

**RESEARCH ON DEVELOPMENT DYNAMICS OF
CHILDREN ENROLLED IN PRESCHOOL
INSTITUTIONS AND OBSERVATION OF FACTORS
AFFECTING THEIR DEVELOPMENT**

SA “Center for Education Projects” PIU

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1. EXECUTIVE SUMMARY

A lot of research has been done for assessment of preschool institutions' role and importance in the education sphere and of the children development. The results reveal that preschools affect positively the quality of elementary education, as it increases the child's ability to adapt to the school environment, perceptivity and learning progress. The main goal of preschool education is to form a basis for the children's physical, psychological and intellectual development, preparing them for school.

Preschool education is also emerging in Armenia. One of its priorities is to make preschool education accessible for everyone through reconstruction and foundation of preschool institutions, paying a special attention to increase of the level of enrollment of children from socially vulnerable families. The purpose of this research is to analyze the development dynamics of children enrolled and not enrolled in institutions implementing preschool education micro-projects and the factors affecting it / each year, by regions and micro-projects implementation process/.

This research will allow appropriate bodies not only to state the effect of the project on the preschool education efficiency and children development, but also to develop a set of recommendations directed to further development of preschool education sphere in the future.

1.1. Introduction

Highlighting the importance of preschool education issues and the need for reforms in the system, the RA government has signed agreements with the World Bank to support the implementation of the "Education Improvement" Project. The RA government's main goal is to improve the quality and accessibility of preschool education services, with special emphasis on increasing the enrollment of children from socially vulnerable families in preschool institutions.

In the scope of the program the establishment of preschool institutions has been and will be made at different times, therefore it was planned to implement a phased study as well, covering each year the regions where preschools had been newly established.

This project aims to study the development dynamics of children enrolled in preschool institutions and the factors affecting their development in the regions of the RA, by the process of micro project implementation.

Certain issues have been distinguished for implementation of the research: (1) Describe the development dynamics of children enrolled and not enrolled in micro- projects, by appropriate

areas at the beginning and end of the year; and (2) analyze factors affecting the development dynamics of children enrolled and not enrolled¹ in micro-projects.

For the first group of issues quantitative research tools have been used: children testing, class observations. For the second group of issues qualitative research tools have been used, such as: in-depth interviews, focus group discussions, observations of physical environment, standardized survey of parents' socio-demographic characteristics.

See the detailed description below, by groups of issues.

1.1.1. First group of issues

Implementation of first group of issues implies the following steps:

- Study the development level of skills, abilities and knowledge of children enrolled and not enrolled in preschool institutions at the beginning of the school year.
- Study the development level of skills, abilities and knowledge of children enrolled and not enrolled in preschool institutions at the end of the school year.
- Compare and analyze the results of the above mentioned two steps.

1.1.2. Second group of issues

The logic of analysis of factors affecting the development dynamics of children enrolled and not enrolled² in preschool institutions is presented below:

Description of each community in each region:

1. Description of preschool model:
 - days per week,
 - hours per day,
 - staff,
 - number of trained staff,
 - food provision,
 - sleeping facilities.
2. Description of physical conditions of preschool institutions and identification of problems.
3. Description of preschool personnel, work experience, opinions, and possible issues.

^{1,2}For this group of children only the factors of gender issues and family social-economic status have been distinguished as factors affecting the development dynamics

4. Description of opinions, perceptions, expectations and attitudes of parents of children attending preschool institutions:
 - Description of focus group discussions with parents of children attending preschools,
 - Description of interviews with parents of children attending preschool institutions and having special needs,
 - Description of interviews with parents of socially vulnerable children attending preschool,
 - Description of interviews with parents of children attending preschool institutions, who perform paid work in the preschool.
5. Description of social-demographic conditions of families of children attending and not attending preschool institutions.
6. Description of the effect of gender issues on the development dynamics of children attending and not attending preschool institutions³.
7. Description of differences revealed during the research done at the beginning and at the end of the academic year.

For accurate analysis of micro-projects effectiveness the descriptions of aforementioned issues should be synthesized. Hence, the dynamics of children development, factors affecting the latter and the generalized results should have been well observed.

The report is composed of the following sections:

- Description of the fieldwork /where the whole process of fieldwork is presented/,
- Mistakes/problems, where each problem that arose during both fieldwork and analysis, and during the overall process is described in detail,
- Analysis of results, where the results of both qualitative and quantitative research are explained by communities, regions and the elements described,
- Summary of results, which includes conclusion of the research, summary of each aforementioned group of issues, and general conclusions.

³ Source: results of children testing

2. DESCRIPTION OF FIELDWORK

This research was conducted during the period of 2018-2019 in four regions of Armenia: Gegharkunik, Lori, Vayots Dzor, Yerevan. The fieldwork was carried out through four stages as it is presented below.

2.1. Establishment of working groups

A corresponding working group was established to conduct the research. The group was composed of a coordinator, methodologist-experts, interviewers responsible for the qualitative part of the research, testers of children's educational development, stenographers of qualitative interviews, data entry specialists and analysts concerning physical environment, class observations and children's testing.

Fieldwork was implemented by two working groups having similar structure, each of which having two qualitative interviewers and two testing specialists.

The composition of qualitative interviewers during the fieldwork at the end of the academic year in general remained unchanged compared with the beginning of the year. This allowed observing possible changes in the beginning and the end of the academic year, physical environment, ways of application of teaching methods and principles by the preschool staff, changes in parents' expectations and attitude towards preschools, and in their enrollment in preschool life, in methods of children upbringing, as well as in the satisfaction with the physical conditions of the preschool. At the same time, personal experience, attitude and knowledge of the researchers, have had their effect, as the same researchers have conducted the fieldwork both at the beginning and at the end of the year. Due to time scarcity and for optimal management of work, interviewers were assigned with specific roles. Each researcher has had informants of the same category, specifically parents and tutors were interviewed by the same interviewer because of the priority in organizing and conducting focus group discussions. The interviews with micro-project directors were also conducted by the same interviewer to ensure the interviewer's adequacy and maintain the information quality.

2.2. Preparation of specialists enrolled in the fieldwork

Experts and methodologists presented short description of the micro-project, the purpose, deadlines and tools of the research in detail; they discussed the principles of work allocation and organization. Questionnaires were presented to the interviewers, all the sections of which were

explained in detail to make sure that the interviewers clearly understand the purpose of the questions.

All the questionable issues that triggered low-confidence or a need for help among interviewers were discussed. The cases that may require quick orientation and specific conduct for ensuring the smoothness of the process were also discussed.

2.3. Implementation of fieldwork at the beginning of academic year

At the beginning of academic year visits to 14 communities were organized for testing of children attending and not attending preschool institutions. Working day almost always started early in the morning and ended quite late. Nevertheless, working groups did their job enthusiastically in order to get representative and accurate results. Visits were made by two groups in some communities (both prime and reserve).

According to the methodology, 18 children aged 5-6 should have been tested in each prime community. Afterwards, for the group of children attending preschool in each community a group of children not attending preschool institutions should have been formed, which should have been identical with the group of children attending preschools by all the main criteria: number of children as well as gender and age structure of the group. Therefore the group of children attending preschools was tested at the beginning of community visit to obtain the structural description of children attending preschool institutions.

2.3.1. Testing of children attending preschool institutions

At the beginning of academic year, fieldwork for children testing was conducted during the period from November 8 to 21, 2018⁴.

Of the total number of children enrolled in preschool institutions, the sampling number provided for by the methodology (not less than 10 children for each case) was examined during the fieldwork. It is worth to mention that because of small number of children in the preschool of Dzoramut community in Lori region provided by sampling, additional visit was made to other preschool of the same region (Gugark) to maintain the sampling number provided by the methodology and to ensure the representativeness of the sampling parameters.

Agreements for focus group discussions with parents were made beforehand - the director of micro project or the tutor were informed about the visit, the number of beneficiary children was checked

⁴ The fieldwork was conducted at the beginning of November because of adjustments of visits to other regions required by the Contract and autumn vacation.

out, and it was requested to ensure the presence of sufficient number of parents in the morning for focus group discussions.

The schedule of preschool visits is presented in Table 1.

Table 1: Schedule of fieldwork planned in the prime communities for the beginning of 2018-2019 academic year, by regions

Region	Village/City	Date
Gegharkunik	Tsaghkunk	13.11.2018
Vayots Dzor	Getap	16.11.2018
	Gladzor	16.11.2018
	Yeghegis	16.11.2018
	Dzoramut (Gugark)	21.11.2018
Lori	Margahovit	20.11.2018
	Vanadzor	20.11.2018
	Yerevan 1 ⁵	10.11.2018
Yerevan	Yerevan 2 ⁶	08.11.2018
	Yerevan 3 ⁷	12.11.2018

2.3.2. Testing of children not attending preschool institutions

As a category of respondents, children not attending preschool institutions and their parents were also interviewed (in cases when not attending children have been tested in the prime community).

In those communities where sufficient number of not attending children were not present, reserve communities were selected (according to the methodology). According to the methodology, priorities were given to reserve communities (based on the principle of being close to the main community); however, there have not been sufficient number of children in those communities as well. Three reserve communities were selected in two regions, by the way in some cases the selected reserve communities were quite far from the prime community, because there were no 5-6 year old children not attending preschool in the nearby communities.

Reasons for not having sufficient number of children in those communities were as follows: initially the number of children aged 5-6 was small, some of them had relocated/emigrated, were sick, were factually living in other communities or were attending a kindergarten.

Therefore, for all prime communities, generalized groups of non-attending children with certain gender composition were formed. A control group for each preschool was selected from the mentioned generalized groups taking into account the distribution by gender and quantity as well as the distance of the reserve community from the prime community.

⁵ Yerevan Basic School N66 named after A.I. Myasnikyan

⁶ Yerevan Basic School N13 named after E. Thaelmann

⁷ Yerevan Basic School N55 named after A. Chekhov

Table 2: Schedule of visits to the selected reserve communities for the beginning of 2018-2019 academic year, by regions and prime communities

Region	Prime community	Reserve community	Date
Gegharkunik	Tsaghkunk	Norashen	14.11.2018
Vayots Dzor	Getap	Sali Artabuynk Horbategh	16.11.2018
	Gladzor		
	Yeghegis		
Lori	Dzoramut (Gugark)	Vanadzor Spitak Gugark	20.11.2018
	Margahovit		
	Vanadzor		
Yerevan	Yerevan 1	Yerevan	07.11.2018- 08.11.2018
	Yerevan 2		
	Yerevan 3		

Meetings with children not attending preschool institutions were organized with the support of community heads and others. Meetings were organized in community councils.

2.4. Implementation of fieldwork at the end of academic year

At the end of academic year visits were organized to the same 14 communities visited at the beginning of the year. Fieldwork at the end of academic year was implemented in the period from May 22 to June 12, 2019.

For the analysis of children development dynamics, children tested in the previous stage should have been tested in this stage of the fieldwork. Some of the children tested during the previous stage were absent during the end of year visit due to sickness, relocation/emigration and other reasons. Analysis was based on the results of children tested in both stages of fieldwork maintaining the gender distribution foreseen by the methodology.

2.4.1. Testing of children attending preschool institutions

Appointments for interviews were made beforehand. As in the previous stage, the coordinator specified the morning meeting time with the head master or one of the tutors in order to ensure the presence of children attending preschool, observe the classes, complete the work before the children leave the preschool. Moreover, time was agreed for conducting focus group discussions with parents.

Similar to the visits made at the beginning of the year, visits were made at the year end to one more preschool in addition to the three visited preschools in Lori region (Gugark) to ensure the representativeness of the sampling parameters.

The time schedule by regions of visits made to the prime communities is presented in Table 3.

Table 3: Schedule of fieldwork planned in the prime communities at the end of 2018-2019 academic year, by regions

Region	Village/City	Date
Gegharkunik	Tsaghkunk	31.05.2019
Vayots Dzor	Getap	12.06.2019
	Gladzor	12.06.2019
	Yeghegis	12.06.2019
	Dzoramut (Gugark)	05.06.2019
Lori	Margahovit	05.06.2019
	Vanadzor	05.06.2019
	Yerevan 1	27.05.2019
Yerevan	Yerevan 2	07.06.2019
	Yerevan 3	22.05.2019

2.4.2. Testing of children not attending preschool institutions

Meetings with children not attending preschool institutions were organized with the support of community heads. Meetings were organized in community councils, schools and places of residence.

Table 4: Schedule of fieldwork in the reserve communities planned for the end of 2018-2019 academic year, by regions and prime communities

Region	Prime community	Reserve community	Date
Gegharkunik	Tsaghkunk	Norashen	31.05.2019
Vayots Dzor	Getap	Sali Artabuynk Horbategh	12.06.2019
	Gladzor		
	Yeghegis		
Lori	Dzoramut (Gugark)	Vanadzor Spitak Gugark	05.06.2019
	Margahovit		
	Vanadzor		
Yerevan	Yerevan 1	Yerevan	11.06.2019- 12.06.2019
	Yerevan 2		
	Yerevan 3		

2.5. Quantitative picture of fieldwork

390 standardized interviews were conducted with 5-6 years old children attending and not attending preschool institutions at the beginning and at the end of academic year, out of which the number of children tested at the beginning and at the end of the year comprised 195 children. In general, 137 children attending preschool institutions and 58⁸ children not attending preschool institutions were tested and retested. As a result, 184 children aged 5-6 participated in the analysis, of which the number of children attending and not attending preschools comprised 126 and 58⁹, respectively.

Table 5: The number of tested and retested children attending and not attending preschool institutions at the beginning and at the end of 2018-2019 academic year, by regions

Region	Village/City	Number of tested beneficiary children	Number of retested beneficiary children (of which participated in the analysis)	Number of tested children not attending preschool institutions	Number of retested children not attending preschool institutions (of which participated in the analysis)
Gegharkunik	Tsaghkunk	11	12 (10)	10	10 (10)
Vayots Dzor	Getap	10	10 (10)	11	11 (11)
	Gladzor	18	16 (11)		
	Yeghegis	4	4 (10 ¹⁰)		
Lori	Dzoramut (Gugark)	15	15 (15)	18	18 (18)

^{8,9} The mentioned number does not correspond to the total number of tested, retested and participated in analysis children not attending preschool presented in the table, as for all prime communities generalized gender composed groups were formed for children not attending preschool. A control group for each preschool was selected from the mentioned generalized groups taking into account the distribution by gender and quantity as well as the distance of the reserve community from the prime community.

¹⁰ To have the minimum number of children (10) according to the methodology, for the analysis of Yeghegis the number of children were added by children of preschool in Gladzor (not participated in the analysis of Gladzor).

	Margahovit	26	28 (18)		
	Vanadzor	17	15 (12)		
Yerevan	Yerevan 1	18	18 (14)	19	19 (19)
	Yerevan 2	10	11 (10)		
	Yerevan 3	18	18 (16)		
Total		147	147 (126)	58	58 (58)

Interviews with the head master, tutor and parents of beneficiary children were conducted in each community. Focus group discussions were conducted with the parents as well. In the preschools of these communities the category of tutor assistant was missing. In case there were categories of parents of children with special needs, children from socially vulnerable families, parents working for payment interviews were conducted with those parents as well. Interviews with parents of children not attending preschool institution were conducted in Vanadzor and Yerevan. More detailed description of each category is presented in the Analysis section.

Table 6: Qualitative research conducted by regions and categories at the beginning and end of 2018-2019 academic year.

