

AVAILABILITY OF PRE-SCHOOLING AS AN EDUCATIONAL AND SOCIAL INDICATOR

Gediminas Merkys

Association of Trade Unions of Lithuanian Higher education institutions, Lithuania

Daiva Bubeliene

Kaunas University of Applied Sciences, Lithuania

Nijole Čiučiulkienė

Aleksandras Stulginskis University, Lithuania

Abstract. *The research paper presents the results of a large-scale longitudinal study which aims to highlight pre-schooling social problems with the help of social indicators. For over a decade, the authors of the research paper have been developing a survey inventory aiming to determine the population's satisfaction with the public service index. The tool includes 190 original survey indicators that represent all public services. 20 indicators are devoted to education; two of them represent pre-school education. These are: 1) assessment of the quality of pre-school services; and 2) the availability of a child's place in a kindergarten in a residential area (availability). The existing statistical norming base (not older than 2 years) includes 12 municipalities in Lithuania and 88 subdistricts. The total number of respondents is 16202 (n=16202). It has been cleared out that the residents consider the quality of the service "high", but its "availability" is considered to be poor. The statistical regularity found is common to all surveyed municipalities. There is a significant dispersion of measured indicators in separate municipalities and in the subdistricts. Facing the negative evaluation tendency of the "availability" service some municipalities are more able to handle the problem. For this reason their experience is worth to analyze and to disseminate in a broader way. It is also worth to mention that the results of this study have much in common with EUROSTAT data. In Lithuania, the inclusion of 2-3 years old children in the education system is extremely poor, whereas the inclusion of preschoolers is largely universal. It is possible to state that poor situation of 2-3 years old children inclusion in the Lithuanian education system is related to the problems of Lithuanian social policy. In Lithuania, mother (or father) receives financial benefits for two years after the birth of a child. It is also possible to save one's job without receiving a payment for one year more. From the point of view of women's employment and equal opportunities policies, our discovered regularity testifies social policy dysfunctions at the macro national level which, on their turn, indicate a deep-seated demographic crisis in an EU country.*

Keywords: *education, social indicators, social policy, social service, pre-school education.*

Introduction

The pre-school education is considered to be one of the most important social services (Altgeld & Stöbe-Blossey, 2009). It is reasonable that contemporary education systems in the majority of developed countries have been recently highlighting the issues of quality and availability of the early childhood education (Lehrl, Kluczniok, & Rossbach, 2016). In particular, the availability of pre-school education as a public service may be regarded as a diagnostically meaningful, socially highly indicative social indicator. Its importance may be compared with the importance of the newly borns mortality up till the 1 year age and of the children up till the 5 year age indicator. This indicator is not just a demographic or health indicator, but it also mirrors the level of development and prosperity of the state in general. The pre – school education as a social indicator is diagnostically universal as well. It allows us to decide on many sectoral policies: social, educational, family, employment, equal opportunities, youth development, etc. It also reveals the county's capacity to deal with the social problems.

If we talk about preschool education in Eastern Europe and regard it as a public service, then the natural monopoly is usually the state. General and pre-school education is fully controlled by the state. It could also be stated that the state provides it almost free of charge as parents pay a relevantly symbolic fee for pre-school education services in Lithuania. Business also carries out numerous consumer satisfaction surveys, but in business case it is a supportive additional source of information. The main source of feedback on the service quality in the service business is the "cash vote" for the service or against it, whereas in the public service sector, especially in the context of natural monopoly, consumer satisfaction index surveys are perhaps the only reliable source of feedback. If such surveys are carried out by independent social researchers, the received information seems to be more reliable, "more objective" than any traditional bureaucratic control actions carried out by the agency or even by an individual body such as audits, self-analysis, provider accreditation, licensing and so on (Merkys & Brazienė, 2009). One may argue that it is not worth putting two methods – applied scientific and bureaucratic ones - on the scales and continuing the scholastic dispute, which of them is superior. The authors of this study stick to the opinion that the feedback on the quality of public service will surely be more reliable if quality control is based on both: traditional bureaucratic and applied science (social survey) methods. In this context, it should be noted that the quality of public service and consumer satisfaction are not entirely identical. It is possible to talk about quality more or less objectively while relying on a service standard based on the latest scientific data as well as bench-marking research. Satisfaction with the service, on its turn, is a priori purely subjective dimension. On the other hand, it is hardly possible to talk about any quality of

service (not necessarily public), completely separating it from user satisfaction. So, quality of service is a more universal phenomenon than satisfaction, but the subjective satisfaction of users with the service is one of the essential components that ultimately allow us to evaluate the quality of the service.

