal of this paper is to point out the recent public policy efforts made in the attempt to ensure the quality of preschool education in Bosnia and Herzegovina, as well as the effects that are being achieved in this regard. Since quality can be approached from the aspects of structure and process, the elementary structural and process dimensions of preschool education will be taken as units of this analysis. Conceptualizing the results of this analysis, the status and quality of preschool education in Bosnia and Herzegovina will be positioned through an orientation towards the European framework for the quality and development trends of preschool education in Europe.

Keywords: Curriculum, equity and equal opportunities, preschool education, quality of preschool education.

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Introduction

The issue of the quality of preschool education has been present in the European context for many years (European Union, 2019, 2021; European Commission Network on Childcare and Other Measures to Reconcile Employment and Family Responsibilities, 1996; Working Group on Early Childhood Education and Care [ECEC], 2014). Various public policy efforts sought to realize the idea of equal access to high-quality preschool programmes for every child. Thus, one of the last millennium goals to be achieved by 2030 is to ensure “inclusive and equitable quality education and promote lifelong learning opportunities for all”, by “ensuring that all girls and boys have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education” (United Nations, 2018, p. 27).

As quality is a complex and multidimensional concept, there are many attempts to determine the quality of preschool education. However, there is a development perspective among researchers, where high-quality preschools are defined as those that “promote optimal child outcomes in all domains of development, while low-quality care is associated with negative outcomes for children” (Hunstman, 2008, p. 7). Among the elements that specifically determine the level of quality of a preschool institution, Vermeer et al. (2016) state *structural* (size of the educational group, the ratio of children and educators, level of education and professional development of educators, the permanence of educators in the group, physical environment of the kindergarten) and *process* (interactions of children with other children and educators and possibility to participate in various activities) ones.

The end of the 20th and the beginning of the 21st century have been marked by numerous studies indicating consensus on the positive effects of a quality preschool programme on children's developmental outcomes, especially in disadvantaged children (Belsky et al., 2007; Huizen & Plantenga, 2018; Hunstman, 2008; National Institute of Child Health and Human Development [NICHD], 2002; Sylva et al., 2011). Quality preschool programs are considered important for the improvement of children's cognitive, language, and social skills (Melhuish, 2001; Peisner-Feinberg et al., 2001) and can be crucial in the reduction of the development gap that opens up among children of different

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socioeconomic backgrounds (Felfe & Lalive, 2014; Felfe et al., 2015; Heckman et al., 2010). Research also indicates not only the importance of the availability of preschool programmes (in terms of diverse infrastructure of preschool institutions and opportunities for children to participate in different socio-economic backgrounds) but also in the quality of experiences that children gain in them. Sylva (2010) cites the example that children's experiences can differ significantly if one of them attends a public kindergarten for half a day and the other has a full day stay in a private kindergarten.

Although there are differences between countries in the implementation of strategic directions aiming to ensure quality in preschool institutions, it is also possible to discuss global efforts in this area. Thus, to make proposals for improving the quality of preschool education, experts from all over Europe under the auspices of the European Union have discussed international research and key public policy actions that have led to improved quality in preschool education. As a result of the work of this Early Childhood Education Working Group, a *European Framework for the Quality of Preschool Education* has been proposed, consisting of five priority objectives (Working Group on ECEC, 2014): *accessibility, professionals employed in preschool institutions, curriculum, monitoring and evaluation, management, and funding*.

This paper aims to present the strategic efforts and current circumstances with the aim of developing the quality of preschool education in Bosnia and Herzegovina, hereinafter BiH. From the above mentioned, we single out the main research question: *What can be concluded about the quality of preschool education in BiH in the context of the five priority objectives of the European Framework for the Quality Preschool Education?*

The quality of the structure will be judged based on available relevant statistical indicators and the quality of the process through the analysis of systemic and curricular approaches and solutions, which aim to ensure quality preschool education in BiH. In this procedure, we start from the analysis of the publications presented in *Analytical Framework* (Figure 1) to reveal the basic elements that indicate the quality of preschool education in BiH. The five priority objectives of the *European Framework for the Quality of Preschool Education* are taken as a reference framework for the paper structure and data analysis.

