

AN ANALYSIS OF THE LEVEL OF PARENTAL DEMAND FOR A PRESCHOOL FACILITY WITH A SPECIAL FOCUS ON THE INCLUSION OF ARTISTICALLY GIFTED CHILDREN AND THE ADEQUACY OF ITS MARKETABILITY

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ABSTRACT

The aim of this paper is to analyse the level of awareness and interest of parents and other relevant subjects in a new form of educational preparation for the inclusion of specially talented children, and the adequacy of its introduction to the market, through the analysis of demographic development at selected locations. The research in this area is very underdeveloped, because the focus is shifted towards the other end of the spectrum, and that is why we would like to draw attention to this problem via our article. In the introduction, the paper deals with the theoretical definition of social inclusion of gifted children and social entrepreneurship and its conditions in the Slovak Republic. In a separate chapter, the paper describes the methodology, data collection procedure, and sources and methods used, such as abstraction, comparison, and basic statistical and mathematical methods. Then exponential smoothing was used for prediction. We analysed through a survey the interest of parents and other relevant subjects, and the data collected was then synthesised. The last chapter presents the results of our work together with its limitations, and recommendations for future research. The whole idea of our preschool facility could be summarised in four words based on our results, namely, adequate, necessary, desirable and original. The paper serves to clarify and support the solution of our chosen research problem: education and the inclusion of above-average gifted children through social entrepreneurship.

KEY WORDS: *gifted children, preschool education, art kindergarten, social enterprise, analysis of demand.*

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Introduction

Education and the arts have been an important and significant part of every society since the beginning of society's development. According to the Latin poet Virgil, art is capable of revealing what no science can ever reveal to the human mind. Fields like art and education play an important and beneficial role, as they can strongly support human efforts to achieve a deeper and broader understanding and perception of reality. By supporting and implementing activities in these areas, we can contribute to the progress of our society, for which it is appropriate to apply through social entrepreneurship (Pagani, 2016).

The problem of over-talented children, for whom the educational process in preschool institutions (kindergartens) that they need for the development of their abilities, skills, and especially their artistic talent, are not provided, is not given enough professional and social attention. These children are specifically disadvantaged compared to their less talented classmates. In Slovakia, not only is the low level of society-wide interest in addressing the issue evident, but so is the absence of scientific research in the area. This is why there is also an absence of legislative anchoring of facilities that could strengthen social inclusion by providing full-day education and training for over-talented preschool children. The absence of facilities of this

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type in the Slovak Republic blocks the development of the artistic side of a child's personality to the greatest possible extent. Therefore, the interest of parents of such children in this kind of public service is growing.

The existence of the need to address the issue, and the existence of special artistic preschool facilities and methods, is confirmed by several studies by Sánchez-Escobedo (2013), Reaid and Boettger (2015), Papadopoulos (2020), Tatarintseva et al. (2018), and Steenbergen-Hu, Olszewski-Kubilius and Calvert (2020). In Slovakia, facilities for gifted children offering services of a circular nature operate in elementary art schools, and their capacities and numbers are stagnating. We can observe that a larger offer is connected with the extra-curricular activities for children from the first year of primary school (elementary art schools, leisure centres, clubs, ensembles, and others). One solution to ensure inclusion through a full-day educational process for talented preschool children is an artistic kindergarten in the legal form of a social enterprise. Children have the opportunity to progress and develop their talents, and thus achieve more positive results in their personal and artistic growth than they would get from attending a mainstream preschool. In 2018, Slovak law on the social economy and social enterprises created opportunities to build the first pilot project, where art, education and inclusion are creatively combined for particularly talented children who are paradoxically 'disadvantaged' due to their innate talent. Our aim is to analyse the level of awareness and interest of parents and other relevant subjects in a new form of educational preparation for the inclusion of specially talented children, and the adequacy of its introduction to the market, through the analysis of demographic development in selected areas: the Slovak Republic, the Banská Bystrica region, the Banská Bystrica district, the town of Banská Bystrica, and the town of Zvolen, and the prediction of children attending elementary art schools in the Banská Bystrica district, with the use of abstraction, comparison, and basic statistical and mathematical methods. Exponential smoothing was then used for prediction. We analysed through a survey the interest of parents and other relevant subjects, and the data collected was then synthesised. At the same time, we present the interdisciplinary possibilities for the preparation of a social enterprise project, and a proposal for teaching exceptionally artistically talented children.

This research answers the following questions: (1) How does demographic development in the selected period in the Banská Bystrica district and the town of Banská Bystrica influence the establishment of a potential preschool facility for specifically artistically talented children? (2) How does the prediction of children attending elementary art schools in a selected period in the Banská Bystrica district influence the establishment of a potential preschool facility specifically for artistically talented children? (3) How do the preferences of survey respondents influence the establishment of a potential preschool for specifically artistically talented children?

1. Social inclusion of gifted children and social entrepreneurship

Social inclusion is a process for a child to self-realise in society, to be accepted and recognised for his or her potential. This process can also be achieved through education, where key knowledge, skills and attitudes for social inclusion in different areas of their lives is provided to children (European Union and Council of Europe, 2023). The concept of inclusion in children's education is approached differently in many countries. Ninkov (2020) states that in the USA, inclusion is defined as the provision of services to students with disabilities in order to achieve social adaptation. In the UK, it is inclusive education, by seeking to remove barriers to learning and participation that may exclude disadvantaged children. By taking this approach, they see inclusion in education as an opportunity for all children to participate in a long-term process. In Scotland, they understand inclusive education as recognising that children have equal rights and value, which should be a fundamental starting point for educational and social policy in modern society. Turkey practises inclusive education by putting children without disadvantages together with children with disadvantages, who receive special educational support services. In the Netherlands, they refer to inclusive education as 'appropriate education'. The process of social inclusion affects different areas of children's lives, also with regard to their future. These areas are economic, political, cultural and social. According to Coombs, Nicholas and Pirkis (2013), social inclusion is also essential for mental health and overall well-being. Social inclusion enables

gifted children to develop and empower themselves in accordance with their specific abilities, talents and needs. However, without respecting diversity and creating the right conditions, it is not possible to achieve the realisation and acceptance of social inclusion of gifted children. In the Slovak Republic, there is a great space for the creation of a special environment for exceptionally gifted children, precisely through the establishment of a social enterprise to provide special preschool educational services, thereby contributing to the social inclusion of such children (European Union and Council of Europe, 2023; Ninkov, 2020).