Finally, it is clear that even very reliable, objective institutional statistics on the network of pre-school institutions, as well as about the relative size of children's involvement in this educational sector, provide us with relatively minor information about the quality of the pre-school education service. For this reason it is meaningful and appropriate to use social surveys of the population. It is sensible to organize an inquiry of both: the direct users of the service - parents, as well as representatives of the general population. If you want to look at a single institution, it makes sense to question the parents. If you want to evaluate the sector itself and compare your pre-school education with other educational and public services, it is appropriate to conduct a general population survey on the whole package of public services in corpore.

Background

One of the most relevant concepts that is discussed in different contexts is the concept of well-being. If we analyzed the most current definitions of well-being, we would come across such well being indicators as a state of being happy, healthy, or prosperous. These indicators denote subjective feelings and living conditions (Ben-Arieh, Casas, Fronès, & Korbin, 2014; Merkys, Bubelienė, & Čiučiulkienė, 2017). In a wide sense the above mentioned components highlight physical resources, employment and income, education, health, and housing.

A special attention should be paid to pre-school education as the successful start of the general child's development is closely linked with the quality of pre-school education. The evaluation of the preschool education services is rather complex because children are developing and because they are dependent on caretakers on the micro level as well as on politics and economy at the macro level.

Children's well-being is rooted in the interplay of a series of factors on the micro level, framed by the social structures of the wider society (Ben-Arieh, Casas, Fronès, & Korbin, 2014; Merkys, Bubelienė, & Čiučiulkienė, 2017). For this reason the researchers have chosen the standardized questionnaire while paying the major attention to those indicators that are connected with the satisfaction of pre-school education.

Since 2002 the group of social researchers develops a standardized inventory type questionnaire in Lithuania. Target survey group - general population people from 18 years and older. The construct measured by the questionnaire is the

satisfaction of the population with public services. The tool includes 190 primary survey indicators that represent all public service sectors - education, health and social security, public transport, culture and sport, recreation, utilities, etc. (Merkys & Vaitkevičius, 2006; Merkys, Brazienė, & Kondrotaitė, 2008; Merkys & Brazienė, 2009; Merkys & Bubeliene, 2017; Bubeliene, 2018).

A unified response format based on the traditional 5-step Likert scale was applied to all primary inventory indicators. The response format was deliberately visualized: it consisted of five circles of increasing diameter. The larger the marked circle, the more favourable the rating of the service on a five-point scale which starts from "completely unfavourable" to "completely positive". By combining the percentages of the two largest circles, the percentage of the service score that evaluates the service positively is found, the so-called "Yes%".

Table 1 Ratings of Education Indicators in Local Municipalities according percentiles (PR) Cluster dependence of indicators (WARD, squared Euclidean distance)

The indicators of Satisfaction with educational public Service	Lazdijai	Druskininkai	Radviškis	Klaipėda	Kėdainiai	Alytus	Ukmergė	Jonava	Kaunas	Kaunas distr	Mean	CLU
	1	2	3	4	5	6	7	8	9	10	11	12
General education schools network (the accessibility)	94,5	88,6	80,3	93,7	88,4	89,0	91,4	88,7	72,7	87,7	87,5	1
The quality of pre-school education	93,1	79,1	92,8	93,1	90,0	94,2	88,5	79,5	75,5	56,8	84,3	1
The quality of pupils' transport service	98,7	79,1	90,7	97,4	96,3	99,5	96,0	85,4	0,0	93,2	83,6	1
The quality of secondary education	89,2	68,2	87,6	84,92	82,5	94,2	84,5	66,2	85,7	56,8	79,4	2
The quality of pre-school service	82,1	76,5	82,9	82,5	84,4	80,9	82,6	78,5	65,8	39,3	75,6	1
The accesability of pre-school education	91,3	83,8	67,9	68,0	83,3	82,0	85,3	81,0	11,7	10,1	66,5	2
The variety and accesability of informal education institutions	67,6	68,2	66,3	63,0	66,4	50,3	69,0	70,5	69,9	37,0	62,8	2
Children's security in educational institutions	72,4	43,3	73,1	73,8	66,4	77,6	57,0	60,0	45,2	0,0	56,9	2
Quality of informal adult education	47,6	0,0	50,3	37,3	28,6	35,1	24,3	44,1	30,4	10,1	30,8	3
Mean	77,4	62,2	74,1	73,0	71,8	72,8	71,5	68,1	49,8	39,1	66,1	