Region	Village/City	At preschools
Gegharkunik	Tsaghkunk	1 focus group discussion 1 in-depth interview with the head master 1 in-depth interview with a tutor
Vayots Dzor	Getap	1 focus group discussion 1 in-depth interview with the head teacher 1 in-depth interview with a tutor 1 in depth interview with a parent from socially vulnerable family (beginning of the year) 1 in-depth interview with the parent of a child with special needs (beginning of the year) 1 in-depth interview with the parent working for payment
	Gladzor	1 focus group discussion 1 in-depth interview with the head teacher 1 in-depth interview with a tutor 1 in-depth interview with the parent of a child with special needs (beginning of the year) 1 in-depth interview with the parent working for payment
	Yeghegis	1 focus group discussion 1 in-depth interview with the head master 1 in-depth interview with the tutor
Lori	Dzoramut (Gugark)	1 focus group discussion 1 in-depth interview with the head master 1 in-depth interviews with the tutor
	Margahovit	1 focus group discussion 1 in-depth interview with the head master 1 in-depth interviews with the tutor 1 in depth interview with a parent from socially vulnerable family
	Vanadzor	1 focus group discussion

		1 in-depth interview with the head master 1 in-depth interview with the tutor
Yerevan	Yerevan 1	1 focus group discussion 1 in-depth interview with the head master 1 in-depth interview with tutor 1 in depth interview with a parent from socially vulnerable family
	Yerevan 2	1 focus group discussion 1 in-depth interview with the head master 1 in-depth interview with the tutor 1 in-depth interview with a parent from socially vulnerable family
	Yerevan 3	1 focus group discussion 1 in-depth interview with the head master 1 in-depth interview with the tutor

3. ISSUES/OVERSIGHTS

During the research various issues were brought up, a part of which was related to fieldwork, while the other part – to research tools, communities or micro projects. The issues related to fieldwork were as follows:

1. Fieldwork started in November that is two month later than it had been provided for by the Contract, according to which the work should start from September.
 - The aim of the fieldwork conducted at the beginning of the year was to benchmark the initial condition of different categories of research: preschool personnel, parents' opinion, children's knowledge, and physical environment. This was realizable parallel to the launch of preschool activities (the academic year started in October). Thus, the deviation from the timeframes provided by the Contract is explained by late opening of the preschools and adjustments of visits to other regions required by the Contract.
2. During the fieldwork a considerable problem was to maintain the sample of focus group discussions. According to sample criteria, it was almost impossible to select parents in all regions, because there were working parents. Interviewers were guided by the principle of focus group discussion with accessible parents.
3. Regarding testing of children not attending preschool institutions a problem was to maintain the time of meeting and number of children agreed beforehand. There were communities where the number of available children during the visit was not maintained (due to sickness or absence from the community), as a result, additional reserve communities were involved. In all regions, one generalized group of children not attending preschool institutions was taken, as the number of children not attending preschool institutions with corresponding gender age composition of children attending preschool in a given region was small.
4. Besides three preschools, one more additional visit was done in Lori region in Gugark preschool, to ensure the representativeness of the sampling parameters.

For the effectiveness of further stages of the project it is notable and more preferable to define a specific criterion for some operations not by methodology, rather act by situational orientation and through selection of optimal selection of principles in case of true arrangement of circumstances.

4. RESULTS ANALYSIS

Analysis of all data collected during the research is presented in this section. As the research mainly aims at analyzing the development dynamics of children and factors affecting their development process, it is appropriate to present the results by two sections: children development dynamics and factors affecting their development process. Moreover, analysis is presented by factor, community and regional sections. But before reaching the main results of the research, principles of analysis are presented below.

4.1. Analysis principles

Analysis of qualitative section includes focus group discussions, in-depth interviews and physical environment observations, while quantitative analysis includes class observations and testing of children.

4.1.1. Principles of quantitative analysis

4.1.1.1. Child testing

For the analysis of children development dynamics enrolled in preschool institutions 184 beneficiary children (126 children attending preschools, 58 children not attending preschool institutions) have been evaluated and all of them passed both preliminary and secondary testing. The dynamics of children development can be observed only through this kind of analysis.

The group of children not enrolled in preschool institutions served as a control group for the analysis. Children not enrolled in preschool institutions are either inhabitants of the same region, or inhabitants of the closest community due to the insufficient number of children in the selected communities. For measurement of program effectiveness, testing results of control group for the beginning/end of the year will be compared with the results of the observation group for the beginning/end of the year.

Based on “State education criterion of preschool education”, all the assignments included in the evaluation package can be differentiated into five fields, which in turn can be differentiated into the following subfields:

- General math knowledge (the child has basic math knowledge, knowledge of size and shape, spatial perception, time reading ability) /assignments 2, 3, 5,6,9,10/ /cognitive field/,

- Logic and thinking (the child is able to compare, explore the phenomena and objects, find solutions to various problems, find patterns, perform critical analysis)/assignments 11,4/ /cognitive field/,
- Oral speech perception (the child has a proper vocabulary of his/her age, recognizes linguistic notions, displays knowledge of various sounds and grammar concepts, shows interest in books and reading, expresses and understands words, tells stories)/assignment 7/ /speech development/,
- Early reading (the child understands the principles of printed word, distinguishes letters and their images in books)/assignments 1,8/ /speech development/,
- Writing and drawing skills (the child exhibits development of coordination, balance and control when walking, running, lounging, and moving, displays painting, modeling, cutting, building skills)/assignments 12, 13/ /motor function field/:

The analysis of development dynamics of children enrolled in preschool institutions as well as analysis of development level of children not enrolled in program was implemented based on the following principles:

- analysis of the development dynamics of children enrolled and not enrolled in preschool institutions of each target community according to the criteria mentioned above,
- analysis of the development dynamics of children enrolled and not enrolled in preschool institutions of each target region according to the criteria mentioned above,
- comparison of the generalized results of the analysis for all regions according to the criteria mentioned above.

Analyzed data is presented through histograms in percentages. Each figure is accompanied by descriptive analysis.

4.1.1.2. Class observations

Class observations conducted in preschool institutions give an opportunity for getting insights and analyse the following areas:

- purpose,
- objectives /developmental, teaching, instructional/,

- structure /type of class, clear sequence of class stages, time constraints, correspondence of class stages to the type of child's cognitive activity, etc./..
- content /scientism and significance of the material presented, correspondence of the content, complexity and scope of the material to the age peculiarities of the child, the ratio of didactic and theoretical material, relation of the material presented to the real life, etc./
- methodological saturation /usage of diverse educational methods and tactics, justification of their selection, feasibility and effectiveness of application, etc./,
- behavioral and operational peculiarities of children /activeness, independence, interest, attention stability during different stages of the class, organized activity, peculiarities of children's intergroup and interpersonal relationships, as well as relationships with the teacher/,
- peculiarities of teacher's professional qualities /familiarity with the material, preparedness for the lesson, pedagogical skills, usage of communication skills with the child, speech literacy, teacher's attitude, etc./,
- general results /implementation of class plan, reaching the target, quality, inferences directed towards improvement of future work, strengthening of success, etc./.

Each class can be analyzed based on different approaches. During the analysis the criteria and characteristics separated in class observation cards were considered.

Class observation cards were analyzed based on the following principles:

- Comprehensive analysis of class observation cards of each preschool, by the separated eight criteria in each card,
- Comprehensive analysis of class observation cards of preschools in each region, by the separated eight criteria in each card,
- General average indicators of all eight criteria, by all regions.

For more accurate illustration of comparative results obtained during the analysis of classes held in preschools, the data is presented in the following way:

- Comparison of each criterion, by all preschools,
- Analysis of each criterion, by regions,

- Analysis of class observation results, by the general average indicators of preschools in all communities/regions.

Analysed data is presented in the form of histograms and in percentages. Each figure is accompanied with descriptive analysis.

4.1.2. Principles of qualitative analysis

4.1.2.1. Interviews and discussions

For understanding and stating the notion of appropriate personnel recruitment for preschool institutions and for decent management of microproject and children upbringing, the following activities have been performed:

- Focus group discussions, which have been implemented among the parents of children enrolled in preschool institutions,
- In-depth interviews, by the following categories:
 - micro project directors
 - tutors,
 - assistants of tutors,
 - parents of children with special needs,
 - parents of socially vulnerable children.¹¹

During the analysis the effect of respondents surveyed for each category, their characteristics and skills were taken into account. Analysis of interviews and discussions was implemented based on the following principles:

- comprehensive analysis of interviews and discussions in each preschool, by the aforementioned categories,
- comprehensive analysis of interviews and discussions in the selected preschools of each region, by the aforementioned categories.

We have tried to maximally show the comparative situation for different preschools in the same region. Analysed data are mainly presented through text.

¹¹ There were no parents performing paid work in the preschool and parents of children not attending preschools categories in the observing preschools or communities.

4.1.2.2. Physical environment observation

Observation of physical environment in preschool institutions was implemented by the following criteria:

- child security,
- conformity to the dimensions of the child: accessibility of accessories (objects, building conditions and other supplies) for the child,
- availability of required materials, which may include: books, desks, hygiene means, etc,
- accessibility of materials, which will show how easily children can make use of them,
- movability of the environment,
- workability of accessories.

During the analysis, the effect of each criterion on child physical development was taken into account. Analysis was performed based on the following principles:

- Complete analysis of physical environment observation held in each preschool, by criteria,
- Complete analysis of physical environment observation held in preschools of each region.

We have tried to maximally show the comparative situation for different preschools in the same region. Analysed data are mainly presented through text and figures.

5. REGIONAL ANALYSIS

5.1. Gegharkunik region

The only preschool opened in 2018 has been examined in this region.

5.1.1. “Tsaghkunk Open School Foundation”

The preschool was established on the school basis and has one group of children.

During the visits the preschool was working according to the following *model*:

- 5 days in a week;
- part-time working regime - 09:00-13:00;

- one tutor was working in the preschool;
- the tutor was trained;
- the children were provided with one time food brought from their homes;
- the preschool was heated from the central boiler house;
- the preschool did not have sleeping facilities.

General description of preschool conditions is as follows:

- The preschool has been provided with a classroom, playroom, wardrobe, water-closets (separated with partitions and doors).
- The classroom, playroom, wardrobe and water-closets were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (see Pictures 1 and 2).
- The preschool was provided with permanent cold and hot water supply.
- The preschool had central heating system.



Picture 1. Beginning of year, Tsaghkunk, W.C.



Picture 2. Beginning of year, Tsaghkunk, classroom

Conditions of the classroom and working centers (See Pictures 3) matched the requirements of defined norms. Although there were sports and natural sciences centers, they were not fully equipped with accessories at the time of our visit. All the centers prescribed by standards were available at the preschool. At the same time it is worth to mention that there

was no outdoor playground. The preschool had wardrobes (*See Picture 4*), a carpet, tables and chairs, toy cabinets, a blackboard, TV set, a sofa, etc. The classroom was light enough. The preschool children's food was organized by parents; children brought the food from their homes.



Picture 3. Beginning of year, Tsaghkunk, math, literacy and art centers



Picture 4. Beginning of year, Tsaghkunk, wardrobes

According to the head master, *the preschool was created* as far as there was neither a kindergarten nor a preschool in the community. Some parents have been taking their children to the neighboring village preschool or Sevan town preschool for years. They wished to repair the kindergarten building to solve the problem, however this was a very time consuming work.

According to the head master, *the strengths of the preschool are quite a lot*. He had doubts that the project could be implemented in such a short period of time, but everything came quickly - the construction of the building, the purchase of furniture, and the training of the tutor.

During the interview the head master stated that she was satisfied with the preschool *building conditions*, as it was completely renovated and provided with permanent hot and cold water supply and heating system. The *parents* participating in focus group discussion mentioned that they are very pleased with the preschool building conditions and the availability of the necessary accessories.

All *work centers* were available in the preschool. The tutor mentioned that she acquired all lacking accessories. The school also had an outdoor playground for which the head master and tutor had expressed during the interview a desire to have preschool-age games and

swings. Preschool work centers were equipped with educational materials, didactic accessories and toys.

The head master mentioned that they were not facing any problems, and that any problem which might arise is solved with the help of the community head. The parents stated that they were satisfied with the preschool conditions, and that all work centers were in correspondence with the safety standards.

However, parents did not like the fact that the nutrition issue in the preschool was not regulated as they did not consider the eating of differing foods to be correct; they believe that children in the preschool should eat the same food.

Head master and one *tutor* were working at the preschool. The head master had previously worked at the same school, during 1997-2015 she worked as a deputy principal, and from 2015 - as a principal. The tutor previously worked as a teacher. The tutor was trained and mastered the provisions of the preschool curriculum.

According to the tutor, *the training* was very interesting and informative. There had been both practical and theoretical trainings which started on time and had no drawbacks.

Introduction of games during the training was something new for the tutor.

The tutor gave importance to both principles of teaching; however in most cases an integrated approach was applied. It could be judged from the interview that the tutor did not understand well what the integrated teaching principle was and directed her reasoning towards the integration of children with special needs. She conducted the lessons through games, stating that children get tired very soon, and learning through games is more accessible to them. The tutor placed more emphasis on language development, and during free lessons she preferred to conduct speech and language development training.

The tutor made use of assessment sheets suggested during the training of trainers and realized an individual assessment. At the same time she mentioned that this assessment method was time consuming, and that the duration of the assessment for each child was 10-15 minutes.

The tutor had *a tutorial plan*. The lessons were planned weekly (the tutor considered that organization of lessons with a clear plan would make the work more difficult). The lessons were conducted with demonstrations; visual and didactic materials were used; the selected and applied methods were in correspondence with the purpose of the class, and the learning materials – with the subject of the lesson; the children engagement in class was high. Individual approach to children was applied. There was no difference in gender issues between children. During the lessons, different forms of class organization, that is individual,

pair work, group work and research, knowledge acquisition through collaboration, were not used.

According to the tutor, the strongest child in the group was able to respond to any question, while the weakest child had difficulty speaking, but according to the tutor, the positive movement was already evident.

There were close relationships with the parents. The tutor also mentioned that at the end of each day she informs the parents in person or on the phone about the children's progress. The parents cooperate with the tutor if they wish so. The tutor gives advices every day, such as forbidding children to be reprimanded loudly. At the end of the day the parents are informed about the preschool activities of that day to work additionally at home with their children. According to the head master, there is a close cooperation with the parents, which help them in solving any problems.

During the *focus group discussion* the parents mentioned that they are regularly engaged in the cleanliness activities, and this is done solely on their own initiative and desire.

The socio-economic situation of the community's families, according to the head master, is very difficult, there are no workplaces. Most of the residents go to work in Yerevan or leave the village and go to other countries. The number of children decreases every year. The tutor found that the socio-economic condition of the family/community had no effect on children's development.

The source of income for the families surveyed in the community was agriculture and working abroad. All the families surveyed were engaged in farming and / or cattle breeding.

During the focus group discussion with the parents, the families of six participants were comprised of 6-9 persons, with two beneficiary families. Mainly the fathers were working, and the mothers were involved in housework. All families were engaged in farming (cultivating farmlands) and/or cattle breeding keeping cows, fowl. The children had no responsibilities in this regard as they were still young.

The primary purpose of children attending preschool was to provide children with sufficient knowledge to attend school. The parents also expressed their satisfaction with the preschool building conditions and the availability of necessary supplies.

During the focus group discussion, it became clear that the children in the participating families were mostly cleaning up after themselves at home, helping with simple housework.

Mainly mothers were responsible for children's care, and sometimes grandmothers helped them. All family members were involved in children's education process. In the absence of

mothers, the grandmothers were mainly taking care of the children, however similar absences were rare, as mothers were housewives. The child's daily life was planned by mothers, taking into account the child's wishes if possible. The children themselves initiated learning something at home, and the parents were lovingly involved with them.

According to the parents, their decisions and requirements in respect of the children were mostly explained to them. A child may be punished mainly for altercating and bad behavior. In similar cases the parents punished the children through forbidding the child's favorite occupation. Most parents found that children should not be beaten and that any actions should be explained to the children; and one parent noted that at the time of extreme anger, the child could also be lightly hit so that the child would collect itself and no longer misbehave.

They also mentioned that children have not yet gained autonomy, of course there are some issues when children are able to do things on their own, but it cannot be considered that they are independent.

Most of the children of the parents participating in the discussion attended the kindergarten located in the neighboring community, where they learned the right behavior.

The parents thought that the child's development was mostly affected by the influence of parents (the environment), and after that - the education (teaching methods, subjects); the socio-economic conditions also had great importance.

The parents did not provide any kind of financial support to the preschool. They wished there was a dance group in the preschool and they were ready to pay for it. They expressed satisfaction with the preschool activities and noted that all the questions raised by them were resolved.

End of year visit can be described as follows:

Regarding the general conditions, at the year-end also the parents noted that the only issue is the meal provision problem. It was not resolved by the year-end.