Social entrepreneurship is based on social progress, and creates a new entrepreneurial direction. It offers a measurable, positive, socially beneficial impact, and, together with pro-social values, presents them as its priority. It is a business where any profit is used primarily to reinvest in the business, to support the social sphere, or to help specific people or a community in a socially disadvantaged situation. This puts entrepreneurship in a completely different dimension, creating a space for the realisation of solutions to problems and issues of social exclusion, and thus, unlike private profit, also creates social profit. Values in social entrepreneurship include, above all, solidarity, justice, participation, non-discrimination and human dignity. This is why it constitutes a different way of doing business and solving social and societal problems. In the context of the perception of the social economy, it is a new direction for economic thought, action and activity. This economy affects many actors, and creates new opportunities for socially beneficial activities and activities that the private sector is not interested in because they are financially unattractive, i.e. they do not bring adequate profit. Social entrepreneurship is an implementation tool of the social economy. It is a space for the fulfilment of its social objectives. Through social entrepreneurship and social enterprises, it also influences community development and the development of civil society, which synergistically create a space for cooperation.

The core of social entrepreneurship is based on values and criteria which, according to Defourny (in Lubelcová, 2012), belong to two groups. The first group are social criteria that constitute an explicit social goal. The second group includes economic criteria, especially a high degree of autonomy, management, control, decision-making and planning independent of the competence of the founders, bearing economic risk, flexibility in terms of competitiveness and the ability to survive in the economic market, and a combination of paid and unpaid work.

The heterogeneity of the structure of national economies, economic policy objectives and social policy means that there is no one-size-fits-all law relating to the social economy and social entrepreneurship. Therefore, the degree of their acceptance varies, and is anchored by different legislation. A major contribution to social entrepreneurship in Slovakia was the recognition of the legitimacy of social entrepreneurship as an instrument of active labour market policy in 2008, and the adoption of comprehensive legislation in 2018. Act No 112/2018 Coll. on Social Economy and Social Enterprises is a breakthrough for social entrepreneurship in Slovakia. In addition to raising awareness and precise definitions, it introduces rules for granting registration status, types of social enterprise, and their support or financing. The aforementioned Act No. 112/2018 Coll. defines a social enterprise as a social economy entity that carries out, on a continuous basis, independently, on its own behalf and at its own responsibility, an economic activity. The main objective is the achievement of a measurable positive social impact, in which the goods or services it produces, supplies, provides or distributes contribute to the achievement of a positive social impact, or the way in which they are produced or provided contributes to it. If it makes a profit from its activities, it uses more than 50% of its after-tax profits to achieve its main objective, or distributes part of the profit in accordance with the Commercial Code, and distributes it according to procedures and rules that do not undermine the main objective, and which involve interested persons in the management of its economic activity. The law stipulates that the target groups are, in particular, in addition to society as a whole, disadvantaged and vulnerable persons. It classifies social enterprises as three types according to their purpose. The first type is an integrative social enterprise with the aim of developing employment; the second type is a housing social enterprise; and the third type of social enterprise is a general registered social enterprise. The aim of this type of enterprise is to provide any socially useful service (and also field of education) to the community. Act No. 112/2018 Coll. also deals with the conditions for financing social enterprises and the control of the fulfilment of the main (social)

objectives. Together with the law, a register of social enterprises was created, which as of 9 November 2022, has recorded 532 registered social enterprises in Slovakia, of which 515 are integrative (Act No. 112/2018 Coll. on Social Economy and Social Enterprises; Ministry of Labour, Social Affairs and Family, 2022).

In some countries, such as the UK, Ireland and France, social enterprises account for 30% of the market share of selected business activities. Globally, around 11 million social enterprises were identified in 2022. In the EU, there were 2.8 million social enterprises in 2021 (representing 10% of all EU enterprises), which altogether provided 13.6 million jobs (i.e. 6.2% of EU employment), and accounted for 8% of the EU's GDP. According to this, we can conclude that the current social economy and social entrepreneurship abroad forms an important part of the national market economy (British Council, 2022; European Commission, 2022).

1.1. Educational work in preschool institutions in the context of the Slovak Republic for a selected group of children as a core of social enterprise activity

In this part of the paper, we deal with our target group, preschool children. The selected group includes children from three to six years of age who receive education and training in the institution. According to Act No. 245/2008 Coll., as amended by other regulations and regulations on education and training, the aim of this process is the development of children in socio-emotional, intellectual, physical, moral and aesthetic spheres, and the development of the abilities and skills necessary for fulfilling compulsory school attendance in primary school and later for independent life in society. In education and training in pre-primary educational establishments, it is very important to determine the plan, curriculum, aim, content and methods of education, which should be based on the relevant laws and regulations, the content and focus of the establishment, and the individual needs of the children. In our proposed approach to the education of talented preschool children, in addition to the established general structure of preschool education, the teaching is interwoven, guided and supplemented by the artistic style and methods that will develop the talented side of the pupils (Act No 245/2008 Coll. on education and training).

In addition to the acquired skills and knowledge through a universal and content-rich educational process, children in preschool establishments also develop a number of competences, i.e. abilities, which are, according to the ISCED 0-pre-primary education-state educational programme, mainly psychomotor, interpersonal, communicative, social, cognitive and informational competences. In addition to the parts where teaching takes place, games and play activities, movement and relaxation exercises, being outdoors, resting, and activities ensuring life management (personal hygiene, eating and dining) are an overall part of the daily schedule of the educational process (State Pedagogical Institute, 2016).