In many respects, this dimension is more eloquent and informative than the traditionally calculated mean of the Likert scale, which, by the way, is hardly correct on the ranking scale even though it is calculated very often. Such arguments speak for the percent advantage over traditional Likert scale mean in a large empirical study (Borg & Gabler, 2002). The unification and visualization of the response format opens up the possibility to compare very different estimates of service indicators. It is possible to compile a rate of all the services included in the survey, as well as to find percentages of indicators.

From the heuristic point of view this possibility is quite significant. Indicators representing very different sectors, different natures and meanings are transformed into homogeneous survey-generated opinion indicators that can be directly compared and ranked. It is worth to note that working with objective indicators of departmental statistics we could never directly compare or rank indicators that represent different service sectors, such as education, health, transport.

Of 190 primary inventory indicators, even 20 indicators are devoted for education and are reflected in Table 1. Two of them represent pre-school education, which is the subject of this research paper. These indicators are: 1) assessment of the quality of services provided in pre-school institutions and 2) assessment of the availability of a child's place in a nursery in his / her residential area. Although both indicators are about pre-school education, the semantic between them is quite clear. In one case, satisfaction with the quality of the service is measured and otherwise satisfaction with the availability of the service is measured. The relative mismatch of thematically related indicators is also evidenced by the correlation between their estimates, which in 12 municipalities has a value of $r = 0.555$. The coefficient of determination of this size $r^2 = 0.308$, which indicates that the count of both variables is only about 31%.

Methodology

The sample and the normative base. The available statistical standardization database was formed in 2013-2018. Previous data base (2002-2012) has been eliminated as it could be treated as a stale one. The database includes 10 Lithuanian municipalities, 124 regional districts. The total number of surveyed population is 16202 persons. The average sample size is about 1,300 respondents and no less than 1000 respondents. In municipalities with a large population, the sample size was deliberately increased to nearly 2,000 of respondents. Such high coverage of respondents allows to calculate sample errors by the maximum spreading method, when $\alpha = 0.05$ generally does not exceed 3%, and when $\alpha = 0.01$ does not exceed 4%.

Statistical Measures and Methods Used in the Research Study. There was calculated the service indicator's positive evaluation percentage rate. Another meaningful dimension is the percentage rank (PR) reached by the service indicator in the general list of 190 public service indicators. For example, if the indicator "satisfaction with the quality of preschool education" reaches 90 percent, it means that only about 10 percent of all 190 different services of the municipality are evaluated better, and about 9/10 of all service indicators are evaluated worse. The statistical measure of PR relatively evaluates the analyzed service indicator in the context of other indicators. The usage of PR may be regarded as a statistical norming technique. The five Likert scale stages will always be trivially filled with percentage frequencies and will have one or another mean on a five-point scale. It is a question what this mean might denote. The use of such relative measure as a percentage rank contributes to the clarity of the research, as it shows the position of a given mean value in the empirical curve of accumulated frequencies. Here it becomes clear whether we are talking about poorly evaluated indicators, which, for example, do not exceed the first quartile's upper limit, or about very favorable service indicators that fall into the fourth - the highest quartile. We may also be talking about scores of average services, the estimates of which are divided between 2 and 3 quartiles between 26 and 74 percentages. Furthermore, statistical values such as percentages of positive responses (percentages of agreement) and percentage ranks, as well as the differences of the above mentioned values according the two dimensions of the service - "the quality of pre-school education" and "the availability of pre-school education" - have become the research material while using cluster hierarchy analysis and MDS.