Regarding the *building's condition* no changes were observed, everyone were satisfied with the conditions. During the interview the head master mentioned that a preliminary agreement has been reached for provision of food to children attending kindergarten for the next year, in particular, it is envisaged to provide the children's food under the UN Food Program.

There were no changes at the end of the year regarding building conditions. All stakeholders are satisfied with the conditions and there is no need for improvement.

Compared to the beginning of the year, an increase of some work center accessories, handmade items, self-made didactic materials has been observed (See Figures 5 and 6).



Picture 5. End of year, Tsaghkunk, group room, cabinet



Picture 6. End of year, Tsaghkunk, group room

In the year-end the tutor applied more methods and used more didactic materials during classes. As opposed to the beginning of the year when she applied only the game method, at the year-end she applied brainstorming method, various didactic materials. More attention was paid to the linguistic field as the children used the rural dialect in their speech.

According to the tutor, at the end of the year the children recognized letters, became able to count and write. They have gained and improved their language skills, writing, communicating, etc. There have been no unsuccessful cases in respect of children's progress.

The tutor noted that she appreciates children with small, medium and large smiles and starlets, as well as words of praise. To assess the dynamics of child development, the tutor also uses a tutor's observation questionnaire and makes weekly records, but she has noted that the process is quite extensive and time consuming.

The parents stated that they remarked essential changes in their children after attending the preschool, and that they were very pleased with the preschool; in particular, the children recognize letters and are ready for the school.

The tutor has applied individual approach towards the children and mentioned that there are no gender differences in respect of their development level.

The parents find that the children attending the preschool have more knowledge compared with children of the same age not attending the preschool, and the education level differences are evident.

According to the head master, the parents did not participate in the classes, but they always assisted the tutor in organizing the events, as well as the parents arranged for the cleanliness of the preschool by making a duty schedule for themselves.

The parents noted that due to the preschool they had a spare time and could use it more efficiently; and one parent mentioned that due to her free time she was able to give tutorials, that is conduct individual language lessons at home.

Head master mentioned that the children have completely integrated into school, and this was due to the children's engagement in every event; the children participated in performances, sang, danced, recited, and as a result developed a love for art, science, and school.

At Tsaghkunk preschool the most part of the class observation criteria (the *Objective*, *Teaching activities*, *Questions*, *Time*, *Developing environment*, *Children participation* criteria) have maximum representation /100.00%/. Relatively lower representation relates to the *Methods* /96.43%/ and *Tutor skills* /83.33%/ criteria. The overall average score for the criteria is high and makes up 97.47%.

Figure 1. Analysis of Tsaghkunk preschool's classes observation results.

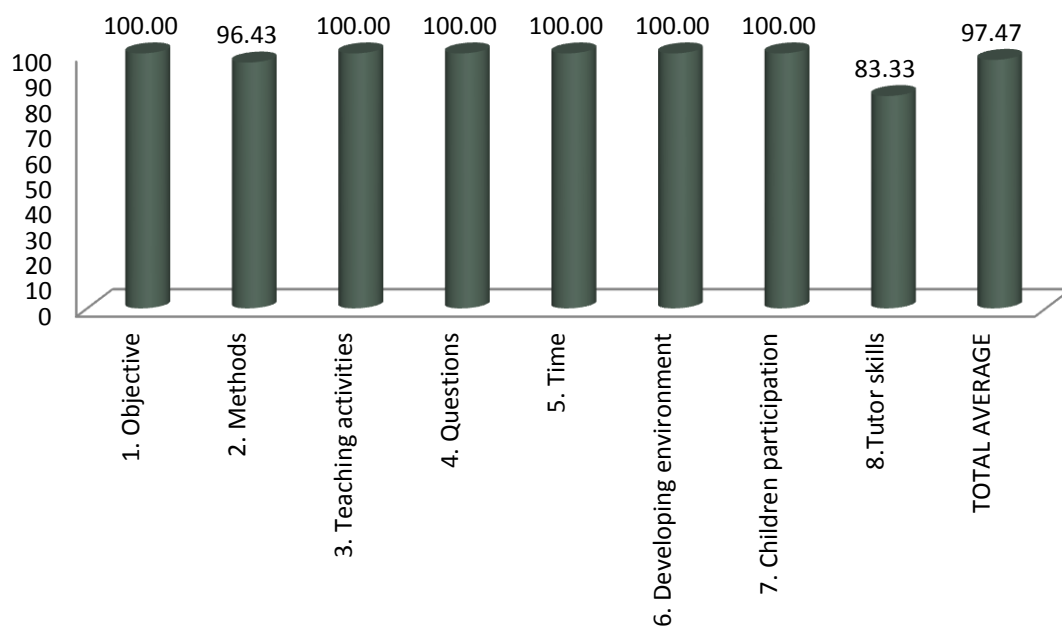
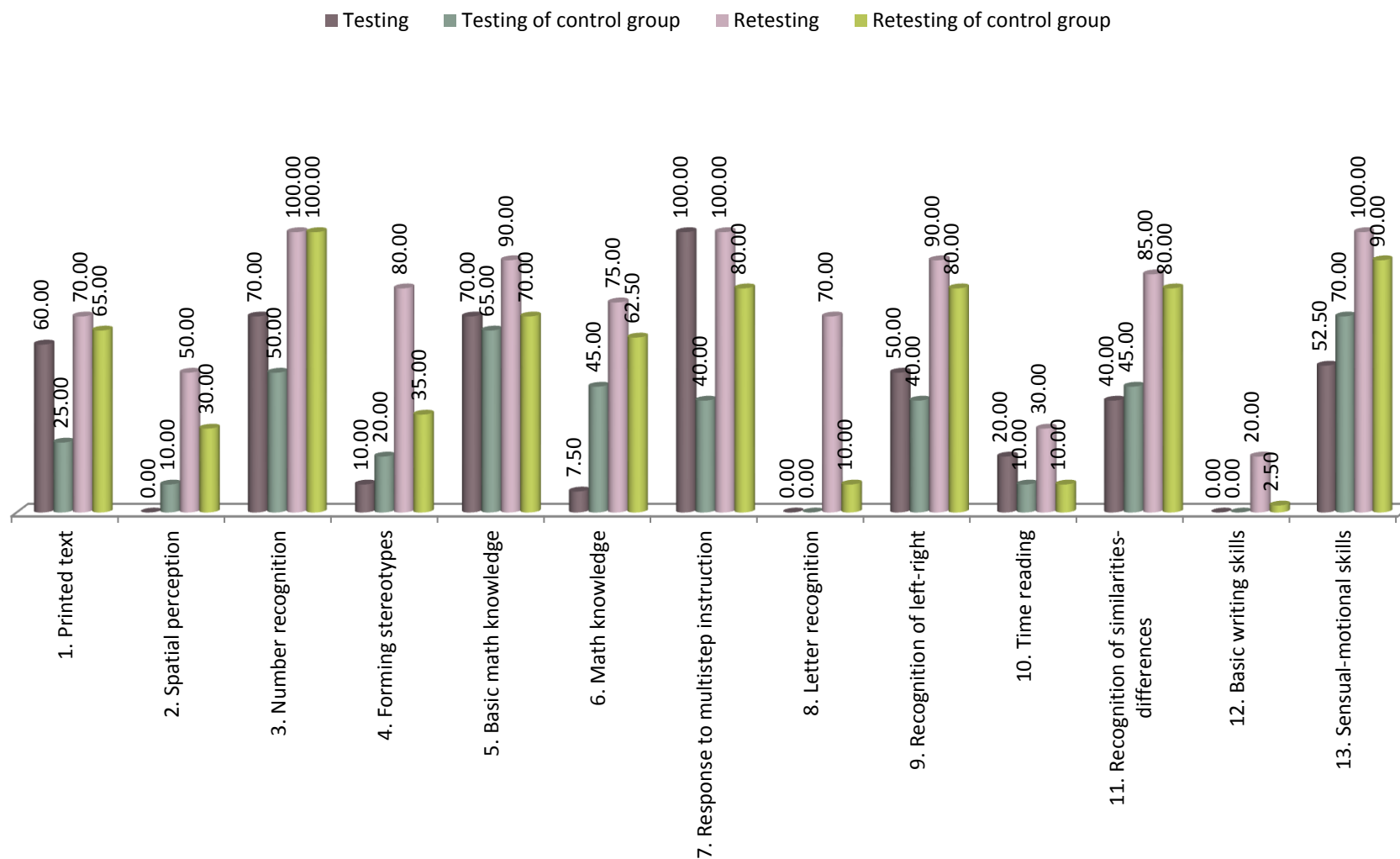


Figure 2. Analysis of testing and retesting results at Tsaghkunk preschool.



When looking at the testing and retesting results of Tsaghkunk preschool in Figure 2, we can see that a significant increase has been observed in the (4) forming stereotypes /10.00%→80.00%/ indicator of *logic and thinking* subfield; (8) letter recognition /0.00%→70.00%/ indicator of *early reading* subfield; (6) math knowledge indicator /7.50%→75.00%/ of *general math knowledge* subfield. There was no change in (7) response to multistep instructions indicator of *oral speech perception* subfield. Maximum increase was observed in (3) number recognition indicator /70.00%→100.00%/ of *general math knowledge* subfield, and (13) sensual-motional skills indicator /52.50%→100.00%/ of *writing and drawing skills* subfield.

When looking at the testing and retesting results of children in control group, we see that the most increase was in (3) number recognition indicator /50.00%→100.00%/ and (9) recognition of right-left indicator /40.00%→80.00%/ of *general math knowledge* subfield, and (1) printed text indicator /25.00%→65.00%/ of *early reading* subfield. No change was observed in (10) time reading indicator /10.00%/. Maximum increase was observed only in (3) number recognition indicator /50.00%→100.00%/ of *general math knowledge* subfield.

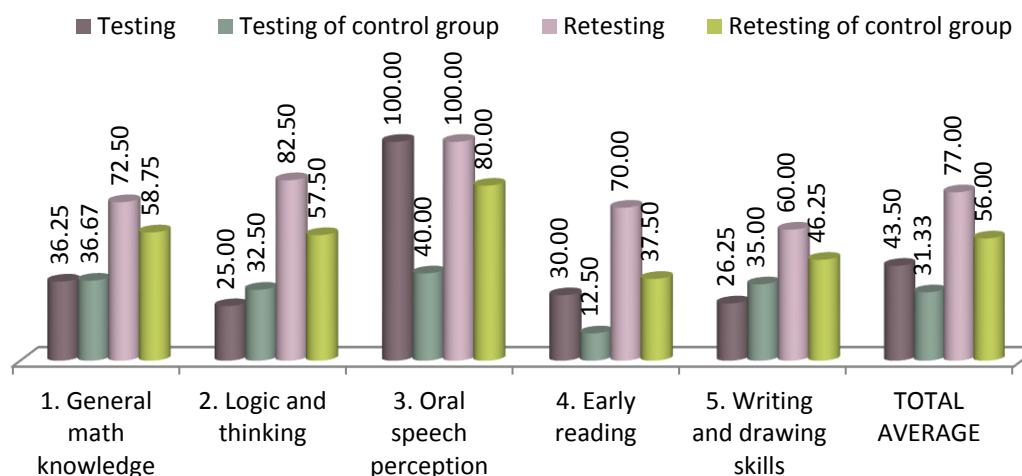
When looking at Figure 2, we can see that in general the number of exceeding indicators (one another) in testing results of the control and target groups is the same. The testing results of the children attending the preschool are lower than that of the children not attending the preschool (regarding 5 indicators), and the greatest difference is in case of the (6) math knowledge indicator /37.50%/ of *general math knowledge* subfield and (13) sensual-motional skills indicator /17.50%/ of *writing and drawing skills* subfield.

The testing results of the children not attending the preschool are lower than that of the children attending the preschool (regarding 5 indicators), and the greatest difference is in case of the (7) response to multistep instructions indicator /60.00%/ of *oral speech perception* subfield. There is no difference in case of (8) letter recognition indicator /0.00%/ of *early reading* subfield and (12) basic writing skills indicator /0.00%/ of *writing and drawing skills* subfield.

Comparing the retesting results of children from target and control groups, we see that the performance of the target group regarding all the indicators at the year end is higher than that of the control group. Difference has been mainly observed in the following indicators: (8) letter recognition indicator /60.00%/ of *early reading* subfield, (4) forming stereotypes

indicator /45.00%/ of logic and thinking subfield. No difference is observed only in case of (3) number recognition indicator /100.00%/ of *general math knowledge* subfield.

Figure 3: Comparison of results of Tsaghkunk preschool by subfields.



The Figure 3 shows that the retesting results of Tsaghkunk preschool mostly exceed the testing results, in particular in respect of (2) *logic and thinking* /25.00%→82.50%/ subfield: No change is observed in (3) *oral speech perception* /100.00%/ subfield.

When looking at the testing and retesting results of children not attending preschool in Tsaghkunk community (Figure 3), we can see there is an increase in respect of all subfields. The greatest increase has been observed in (3) *oral speech perception* /40.00%→80.00%/ subfield.

When looking at Figure 3 we can see that the testing results of target group are lower than the testing results of control group, except for (3) *oral speech perception* /60.00%/ and (4) *early reading* /17.50%/ subfields. The target group results are lower than that of the control group mainly in case of (5) *writing and drawing skills* /8.75%/ subfield.

Comparing the retesting results of target group and control group, we can see that the target group retesting results exceed the retesting results of the control group. The most significant difference has been observed in (4) *early reading* /32.50%/ subfield.

5.2. Lori region

Four preschools were opened in this region in 2018 – in Vanadzor, Gugark, Margahovit, and Dzoramut, of which, according to the methodology, three preschools were selected.

5.2.1. “Vanadzor №30 primary school SNCO

The preschool has been established on the school basis and has one group of children. According to the budget foreseen by the micro project for one group, the community preschool is classified in the region as one having “large” resources (financial criteria for community classification of the region included in the sample).

During our visits the preschool was working according to the following model:

- 5 days in a week,
- part-time working regime - 09:00-13:00,
- one tutor was working in the preschool during the visit,
- the tutor was trained,
- children were having one hot meal a day,
- the preschool was heated from the central boiling house of the school;
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, playroom, a wardrobe and a water-closet (separated by partitions and doors).
- The group room, playroom, wardrobe and water-closet were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (see Pictures 7 and 8).
- The preschool was provided with permanent cold water.
- The preschool had a central heating system.



Picture 7. Beginning of year, Vanadzor, water-closet



Picture 8. Beginning of year, Vanadzor, group room

Conditions of the group room and work centers were satisfying the defined norms (See Picture 9). The natural sciences center was equipped partly, and only role playing center was missing. The group room had wardrobes (See Picture 10), carpet, tables and chairs, boxes for toys, blackboard, TV set, sofa, etc. The group room was light enough. The preschool children's food was organized through the UN Food Program. The preschool's children used the outdoor playground of the school.



Picture 9. Beginning of year, Vanadzor, math, literacy, art centers



Picture 10. Beginning of year, Vanadzor, wardrobes

According to the head master, the *main purpose of establishment of the preschool* was preparing the community children for school, smoothing the transition from preschool to primary school, and turning the school into a complex structure. The most part of the preschool children's parents have been unemployed and indigent. The main goal of the head master was involving in preschool the children from needy families.

The strength of the preschool, according to the head master, is that due to the project the children have become ready for school. During an interview the tutor mentioned that the only problem in her opinion is that she was working alone (absence of second educator).

The preschool's *building conditions* were good enough. The *work centers* of the preschool were well equipped with educational materials, didactic accessories and toys. The art, construction and cooking centers were mostly equipped. According to the head master, the *work centers* were equipped sufficiently, but she planned to increase the number of accessories during the academic year.

Head master and a *tutor* were working at the preschool. The head master previously worked at a kindergarten as a tutor, and then as teacher of Armenian language and literature; from 2007 she was working as principal of the school. The tutor previously worked in the

kindergarten, then she was reduced and transferred to the school. The tutor was engaged in the process of launching the preschool activities from the very beginning. The tutor was trained and mastered the provisions of the pre-school curriculum.

The tutor mentioned that the *training* was very interesting and saturated. There were both practical and theoretical training. For the tutor it was a novelty to make connections between games and subjects. She also noted that all the topics studied during the training are usable in their community. The training provided the tutor with the necessary for teaching knowledge.