However, educational work in preschool institutions for our selected group of children, who have specific talents, is lagging behind in Slovakia. One of the reasons for this is the lack of facilities dedicated to such children as part of full-day education and training. This fact has been confirmed by numerous studies. Traditional statistical data according to the Gaussian curve claim that the total percentage of the gifted population is 2% to 3%. Psychologists claim that we have as many gifted ones as we can identify and diagnose; economists, or politicians, in turn, as many as we can financially support. Even at an international level, the issue of gifted individuals, especially gifted children, is still an under-addressed and under-supported area. According to the Council of Europe, one in five children in Europe is gifted, which means 20% of the population is gifted or talented in an intellectual, artistic or sporting sphere (Sánchez-Escobedo, 2013).

Freeman (in Sánchez-Escobedo, 2013, p. 182) argues that 'some experts believe that if we create and maintain enough appropriate programs with entitlements to promote the development of their gifts, talents and skills, as many as 20–25% of the individuals of the population would be able to achieve extraordinary performance in educational activities or in different areas of human activity.' According to Reid and Boettger (2015), many countries in the European Union have programmes for specially gifted children, while some do not even recognise or examine terms such as 'gifted' or 'talented'. They conclude that gifted children need to be found, recognised and respected. They argue that these children need professionals who understand the issues and challenges of their gifts, their struggles, their search for meaning, their desire to find connections,

understanding and complexity, and their sensitivity and intensity. They also argue that without an intentional search for gifted children and responsive school programmes for all gifted children (including those with low levels of educational attainment), education will not be successful and equitable. Papadopoulos (2020), in his analysis of 95 professional and scholarly sources, suggests that outstanding performance is a key element in giftedness, but in his view, ability alone cannot lead a gifted child to personal excellence and long-term commitment to talent. His analysis provides evidence that the process of nurturing giftedness in children is a dynamic interaction between the child's individual strengths and a supportive environment that can both stimulate and inhibit the full use of the child's abilities. The author refers to the results of this analysis to change the perception of the limitations and abilities of gifted children to provide suggestions for strategies to support their development. Tatarintseva et al. (2018), based on an analysis of scientific literature on giftedness, and the implementation of the educational approach model and tests, concluded that there should be a selection of versatile material, methods and creative learning tasks to support the achievements and creativity of gifted and talented students, taking into account their individual learning preferences. Steenbergen-Hu, Olszewski-Kubilius and Calvert (2020) found that underachieving gifted students who receive increased educational intervention significantly outperform their peers in psychosocial outcomes in self-efficacy, goal evaluation, the perception of the school environment and meaningfulness, improved self-regulation, increased motivation to learn, and psychosocial functioning, which was confirmed in qualitative studies.

Based on the studies and statistics mentioned above, we can assume that approximately 20% of the total population are gifted and talented children, which should be the basis for appropriate conditions, opportunities and support. In fact, this issue has not been addressed sufficiently, from which we deduce a need and intention to attend to artistically gifted children. A social enterprise with a focus on specific areas of giftedness, and the development of giftedness and talent, can lead to an extremely positive impact on these individuals.

2. Material and methods

The aim of the paper is to analyse the level of awareness and interest of parents and other relevant subjects in a new form of educational preparation for the inclusion of specifically talented children, and the adequacy of its introduction to the market, through the analysis of demographic development in selected areas: the Slovak Republic, the Banská Bystrica region, the Banská Bystrica district, the town of Banská Bystrica, and the town of Zvolen, and the prediction for children attending elementary art schools in the district of Banská Bystrica. At the same time, we present interdisciplinary possibilities for the preparation of a social enterprise project, and a proposal for teaching exceptionally artistically talented children.

The primary object of the research was children from three to six years of age with special artistic talents, who risk losing their uniqueness and 'disadvantage' if they are not given special care for their inclusion in the preschool period. These children do not reach the highest possible development of their talent, relationships, personality or mentality in a traditional kindergarten. The secondary object of the research was the legal guardians of the children: parents, other family members, and other interested parties or supporters.

In the context of this research, we set the following research questions: (1) How does demographic development in the selected period in the Banská Bystrica district and the town of Banská Bystrica influence the establishment of a potential preschool facility for specifically artistically talented children? (2) How does the prediction for children attending elementary art schools in a selected period in the Banská Bystrica district influence the establishment of a potential preschool facility for specifically artistically talented children? (3) How do the preferences of the survey respondents influence the establishment of a potential preschool for specifically artistically talented children?

Through this empirical research in the analysis of demographic development, we used the method of comparison and basic statistical and mathematical methods, thanks to which we compared and commented on the data within the context of the aim of the paper. Our database for the analysis of demographic development consisted of data from the Statistical Office of the Slovak Republic for the period 2011 to 2021 at the level of the Slovak Republic, the Banská Bystrica region, the Banská Bystrica district, the town of Banská

Bystrica, and the town of Zvolen. We subsequently used data from the Centre for Scientific and Technical Information of the Slovak Republic for the period 2011 to 2021; we analysed specifically statistical yearbooks of public, private and church kindergartens, at the level of the Slovak Republic and the Banská Bystrica district. We also used data from the annual report of the town of Banská Bystrica for the year 2019, for the information on the number of kindergartens in the town and the average number of children per kindergarten in the town of Banská Bystrica. For calculations and data comparison, we used MS Excel. We used this information and datasets to create a demographic basis for analysis, and to assess the background of the selected location for the implementation of our idea.

In the prediction, we estimated a forecast for the number of pupils in elementary art schools at the level of the Banská Bystrica district, using the SPSS program, by the method of exponential equilibration, using the most significant statistical type of model, which in our case was the Holt model. We deliberately chose the district of Banská Bystrica, because of the greatest connection with the potential location of our proposed facility. The exponential smoothing covered the time series of the selected period from 2011 to 2021. We used SPSS to make a model selection for the most accurate prediction. Based on the MAE value, which represents the mean absolute error, we matched the Holt model for the smallest value, the most statistically significant. Through this model, we further implemented the prediction until 2024.