Results

Table 1 displays the percentages of satisfaction indicators for various educational services achieved in each of the researched municipalities. Indicators are ranked by top-down list which is started by the education indicator which has reached the highest percentage in all municipalities and is ended with an indicator with the relatively low percentage. The mean of all percentages in table cells (10x10) is 66.1. This is the average percentage rank of all education indicators assessed, which is calculated while summing up the data of all municipalities surveyed. From the relatively high rates of percentages, we can see that in many other public services, the indicators of education services are evaluated quite positively. The conditional exception is limited to a few lower evaluated educational indicators: the quality of education for children with disabilities and the quality of non-formal education for adults. It is symptomatic that both indicators of pre-school education - quality and accessibility - are well above from the bottom of the rating. However, there is a lot of distance between them because

satisfaction with the quality of pre-school education is appreciated much more favorably than the availability of pre-school education. This is particularly highlighted by a hierarchical cluster analysis with percentage rate estimates from Table 1. Such an analysis is worth performing because the ratings of scores are similar, so the confidence intervals often overlap. It becomes not quite clear how "to layer", structure the ranking.

Table 2 Municipal rating by quality and availability of pre-school education: percentiles and "Yes-percent". MunicipalClusters, Ward, SquaredEuclideanDistance

MUNICIPALITY	CLU	N	Q-YES%	Q-PR	AV-YES%	AV-PR	Diff%	Diff PR
	1	2	3	4	5	6	7	8
Lazdijai district	1	1060	74,1	93,14	73,5	91,32	,60	1,82
Druskininkai district	1	1206	73,1	79,05	72,8	83,8	,30	-4,75
Radviliškis district	2	1333	69,8	92,8	53,6	67,9	16,20	24,90
Klaipėda district	2	1002	69,3	93,12	54,7	67,99	14,60	25,13
Kėdainiai district	1	1384	69,1	90	66,7	83,3	2,40	6,70
Alytus district	2	1047	66,1	94,2	46,7	82,04	19,40	12,6
Ukmergė district	1	1259	64,3	88,5	62,8	85,29	1,50	3,21
Jonava district (2018)	1	1212	64,2	79,49	65,7	81,03	-1,50	-1,54
Jonava district (2016)	2	1035	62,1	82,3	56	70,3	6,10	12,00
Kaunas district	3	1900	58,5	56,8	34,8	10,1	23,70	46,70
Kaunas city 2013	3	1832	50,30	90,24	24,60	22,93	25,70	67,31
Kauno city 2014	3	1932	44,3	75,51	17,2	11,73	27,10	63,78
<i>Mean</i>	--	63,8	84,6	52,4	60,5	11,40	24,10	
<i>Total</i>	16202	--	--	--	--	--	--	

MARKING 1. Cluster Membership. 2. N - Number of respondents. 3. Q-YES% i - the percentage of favorable evaluation of service quality. 4. Q-PR Quality Service Percentage Rank in the 190 List of Indicators. 5. AV-YES% The positive evaluation percentage of the accessibility of the service. 6. AV-PR- Percentage rank of service availability in the list of 190 indicators. 7. Diff% Difference Between Favorable Percentage of Service Quality and Service Availability. Diff PR is the difference between the percentages ranks of service quality and service availability.

The results of cluster analysis are reflected in Table 2. They show that the analyzed dimensions of pre-school education fall into distinctly different clusters. For example, satisfaction with the quality falls within the cluster of the most popular educational indicators, while the availability indicator falls into the mid-range cluster of services.

The contrast between quality and accessibility dimensions is even more visible in terms of elementary measure as a percentage of service-favored

assessment (see Table 2). There are some municipalities where the distance between quality and satisfaction dimensions is very high. For example, in the case of metropolitan areas, as well as the rather large circular Kaunas district municipality, this distance reaches even 24-27 percentage points. An even more impressive range of evaluation can be seen if we compare similar differences between percentages (see Table 3). In this case, the difference between the two dimensions - quality and availability - ranges from 47 to 64 percent in the mentioned large municipalities. On the other hand, it should be underlined that the high contrast between the quality of the pre-school education service and its availability is not found in all municipalities. There are small or medium-sized municipalities where this contrast is not identified, or is regarded as small. The worst condition in this respect is found in the metropolitan and large circular municipalities. In addition, in all large metropolitan municipalities of Kaunas and Kaunas district, all educational services, including pre-school education, are evaluated more critically. This shows that local administrations have different management skills in public service provision or there are some other demographic, cultural circumstances, etc. that need to be discovered and examined in a more detailed way in the future. It is possible that residents of a metropolitan municipality, due to higher educational censorship, higher level of cultural capital, have higher expectations in all public services, including educational services.