The tutor considered important both teaching approaches, however she mostly applied the child-centered approach. She also uses games as a teaching method during classes to help children to get accustomed to the learning process. She loves to use demos, often organizes television shows. She likes to use smart screens. The educator focuses on all areas of child development, with more emphasis on cognitive development and language development. She makes group and individual assessment through encouragement.

The tutor had *summary lesson plan*, but it was not completed during the visit. She planned the lessons on a weekly basis (the tutor believed that organization of lessons with a clear plan would make the work more difficult). The lessons were conducted with demonstrations and use of didactic materials; thought provoking tasks were used; the selected and applied methods were in correspondence with the lessons objectives. Individual approach was applied towards the children. No differences were made among the children regarding gender issues. Invigorating activities and games were envisaged during the classes. Free movement of children in the classroom was limited.

According to the tutor the strongest child in the group knew Russian, was able to count to 100, was fast-paced, very developed; and the weakest child was a little shamefaced because of not attending previously either kindergarten or preschool.

There were close relations with the parents. The tutor said that she often gave advice to parents, in particular banning them from behaving harshly toward children. According to the head master, parents have serious household and social problems, so they have tried to help them with every issue except financial issues. Often parents visit the preschool to attend the lessons.

The majority of community families has no jobs and is in need. The families who lost their homes during the earthquake mostly live in the area where the preschool is located. According to the tutor, the parents of the preschool children have mainly secondary vocational education. She also finds that the socio-economic status of the family / community

definitely affects the development level of the children as no one has been working with the children at home, and they use street language. On the contrary, the head master finds that socially safe families are able to spend more time on their children's upbringing and education.

During the focus group discussions held with *parents* the families of eight participants were composed of 4-7 members. Two of the participants were beneficiary families. Mainly fathers were working, and mothers were housewives. The main purpose of children attending the preschool was becoming educated and getting prepared for school. The parents were satisfied with the preschool's conditions and mentioned that everything in the preschool was in correspondence with the established standards, there were enough necessary accessories, and the attitude of the tutor was especially pleasing to everyone. They also noted that the most satisfying in the preschool was the organization of hygiene. The children of the focus group families were mostly cleaning up after themselves at home, helping mothers with simple housework, and feeding themselves.

Mainly mothers were responsible for taking care of the children, and sometimes grandmothers helped them. In the absence of mothers, the grandmothers were taking care of the child. The child's daily life was planned by mothers, taking into account the child's wishes if possible.

Parents generally found that their decisions and requirements should have been explained to the child. A child may be punished for being naughty, disobeying the adults, and lying. In similar cases parents deprived their children of their favorite occupation for a certain period of time (for example, banned computer games, turned off the internet, put the child into the corner, etc.).

There was a kindergarten in the community, and the most part of the children of parents participating in the discussion had attended the kindergarten, however the children did not adapt to it.

There were close relationships between the parents and the preschool. They helped the tutor in organization of events and prepare posters. Parents did not participate in development of lesson plans, but the tutor presented the plans to the parents. Parents often visit the preschool, and follow the training process, and they are very pleased for that.

Parents mentioned that they collect money only for food provision – up to 1000 Drams monthly, and if the children have absences, the amount is proportionally reduced (40 drams

daily). Three parents were ready to pay for additional training (foreign languages), but the other parents did not find it necessary or were not ready to pay for that.

Concerning the continuity of the program, the head master noted only the problem of payment to the tutor.

End of year visit can be described as follows:

In the beginning of the year the head master noted difficulties only in respect of the tutor's remuneration, and at the end of the year she mentioned that the program will be continued through the state budget means, and they would have no problems with both tutor remuneration and regular updating of training materials for work centers.

There were no changes at the year end in respect of *building conditions*. All the beneficiary parties expressed their satisfaction with the created conditions.

Compared to the beginning of the year, an increase of some work center accessories, handmade items, self-made didactic materials has been observed (See Figures 11 and 12). However during the interviews the head master and the tutor mentioned that the stationery needs to be replenished on a regular basis, especially the didactic materials (putty, etc.).

At the same time the tutor mentioned that parents could not provide all the accessories and goods that are available in the preschool in home conditions; they could not provide for the children's reciprocal communication in home conditions as well.



Picture 11. End of year, Vanadzor, grouproom



Picture 12. End of year, Vanadzor, grouproom, cabinet

At the end of the year, the tutor had already applied more teaching methods and paid equal attention to all areas of development, but noted that the most important of these areas was emotional development.

According to the tutor, the children acquired certain knowledge at the end of the year, they recognized letters and got rid of some of the complexes, in particular, they became communicative. In respect of child development there were mostly successful cases, for example, at the beginning of the year one child was always crying while drawing, and at the end of the year he was happy to draw. However, there was also a case of slight increase in development, the main reason of which, according to the tutor, was that the parent was not involved in the child's education at home.

The tutor also noted that she encouraged the children by praise words and awarding starlets, she also used tutors' observation questionnaire to assess children development. The tutor emphasized the importance of encouraging children, noting that it was necessary to explain to children why they had received starlet award, to make it clear to children.

The parents stated that the children know letters, and they were very satisfied with both the conditions of the preschool and the knowledge given to the children.

As for the gender development of the children, the tutor noted that she did not see any difference, but also noted that the girls lag behind a bit in sports games.

Parents compare the preschool children to their older children at that age and find that these children have more knowledge and that the preschool has played a major role. Parents participated in events and assisted the tutor in decorating and arranging activities, they also helped the tutor during excursions. According to the head master, the parents did not attend the classes, but assisted the children in homework and constantly followed the advices of the tutor and the principal.

The parents mentioned that due to the preschool they were able to do housework and carry out other activities, being sure that their children were in a safe place.

The head master noted that the children had actually integrated into school, as the children had been in preschool for a year and had in fact become school children, and they were ready to the greatest extent to go to first grade.

At Vanadzor preschool the overall picture of the class observation is above average. The *Objective*, *Teaching activities*, *Questions criteria* have maximum representation /100.00%/, which demonstrates that the tutors are effectively organizing the classes and ensuring, with their questions, the right course of action for the purpose. Relatively lower representation relates to the *Methods* /89.29%/, *Time* /90.00%/, *Developing environment* /93.75%/, *Children participation* /89.29%/, and *Tutor skills* /83.33%/ criteria. The overall average score for the criteria makes up 93.21%.

Figure 4. Analysis of classes observation results at Vanadzor preschool

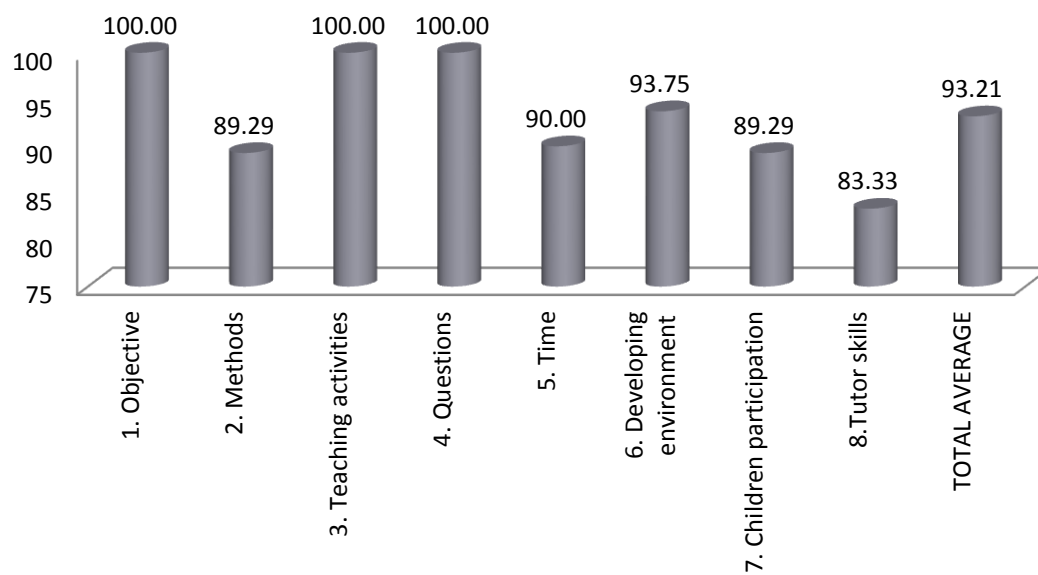
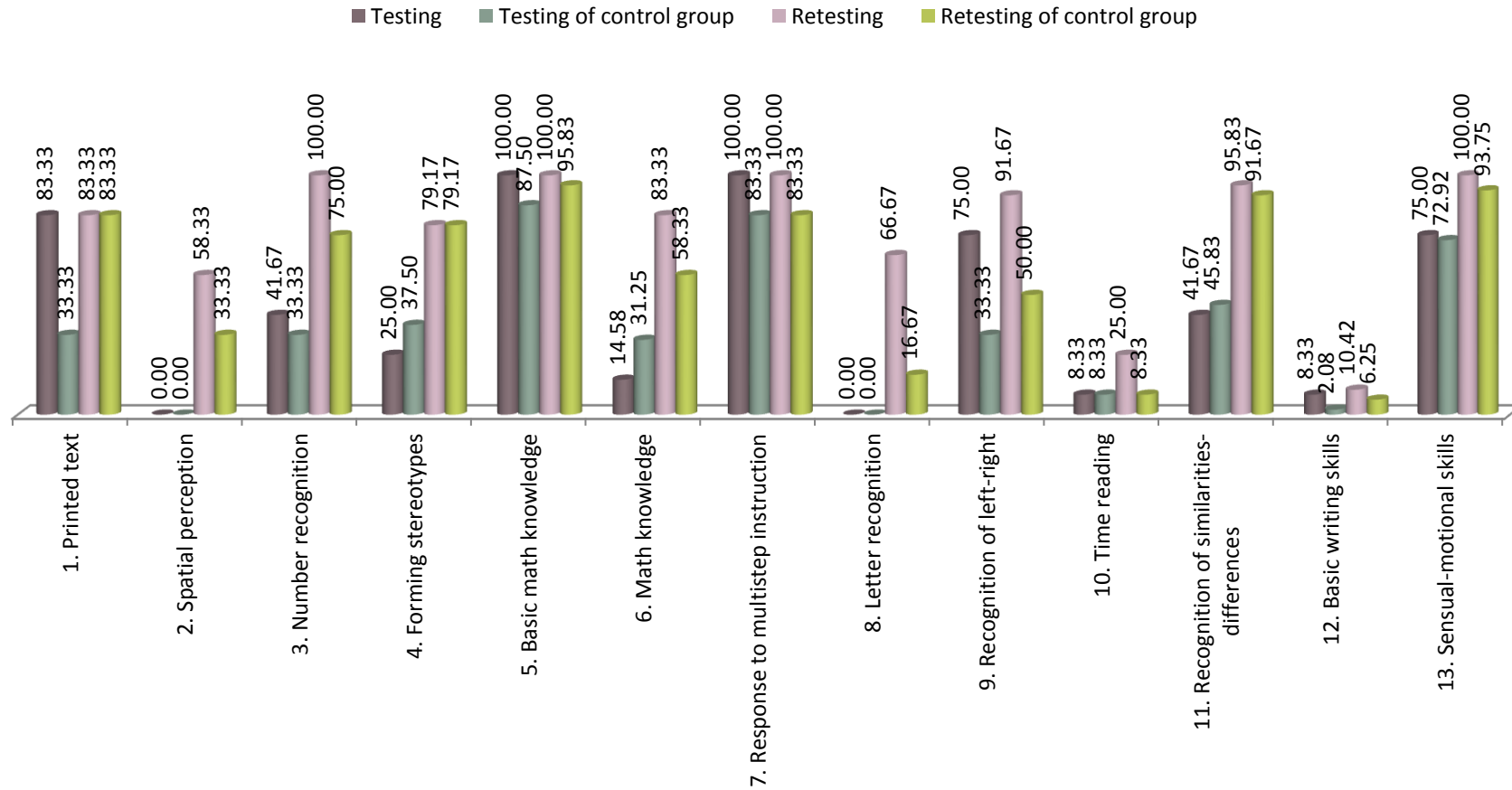


Figure 5. Analysis of testing and retesting results of Vanadzor preschool children



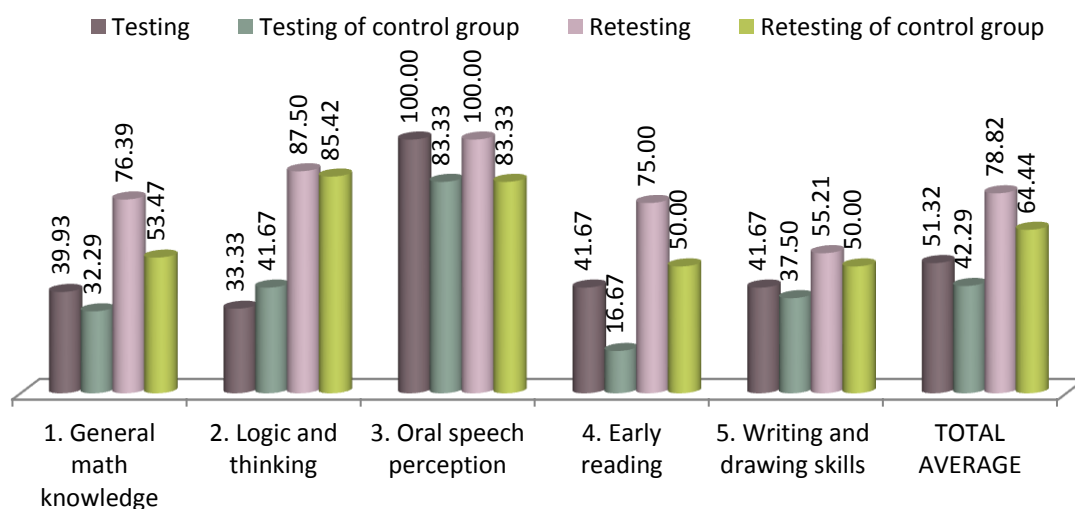
When looking at the testing and retesting results of the preschool children in Vanadzor community in Figure 5, we can see that a significant increase has been observed in (6) math knowledge indicator /14.58%→83.33%/ of *general math knowledge* subfield, and (8) letter recognition indicator /00.0%→66.67%/ of *early reading* subfield. There were no changes in (1) printed text indicator /83.33%/ of *early reading* subfield, (5) basic math notions /100.00%/ indicator of *general math knowledge* subfield, and (7) response to multistep instructions indicator /100.00%/ of *oral speech perception* subfield.

According to the analysis of testing and retesting results of children not attending preschool, a significant increase has been observed in (1) printed text indicator /33.33%→83.33%/ of *early reading* subfield, and then in (11) recognition of similarities–differences indicator /45.83%→91.67%/ of *logic and thinking* subfield. There were no changes in (7) response to multistep instructions indicator /83.33%/ of *oral speech perception* subfield.

Based on the Figure 5, we can say that the testing results of children attending preschool mostly exceed the testing results of children not attending preschool, except for (4) forming stereotypes /12.50%/ and (11) recognition of similarities–differences /4.17%/ indicators of *logic and thinking* subfield, and (6) math knowledge /16.67%/ of *general math knowledge* subfield. The greatest difference was observed in respect of the (1) printed text indicator /50.00%/ of *early reading* subfield.

Comparing the retesting results of children from target and control groups, we see that at the year end the performance of the target group regarding almost all the indicators is higher than that of the control group, except for the (1) printed text indicator /83.33%/ of *early reading* subfield and (4) forming stereotypes /79.17%/ indicator of *logic and thinking* subfield, which were similar.

Figure 6: Comparison of Vanadzor preschool children testing results by subfields



We see from the Figure 6 that compared with the testing results of Vanadzor preschool children, their retesting results significantly increased in respect of (2) *logic and thinking* subfield /33.33%→87.50%. No change was observed only in respect of the (3) *oral speech perception* subfield /100.0%/.

When looking at the testing and retesting results of children not attending the preschool (Figure 6), we can see that there is an increase in respect of all the subfields. In particular, the greatest increase was observed in (2) *logic and thinking* subfield /41.67%→85.42%/.