For the purpose of analysing the interest and awareness level of parents, we used the survey method, in the form of questionnaires, which consisted of collecting direct data and the opinions of parents. We perceived them as potential intermediaries (children's guardians) of consumers and clients using our proposed service. Our research sample, which was deliberately selected and oriented towards parents, consisted of 85 respondents. The questionnaire included five closed-ended questions, with a choice of two alternatives, and two open-ended questions. The survey was administered electronically via Google Forms, and shared via email, social networking and other channels. The collection of the questionnaires was carried out in the month of May in 2021. The reliability and validity of the survey was ensured via anonymity, voluntariness and the correct understandable explanation of the research conducted. We collected only information necessary to the purpose of our research. This information was handled with care, and with the use of correct ethics and data processing.

3. Results and discussion

In this section, we present in more detail the results of the research. In the context of the first research question (How does the demographic development in the selected period in the Banská Bystrica district and the town of Banská Bystrica influence the establishment of a potential preschool facility for specifically artistically talented children?), we present our findings. In the basic statistics, we observe the population growth and the number of preschools (kindergartens) over ten years, the real growth of potential beneficiaries of the preschool education service, and the market conditions for providers of arts education preschool services. In the data for natural population growth from 2011 to 2021, of which the last years could be potential clients of our facility, we register that from 2011 to 2021, the data for natality in the Slovak Republic is lower by 4,248, and therefore births and demand for the services of preschool facilities should be less. We also observe this decreasing trend in natural growth in selected years in the Banská Bystrica region and the Banská Bystrica district. Table 1 shows the number of kindergartens at the level of the Banská Bystrica region, the Banská Bystrica district, and Banská Bystrica. The aim is to find out the density of the kindergarten network and the occupancy rates.

Table 1. The number of kindergartens and the number of pupils in kindergartens in the Banská Bystrica region, the Banská Bystrica district, and Banská Bystrica

Year	Banská Bystrica Region		District Banská Bystrica		Banská Bystrica City	
	Kinder-gartens	Pupils in kindergartens	Kinder-gartens	Pupils in kindergartens	Kinder-gartens	Pupils in kindergartens
2011	373	15 968	52	2 891	30	2 133
2012	370	16 585	52	3 062	30	2 288
2013	372	16 875	55	3 180	33	2 428
2014	372	17 051	56	3 263	34	2 494
2015	375	17 057	57	3 292	35	2 498
2016	378	17 020	59	3 343	37	2 565
2017	376	16 940	60	3 346	38	2 597
2018	380	17 150	62	3 377	39	2 586
2019	382	17 351	62	3 403	39	2 623
2020	380	17 364	62	3 465	39	2 659
2021	381	17 919	62	3 529	39	2 702

Source: the authors' own elaboration according to the Statistical Office of the Slovak Republic.

From Table 1, we can see that over a period of ten years, the number of preschool facilities in Banská Bystrica increased by nine. This may mean that competition in this area is increasing. After a thorough analysis of the competitors, we conclude that none of the preschools offer full-day arts services. We can conclude that there is no direct competition in our area or a focus on full-day preschool. However, a more important fact is that according to the annual report of the town of Banská Bystrica in 2019, even with the growth in the number of preschool facilities, the average number of children per class in 2018–2019 was 19.74 in total; but by 2019–2020 it was 19.83, which means that despite the increase in the number of facilities, the number of children per class increased. We foresee an increase in demand for preschool facilities from young families, and thus a lack of capacity. This statement is supported by the fact that in 2020 there was a total of 894 pending applications for placements in the Banská Bystrica region that were not approved due to the lack of space. For the Banská Bystrica district in 2020, this figure was 466 unapproved applications. In 2021, the number of unapproved applications in the Banská Bystrica region was 867, and in the Banská Bystrica district 437. The number of applications not approved due to a lack of space thus accounted for an average of 15% of all applications submitted for the years 2020 and 2021 in the Banská Bystrica region. In the Banská Bystrica district, it was up to 45%.

Over a period of ten years, we have seen an increase in the number of pupils in kindergartens, specifically in Banská Bystrica, at 569 children. This rising trend and demand have been gradually matched by the newly established kindergartens mentioned earlier, which have also increased in number, but their capacity and numbers are still insufficient. We can assume that this trend and demand will remain positive, and so our proposed facility will be unrivalled in the market with the services it offers.

In terms of occupancy and the average number of pupils in kindergartens in the Banská Bystrica region and the Banská Bystrica district for the chosen ten years, we have observed an increasing trend in recent years. In the town of Banská Bystrica, the average number of pupils in kindergarten for the year 2021 exceeds both the Banská Bystrica region (47) and the Banská Bystrica district (57), with its figure of 69 pupils per kindergarten.

In the context of solving the problem of the educational process for gifted children, we also consider the indirect competitors of the facility: elementary art schools that provide services in the field of art education in several disciplines (music, art, dance, etc). Although they are not specified for the education of preschool