On the other hand, there are municipalities where no distinction between quality and accessibility dimensions of pre-school education has been identified. Typical municipalities in this regard are Lazdijai district, Druskininkai district. The latter are small municipalities in the resort-recreational Southern Lithuania region. The small difference between the quality and accessibility dimensions under consideration is also found in medium-sized municipalities: Jonava, Kėdainiai, Ukmergė. The latter form a cluster of neighboring municipalities, which is positioned in the region of the middle Lithuania. Further, there is a cluster of municipalities where there is clarified difference between the quality and availability of pre-school education. Availability is evaluated worse than the quality. Still this difference is not as great as in the case of large municipalities. Great difference case is in Klaipėda, Radviliškis and Alytus district municipalities. In order to make more precise classification of municipalities according to their achievements, highlighting the indicators of residents' satisfaction of with the quality and accessibility of pre-school education, hierarchical cluster analysis was performed. The percentages of the service's favorable evaluation and the percentage rate were used as the research material for classification. They are presented in Table 2. Results of cluster analysis are reflected in Table 2.

Obviously, there are municipalities in the country that, according to the opinion of population, are able to guarantee the high quality of preschool education according to both main dimensions - by the quality of the service and by its availability. Unfortunately, some municipalities are unable to provide such a balanced service, as some average quality can still be guaranteed, but the availability of the service is no longer possible. Furthermore, it is clear, that the ability of individual municipalities to provide satisfaction with such socially sensitive service as pre-school education is highly contrasting. For example, according to the quality of service, the highest "yes-percent" is achieved in Lazdijai municipality (74.1 percent), and the worst "yes-percent" (44.3 percent) was achieved in Kaunas city municipality in 2014 during the survey. The volume of variation is impressive, reaching even 29.8 percent. ($74.1 - 44.3 = 29.8 \approx 30$). Even greater contrast between municipalities was found in the availability indicator of pre-school education. Accordingly, it reaches nearly 60 percentage points ($73.5 - 17.256.3 \approx 60$). Such clear contrasts and high dispersion of the measured feature are found in a very short ($N_{\text{municipalities}} = 12$) variation statistical line. The question is: what are the reasons that the municipalities, giving the same kind of pre-school education services, are so different in the capacity to provide them?

An informative source of information in this situation would be an analysis of the indicators of the departmental statistics (national and EU). The latter shows that the situation of pre-school education accessibility in Lithuania is far from being exemplary. The data we have got in our research correspond to EUROSTAT data, which show that the inclusion of children aged of 2-3 years in the education system is extremely poor in Lithuania. Meanwhile, the inclusion of pre-school pupils in the relevant education sector is almost universal. The problem of 2-3-year-old children inclusion in educational system, which is partly confirmed by our data, may be regarded as a major challenge for the Lithuanian state and municipalities as providers of public educational services. According to the contemporary functioning Lithuanian law, the mother (or father) receives two (!) years of financial benefits when the baby is born. You can save your job for another year without receiving a payment. So families, single mothers raising a 2-3 year old child face a real challenge in getting a place in a preschool institution. From the point of view of women's employment and equal opportunities policies, the regularity we found at national macro level demonstrates the dysfunctions of social policy in an EU country experiencing a deep demographic crisis. Facing quite desperate situation of service provision, some metropolitan municipalities, their leaders publicly recognized the inability of their authorities to provide children with a place in a preschool and began to distribute direct cash benefits to their families. It could be a support to hire a nanny or have a child in a private kindergarten. Part of the Lithuanian sociologists and economists criticize such