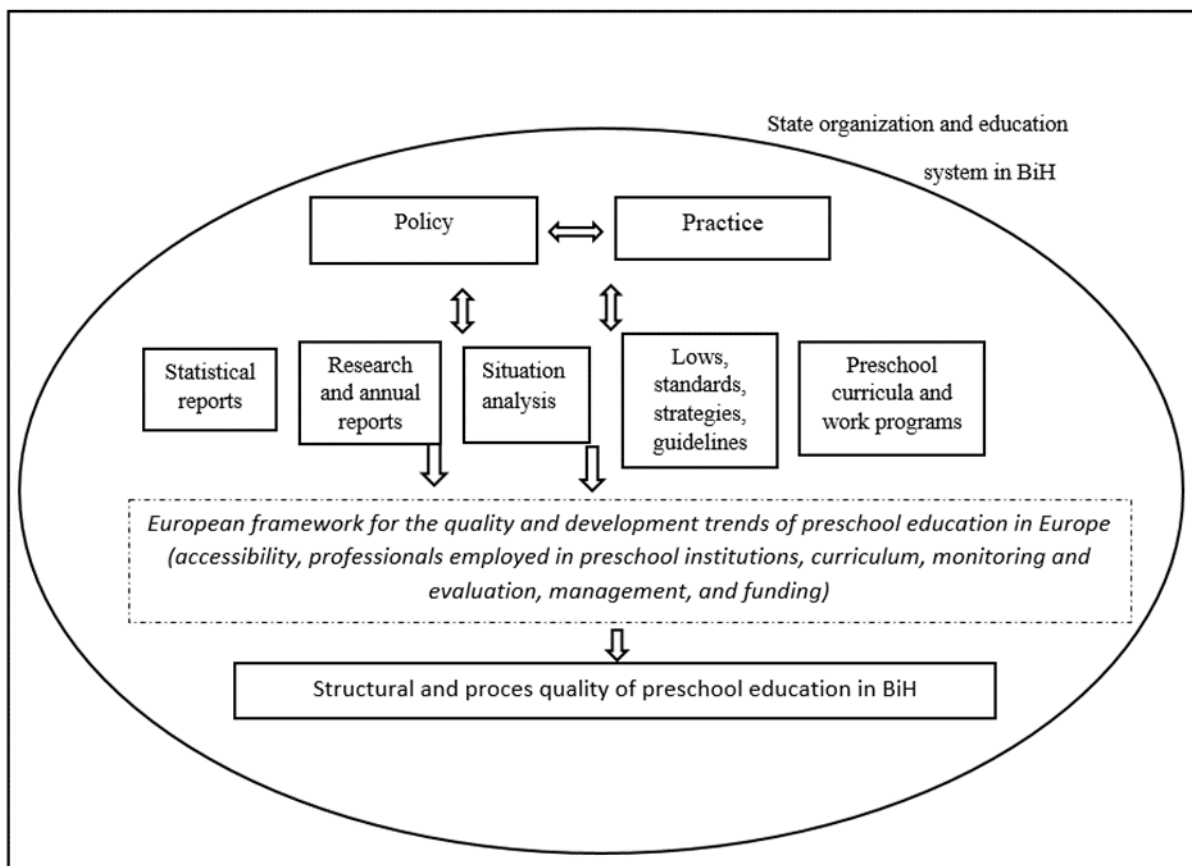


Figure 1. Analytical Framework of Data Analysis

Methodology

The Research Stages

The research used a systematic literature review, which is considered suitable when we want to summarize and analyze literature to gain broader and deeper insights into certain phenomena (Xiao & Watson, 2017). An interpretive type of literature review was used, which leads to an understanding of the current state of quality of preschool education in BiH and ends with recommendations for improvement.

In *Table 1*, we present the types and selection criteria (inclusion/exclusion of studies) defined prior to the data search.

Table 1. The Inclusion and Exclusion Criteria

Type of criterion	Criteria	Inclusion	Exclusion
Type of publication	Statistical reports	x	
	Research and annual reports	x	
	Situation analysis		
	Laws, standards, strategies, guidelines	x	
	Preschool curricula and work programs		
	Journal articles	x	
	Conference papers		
	Books	x	
			x
			x
Research methods	Qualitative	x	
	Quantitative	x	
Access	Online	x	
	Paper	x	
Places of publication	BiH	x	
Publication period	2004 – 2021		

Sample Analysis

The sample includes 37 major publication units relevant to early childhood education and care in BiH. The number of studies in relation to the type of publication is presented in *Table 2*. Since there is no single base for monitoring and evaluation of preschool education in BiH, relevant data are scattered in various reports by governmental and non-governmental organizations. In addition, a decentralized management system results in different legislative and curricular solutions. All valid curricula from all administrative units (online or paper form) were collected and a detailed analysis of each program/curriculum was made, guided by the predefined elements of analysis (objectives, principles, philosophy, and structure of the document).

Table 2. Number of Studies in Relation to the Type of Publication

Type of publication	Statistical reports	Research and annual reports	Situation analysis	Laws, standards, strategies, guidelines	Preschool curricula and work programs
N	9	4	2	10	12

The available reports dealing with certain aspects of the quality of preschool education were then collected and clearly presented. The criteria for selecting the report were the reliability and relevance of the information and the credibility of the sources (agencies, organizations, ministries). Publications were collected based on the responses to official requests sent out to the relevant institutions and based on the web search results.

The main intention behind basing the research on the secondary literature was reflected from the authors' informed conclusion that there is a great dispersion of documents from the key institutions for the development of preschool education at the level of BiH. For example, the preschool curricula of all ten cantons do not have their own central database (the curricula are very difficult to access and some of them are even available only in paper form), as well as reports from ministries or other organizations. The intention was to consolidate and collect all relevant reports of the key institutions and, based on that, to create a comprehensive picture of the quality of preschool education in BiH.

Data analysis was performed through meta-analysis (showing trends, comparisons, or structural analysis) based on a protocol created on the basis of the five key elements arising from the *European Quality Framework*. The meta-analysis, which refers to the analysis of analyses, was based on the integration of statistical and narrative data with the aim to

create a complete picture and insight into the quality of preschool education in BiH. The analysis was performed by two independent evaluators, who, upon completion, discussed and harmonized the results of the research listed below.