From the Figure 6 we can see that the testing results of children attending preschool exceed testing results of children not attending preschool, except for the (2) *logic and thinking* subfield /8.33%/. The target group results exceeded the control group results mostly in respect of (4) *early reading* subfield /25.00%/.

Comparing the retesting results of children attending and not attending preschool, we can see that the results of the children attending preschool are higher than the results of the children not attending preschool. The greatest difference was recorded for (4) *early reading* subfield /25.00%/.

5.2.2. “Margahovit secondary school” SNCO

The preschool was established on the school basis and has one group of children. According to the budget foreseen by the micro project for one group, the community preschool is classified in the region as one having “small” resources (financial criteria for community classification of the region included in the sample).

During our visits the preschool was working according to the following model:

- 5 days in a week,
- part-time working regime - 09:00-12:30,
- one tutor was working in the preschool,
- the tutor was trained,
- children were having one hot meal a day,
- the preschool was heated through central heating system,
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, a wardrobe and a water-closet (not separated by gender, there were no partitions and doors between toilet bowls).
- Group room, wardrobe and water-closets were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (see Pictures 13 and 14).
- The preschool was provided with permanent cold water.
- The preschool was heated through central heating system.

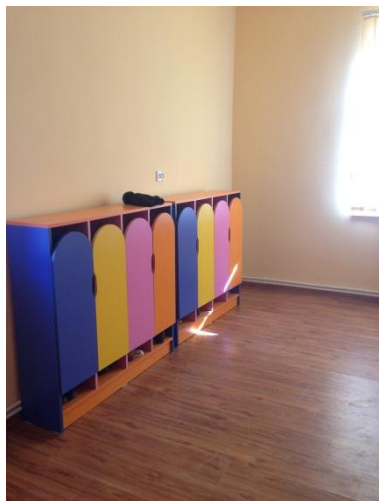


Picture 13. Beginning of year, Margahovit, water-closet



Picture 14. Beginning of year, Margahovit, group room

Conditions of the group room, and working centers were mainly satisfying the defined norms. As it relates to availability of centers, construction, biology, and sports centers were not available, and the other centers equipment level was average (*See Picture 16*). The preschool had wardrobes, carpet, tables and chairs, blackboard, TV set, etc. The group room was light enough, but the space was not convenient for working with large groups. The preschool children's feeding was organized at the school canteen through means of parents (1000-1200 Drams monthly). The preschool did not have outdoor playground.



Picture 13. Beginning of year, Margahovit, wardrobes



Picture 13. Beginning of year, Margahovit, cabinet

According to the *head master* the main purpose of the micro program was to have a preschool in the community to organize the preschool-age children's education at school, which will in turn ensure children's integration into school, and the children will be ready to go from the preschool to first grade.

Creation of the preschool provides the children of the community favorable conditions for receiving quality education, as well as increasing parents activity in the community and bringing the school to life.

As *the strength* of the preschool the head master mentioned the importance and necessity of the preschool for the community children, as favorable conditions were created for the children for receiving quality education. The head master also mentioned that for now the preschool has no weaknesses.

The preschool's building conditions are good, it has just been renovated. All stakeholders appreciated the preschool's building conditions.

The preschool did not have construction work center and the cooking and role play centers were equipped partly, in particular, there were only one-two accessories in each center. Absence of some of the work centers and/or insufficient number of accessories in the group room was explained by limited quantity of property, as all work centers could not be created in the available cabinets. In general, there were learning materials, didactic supplies and toys in the preschool, but they needed to be replenished, as they did not correspond to the number of children. Head master and tutor mentioned that work centers and rooms correspond to the established norms, and they considered work centers saturation satisfactory.

Head master and a tutor were working at the preschool. Head master previously worked as a deputy principal, and starting from 1991 – as a principal. The tutor previously worked as an educator at a kindergarten, she was trained and mastered the provisions of the preschool curriculum.

The *training* according to the tutor was organized and carried competently. However the necessary training materials were incomplete, and the practical part was missing. Shortcomings were raised. She also noted that since she had previously worked as a kindergarten educator, there was nothing new for her, except that the children would not be forced to learn, they should learn at their will. From the training topics, regular attendance at events and theaters has not been generally applicable, as there are no relevant institutions in the community.

The tutor applied child-centered and integrated teaching (topic-based teaching) approach, but more often the integrated teaching method was applied, as the tutor found that connections should have been established between different education sections. The tutor planned the lessons weekly. All areas of the child development were taken into consideration, but the main attention was focused on language development, as they lived in the village.

The tutor did not have a summary teaching plan (according to the tutor, organizing classes with a clear schedule would make her work more difficult), but she stated during the interview that she made planning weekly. The methods used corresponded to the purpose of the lessons and were successfully combined. The tutor did not use visual, didactic accessories during the classes. She gave not extensive tasks, exercises, and the questions were formulated clearly and concisely. During the observed classes, the children did not make a group work. The tutor had an individual approach towards the children and did not make a difference by gender between the children. She did not make assessment of the children.

According to the tutor, the strongest child in the group had good math knowledge, and the weakest child did not speak. She mentioned that the children's abilities differed by gender, girls were more capable.

The head master mentioned that there was a close cooperation with the parents, and no project was realized without their participation, for example, when food supply in the preschool was interrupted for a while, the parents quickly became self-organized and provided food for the children by own means.

Parents had certain participation in the preschool's life, in particular, they paid 1000-1200 Drams monthly for the children's feeding. Parents of some of the children were not able to

pay the mentioned amount, and the preschool organized things in such a way that the collected money was enough for all the children. The head master had a list of needy families, and she applied to local authorities and NGOs to help and support them.

Parents council has also been set up in the preschool, which plans and organizes every activity necessary for the preschool. A parent meeting was organized once and the parents kindly accepted the advices of the head master and the tutor. According to the tutor's advice, parents continue teaching partially completed topics at home.

According to the tutor, the socio-economic condition of the community families was average, and according to the head master – it was satisfactory. The tutor and the head master found that the socioeconomic status of the family/community affected the child's development. The tutor mentioned that when one child comes in new clothes, the others feel and say that they too want to have similar clothes. The head master noted that self-dependent families place more emphasis on education, and that the main task of poor families is to earn a living and that is why education is pushed into the background.

All the families surveyed in the community were engaged in agriculture and their main source of income was the sale of agricultural products. The majority of community residents were included in the lists of families receiving family benefits or emergency assistance.

During the focus group discussions held with *parents* it turned out that the families of participants were composed of 4-7 members. Four of six families were enrolled in the list of people getting social benefit. All the fathers were engaged in agriculture, and the mothers were housewives, however the latter helped their husbands to cultivate the farmland. Parents were very pleased with the tutor's attitude, as she was very attentive and applied an individual approach towards the children.

The children of these families mainly had no responsibilities at home, but they sometimes put their toys in order. In most cases, they were self-sufficient in nutrition, dressing and washing issues; two children were able to make small purchases (e.g., purchase bread).

Mainly parents were responsible for taking care and upbringing of the children, sometimes they were assisted by grandmothers as well. Mothers were mainly staying at home, and grandmothers took care of children if mothers went out. The child's daily life was planned by parents, but they were taking into account the child's wishes as well and realized them, if possible.

Parents generally found that their decisions and requirements should have been explained to the child, and they were acting so. Parents required that the children do not lie, be disciplined, do not altercate, and one parent – do not steal as well.

Parents punished their children for stealing, deceiving, disobeying the adults (caprice), sitting long time in front of a computer or playing long on the phone, being aggressive, and more. The punishment was mainly in the form of forbidding the child's favorite occupation, in particular, playing on the computer or in the court. The parent of a child who committed a theft said that such cases were not frequent, and they were careful to eliminate a possibility of repeating similar cases.

The children of all parents who participated in the discussion attended kindergarten, which disciplined them. After the opening of the preschool in the community, the group of older children along with the educator moved to the kindergarten. An interview with a parent from a socially disadvantaged family revealed that the child had attended kindergarten for three months and was moved to the preschool with the other children.

Parents believed that the family (parents influence), education (teaching methods, topics), and socioeconomic conditions had a major impact on child development.

The parents who participated in the discussion noted that they were getting everything appropriate for the children's age in the preschool and had no additional wishes so far. Parents' expectations from the preschool related to the children's progress in education and elimination of difficulties while attending first grade. Overall, parents were very satisfied with the preschool activity, tutor's attitude, and classes.

The parents also stated that they collect money only for food and do not provide any kind of financial or non-monetary support to the preschool.

End of year visit can be described as follows:

The head master assessed the *community's socio-economic condition* at the year end as satisfactory as well, and she mentioned that the main source of livelihood of the community's residents was agriculture and working abroad. The head master noted that the socio-economic status of the community directly affected the children development, as self-sufficient families pay more attention to the education of children, than the disadvantaged families.

There has been a change in the separation of work centers (see Figures 17 and 18). The tutor noted at the end of the year that they created construction and role-playing centers, but they did not separate sports center. It should also be noted that parents assist in solving the issue of

replenishment of educational materials, supplies and role-playing games, as the preschool did not have the necessary quantity of supplies. The tutor also noted that stationery was not sufficient during the year, and that the gap was filled by the parents' assistance. In this regard, the head master noted that in the coming years they will have no problems, as they will be financed from the state budget.



Picture 17. End of year, Margahovit, group room



Picture 18. End of year, Margahovit, cabinet

The head master mentioned about the close cooperation with the parents and informed that twice she had meetings with the parents, and that the tutor had meetings with them regularly. She also mentioned that the parents co-finance (25%) the children feeding, as it is organized in the preschool within the UN Food Program framework.

According to the head master, at the year end there were no programs to support needy families at the school, but the needy families did not participate in co-financing the food provided to their children in the preschool, as it was made through the other parents.

The head master mentioned that she had no fears in respect of the insuring the program's continuity, the only problem may be related to cessation of the budget financing.

In respect of children development the tutor said that she appreciates the children with encouraging words that inspire them. In one case the increase in child's development was slight (due to illness), while in others there was a significant increase, in particular, children recognized letters and were able to write fluently.

In respect of children development the parents at the year end mentioned that their expectations realized completely, and the children became ready for school. In particular, the parents said that the increase in children's development is evident, and similar results would

have been impossible in home conditions. They also mentioned that compared with the children of the same age not attending the preschool, the difference in the level of knowledge of the children attending the preschool is significant.

The tutor did not see any gender differences in the children's capabilities both in the beginning of the year and in the year end. She also noted that she was going to use tutors' observation questionnaire at the end of the academic year to observe the children development level, and make an assessment.

It can be seen from the Figure 7 that the overall picture of the class observation criteria is above average, making up 83.65%. Only the *Questions criterion* has maximum representation /100.00%/. Relatively lower representation relates to the *Objective* /75.00%/ and *Developing environment* /62.50%/ criteria. The other criteria are in the range of 81.25% - 92.86%.

Figure 7. Analysis of classes observation results at Margahovit preschool

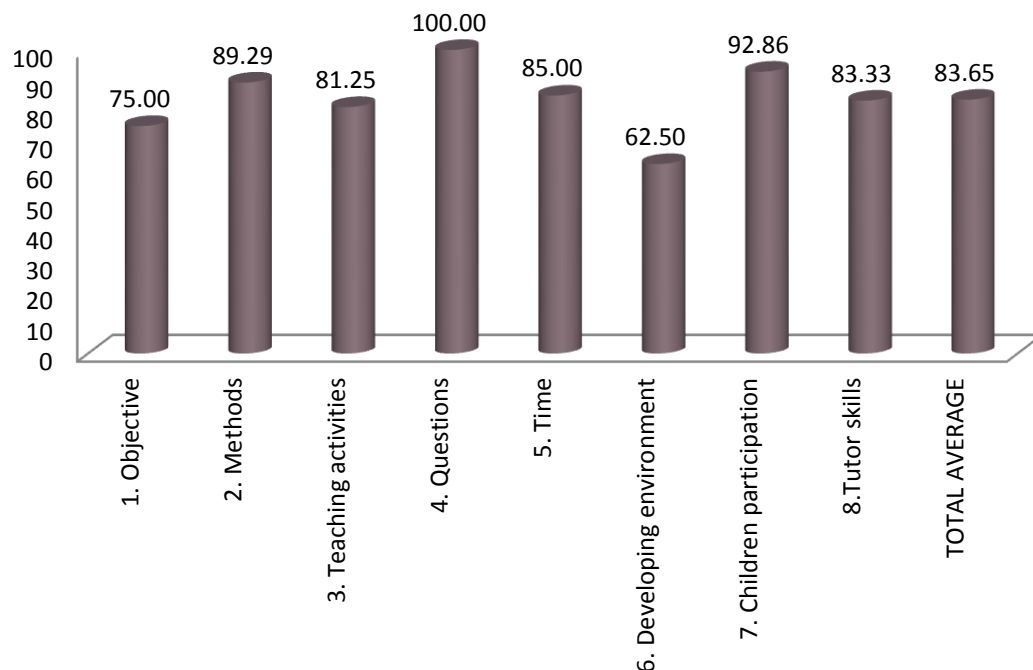
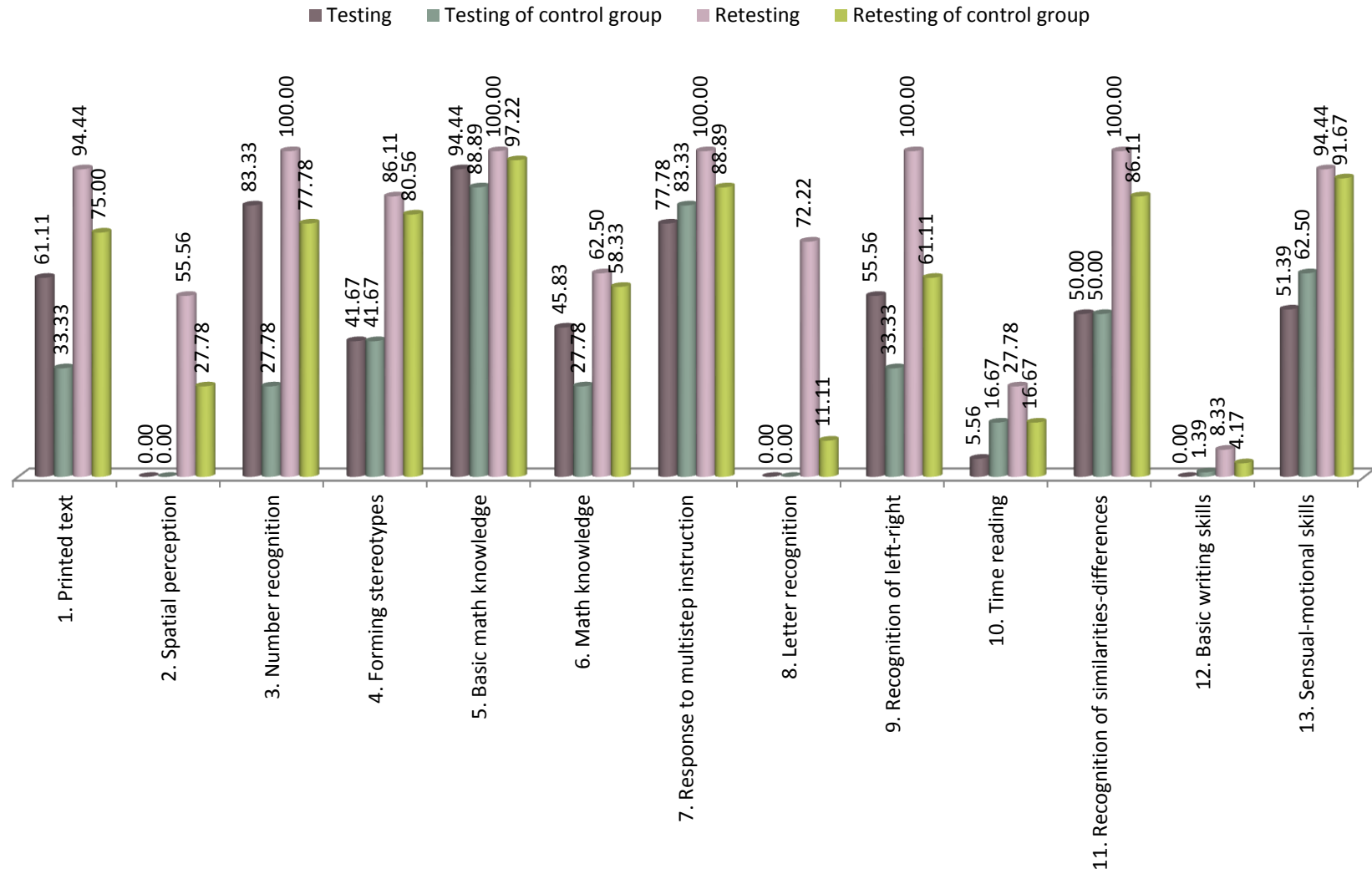