politics, criticize the authorities for keeping apart from creating public wealth in the state, violating equal opportunities and, instead of carrying out constitutional obligations to foster state-owned general education infrastructure and services, engage in direct private business grant provision and increase of social inequality. On the one hand, the presented research polemics touches not only upon the theoretical issues of the political economy or the eternal liberal and socialist debate on the mission of welfare states in the EU to provide socially sensitive public services (Yue, 2018; Merkys, Bubelienė, & Čiučiulkienė, 2017). The issue concerns the well-being of children, their equal opportunities and their future. After all, there is a chance that the hired nanny will only provide the physical care of the child, but support and organize the mental and social development of the child, similar to that as it would be in a group of peers and in an educational environment developed by professional educators. On the other hand, that government's direct grant is not sufficient for the family to fully acquire the desired service in the private education market. In addition, private kindergartens are established only in metropolitan areas. There are very few analogical tendencies in the periphery, and in rural areas. It is obvious that only a wealthy family will be able to generate an additional contribution to a private kindergarten. For socially disadvantaged families, such a partial grant will be disastrous from the point of view of the socialization of children, as its use is not controlled by any local authority. There is a risk that such a payment will be trivially dissolved in the overall household budget, without actually linking it with the systematic purposeful education in the preschool.

For some time, the thoughtful idea that already existing kindergartens, which have large areas around themselves since the Soviet urbanization times, could be attached light construction modules. The idea proposed a lot of savings, because there is no need for a new earth piece, the existing communication infrastructure of the household is used, the lower design costs are used. Unfortunately, there has been no transition from municipal talking to reasonable working. The module building did not become a popular practice. It has made clear that the nursery concept itself has to change. It doesn't have to be a traditional two-storied monster with a two-stadium earth piece, a medical cabinet, irrational number of staff and overestimated hygienic standards. In future the current bulky kindergarten system should converge towards the typological diversity of preschool institutions. Among other ideas, there could appear very compact "community", "quarter" kindergartens, accommodating up to 10-12 children. Children could be accommodated by some household who are raising their children. Of course, such household should receive a grant from the state, as well as permanent methodological assistance from the municipal local educational unit and its specialists. If there is no such flexibility, orientation towards typological diversity,

then the availability of pre-school education in Lithuania will desperately deteriorate.

In any case, the situation found may be defined as paradoxical because it denies the usual sociological theories about rural-urban differences. The latter traditionally postulate that the indicators of cultural educational infrastructure in peripheral rural areas are usually worse than in metropolitan areas. Our empirical findings from the Lithuanian context partly deny this traditional theoretical insight and postulate, at least from the point of view of preschool education. However, the facts show that the quality of pre-school education and satisfaction with this type of service in Lithuania depends on the geographical location. This allows us to talk about systemic discrimination and violations of equal opportunities, which in a modern state of social welfare, whose status Lithuania is purposefully seeking, should not be in general. This is a strange tendency, as the regions of Lithuania, the periphery, excluding several metropolitan areas, have been developed (or not developed) quite evenly. It is possible to state that all regions are similar. We have no phenomenon in the regions of Lithuania similar to Northern Italy and Southern Italy, where it may seem that these are different countries.

It is evident that only two indicators of education - the quality of education of children with disabilities and the quality of non-formal education of adults - are underestimated. This responds to the actual realities known from practical expert experience. Although much is said about the necessity and social value of integration, inclusion, Lithuanian schools, if we talk about their factual organizational behavior and organizational culture, remain in the spirit of pervasive competition and cult of perfectionism. Schools and teachers are reluctant to accept children with disabilities as they drag down all the indicators of assessment and standardized testing. The number of pupils in the classroom is often high, the position of a teacher assistant is not introduced, and education support specialists - speech therapists, social pedagogues, psychologists in Lithuania are poorly paid. Some of them are not given the full-time school staff status.

Conclusions

1. Residents of Lithuanian municipalities in general are satisfied with education services. Still there are problematic aspects concerning children with disabilities. Schools and teachers are reluctant to accept children with disabilities as they drag down all the indicators of assessment and standardized testing.
2. The dimensions of pre-school education - "quality" and "availability", which were the goal of this study, are not assessed poorly in the Lithuanian

municipalities as a whole. On the other hand, the capacity of municipalities to provide this important educational service is very uneven. It is worrying that there is an unacceptably high distance between the dimensions of the service being assessed: the availability of pre-school education is much lower than the satisfaction of the quality of the relevant education sector. It is a systemic problem and a challenge that shows the disproportions while assuring a socially sensitive service in a social welfare state.