The reliability of the research is based on the competencies of the authors as experts in the field of preschool education, and their experience in studying and keeping track of the trends in the development of preschool education in BiH. The *Analytical Framework* of data analysis was presented to the third expert in the field of preschool education. All disagreements were discussed and the initial analytical framework was modified accordingly.

The validity of the research is based on the clearly defined criteria of analysis (accessibility, professionals employed in preschool institutions, curriculum, monitoring and evaluation, management, and funding), which further determined the sources of relevant documents included in the analysis. Validity is reflected in the fact that the documents have been selected from all of the relevant institutions that have a role in the management, monitoring, evaluation, and development of the quality of preschool education in BiH, in the domain important for the aim of this research.

Results

The results presented below are organized into five thematic units, reflecting the five priority objectives of the *European Framework for the Quality of Preschool Education: accessibility, professionals employed in preschool institutions, curriculum, monitoring and evaluation, management, and funding*. Data are presented in a tabular form in the case of extraction of the basic statistical data, or narratively through the interpretation of key quality indicators.

Accessibility and Availability of Preschool Education in BiH - Analysis in the Context of Priority European Goals

Under the stated European tendencies, BiH has been especially focused on the development of preschool education in the last decade. In February 2005, the Council of Ministers of BiH adopted the *Strategic Directions for the Development of Preschool Education in Bosnia and Herzegovina* (Ministry of Civil Affairs of Bosnia and Herzegovina, 2004). In this way, the state decided to undertake and systematically implement the most important activities related to the improvement of preschool education. After that, in June 2008, the state adopted the *Strategic Directions for the Development of Education in Bosnia and Herzegovina with an implementation plan, 2008-2015* (Council of Ministers of Bosnia and Herzegovina, 2008). It was the second state document to promote the importance of preschool education, which envisages short-term, medium-term, and long-term development goals, mostly aimed at increasing the coverage of children from the age of four until they start school. The long-term goal (2011-2015) is to increase the number of children enrolled in preschool institutions to 50% of the population, and for the mandatory preschool programme in the year before starting school to 100% of the population, which was not achieved within the specified time frame.

The strategic goals of preschool education in BiH are united in the *Platform for the Development of Preschool Education in Bosnia and Herzegovina for the period 2017-2022* (Ministry of Civil Affairs of Bosnia and Herzegovina, 2016). The goals are grouped into five packages and related to increasing coverage, ensuring the quality of preschool education, regular funding, inclusion, and sensitization of society. Apart from being a framework for strategic action and improvement of preschool education, this platform represents one line of efforts to harmonize with the European goals in this area, especially in the field of children's inclusion and quality assurance.

According to the latest data (United Nations International Children's Emergency Fund [UNICEF], 2020), the coverage is estimated at 25%, which is only half the way when it comes to the long-term national strategic goal (2011-2015) that planned coverage of 50% of children. Comparing the above data with the data from 2006 (UNICEF, 2006) and 2012 (UNICEF, 2013), it can be stated that there is a tendency to increase slightly (*Table 3*). However, many children are still on the waiting list and cannot be admitted due to overcrowding, which indicates the need to expand the staff and infrastructure capacity of preschools.

Table 3. Coverage of Preschool Education in BiH (UNICEF 2006, 2013, 2020)

Percentage of coverage of children aged 3 to 5 in preschool education	
2006	6.4%
2012	13.1%
2020	25%

When it comes to the infrastructural capacities of preschool institutions (which significantly affect the coverage of children), it can be said that they are unevenly distributed, more concentrated in urban and less in rural or suburban areas. Therefore, in BiH, there is low coverage of disadvantaged children (children from families of lower socioeconomic status and marginalized children). There is a gap between urban and rural areas and the coverage of children of employed and unemployed parents. Of the total coverage of children with preschool education, only 0.5% of them are children from rural regions, 2% are children of unemployed parents and 2% of them are Roma children (UNICEF, 2016). Preschool institutions in BiH are more often attended by children from the urban areas than by those from the rural ones, children

living in richer households than in poor ones, and children whose mothers have a higher level of education than children whose mothers have lower levels of education (UNICEF, 2013).

To reduce this gap and make preschool education more accessible to all children, Article 16 of the *Framework Law on Preschool Education in Bosnia and Herzegovina*, hereinafter the *Framework Law* (Parliamentary Assembly of Bosnia and Herzegovina, 2007a), defines the obligation to attend compulsory preschool education for all children in the year before going to school. The goal of the programme is to provide equal opportunities for every child (from urban, suburban, or rural area) to exercise their fundamental rights. It is mainly performed in preschool institutions, or in primary school premises (where there are no preschool institutions). In most cantons, the programme of compulsory inclusion of children in preschool education is implemented throughout the year for 150-300 hours. Most administrative units in BiH that have adopted laws in line with the *Framework Law* have introduced a mandatory programme for children before starting school, and according to the latest data (Ministry of Civil Affairs of Bosnia and Herzegovina, 2021), many of them include 100% of children (Posavina Canton, Tuzla Canton, Zenica-Doboj Canton, Bosnia-Podrinje Canton, Sarajevo Canton, Canton 10 and Brčko District). In other cantons, a compulsory preschool programme has not been introduced (West Herzegovina Canton), but certain project activities are being carried out to include children in the programme with the help of non-governmental organizations (Una-Sana Canton, Herzegovina-Neretva Canton, Republika Srpska entity). The primary problem in the ensuring of improved conditions for the inclusion of all preschool children in these cantons is the lack of equipment of spatial infrastructure, financing of educational staff, providing transport, etc. (Ministry of Civil Affairs of Bosnia and Herzegovina, 2021).