children, most of them have the possibility to set up a preparatory class, the so-called ‘preparatory school’, where children are prepared for later education in the first stage of elementary art school. There may be potential competition. We consider it important to note that our project offers a unique service in full-day art education, combined with preparation for the first stage of primary school. It gives parents, as legal representatives of their children, who wish to guide them in an artistic direction, a more suitable and better alternative. It combines the two most important tasks for the child, our client, namely: the correct and necessary general education for appropriate skills and self-care, preparation for the first grade of primary school, and a full-quality education in the chosen field of art. From the perspective of the Banská Bystrica region, we registered the total number of pupils in elementary art schools at 17,955 by 2021, which means an increase of 3,379 since 2011. The upward trend in the number of pupils in elementary art schools in the Banská Bystrica region started to decline only in 2020–2021. We assume that this was influenced by the Covid-19 pandemic. The number of schools also increased, from 44 (2011) to 55 in 2021. At the Banská Bystrica district level, the total number of elementary art schools is seven, which means that the number of schools has increased by two in the last decade. The number of pupils has seen a slight increase. We also included the town of Zvolen in the research, which is a competitor town in several areas, including the number and the quality of teaching in elementary art schools. We did not investigate how many children attend elementary art schools in Zvolen with their parents from Banská Bystrica, but given the relatively high quality of their artistic training, we can assume that Banská Bystrica children also attend them. Similarly, the reverse may also be true: Zvolen children in elementary art schools in Banská Bystrica. In the town of Banská Bystrica, the number of elementary art schools was constant in the period under review (three) and, unlike at the regional or district level, the number of children slightly decreased (195). We assume that this is also a direct reflection of the reduction in the total population in the town, and the simultaneous growth of the older population. In the town of Zvolen, the number of elementary art schools remained constant during the period under review, and the number of pupils increased slightly, and then decreased slightly.

As for the town of Banská Bystrica, regarding the total number of children attending state, private, or church elementary art schools in the ‘preparatory school’, which is usually the last year in kindergarten, according to the statistical yearbooks of the Centre for Scientific and Technical Information of the Slovak Republic, we found that the preparatory school as of 15 September 2020 was attended by a total of 523 children in classes in elementary art schools. On that date and in the year of the child representing the possibility of attending preparatory school in the elementary art school, 957 children attended a state, private or church kindergarten. This means that the potential clients who might be interested in the educational process in our proposed facility accounted for 55%, which is a significant finding for us.

Another finding is the average number of children attending elementary art schools. In the town of Banská Bystrica, seven institutions, three of them public and four private, provided preparatory services in elementary art schools. After calculating the number of children attending the preparatory school, we found that one public elementary art school in the preparatory school was attended by 86.34 children on average. In the private elementary art school, this figure was 66. On average, 74.71 children attended one elementary art school in Banská Bystrica.

In the context of the second research question (How does the prediction of children attending elementary art schools in a selected period in the Banská Bystrica district influence the establishment of a potential preschool facility specifically for artistically talented children?), we present our findings. Using the SPSS program, we applied the method of exponential equalisation, using the most significant statistical type of model, which in our case was the Holt model, to predict the number of pupils in elementary art schools in the Banská Bystrica district after 2024. Exponential smoothing was applied to the time series of the number of children in elementary art schools in the Banská Bystrica district for the period 2011 to 2021. The choice of method was deliberate, due to the statistical significance, the type of data, the required quality of the prediction, and based on the value of MAE, which represents the mean absolute error, for which the Holt model corresponded to the lowest value. According to the values after exponential smoothing, the number of children in elementary art schools in the Banská Bystrica district is 4,019. The predictions for 2022 (4,036),

2023 (4,104) and 2024 (4,171) indicate that the number of children will increase. This means an increasing interest in the type of services in the artistic environment, which is the subject of the educational process in our proposed facility specifically for the inclusion of artistically gifted children.

With this positive impact and growing trend, we can reinforce the importance of establishing our proposed social enterprise as suitable for implementation. Its existence will be able to partially cover the demand for these services in the market, which will grow in the Banská Bystrica district, as the number of elementary art schools in the same district has been stagnant for eight years. The findings are also presented in Figure 1 of the SPSS program, where we can see the growth trend in the next few years.

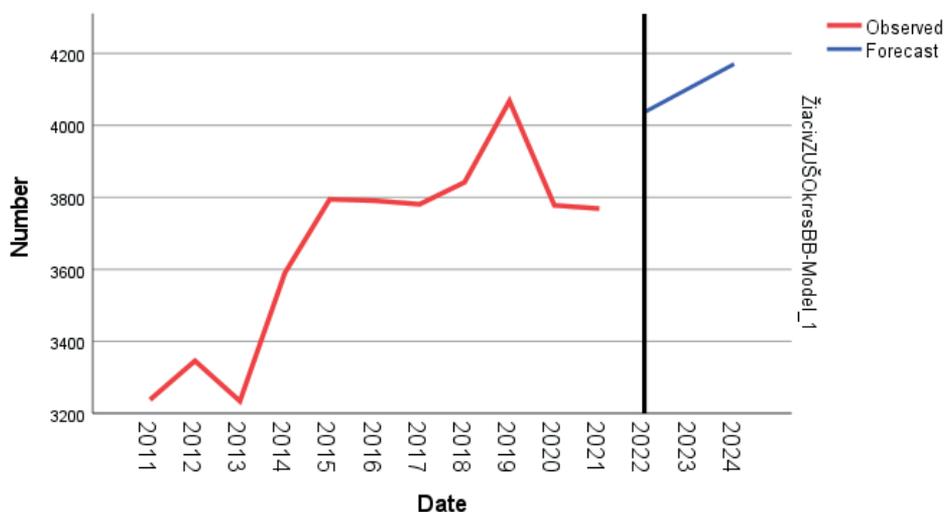


Figure 1. The trend of exponential Holt equalisation of the number of children in elementary art schools in the Banská Bystrica district, and predictions

Source: SPSS output.

We note that there is a competitive environment in terms of the number of relevant facilities and client group for a new educational entity for preschool children with special talents (in the selected region). However, it is precisely the originality of its content and legal form (social enterprise) that makes its establishment advantageous, and, in the space of social entrepreneurship, beneficial, adequate and competitive.

In the context of the third research question (How do the preferences of survey respondents influence the establishment of a potential preschool specifically for artistically talented children?), we present our findings. This part of the research consisted of a questionnaire survey, in which, through research questions, we ascertained the level of awareness and interest of parents in specific types of preschools.

The first question in the questionnaire asked whether the respondents preferred a traditional preschool, or were considering a new form of preschool (language, sport, etc). According to the answers, the respondents tend to prefer traditional preschools (57.6%), but the perception of more respondents on this issue will change, based on more detailed questions.