3. Although the capital of the country - Vilnius - did not go into our research, but it is known from the media reports that the crisis of access to pre-school education occurs not only in Kaunas, Kaunas district, but also in Vilnius. Efforts to explain why this has happened require more in-depth research, the lack of which is currently evident. Presumably in the past the pre-school education was considered to be a priority, so the infrastructure of the institutional network, which was quite well developed in Soviet times, was partly abandoned. Apparently, it is thought that the birth rate of children is decreasing, so the existing network of institutions will be sufficient. Unfortunately, it appeared to be not enough.
4. The pre-school access crisis is paradoxically linked to the country's demographic crisis. If the country's birth rate is decreasing, there should be enough places in preschools, even when the preschools network is decreasing. Unfortunately, this is not the case. It is important to get a real, not a statistical place for a child in a kindergarten. It should be associated with a particular geographical area. It is equally important in the city and in the countryside.

References

- Altgeld, K., & Stöbe-Blossey, S. (2009). *Qualitäts management in der früh kindlich en Bildung, Erziehung und Betreuung. Perspektiven für eine öffentliche Qualitäts politik*. VS Verlag für Sozialwissenschaften. Wiesbaden.
- Ben-Arieh, A., Casas, F., Frønes, I., & Korbin, J.E. (2014). Multifaceted concept of child well-being. *Handbook of child well-being: Theories, methods and policies in global perspective*, 1-27.
- Borg, I., & Gabler, S. (2002). Zustimmungssanteile und Mittelwerte von Liker-skalierten Items. *ZUMA Nachrichten*, 26, 50, 7–25.
- Bubelienė, D. (2018). *Klaipėdos rajono savivaldybės gyventojų pasitenkinimo viešosiomis paslaugomis indekso nustatymo tyrimas*. Unpublished research report.
- Land, K.C. et al. (eds.), (2012). *Handbook of Social Indicators and Quality of Life Research*. Springer Science+Business Media B.V. DOI 10.1007/978-94-007-2421-1_14
- Lehrl, S., Kluczniok, K., & Rossbach, H.G. (2016). Longer-term associations of preschool education: The predictive role of preschool quality for the development of mathematical skills through elementary school. *Early Childhood Research Quarterly*, 36, 475-488.

- Merkys, G., & Bubelienė, D. (2017). *Radviliškio rajono savivaldybės gyventojų pasitenkinimo viešosiomis paslaugomis indekso nustatymo tyrimas*. Unpublished research report.
- Merkys, G., Bubelienė, D., & Čiučiulkienė, N. (2017). Satisfaction of rural population with public services in the regions: analysis of educational indicators. *Rural Development: Bioeconomy challenges*, 1189 – 1194. DOI: <http://doi.org/10.15544/RD.2017.154>
- Merkys, G., & Brazienė, R. (2009). Evaluation of public services provided by municipalities in Lithuania: an experience of applying a standardized survey inventory. *Social Sciences = Socialiniai mokslai*. Kaunas University of Technology. Kaunas: Technologija, 4(66), 50-61.
- Merkys, G., Brazienė, R., & Kondrotaitė, G. (2008). Subjektyvi gyvenimo kokybė kaip socialinis indikatorius: viešojo sektoriaus kontekstas. *Viešoji politika ir administravimas = Public policy and administration*, 23, 23-38.
- Merkys, G., Brazienė, R., Urbonaitė-Šlyžiuvienė, D., & Misiovič, J. (2007). Lietuvos vietos savivaldos įstatymo įgyvendinimo klausimu: gyventojų viešosios nuomonės tyrimo metodikos pristatymas. *Jurisprudencija = Jurisprudence: mokslo darba*, 6(96), 63-71.
- Yue, H.L. (2018). Balanced Allocation Method of Preschool Education Resources Based on Coordinated Development of Urban and Rural Areas. *Educational Sciences: Theory & Practice*, 18(6), 3599-3609. DOI: <http://dx.doi.org/10.12738/estp.2018.6.272>
- Vaitkevičius, S., & Merkys, G. (2006). *Savivaldybės strateginio plano monitoring metodika: mokomoji knyga*. Kaunas: Technologija.