Number of Educators, Preschool Institutions and Preschool Education Coverage of Children in BiH

According to the statistical indicators of the Agency for Statistics of Bosnia and Herzegovina (BHAS, 2018a, 2019a, 2020a, 2021a), the number of preschool institutions and the number of children covered by preschool institutions, as well as children with special needs, is slightly increasing (Table 4). However, according to the latest data from the 2020/21 school year, the number of children enrolled decreased by 9.4%, which may be related to the effects of the COVID-19 pandemic on the functioning of preschool education, due to prescribed epidemiological measures and recommendations. The number of children with special needs in 2020/21 is lower by 24.5% compared to the previous year. On the other hand, the number of children on hold is drastically increasing, so in 2020/21 it is 54.3% higher than in the previous year.

Table 4. Number of Preschool Institutions and Children Beneficiaries in BiH (BHAS, 2018a, 2019a, 2020a, 2021a)

	Number of institutions (public + private)	Number of children	Number of children in public preschools	Number of children in private preschools	Children on hold	Children with special needs
2020/21	399 (215+184)	27,698	64.3%	35.7%	6,660	388
2019/20	390 (209+181)	30,587	65.7%	34.3%	4,316	514
2018/19	359 (202+157)	28,511	67.8%	32.2%	3,531	500
2017/18	322 (188+134)	25,844	70.3%	29.7%	2,777	543

According to the statistical indicators of the BHAS (2018a, 2019a, 2020a, 2021a, 2021b), a continuous long-term trend of increasing the number of educators is evident, which can be a good indicator of positive efforts to improve the quality of preschool education. It can be said that, according to the data from 2020/21, the number of educators has doubled compared to the last ten-year period. If we take into account the structure of educators in terms of gender, it can be said that in recent years, in 1% of the cases, educators are male. When it comes to the ratio of educators to the number of children, according to the latest Eurostat (2020) data for 2019 for BiH, it is 1:26.2.

Professionals Employed in Preschool Institutions

What can be considered an advantage of preschool education in BiH is a higher level of initial education of educators. According to a survey (Agency of Preschool, Primary, and Secondary Education, 2016) on a representative sample of educators in BiH, 51% of them have completed a four-year study, 9% of them have completed a Bachelor's degree and 8% of them have a Master's degree, which is above the recommended European minimum. However, what stands out as a shortcoming is the negative selection of students who choose the study of Preschool Education, the insufficient link between theory and practice during their studies as well as the lack of innovative pedagogical practice (UNICEF, 2016). This is supported by the research results (Agency of Preschool, Primary, and Secondary Education, 2016) which indicate that educators pointed out that the initial education did not prepare them enough for their future work and that work experience is the most important source in acquiring and developing professional competencies. When it comes to professional development, it can be assumed that there is a lack of continuous professional development of educators

that contributes to the development of better practice (UNICEF, 2016). Therefore, there is a need for its systematic improvement and design through an orientation towards the improvement of educational practice in the community of reflective practitioners.

In order to improve the professional development of the educators, and to encourage the educators to assume responsibility for their own individual professional development the Agency announced a *Model for the Promotion of Continuous Professional Development of Preschool Educators, Teachers and Professional Associates in Bosnia and Herzegovina* (Agency of Preschool, Primary, and Secondary Education, 2014) in 2014. Further, employees in public and private educational institutions for preschool education in BiH are provided with conditions for professional development, networking, and cooperation through the ERASMUS + program, i.e., eTwinning project supported by the *Agency of the State Support Service in Bosnia and Herzegovina* (Ministry of Civil Affairs of Bosnia and Herzegovina, 2020).

Curriculum

According to UNICEF (2016) data, field observations suggest that a transmission approach to teaching is still prevalent in BiH's preschools, with the educator at the center as the transmitter of ready-made information. Poor documentation on incentive activities with children was also recorded, as well as the lack of a portfolio on monitoring children's development. These data indicate elements of the traditional approach in practice, although, on the other hand, in the theoretical concepts (curriculum), a modern approach aimed at children is proclaimed. Thus, its implementation in practice can result in variations in quality, both due to different approaches and due to different limitations or unequal opportunities.

Apart from the aforementioned and similar individual field research, no more comprehensive studies on the quality of the process (implementation of the curriculum in practice) of preschool education in BiH have been conducted. There are mainly theoretical analyses and public policy tendencies towards the improvement of legal and curricular approaches, given the specific state system and the complexity of curricular solutions in BiH. Since there are certain inconsistencies in terms of legislation and curriculum concepts, it is possible to expect significant differences in the quality of the practice of preschool education that arise from the above.

BiH is specific in that it does not have a national curriculum for preschool education. Instead, there is a certain curriculum inconsistency (within its administrative units), which is the result of a specific state constitution comprising 4 tiers of governance, at the State, Entity, Canton and municipal levels, and the legal inconsistency that is characteristic of legal pluralism. There are 14 ministries in BiH in charge of education, of which only one, the Ministry of Civil Affairs, operates at the level of the entire BiH and has a coordinating role, while at the level of the Federation of BiH entity, there is the Federal Ministry of Education and Science which performs administrative, professional, and other tasks in the field of education.