Figure 8. Analysis of testing and retesting results of Margahovit preschool children



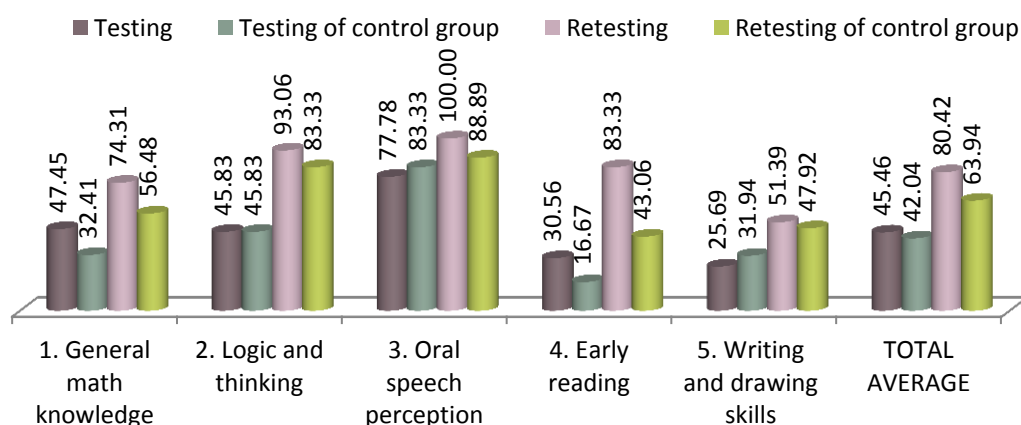
When looking at the testing and retesting results of the preschool children in Margahovit community in Figure 8, we can see that a significant increase has been observed in (8) letter recognition /0.00%→72.22%/ indicator of *early reading* subfield, then in (2) spatial perception /00.00%→55.56%/ indicator of *general math knowledge* subfield.

When looking at the testing and retesting results of children of the control group, we see that there is no change only in (10) time reading /16.67%/ indicator of *general math knowledge* subfield. The greatest positive change has been recorded in case of (3) number recognition indicator /27.78%→77.78%/ of *general math knowledge* subfield.

We see in the Figure 8 that the testing results of children attending Margahovit preschool are mostly exceed the testing results of children not attending the preschool in case of number recognition indicator /55.56%/ of *general math knowledge* subfield. There are no changes in respect of the following indicators: (2) spatial perception /00.00%/ indicator of *general math knowledge* subfield, (4) forming stereotypes /41.67%/ indicator of *logic and thinking* subfield, (8) letter recognition /0.00%/ indicator of *early reading* subfield, and (11) recognition of similarities-differences indicator /50.00%/ of *logic and thinking* subfield. On the contrary, some of the indicators were higher in case of the children not attending the preschool, for example, (7) response to multistep instructions /5.56%/ indicator of *oral speech perception* subfield, (10) time reading /11.11%/ indicator of *general math knowledge* subfield, (12) basic writing skills /1.39%/ and (13) sensual-motional skills indicators of *writing and drawing skills* subfield.

Comparing the retesting results of children from target and control groups, we see that the performance of the target group is higher than that of the control group. Difference has been mainly observed in (8) letter recognition /61.11%/ indicator of *early reading* subfield and (9) recognition of left-right /38.89%/ indicator of *general math knowledge* subfield.

Figure 9. Comparison of Margahovit preschool children results by subfields



Analysis of testing and retesting results of preschool children in Margahovit community (Figure 9) shows that maximum increase was recorded in (4) *early reading* /30.56%→83.33%/ subfield.

The retesting results of children in control group (Figure 9) have increased compared with the testing results, and the greatest increase has been recorded in case of (2) *logic and thinking* /45.83%→83.33%/ subfield.

Figure 9 shows that the testing results of children attending the preschool exceed the testing results of children not attending the preschool only in case of (1) *general math knowledge* /15.05%/ and (4) *early reading* /13.89%/ subfields. The testing results of children attending the preschool are lower than the testing results of children not attending the preschool in case of (3) *Oral speech perception* /5.56%/ and (5) *writing and drawing skills* /6.25%/ subfields. No differences were observed only in case of (2) *logic and thinking* /45.83%/ subfield.

Comparing the retesting results of children from target and control groups, we see that the performance of the target group children is higher than that of the control group. The largest difference is in (4) *early reading* /40.28%/ subfield.

5.2.3. “Dzoramut secondary school” SNCO

The preschool was established on the school basis and has one group of children. According to the budget foreseen by the micro project for one group, the community preschool is classified in the region as one having “average” resources (financial criteria for community classification of the region included in the sample).

During our visits the preschool was working according to the following *model*:

- 5 days in a week,
- part-time working regime - 13:00-16:00,
- one tutor was working in the preschool,
- the tutor was trained,
- meal brought from home was provided once a day,
- the preschool was heated through electric heaters,
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, playroom, and a water-closet (the toilet bowls were not separated by partitions and doors. The playroom was not used, as the room had not been heated yet.

- The group room, playroom, wardrobe-hall and water-closets were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (See Pictures 19 and 20).
- The preschool was provided with permanent cold water.
- The preschool was heated through electric heaters.



Picture 19. Beginning of year, Dzoramut, water-closet



Picture 20. Beginning of year, Dzoramut, group room

Conditions of the group room, playroom, and working centers were satisfying the defined norms, but they were equipped poorly. The working centers of literacy, math, role play, and biology were missing, and the construction, cooking and sports working centers had very few accessories (*see Pictures 21 and 22*). An exception was the art center, which was equipped with the necessary supplies.

The preschool had wardrobes, tables and chairs, boxes for toys, blackboard, TV set, etc. The group room was light. The preschool children were provided with food brought from home (e.g., biscuits, juice). There was no outdoor playground in the preschool, and the children used the school courtyard.



Picture 21. Beginning of year, Dzoramut, cabinet



Picture 22. Beginning of year, Dzoramut, cabinet

According to the *head master*, the *purpose of the preschool creation* was increasing the level of education quality to bring the education quality level of the village community into line with the education quality level in town. Moreover, it was aimed at preparing the children for school cutting them off from street.

According to the head master, the preschool provided the children an opportunity to be prepared for school. She said that parents brought their children to the preschool mainly for receiving education.

Head master noted that she did not see any *weaknesses* in respect of the preschool so far.

Concerning the *building conditions*, the head master mentioned during the interview that the preschool was renovated, water supply and heating were available, and the sanitation was good. What concerns the work centers availability in the preschool, according to the head master, all the existing work centers were for common use, and there was no shortage of accessories, while the tutor noted that the centers were not separated and there was a need for replenishment of accessories, as they had been insufficient. It is worth to mention once again that there was a shortage of education materials, didactic supplies and toys. Parents mentioned in this respect that heating performance in the preschool is poor, and there is a necessity to replenish the stock of didactic materials and toys, as they are very few in the preschool.

Head teacher and a tutor were working at the preschool. The tutor simultaneously worked at school as a teacher. She had attended training only two days of the five prescribed days. The head master had previously worked at the same school for eight years as a deputy principal, and from 1999 he was appointed as a principal of that school.

The *training* passed without drawbacks. The tutor mentioned that there were both practical and theoretical classes during which they were provided with necessary materials. According to the tutor the topics presented during the training were applicable to their community, but due to a lack of accessories and materials some methods / materials cannot be applied.

The tutor had a *summary plan*, but the time factor was not accounted for. She planned the classes weekly. Due to the lack of a methodical manual during the lessons (according to the tutor, organizing the lessons would have been easier if they had been given a clear schedule indicating the topics, corresponding games and lessons, and days on which those activities should have been organized) the educator used the simplest methods to ensure children participation in the following activities: counting of available objects and numbers from one to ten, reciting poems. Children were treated individually. The tutor did not use observation and assessment sheets on child development dynamics, she only used encouraging, appraisal words for individual and group assessment. There was no difference between the children in gender issues (noted from class observation).

The tutor applied an integrated approach during classes because of the age differences of the group children: there were both five-year-olds and four-year-olds in the group. The tutor focused on the child's language development area.

Based on the age characteristics of the group, the tutor works separately with younger children, as they are relatively weaker than the rest of the group. According to the tutor, the children's abilities did not differ by gender.

The tutor almost daily informed parents of the progress of their children. Parents assisted the tutor in case of difficulties and even established duty, they also assisted in maintaining cleanliness. The parents did not participate in the education of the children in the preschool, but they were involved with the children at home.

According to the tutor, the socio-economic condition of the community's families was average, with the majority of them engaged in outgoing work. The head master found that the *socio-economic status* of the community did not affect the child's development, whereas according to the tutor, it did affect, as otherwise the father would stay at home rather than be engaged in outgoing work, which would reduce the burden of the mother and provide time for being involved in the child's upbringing and education.

In the community, the families were engaged in agricultural work, mainly farming and cattle-breeding.

During the focus group discussion with the parents, the families of six participants were comprised of 4-6 people, three families were included in the beneficiary system. The families

were engaged in farming, cattle-breeding, and were leaving for outgoing work. Children were not involved in agricultural activities since they were still young.

Children from these were mostly clearing after themselves and making their lessons at home. For the most part, the children were self-sufficient in the feeding, dressing, and toilet using issues.

Mainly mothers, fathers, and grandmothers were responsible for child care and upbringing. In the absence of mothers, the grandmothers took care of the child, but the absences were not frequent. Parents were absent from home mainly due to shopping. The daily routine of the child was mainly planned by the parents, taking into account the child's wishes whenever possible.

The parents generally believed that their decisions had to be explained to the child, and what concerns requirements, they did not impose requirements on children at all.

The child's actions were punishable for selfishness, lying, not listening to adults, misbehaving. Parents generally punished children by depriving them of their favorite occupation (eg, computer, internet, etc.). One parent mentioned that she used to threaten the child to throw its toys into the valley, and the child collected itself.

The children of the parents who participated in the discussion did not attend kindergarten as there was no kindergarten in the community. The parents were informed about the opening of a preschool in the community by the principal of the community school.

Parents believed that the children development was mostly affected firstly by their parents, then education (teaching methods, topics) and the physical environment.

Overall, the parents were very satisfied with the activity and conditions of the preschool and noted that all the questions they raised were being resolved. They also stated that they did not collect any money, but they were willing to provide financial support for food provision, foreign languages and dance lessons as there were no such opportunities in the community.

The head master did not see any threats in respect of the program continuity.

End of year visit can be described as follows:

Concerning the *building conditions* of the preschool, the tutor said that everything was fine except for the rooms heating, which was weak and they had to stop working in January. It should also be noted that the preschool was not provided with hot water.

Work centers were not separated at the beginning of the year, and there was a need for the accessories replenishment; and at the end of the year some centers were separated, but there were no biology, role-playing centers, and an outdoor playground was missing as well. As for

the centers supplies, at the end of the year the supplies were still few and there was a need for their replenishment (*See Figure 24*).

As a *strength of the preschool*, the head master noted at the end of the year the cooperation with parents; they organized the cleaning of the preschool after renovation, and they do that to this day (the parents set up a duty to do the cleaning, and one parent comes to the preschool daily to do the cleaning at the preschool).

The head master noted that there were no threats in ensuring the program continuity. At the same time, she said that the preschool provided the children with knowledge, provided the school with children ready for school, and provided the parents with free time during which they could work or manage their time more effectively and not have to worry about the children's education issues as they were completely solved by the preschool.

Of the factors affected the children's development level, the parents highlighted the influences of the preschool (education), socioeconomic conditions, and family. Parents said that their expectations from the preschool were justified and that the children had acquired enough knowledge and were ready to go to school.

The tutor mentioned that the children learned letters, were able to count and write, paint, sing, and, in general, children were ready to go to school. At the beginning of the year there were children who were not communicative, and due to attending the preschool, they became more communicative and active. The parents also mentioned that the children were self-contained before attending the preschool, and are now very active and friendly.



Picture 23. End of year, Dzoramut, wardrobe



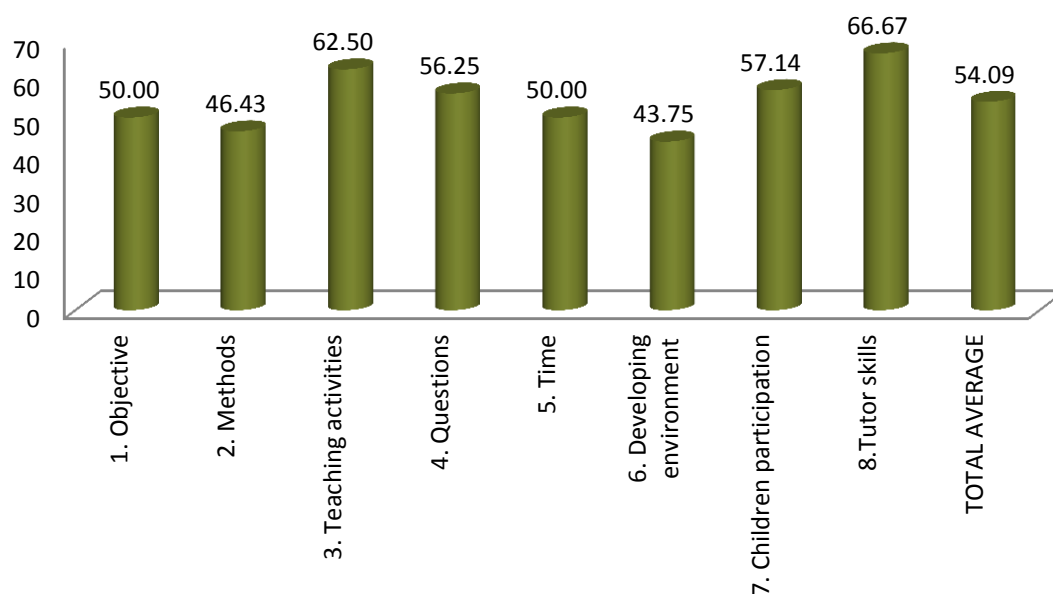
Picture 24. End of year, Dzoramut, cabinet

According to the tutor's assessment, there is no gender difference in children's capabilities. To assess the dynamics of child development, the tutor once used the tutors' observation questionnaire and was going to make an assessment once again at the year end as well.

Parents mentioned at the end of the year that they would like that the children stay longer in the preschool, have more classes, and that dancing and singing classes be opened at the preschool.

The picture of the classes observation in the Dzoramut preschool is average. The overall average rating has been 54.09%. The *Methods* /46.43%/ and *Developing Environment* /43.75%/ criteria have relatively low representation. The Tutor Skills criterion /66.67%/ has the highest representation. The rest of the criteria are in the range of 50.00% -62.50%.