In the second question, we asked whether respondents, in terms of supporting children's special talents, find it beneficial to guide them individually as early as preschool age. The answer 'Yes' (80%) suggests that new specifically focused entities (art nurseries) would be more likely to meet their preference.

In the third question, we asked whether, in the case of artistic talent in a child, parents would be interested in guiding their child in an individual educational process. Just as there was a preference in the previous question for the individual guidance of the child from preschool age, the respondents were more likely to choose an individual educational process for their child if they observed artistic talent, at 88.2%. As mentioned

earlier, the result of this question also suggests that respondents would be more likely to prefer the services of a specially focused preschool facility, an art kindergarten.

We found a similar interest in a specific form of arts preschool in question four, where up to 77.6% of the 85 respondents would choose to attend an art preschool. We assume that the above suggests that parents are in fact interested in specifically targeted preschools, but if they did not know that such an option existed, they were more likely to choose a traditional form of preschool. This explains the difference in the results of the first and fourth questions.

The fifth question asked directly whether parents have the option of enrolling their child in a special full-day kindergarten from the age of two or three if they observe above-average giftedness in the child. The answer 'No' was marked by 73.8% of the respondents; the answer 'Yes' by 26.2% of the respondents, and thus that they have the possibility for enrolment in the mentioned institution. The result of the fifth question proves that most of the respondents, after noticing their child's artistic talent in early childhood (two or three years old), do not have the opportunity to enrol their child in a full-day special kindergarten in their town or neighbourhood. In this question, we simultaneously tested the respondents' knowledge of how and what they understand by full-day preschool education. We believe that the respondents understood by the mentioned facility the existing elementary art schools, leisure centres, clubs, ensembles and others, because a full-day special preschool facility specialising in artistic activities does not exist, or is not sufficiently presented in the Slovak Republic.

The next question was used to find out whether the respondents would be willing to enrol their talented child in a special preschool from the age of three. As many as 60.7% (51) of respondents answered 'Yes', and thus a positive interest prevails among the respondents. At the same time, we asked the respondents who answered 'Yes' to explain their reasons. In Figure 2 we can see that the most common reason for answering 'Yes' to the question of willingness to enrol their talented child in a special school from the age of three was to develop individual talent as early as possible, so that the child would not pick up the habits of a self-taught child. We consider this finding significant, because 74% of respondents who could be our potential clients agreed. The responses that prevailed included, for example, justifications for enrolling a child in such a school for the sake of personal growth. Less common reasons for enrolling which were cited by respondents were if the facility was close to home, when the development of talent could not be looked after at home, or to be able to work.

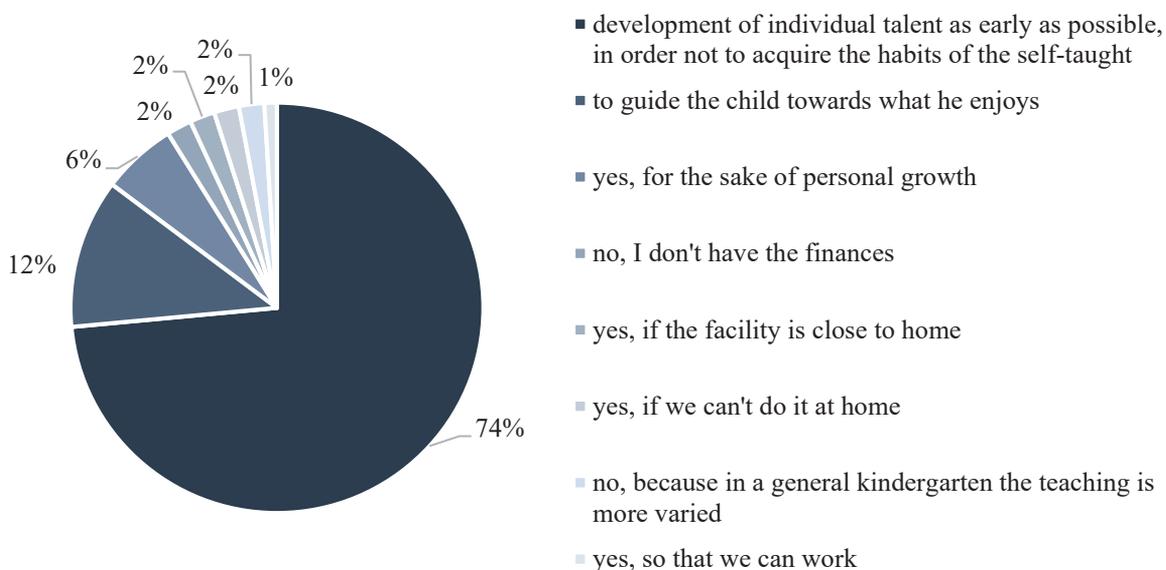


Figure 2. Reasons for answering 'Yes' to the question whether they would be willing to enrol their talented child in a special kindergarten from the age of three

Source: the authors.

From an economic point of view, the responses of the 6% of respondents who stated directly that they would not enrol a child in an art preschool from the age of three because they did not have the finances to do so are important to us. We assume that financial issues often resonate in parents' decision-making processes, and therefore we will consistently plan for income from client-parents in the business plan of the new preschool art school. We are confirmed in our recognition that a social enterprise is an appropriate legal form for the projected pilot educational process. In Act No 112/2018 Coll. when granting the status of talented children as a vulnerable group, the founder is entitled to the financial reimbursement of costs. These would significantly eliminate the costs for parents.

In the last question, we asked what respondents would see as a beneficial change in the management of children in special-needs preschools. Respondents agreed in 42% of the responses that the most beneficial change in the leadership of children in special needs preschools would be a more individualised and professional approach to the development of talent. The second largest group, 28% of respondents, reported that they had not encountered this type of facility, and therefore could not answer the question. This answer is evidence of the non-existence of a facility of this type, and the originality and timeliness of the issue we are bringing to the table. The third largest group of respondents stated that showing more concern for children, a higher level of empathy and respect for the child and his/her differences, would be a beneficial change. Among other things, the implementation of various support activities, healthy food, foreign languages or Christianity was also mentioned, and also attention to education and training in basic general skills, more modern and better equipment, lower costs, and the very existence of such facilities. Respondents would also like to see more government funding for such facilities. A more detailed representation of the responses can be seen in Figure 3.