The remaining 12 ministries responsible for education (ten cantonal ministries of education within the Federation, the Ministry of Education and Culture of the Republika Srpska entity, and the Brčko District Education Department) are responsible for creating the curriculum, which is the official cantonal/entity/district educational concept. Each ministry has full and undivided competence in education and enacts its own laws in the field of preschool education, which should be harmonized with the *Framework Law*. Although the *Framework Law* was adopted in 2007, in three cantons in the Federation of BiH there is still no law on preschool education. It was never adopted in the Herzegovina-Neretva Canton and West Herzegovina Canton, while it was adopted in the Una-Sana Canton but did not enter into force. Due to the differences that exist in the legislation, certain curricular non-compliances and inconsistencies will also be discussed below.

The Common Core of Comprehensive Development Programmes for Preschool Education – the Basic Core of the Curriculum in the Administrative Units of BiH

To ensure the coherence of the entity/cantonal curricula and consistency in the quality of preschool education, the Ministry of Civil Affairs launched a nationwide reform initiative in 2007, which included the adoption of the aforementioned *Framework Law* and the *Common Core of Comprehensive Development of Programmes for Preschool Education*. The *Framework Law* (Article 21) defines the need to establish and implement the Common Core Comprehensive Development of Programmes for education in preschool institutions, which ensures quality education for all children throughout the country, consistency in the quality of standards of education in all preschool institutions, and implementation of programmes that meet the developmental needs of preschool children. However, the document could not enter into force until it was signed by all 12 education ministers. Due to this fragmentation and indolence, an initiative is being launched to form an expert body that will deal with the issue of education quality. The *Agency for Preschool, Primary, and Secondary Education* is established (Parliamentary Assembly of Bosnia and Herzegovina, 2007b), which, among other things, undertakes further work on the development of a common core of curricula. Two years later, all ministers of education signed the *Agreement on the Common Core of Comprehensive Development Programmes for Education in Preschool Institutions* (Ministry of Education Republika Srpska, Ministry of Education Canton of the

Federation, and Department of Education Brčko District, 2009) hereinafter the *Common Core Agreement*, and pledged that this document would be the basis for the development of preschool curricula in their jurisdictions.

Compliance of preschool curricula (of the administrative units of BiH) with the *Common Core Agreement* is conditioned by different legal structures at the level of respective administrative units. Accordingly, the date of adoption of the curriculum in these environments corresponds to the time of adoption of their own laws on preschool education. Preschool programmes in the Brčko District (Department of Education of the Brčko District of BiH, 2007), Republika Srpska (Ministry of Education and Culture and Sports of Republika Srpska, 2007) and Herzegovina-Neretva Canton (Ministry of Education, Science, Culture and Sports of Herzegovina-Neretva Canton, 2007) date from 2007 at the time when a Common Core was adopted but not yet in force. Harmonised comprehensive programmes with the *Agreement* on a *Common Core* are represented in Tuzla (Ministry of Education, Science, Culture and Sports of Tuzla Canton, 2010), Bosnia-Podrinje Canton (Ministry of Education, Youth, Science, Culture and Sports of Bosnian-Podrinje Canton, 2010), Zenica-Doboj Canton (Ministry of Education, Science, Culture and Sports of Zenica-Doboj Canton, 2011), and Central Bosnia Canton (Ministry of Education, Science, Culture and Sport of Central Bosnia Canton, 2018). All programmes that are harmonised with the *Common Core Agreement* have the same philosophy and similar document structure (definition, goal, tasks, principles of preschool education; structure and areas and outcomes along with the framework contents of educational work; partnership with the family and the environment; application of the programme - planning, documentation, and evaluation).

Programmes in Una-Sana Canton (Ministry of Education, Science, Culture and Sports, 1994) and Sarajevo Canton (Ministry of Education, Science and Information of Sarajevo Canton, 2000) are older and not in line with the *Common Core Agreement* so they belong to the group of traditional preschool programmes that are characterised by a high-level structure of programme contents. The contents are divided into educational areas without interconnection and integrity, which makes it difficult for children to establish meaningful connections, understanding, and easier navigation in the world around them. In the remaining three cantons (Posavina, West Herzegovina Canton, and Canton 10) there is no official comprehensive development programme for preschool education, but the process is carried out following the internal annual programmes within preschool institutions.

Further work on the development and improvement of the quality preschool curriculum was provided by the Agency of Preschool, Primary, and Secondary Education (APOSO, hereinafter the Agency) by adopting the document of the *Common Core Comprehensive Development Programmes for Preschool Education Defined on Learning Outcomes* (Agency of Preschool, Primary, and Secondary Education, 2018), hereinafter the *Common Core*. The document defines the areas that consist of components.

The *Common Core* (Agency of Preschool, Primary, and Secondary Education, 2018) is based on the humanistic and developmental orientation, the holistic approach to children's development and learning, and integrated planning. The main goal is to ensure and create conditions of well-being for every child in BiH, which can be seen in three aspects: personal, emotional, social, and educational well-being; social well-being that strengthens the community and systematic institutional support. The document is the basis for determining the direction of preschool education development in BiH and is intended for ministries of education and pedagogical institutes that need to further develop comprehensive development programmes. So far, no preschool curriculum has been aligned with this document.