Figure 10. Analysis of class observation results at Dzoramut preschool



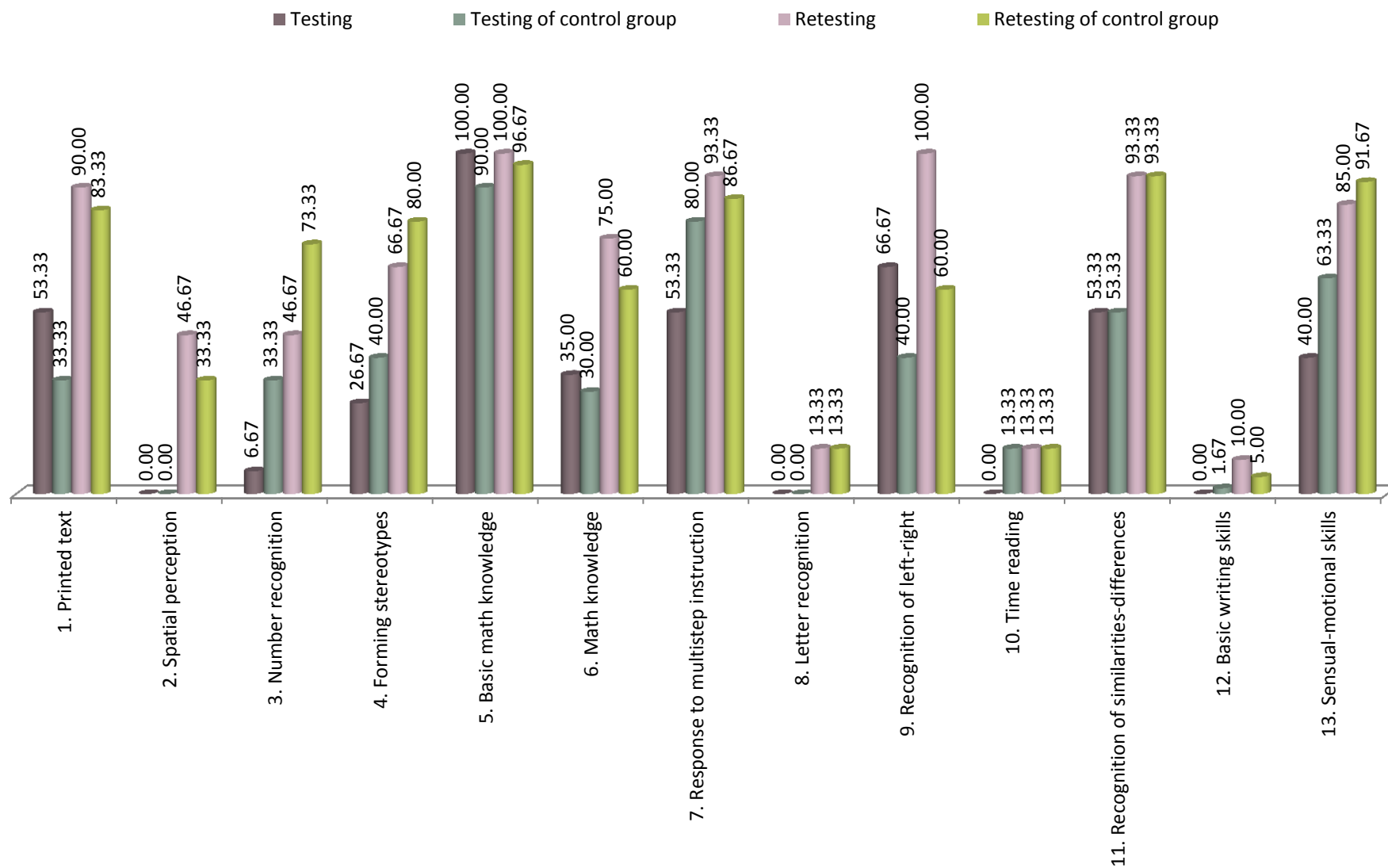
When looking at the testing and retesting results of the preschool children in Dzoramut community in Figure 11, we can see the most significant increase was observed in (2) spatial perception /00.00%→46.67%/ indicator of *general math knowledge* subfield, and (13) sensual-motional skills /40.00%→85.00%/ indicator of *writing and drawing skills* subfield. There was no change in the (6) math knowledge /100.00%/ indicator of *general math knowledge* subfield.

The retesting results of children of the control group in Dzoramut community are mostly exceed the testing results in respect of (1) printed text /33.33%→83.33%/ indicator of *early reading* subfield. No differences were observed between testing and retesting results regarding only (10) time reading /13.33%/ indicator of *general math knowledge* subfield.

When looking at the Figure 11, we can see that the testing results of the children attending preschool in Dzoramut community are mostly lower than those of the control group children. In particular, the greatest differences have been observed in respect of (3) number recognition indicator /26.67%/ of *general math knowledge* subfield, (7) response to multistep instructions

/26.67%/ of *oral speech perception* subfield, and (13) sensual-motional skills /23.33%/ indicator of *writing and drawing skills* subfield. The testing results of the target group children are mostly exceeding the same results of the control group children only in case of three indicators: (1) printed text /20%/ indicator of *early reading* subfield, (5) basic math knowledge /10.00%/ and (6) math knowledge /5.00%/ indicators of *general math knowledge* subfield.

Figure 11. Analysis of testing and retesting results of Dzoramut preschool children

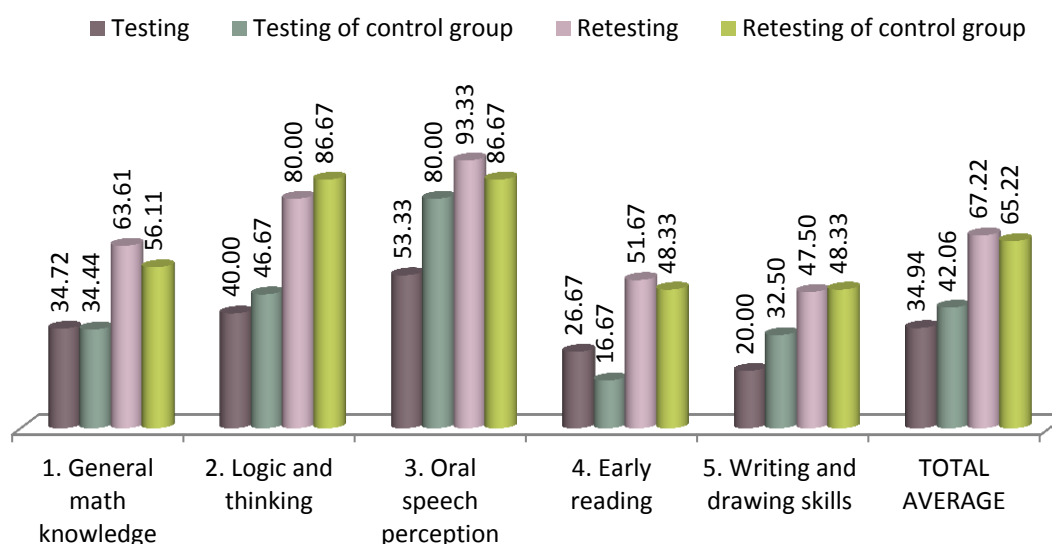


No differences have been observed in respect of (2) spatial perception /0.00%/ indicator of *general math knowledge* subfield, (8) letter recognition /0.00%/ indicator of *early reading* subfield, and (11) recognition of similarities-differences /53.33%/ indicator of *logic and thinking* subfield.

Comparing the retesting results of children from target and control groups (Figure 11), we see that the performance of the target group is mostly higher than that of the control group, except for (3) number recognition /26.67%/ indicator of the *general math knowledge* subfield, (4) forming stereotypes /13.33%/ indicator of *logic and thinking* subfield, and (13) sensual-motional skills /6.67%/ indicator of *writing and drawing skills* subfield. The most significant difference has been observed in case of the (9) recognition of left-right /40.00%/ indicator of *general math knowledge* subfield. No differences have been observed in case of the (8) letter recognition /13.33%/ indicator of *early reading* subfield, (10) time reading /13.33%/ indicator of *general math knowledge* subfield, and (11) recognition of similarities-differences indicator /93.33%/ of *logic and thinking* subfield.

When looking at the testing and retesting results of the preschool children in Dzoramut community in Figure 12, we see that the greatest increase was observed in case of (2) *logic and thinking* /40.00%→80.00%/ and (3) *Oral speech perception* /53.33%→93.33%/ subfields.

Figure 12. Comparison of Dzoramut testing results by subfields



When looking at testing and retesting results of children of the control group, we can see that there is a considerable increase in (2) *logic and thinking* subfield /46.67%→86.67%/.

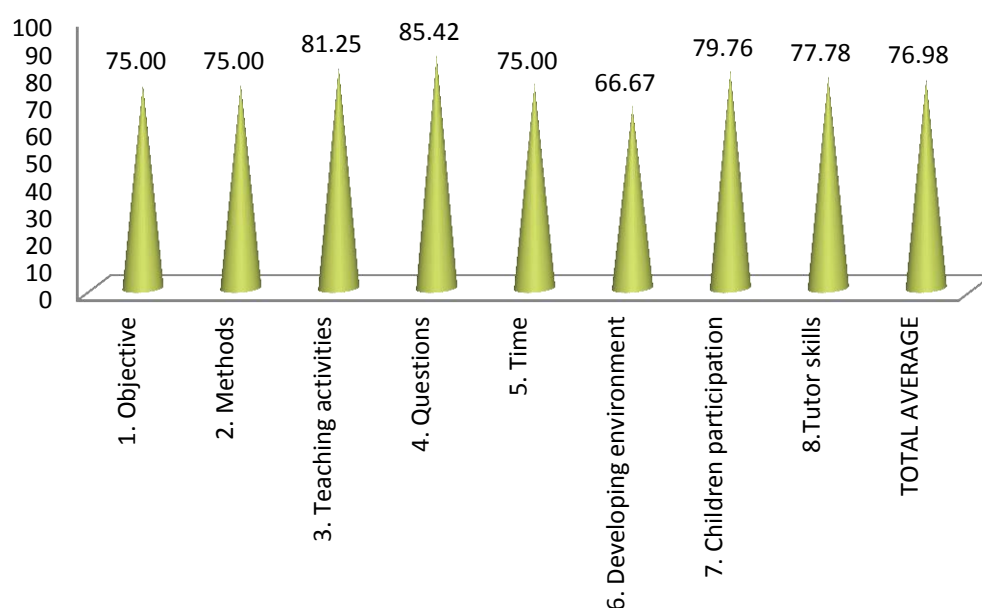
Figure 12 shows that the testing results of children attending preschool are lower than that of the children not attending preschool, except for the (1) *general math knowledge* /0.28%/ and (4) *early reading* /10.00%/ subfields. The lowest result has been observed in respect of the (3) *Oral speech perception* /26.67%/ subfield.

Comparing the retesting results of children enrolled and not enrolled in preschool, we can see that the enrolled children have higher results than the control group children, except for the (2) *logic and thinking* /6.67%/ and (5) *writing and drawing skills* /0.83%/ subfields. The largest difference was observed in case of (1) *general math knowledge* /7.50%/ subfield.

5.2.4 Generalized analysis

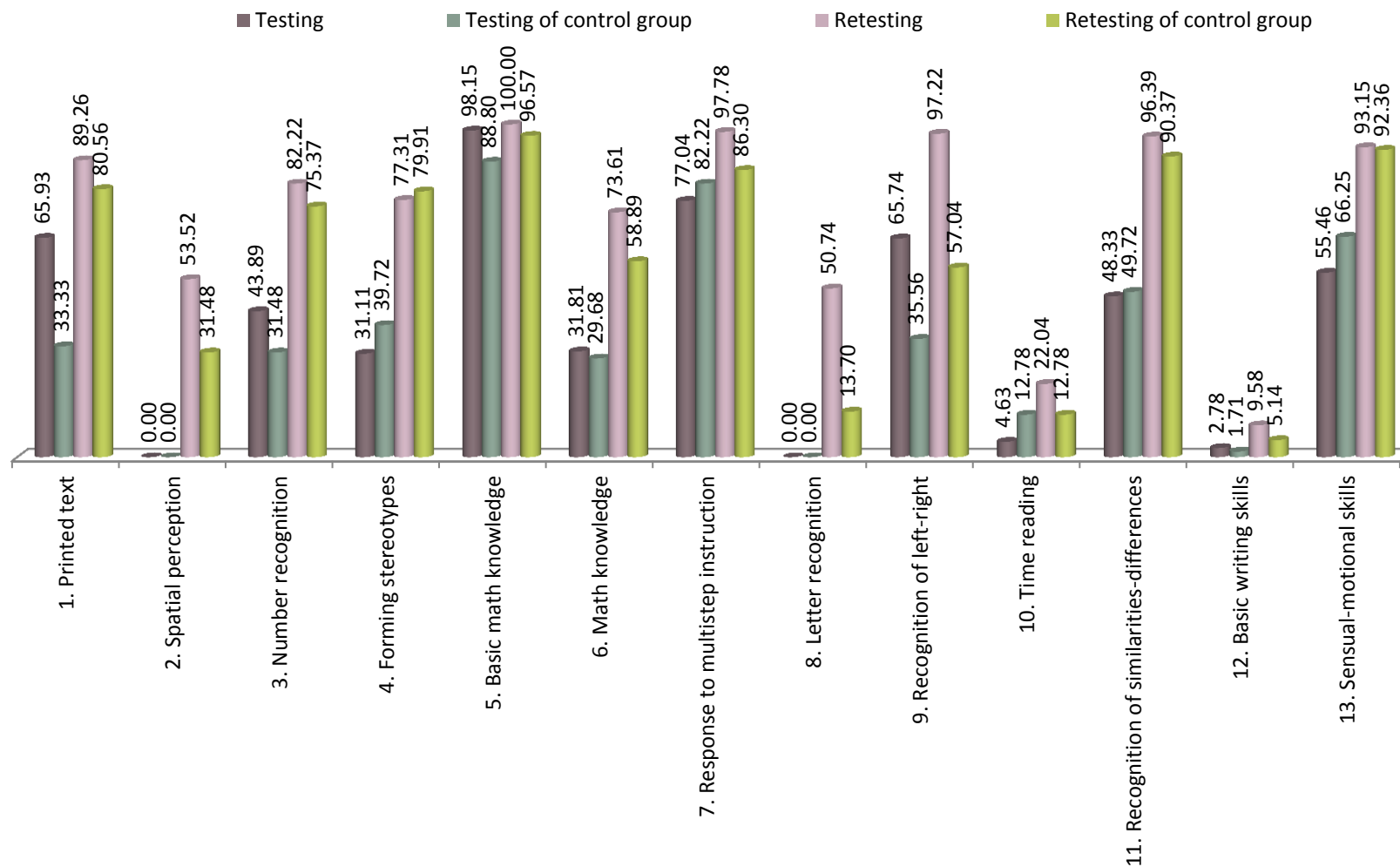
Of the three preschools of Lori region, the program was most successfully implemented in the Vanadzor preschool. The analysis of the class observations (Figure 13) in the three preschools reveals that all the criteria have a representation of 55.00% and above. The *Questions* criterion has the highest performance /85.42%, and the *Developing environment* criterion has the lowest performance /66.67%. Relatively low performance was observed in Time criteria /56.67/ and Methods /60.71%/ criteria. The average performance of these three preschools comprises 76.98%.

Figure 13. Generalized analysis of class observation results in preschools in Lori region



The analysis of testing and retesting results of preschool children in Lori region (Figure 14) shows that the retesting results exceed the results of testing in respect of all indicators. A significant increase has been recorded in (2) spatial perception /17.78%→67.96%/ indicator of *general math knowledge* subfield and (8) letter recognition indicator /0.00%→50.74%/ of *early reading* subfield.

Figure 14. Comparison of children testing results in Lori region by subfields

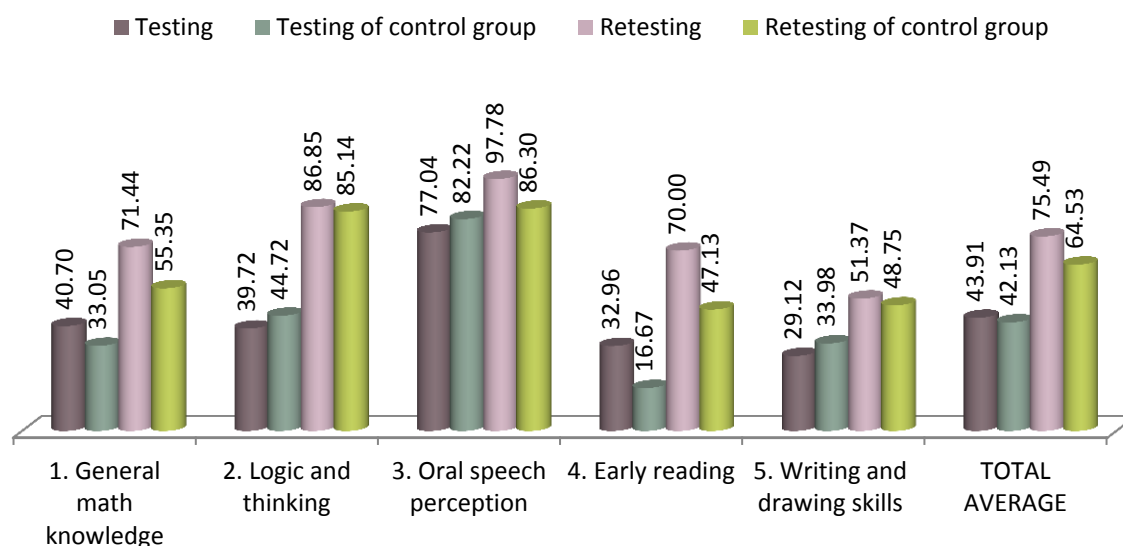


The retesting results of the children not attending preschool are mostly exceeding the testing results. The most notable increase has been observed in respect of the following indicators: (1) printed text /33.33%→80.56%/ indicator of *early reading* subfield, and (3) number recognition /31.48%→75.37%/ indicator of *general math knowledge* subfield.