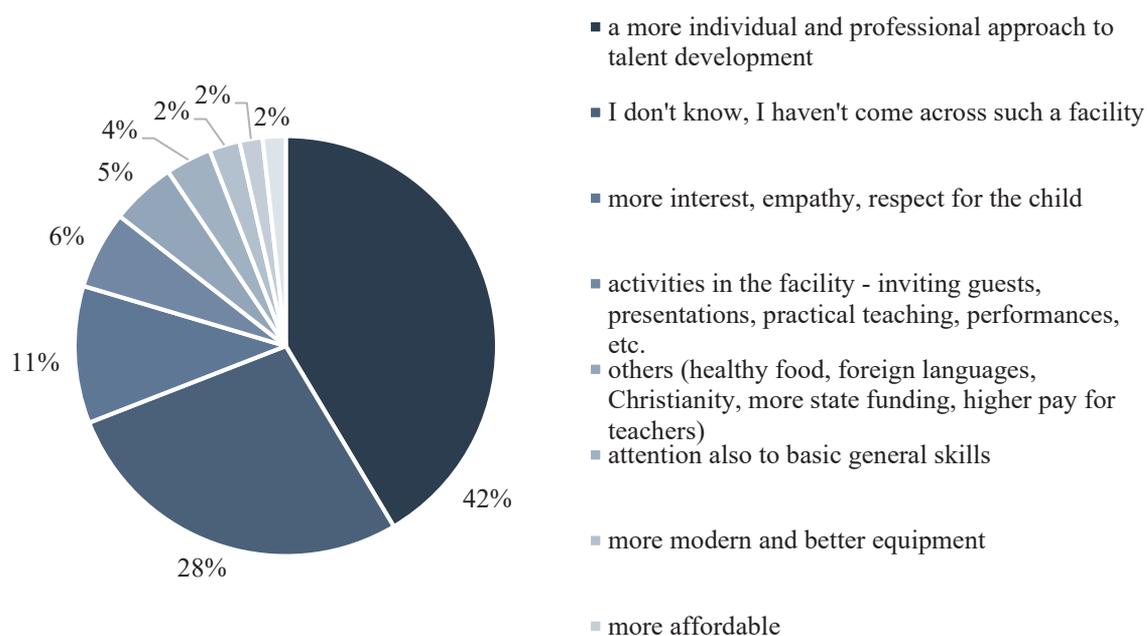


Figure 3. Areas that respondents see as beneficial as a change in the management of children in specifically targeted preschools

Source: the authors.

Conclusion

The aim of the paper was to analyse the level of awareness and interest of parents and other relevant actors in a new form of educational preparation for the inclusion of specifically talented children, and the adequacy of its introduction to the market, through an analysis of demographic development in selected areas: the Slovak Republic, the Banská Bystrica region, the Banská Bystrica district, the town of Banská Bystrica, and the town of Zvolen, and the prediction of children attending elementary art schools in the district of Banská Bystrica. At the same time, we presented interdisciplinary possibilities for preparing a social enterprise project and a proposal for teaching exceptionally artistically talented children.

Based on the results of the analysis of our three research questions, we can deduce that our proposed social enterprise-art kindergarten is adequate, necessary, desirable and original for the market, which indicates its possible future success and sustainability on the market.

An analysis of demographic development that was the subject of the first research question suggests that the number of potential clients is sufficient in the study area. This statement is directly supported by the finding that the number of children in kindergartens, but also the average number of children in classes, is increasing. We also noted 45% unapproved applications for preschool facilities due to a lack of space in the Banská Bystrica district. In the context of our direct competition, elementary art schools, we register that their number is stagnating, but the number of applicants is increasing. A significant finding in this research question, which confirms the positive assumption of potential future clients of this facility, was that after counting children attending preparatory school in elementary art schools in the study area, and children of the same age in preschools of the same age, up to 55% of children attended these preparatory schools, which indicates the interest of our target group in services in the field of art. The second research question, about the prediction of children attending elementary art schools in the study area, also confirms the preference and interest in these services, as the result of this prediction is increased. The findings in the context of the third research question, in which we explored respondents' preferences, suggest that 77.6% of respondents were interested in our proposed facility, while 88.2% of respondents were more likely to choose an individual educational process for their child if they observed artistic talent. A significant finding in the context of this research question was also that 73.8% of respondents do not have the option of enrolling their child in a special full-day kindergarten from the age of two or three years if they have observed above-average giftedness in the child. Our final finding, that 61% of respondents would enrol their gifted child in a special preschool from the age of three, also indicates interest in our proposed facility. The reason most cited by respondents was primarily the development of talent as early as possible, so that the child would not acquire the habits of a self-taught child. However, a more individual and professional approach for the development of talent would also be a benefit for choosing such a facility in the case of our respondents.