The curricular reform is in progress now in Sarajevo Canton and it represents a central part of the overall education reform in this canton, which is planned to be implemented by September 2022. In that canton, the *Common Core Agreement* (Ministry of Education Republika Srpska, Ministry of Education Canton of the Federation, and Department of Education Brčko District, 2009) is applied in all preschools, while the curriculum is aligned with the *Common Core* (Agency of Preschool, Primary, and Secondary Education, 2018) in the drafting process.

Due to the evident inconsistency in the integration of the *Common Core Agreement*, the Agency, while recognizing the problem and real danger to the quality of preschool education, developed the *Guidelines for the implementation of the Common Core of Comprehensive Development Programmes for Preschool Education Defined on Learning Outcomes* (Agency of Preschool, Primary, and Secondary Education, 2021a) which are to support all those involved in the curricular reform process aimed at creating modern, humanistically oriented preschool curricula of the entities, cantons, and the Brčko District of Bosnia and Herzegovina. This document, together with the *Standards of Work Quality of Educators, Pedagogues, and Principals in Preschool Education* (Agency of Preschool, Primary, and Secondary Education, 2011), is an excellent tool for creating high-quality and harmonised upbringing, education, and care in early childhood throughout BiH.

In addition to comprehensive development programmes, in several cantons, preschool education programmes were adopted in the year before starting primary school for children who were not covered by any type of institutional education before attending primary school in Una-Sana Canton (Ministry of Education, Science, Culture and Sports of Una-Sana Canton, 2018) and Posavina Canton (Ministry of Education, Science, Culture and Sports Canton of Posavina, 2016). These programmes are in line with the *Common Core Agreement*, while the *Compulsory Programme for Children in the Year Before Starting School* (Ministry of Education, Science and Youth of Sarajevo Canton, 2010) of Sarajevo Canton is based on traditional foundations and enters the group of obsolete programmes. In other cantons, there is no

compulsory programme, although in most cantons there is a legal obligation to attend preschool education in the year before starting school.

To support the development of quality preschool education, the Agency adopts the *Standards of learning and development for children in the age before entering school* (Agency of Preschool, Primary, and Secondary Education, 2021a) defined in the Common Core with a presentation of visible behaviours that a child can demonstrate, realistic developmental expectations, and competencies without serious developmental difficulties, at the age before starting school, that the child could develop if they were provided with support and appropriate stimulating opportunities (physical, social, educational, cultural) for the development of competencies.

Monitoring and Evaluation of the Quality of Work in Preschool Institutions

Monitoring and evaluation of the quality of work in preschool institutions are performed by pedagogical institutes, ministries of education, and the Agency of Preschool, Primary, and Secondary Education (APOS) established at the state level, and ministries (14 in total) responsible for education in BiH: Ministry of Civil Affairs at the state level, one entity ministry of education and the Department of Education of the Brčko District Government and one ministry of education for each canton in the Federation of BiH.

The Agency is also responsible for cooperating with pedagogical institutes and other institutions for the support, modernisation, and development of preschool, primary, and secondary education, advising the competent educational authorities on the development and implementation of new curricula and the like. In addition to performing professional supervision over the work of educators to systematically monitor the situation, pedagogical institutes supervise professional training, monitor, and compile reports on the work of preschool institutions.

The Ministry of Civil Affairs of BiH supervises the implementation of the *Framework Law* (Parliamentary Assembly of Bosnia and Herzegovina, 2007a), and the competent education authorities are responsible for its implementation and enforcement. The Federal Ministry of Education is especially focused on monitoring the situation and undertaking the necessary activities related to the coverage of children with preschool education, networks of institutions, the state of infrastructure, and the quality of conditions for the educational process at the Federation level. Principals of preschool institutions are also directly responsible for the quality of the institution's work and have the authority to evaluate and monitor its work. In addition, UNICEF (2016) recommends improving the monitoring and evaluation of preschools, especially in the domain of innovation aimed to improve the situation in practice, and monitoring the individual progress of children, by creating individual portfolios. For this purpose, additional investments are needed, as well as the engagement of various experts.

In order to ensure quality, systematic monitoring, and positioning in European databases, within the *Platform for the Development of Preschool Education in Bosnia and Herzegovina for the period 2017-2022* (Ministry of Civil Affairs of Bosnia and Herzegovina, 2016), it is indicated that the establishment and constant updating of a database made according to the methodology of Eurostat and Eurydice should be performed. One of the reasons why the data for BiH are not updated in these databases is that many administrative units do not have developed statistical systems that correspond to these databases. While some of them have already established the mentioned databases (Brčko District, Herzegovina-Neretva Canton), in some of them (Tuzla Canton) the statistical systems will be developed in the next period (Ministry of Civil Affairs of Bosnia and Herzegovina, 2020).

Management and Financing

When it comes to management, there is a complex and decentralised governance system defined by the complex state system of BiH. Jurisdiction for education is dispersed at the entity level, and then lower to the cantons and municipalities within the entity. This type of decentralisation has negative effects on the uniformity of funding, given that preschool education is financed from municipal budgets. Due to uneven economic development in different parts of BiH, according to available indicators (UNICEF, 2020), there is a tendency for irregular or insufficient funding mechanisms, which structurally undermine the sustainability of preschool education. Thus, economically less developed municipalities allocate limited and unstable financial resources. Therefore, management decentralisation has a negative effect on the inclusion of children from poorer municipalities. Financial benefits are provided by law for certain categories of children and parents (children without parental care, children of unemployed parents, children of beneficiaries of social benefits, etc.) in the form of subsidies, but in practice, there are various deviations in exercising this right (UNICEF, 2016).

According to the statistical indicators of the BHAS (2018b, 2019b, 2020b, 2021c), in *Table 5* we present data on total public expenditure from the gross domestic product (GDP) on formal education in BiH and the share for preschool and primary education. Analysing the values presented in it, the percentages of GDP were calculated for the purpose of comparison. Based on this, it can be concluded that the GDP for preschool education in recent years averages 0.20% and for primary education 1.98%. It follows that on average up to 10 times less is allocated for preschool education compared to primary education.

Table 5. Share of Gross Domestic Product (GDP) for Preschool Education (BHAS, 2018a, 2019a, 2020a, 2021b)

	Total GDP for formal education	Share for preschool education	Share for primary education
2019	4.0%	6% (0.24% GDP)	49% (2.00%)
2018	3.9%	4.4% (0.17% GDB)	50.3% (1.96%)
2017	4.1	4.7% (0.9% GDP)	47% (1.92%)
2016	4.3	4.9% (0.21% GDP)	47.8% (2.05%)

Discussion

In a key European document called *European Framework for the Quality of Preschool Education* (Working Group on ECEC, 2014), the quality of an early childhood education (ECE) setting has been considered through the five priority objectives (Working Group on ECEC, 2014): *accessibility, professionals employed in preschool institutions, curriculum, monitoring and evaluation, management, and funding*. According to previous research results, it is possible to analyze the quality of preschool education in the context of key European goals and European statistical indicators.

Increasing access to preschool education is one of the European goals that has been intensively pursued in recent decades. Accordingly, one of the most important strategic goals in the European context was formulated at the meeting in Barcelona in 2002 (European Union, 2002) and refers to the period until 2010, when it was planned to include at least 33% of children under the age of three and 90% for those between the ages of three and starting school. After that, the European Commission (European Commission, 2011) defined the priority goals until 2020. Until then, all EU member states had to cover 95% of children aged four to starting school with preschool education. The last goal agreed by the EU member states to be achieved by 2030 (European Union, 2021) within the *Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond 2021-2030*, is the coverage of children (aged three years before starting school) of 96%.

According to Eurostat data (2020), by 2019 the reference value for Europe (EU-27) was almost achieved with an overall average of 95.1%. A total of 18 EU member states pointed out that in 2019 they have already reached a reference value of 95% (Sweden, Austria, Latvia, Hungary, the Netherlands, Italy, Luxembourg, Germany, Spain, Belgium, Denmark...) and some of them even 100% (Ireland and France). When it comes to the surrounding countries, it can be stated that they are very close to achieving the mentioned goal, so Croatia has coverage of 81.8% and Slovenia 93.6% (Eurostat, 2020a). When it comes to the inclusion of children in preschool education, BiH is only a quarter of the way towards a priority European goal. BiH has the lowest coverage of preschool education in Europe and according to the latest data (UNICEF, 2020) it is estimated at 25%, which is only half the way when it comes to the long-term national strategic goal (2011-2015) that planned coverage of 50% of children. Apart from that, low coverage of children from underdeveloped and rural areas, as well as of children from families of lower socioeconomic status. Accordingly, the main conclusion is that preschool education in BiH does not provide equal opportunities for all children to participate. This conclusion corresponds to the result of the analysis of the status of preschool education in the countries of former Yugoslavia (Hočevár & Kovač-Šebart, 2017), indicating that many countries (Croatia, Slovenia, Bosnia and Herzegovina, Serbia, Montenegro) are facing the problem of fairness and equal access of preschool education. Particularly indicated is the gap between the coverage of children with the preschool education stemming out of the social inequalities - the gap between the urban and rural areas or between the families of different socioeconomic statuses. In spite of the positive efforts, none of the countries in the surrounding (Croatia, Serbia, Montenegro) has not yet achieved the level attained in the countries of the European Union (Krnjaja & Pavlović-Breneselović, 2017; Novović, 2017; Zloković & Nenadić-Bilan, 2017). This leads to important pedagogical implications for policymakers, who should focus on creating strategies that will seek to increase the inclusion of children with preschool education, especially vulnerable children.

When it comes to the number of educators, although the number has doubled recently, which can be a good indicator of positive efforts to improve the quality of preschool education, it is still not sufficient to talk about a satisfactory ratio concerning the number of children. Relating to the ratio of educators to the number of children, according to the latest Eurostat (2020) data for 2019 for BiH it is 1:26.2, which significantly deviates from the European average (EU-27) of 1:13, as well as the average of countries in the region in that year (Croatia 10.7, Slovenia 20.6, Austria 13, Bulgaria 12.1). These data position BiH among the countries with the highest ratio of educators in terms of the number of children, which is not favourable if we talk about the structural elements of the quality of preschool education. In addition, it speaks in favour of the fact that it is necessary to work on the infrastructure of preschool institutions and the chronic shortage of educators. If we look at the structure of educators in terms of gender, it can be said that in recent years, in 1% of cases, educators are male. This trend is in line with the European context where there is a large gender imbalance in the teaching staff, as male educators make up only 4.2% of all educators in the EU (Eurostat, 2020). Long-term national strategic goal (2011-2015) that planned coverage of 50% of children.