In addition to the relatively poorly accepted social order to build a network of social enterprises, in this section we would like to point out several opinions, and especially limitations and recommendations for the future. The opinions are primarily compliance with all measures, regulations and laws relating to the issue of social enterprises and the implementation of the educational process for preschool children. However, this opinion is also a limitation, as there may be individuality in the regulations, measures and generally binding regulations of the town. It also refers to laws applicable only in the Slovak Republic, which is the basis for the second limitation, the national limitation. For the application, it is also important to think about a suitable location for a chosen project, which will be appropriate to the economic environment and the market, i.e. it will be competitive on the market, it will be innovative, and also to the social sphere, which means compliance with the rules for the establishment of a social enterprise. We should also consider the number of clients, where another limit arises: individuality based on the number of clients, and therefore the necessary conversion to the planned capacity of the social enterprise, which will be reflected in the size of the building, the finances, the number of employees, the amount of equipment, etc. However, this limit is also how many clients we will educate, how many classes we will have, and then to determine the number of employees from that. Specifics in economics, resources and funding will be reflected in the type of social enterprise,

and also the number of clients, the size of the facility, the equipment, etc, which forms another limit, as well as the limit of the 'location' of the facility. It is up to the potential founder what kind of facility, and in what location, he chooses. The choice of the location is related to the availability of various attractions, outdoor playgrounds, etc, but it is also about accessibility to the facility for clients, the frequency of the location, the number of the target group in the town, etc. The penultimate limit is individuality in the choice of service providers in the facility, for example, the employment of a cook or a cookery teacher, or the purchase of food from the chosen source. The last limit is the timeliness and skill of the potential founder to keep up-to-date on subsidies, laws, generally binding regulations, and other necessary information relevant to educational facilities, social enterprises and art kindergartens.

The contribution of this paper is a realised analysis, which does not yet exist in the Slovak Republic. We have focused on the originality of the proposed facility, while the issue of pre-primary education has never been linked to the aforementioned artistic focus and social inclusion, the social nature of the business. In Slovakia, we register a low level of interest in solving the problem of education and the inclusion of over-talented children, which is one of the reasons for the lack of adequate facilities. There are also no surveys, which makes this analysis innovative and unique for people working in the sphere. It also has the added benefit of enriching and diversifying the field of social entrepreneurship with a new possibility for realising social objectives that help solve the social problems of individuals, groups, families, communities, and all of society. Another contribution is the possibility of using new methods in approaching disadvantaged clients (talent as a form of disadvantage) through an art-oriented educational process. This analysis is the first to directly address the inclusion of such perceived excluded individuals. Another identified benefit is finding and effectively filling a gap in the market where this kind of enterprise does not exist in the Slovak Republic. The final benefit is to stimulate the further development of social entrepreneurship and individual educational processes, which we have found to be indispensable and necessary. For future research, we recommend expanding the investigation of this issue, that of artistically gifted children and the problem of their disadvantage, in other territories or in other areas of talent. Since this research is the first of its concept in the Slovak Republic, we also recommend further research for the purpose of monitoring the development of the solution to this issue in our country, and also worldwide.

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TĚVŮ IKIMOKYKLINIO UGDYMO ĮSTAIGOS LYGIO POREIKIO ANALIZĖ, YPATINGĄ DĖMESĮ SKIRIANT MENINIAIS GEBĖJIMAIS PASIŽYMINČIŲ VAIKŲ ĮTRAUKIMUI Į IKIMOKYKLINIO UGDYMO ĮSTAIGĄ IR JOS TINKAMUMUI RINKAI

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Santrauka

Šio straipsnio tikslas – išanalizuoti tėvų ir kitų suinteresuotų subjektų informuotumo bei domėjimosi nauja ugdymo – gabių vaikų integracijos forma, vaikų meninio lygio nustatymo lygį ir tokios formos ugdymo įstaigų patekimo į rinką tinkamumą, atliekant demografinės raidos analizę pasirinktų vietovių lygmeniu. Yra daug gabių vaikų, kuriems ikimokyklinio ugdymo įstaigos (darželiai) neužtikrina ugdymo proceso, atitinkančio jų gebėjimus, įgūdžius, ypač siekiant ugdyti meninius gabumus, problemai neskiriama pakankamai profesinio ir socialinio dėmesio. Šių vaikų padėtis, palyginti su mažiau gabių bendraklasių, ypač nepalanki. Slovakijoje akivaizdus ne tik menkas visuomenės domėjimasis šios problemos sprendimu, bet ir mokslinių tyrimų šia tema nebuvimas. Tad teisės aktais neįtvirtintos ypač gabių ikimokyklinio amžiaus vaikų visos dienos ugdymą ir mokymą užtikrinančios priemonės, galinčios didinti jų socialinę įtrauktį.

Šiuos vaikus auginantys tėvai domisi tokio pobūdžio viešąja paslauga. Poreikį spręsti iškilusią problemą dėl specialios meninės ikimokyklinio ugdymo įstaigos ir metodikos, patvirtina keli užsienio mokslininkų P. Sánchez-Escobedo (2013), E. Reid'o ir H. Boettger'io (2015), D. Papadopoulos'o (2020), A. M. Tatarincev'os ir kt. (2018), S. Steenbergen-Hu, P. Olszewski-Kubilius ir E. Calvert'o (2020) atlikti tyrimai. Straipsnio įžangoje aptariamas teorinis gabių vaikų socialinės integracijos ir socialinio verslumo apibrėžimas bei sąlygos Slovakijos Respublikoje. Kitame skyriuje aptariama straipsnio metodika, duomenų rinkimo procedūra, šaltiniai ir taikyti metodai, tokie kaip abstrakcija, lyginimas, pagrindiniai statistiniai ir matemati-

niai metodai. Vėliau prognozei atlikti taikytas eksponentinis išlyginimas. Apklausos būdu išanalizuotas tėvų ir kitų susijusių subjektų susidomėjimas, apibendrinti surinkti duomenys. Paskutiniame skyriuje pateikiami mūsų darbo rezultatai, pateikti apribojimai ir rekomendacijos būsimiems tyrimams.

Visą mūsų ikimokyklinio ugdymo įstaigos idėją, remiantis tyrimo rezultatais, galima apibendrinti keturiais žodžiais: tinkamas, būtinas, pageidaujamas ir originalus. Darbas gali būti naudingas sprendžiant pasirinktą tirti didesnių nei vidutinių gabumų vaikų ugdymo ir integracijos, pasitelkiant socialinį verslumą, problemą: sprendimui paaiškinti ir paremti.

PAGRINDINIAI ŽODŽIAI: *gabūs vaikai, ikimokyklinis ugdymas, meninės pakraipos darželis, socialinė įmonė, apklausos analizė.*

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