When the professional competencies of educators are taken into account, they can be interpreted in two ways related to European tendencies. The official European recommendation (Urban et al., 2011) is that at least 60% of preschool educators should have a minimum Bachelor's degree. This condition has been met, which can be considered an

advantage, but no further conditions have been created for continuous professional development that improves the practice and development of child-centered curricula.

In the countries of the European Union, the preschool curriculum strives for a child-centered approach in which the child actively constructs knowledge and cognition in a rich and stimulating learning environment. In BiH's preschools still prevalent is the transmission approach to teaching with the educator at the center as the transmitter of ready-made information. In this regard, some important pedagogical implications emerge from this research as guidelines for researchers and curriculum creators: It is necessary to develop a child-centered approach and improved learning environment that promotes active learning; It is necessary to develop a framework curriculum based on applicable laws and relevant documents, established on: humanistic development theories as a basis for planning, development adequacy, holistic approach to development, individualized approach, and constructivist approach to learning; It is necessary to develop and improve the existing Common Core of comprehensive development programs for work in preschool institutions;

It is also necessary to increase investment in preschool education. According to the latest data for Europe (Eurostat, 2020), the average GDP in 2017 for preschool education (EU-27) is 0.6% and for primary education 1.1%. The lowest percentage of GDP for preschool education (EU-27) was recorded in Cyprus (0.33) and the highest in Sweden (1.72%). In European countries, there is a trend of greater investment in primary education compared to the preschool one, with the exception of Hungary and Bulgaria, where the opposite is true. Based on the above data, it can be concluded that BiH is one of the countries with the lowest percentage of GDP allocation for preschool education in Europe (compared to the EU-27 countries it would be in last place). The average percentage of GDP allocated to preschool education is up to three times lower than the average GDP for this level of education in Europe (EU-27). BiH also has the largest discrepancy in the investment ratio for preschool and primary education compared to other European countries.

Conclusion

This paper aimed to analyse the key determinants of preschool education quality in BiH, measuring the current state and prospects of its development in the context of the European framework for the quality of preschool education. Putting the current research results in a theoretical, temporal, and spatial context provides an opportunity to make a framework for a scientifically-based approach to creating better preschool education in BiH. From this reference framework, it is possible to summarise the following conclusions and recommendations for future guidelines related to the development of preschool education in BiH:

- I. The planned coverage of children defined by the national strategy, as well as by the global European goals, has not been achieved. It is necessary to work on expanding the coverage of children with preschool education, making it available and accessible to all children.
- II. There is a shortage of educators, as well as a lack of continuous professional development of educators. It is necessary to develop strategies for increasing the capacity and professional development of preschool educators.
- III. Since the education system is decentralised, there is no state curriculum; instead, it is fragmented by administrative units. Major legal incompatibilities and curriculum inconsistencies are emerging. These are mostly outdated programmes of educational work that need to be reconceptualised.
- IV. Monitoring needs to be improved by developing statistical databases based on the methodology of Eurostat and Eurydice. It is important to base the evaluation of preschool institutions' work not only on professional supervision, but also on improving the quality of work. It is necessary to improve the documentation and monitoring of the development and learning of children in kindergarten through portfolios and development maps.
- V. Decentralised management has a negative impact on the uniformity of funding in different parts of BiH, which also negatively affects the involvement of children and the development of preschool education. Given that the GDP for preschool education is three times lower than the European average, it is necessary to increase investments and harmonise the funding system aimed at improving the quality of preschool education.

Recommendations

The results of the study indicate the need for further research into the practice of preschool education. Field research would be of special importance for indicating the key determinants of the process dimension of preschool education quality. While the elements of the structural dimension of quality are mostly available, there is a need for research on the process dimension and qualitative data from field research (physical and social environment of the kindergarten). It is necessary to initiate action research in the function of professional development of educators, as key roles in the development of the quality of preschool education in practice, and to conduct an analysis of the quality of initial education of preschool educators. In addition, given that there is a decentralized education management system in the country, it is necessary to work on developing central bases for monitoring and evaluation, in order to provide more successful surveillance and development of the quality of preschool education in BiH.

Limitations

The limitation of the research comes down to limiting the sample to the analysis of secondary literature: statistical reports and reports from the ministries, agencies, and other organizations that play a significant role in developing the quality of preschool education in BiH. All other sources such as journal articles, conference papers, and books are excluded. However, despite this, the sample is structurally representative and conclusions can be drawn about the quality of preschool education in BiH based thereon.

Based on the initial assessment of the validity of the documents that will be included in the analysis, as well as the expertise of the authors of this research, it was found that there are no significant original scientific articles related to the subject of this paper. On a small number of scientific articles available to the authors, it was concluded that (in the domain of defined criteria relevant to this paper) the data in them are based on secondary literature that has already been selected to be part of this research. This proves how much the segment of preschool education in BiH is neglected in terms of original scientific research.

Authorship Contribution Statement

Camović: Concept and design, analysis, writing, data analysis. Bećirović-Karabegović: Data acquisition, writing, critical revision of manuscript.

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