Looking at the Figure 14, we can say that the testing results of the children attending preschool in Lori region are exceeding the testing results of the children not attending preschool. The most notable increase has been observed in respect of the following indicators: (1) printed text /32.59%/ indicator of *early reading* subfield and (9) Recognition of left-right /30.19%/ of *general math knowledge* subfield. There are no changes in (2) spatial perception /00.00%/ indicator of *general math knowledge* subfield and (8) letter recognition /0.00%/ indicator of *early reading* subfield.

When comparing the retesting results of the children attending and not attending preschool in the region, we can see (Figure 14) that again that the results of the children attending preschool are higher in respect of all indicators (except for the (4) forming stereotypes /2.59%/ indicator of *logic and thinking* subfield). The most notable increase has been observed in respect of the (8) letter recognition /37.07%/ indicator of *early reading* subfield and (9) Recognition of left-right /40.19%/ of *general math knowledge* subfield.

Figure 15. Analysis of Lori region testing results by subfields



In figure 15 we can see that in Lori region the preschool program have had an efficient realization, the progress in the level of development in children has a positive pace.

5.3. Vayots Dzor region

All three preschools opened in Vayots Dzor in 2018 participated in the survey: the preschools in Getap, Gladzor and Yeghegis communities.

5.3.1. “Getap secondary school” SNCO

The preschool has been established on a school basis and has one group of children. According to the budget foreseen by the microprogram for one group, the community preschool is classified in the region as one having “average” resources (financial criteria for community classification of the region included in the sample).

During the visits the preschool was working under the following model:

- 5 days in a week,
- short-day working regime - 10:00-14:00,
- one tutor was working in the preschool,
- the tutor was trained,
- the preschool provided meal brought from home once a day ,
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, play room, corridor with wardrobes, and water-closet with separated toilet bowls.
- The group room, dressing room and water-closet were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (see Pictures 25 and 26).
- The preschool was provided with permanent cold water supply.
- The preschool was heated through the central heating system.



Picture 25. Beginning of year, Getap, water-closet

Picture 26. Beginning of year, Getap, group room

Conditions of the group room, playroom and working centers matched the requirements of defined norms (See pictures 27 and 28). The work centers were not separated, but the accessories of all the work centers were available. The art center was the most rich one. The preschool had wardrobes, carpet, tables and chairs, cabinets, board, TV, piano, etc. The group room and dressing room were quite light.



Picture 27. Beginning of year, Getap, wardrobes



Picture 28. Beginning of year, Getap, cabinet

According to the *head master*, the main purpose of the program was involving in preschool the children from socially insecure families. The preschool provides quality education, as the preschool tutors have higher education and have been trained.

Creation of the preschool, according to the head master, allows parents to have free time to do their jobs, and the children get ready for school and be integrated. In addition, since the preschool is free, the family does not suffer financially.

According to the tutor, some parents bring their children to preschool because the children did not feel free themselves in the kindergarten, while others think that the children will receive sufficient education and become more prepared for school. As far as the group in the preschool is not large, the tutor can spend more time with the children than in the kindergarten.

The preschool building conditions were good. During the focus group discussion, the parents stated that they were satisfied with the general conditions of the preschool, but noted that they had problems with the organization of similar food for children and cleanliness. According to the head master, parents brought food not only for their child, but for all of the children.

The work centers in the group room were not separated. There was no center that was completely missing. At the same time only the art center was well equipped, and regarding the other work centers only some accessories were available. The tutor during the in-depth interview mentioned the lack of some teaching materials, especially toys. She also found that it would be better to have some more cabinets, and that the subjects taught were generally sufficient.

Head master and one tutor worked at the preschool. The tutor had previously worked at the same school as a teacher of Russian (replacing absent teachers). She was trained and mastered the provisions of the preschool curriculum. The head master had previously worked as a teacher, then the school's deputy principal, and from 2016 - as the school's principal. From time to time the school's music and painting teachers worked at the preschool without compensation.

The *training* was very interesting. The tutor mentioned that the training was well organized, and she received the necessary literature and new knowledge. They had both practical and theoretical training. As a practical training, they spent one day at the Yeghegnadzor kindergarten No 5 and attended its integrated classes, observed the collected materials and work centers. The only drawback the tutor noticed was that the training period was short. As for the content of the training, she noted that she learned a lot from the trainings, as this was a new employment field for her.

The tutor had no *summary plan*, but she planned the classes on a weekly basis (the tutor believed that organization of lessons with a clear plan would make the work more difficult). The lessons were conducted with the use of didactic and visual materials, but there was no group work and acquisition of knowledge through cooperation. Individual approach was applied towards the children; questions were asked to stimulate thinking, and a logical sequence of questions was ensured. No differences were made among the children regarding gender issues.

The tutor emphasized the child-centered principle of the lessons. She did not manage to apply an integrated approach as she was alone (according to the tutor), and it was difficult to make a transition from one method to another. During the lessons she organized games, discussions depending on the age, knowledge, and preferences of the children. The tutor displayed a general and individual approach to the lessons. If there were demonstration materials on the subject, the children were seated around the same table to display the materials.

The tutor mentioned that strong children understand things and answer questions easily, and the weaknesses of weak children are related to age; they have children born in 2014.

According to the tutor, all children meet the preschoolers' capabilities criteria. According to her, there were certain gender-related differences between the children capabilities: girls were more industrious, and boys were capable but lazy.

The tutor talked to the parents (also by phone) every day. According to her, the parents were quite actively involved in the preschool life, for example, one of the parents had prepared a poster, the other had prepared other materials for the classes. At the end of each day, she urged parents to inquire about the child's day passed at the preschool and the material learned there. Sometimes she gave out leaflets for the parent to teach the child. A parent council was formed in the preschool. The parent of a child with special needs and the parents participating focus group discussion mentioned that they had a meeting and all parents attended the meeting and discussed the classes to be held, lessons to be provided, the working plan; the tutor's handbook was presented to them, etc., and the parents were very satisfied.

The inhabitants of the community have mainly been engaged in farming and construction, but there were families in a difficult social situation. According to the tutor, the socioeconomic condition of the family had an impact on children's development. She also noted that the children of such families were more unhappy, depressed. And the head master found that the children's development was more influenced by the fact that their parents were not educated and well-mannered; and the socio-economic situation had no impact, as all children saw and learned the same thing.

During the focus group discussion with the parents, the participant families consisted of 4-6 people. Three of the seven families were beneficiary families. These families mainly were engaged in agriculture: farming and cattle-breeding (keeping cows, poultry), and there were also outgoing workers. Most of the children helped their parents in their work at own wish, for example, fed the poultry. According to parents, the primary responsibility of children is to follow the hygiene rules, respect the adults, help the parent in minor works, and study.

During the focus group discussion, some parents stated that they wanted their children to be fully literate (know the letters) before going to school, while the others thought that the children should become fully literate at school, that the cognitive knowledge acquired at the preschool was sufficient, and that the children should not be overloaded. Parents did not notice any shortcomings at the preschool, and of the advantages they mentioned that the children would go to school from the preschool fully prepared for the first grade, and that love for the school would have been created in the preschool.

According to the parents, the children's independence is very individual, the parents allow the children to be independent in many issues (dressing, eating, washing, etc.), but in some

other matters (such as bathing, etc.), where the child may harm itself, parents do not allow independence. Mainly mothers and grandmothers were taking care of the children, and all the family members were involved in the children's upbringing. The daily planning for the children was made by mothers, taking into account their wishes and preferences. The mothers were mostly housewives, and they rarely left home. In their absence, grandmothers were taking care of the children. Mothers were mainly absent because of illness, going shopping, working, and other reasons.

Parents indicated that they present certain requirements to the children: being disciplined, clean and neat, speaking nicely, not offending other people, taking care of the younger child, being attentive to education. There may be moments when a child should unconditionally trust the parent's decision, but there may also be issues which should have been discussed with and be explained to the child. A child may be punished mainly for lying and actions that can harm them. The parents mentioned that they were watching the children very carefully to avoid such cases. Parents often punish children for not listening and disobeying (being stubborn), and they deprive them of their favorite occupation (e.g. internet, games, etc.). As for learning, the tutor, as a *remunerated parent*, noted that she was guided by the idea that they generally say not to speak too much in the presence of the child; parents should do right things and let the child to see and learn that, and she tried to set an example for her child with her own behavior.

There was a kindergarten in the community, and almost all the children attended it. According to the parents, one of the main reasons for moving to the preschool was that many children in the kindergarten did not get used to sleeping, and the knowledge they received there was not enough for the school. As soon as the preschool was opened, the children were transferred to the preschool to receive sufficient knowledge and be ready to attend school next year.

Parents believed that the child development is mostly affected by the parents influence and education (teaching themes, methods). The parents who participated in the discussion expressed a wish for Russian and English groups to be organized in the preschool.

The parent of a child with special needs stated that the child got a language problem because of fright, and an appropriate atmosphere was provided to the child in the preschool.

Overall, the parents were very satisfied with the work of the preschool and the attitude of the tutor; and their expectations were justified. *The parent of a child with special needs* stated that it would be desirable to have dancing lessons in the preschool, but the music teacher

works at several places, and she said that she would not be able to conduct the lessons. The parent also mentioned about the problem of having the same food for the children.

The parents wanted that their children have additional foreign languages classes in the preschool and they expressed their willingness to make necessary payments for that.

The head master noted that she did not see any threats to continuity of the preschool activity for years to come, in her opinion, an expansion tendency can be seen. She also wanted the children to receive food as prescribed by law, noting that both the children and the parents would be more interested.

The description of the end of year visit is presented below:

Regarding the building conditions, the tutor mentioned, that everything has been very satisfactory, but there is need in certain property, in particular, in cabinets.

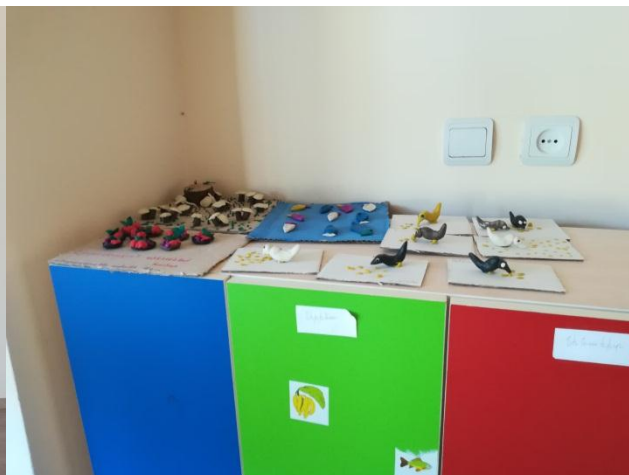
All work centers were available in the preschool, but the tutor noted that it was necessary to regularly replenish work centers supplies, and especially didactic materials. She also noted that in hot weather they do not use outdoor playground from security reasons, as there are many reptiles in their region.

The head master noted at the end of the year that the strength of the preschool is that its activities are justified because the preschool provides knowledge and actually teaches. Preschool makes children busy, and the problem existing in case of children going to first grade (such as a parent staying in school the whole day) has been eliminated, as the preschool children have already been adapted to the school environment and the day regime. She also noted that the time the children spend in preschool is important for parents also because they are able to organize their entire day and work.

During the focus group discussion the parents also mentioned that fine arts and music teachers were needed in the preschool, as the school teachers came in the first half-year and provided lessons without compensation, and in the second half-year they could not teach at the preschool because of absence of free time.



Picture 29. End of year, Getap, group room, handmade accessories



Picture 30. End of year, Getap, handmade accessories

The parents who participated in the focus group discussion appreciated the work of the preschool and noted that the children attending kindergarten have more knowledge than the children of the same age. Parents also noted that after attending preschool, children became disciplined and adapted to the school regime.

The tutor noted that the children learned the letters and numbers, and were able to write to some extent. The tutor focused on all areas during the work, but more importance was placed on the cognitive development. As for the factors affecting the development of children, according to the tutor, the most important factor was the influence of parents.

The tutor, as a paid parent, said that her expectations from the preschool had come true and that the child was fully prepared to go to school this year.

The head master noted at the end of the year that they had a major problem with the school reconstruction, as corresponding specialists made an assessment (the school was built in the area of former marshland), and she hoped that this would happen, as the issue was raised in the Government of Armenia. As for the building conditions of the preschool, the head master noted that besides the existing problem of the school, everything in the preschool is satisfactory, and there is no need for improvement.

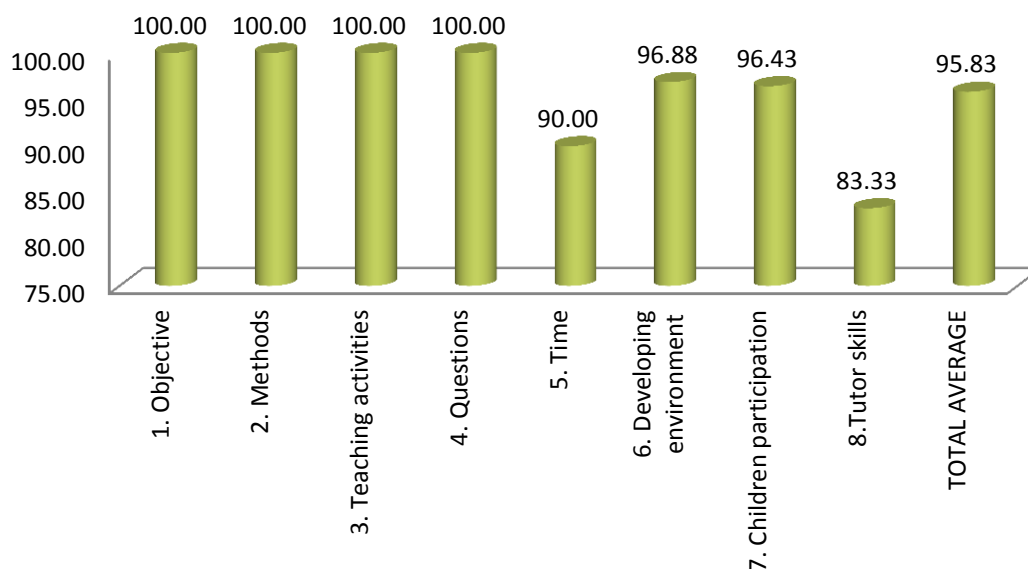
The head master noted that parents do not provide material and immaterial support to the preschool, as the preschool itself takes care of its own issues, and the parents only attend the events with great pleasure and excitement. The parents have asked the head master to arrange a meal in the preschool, and she is hopeful the issue will be resolved next year.

During the year, according to the head master, work was carried out in the preschool in respect of integration into school, in particular, events were organized to help children fully integrate into the school.

Parents regularly attended open classes and were very pleased with the lessons and especially noted the friendliness formed in the children. The parents wanted foreign languages to be taught in the preschool, for which they were willing to pay.

From the data presented in Figure 16 we can see that the overall average of the training observation criteria was 95.83%. The Objective, Methods, Teaching activities, Questions criteria have maximum representation /100.00%/. The lowest representation relates to the Methods criterion / 83.33%/ standard. The rest of the criteria are in the range above the average /90.00% - 96.88% /.

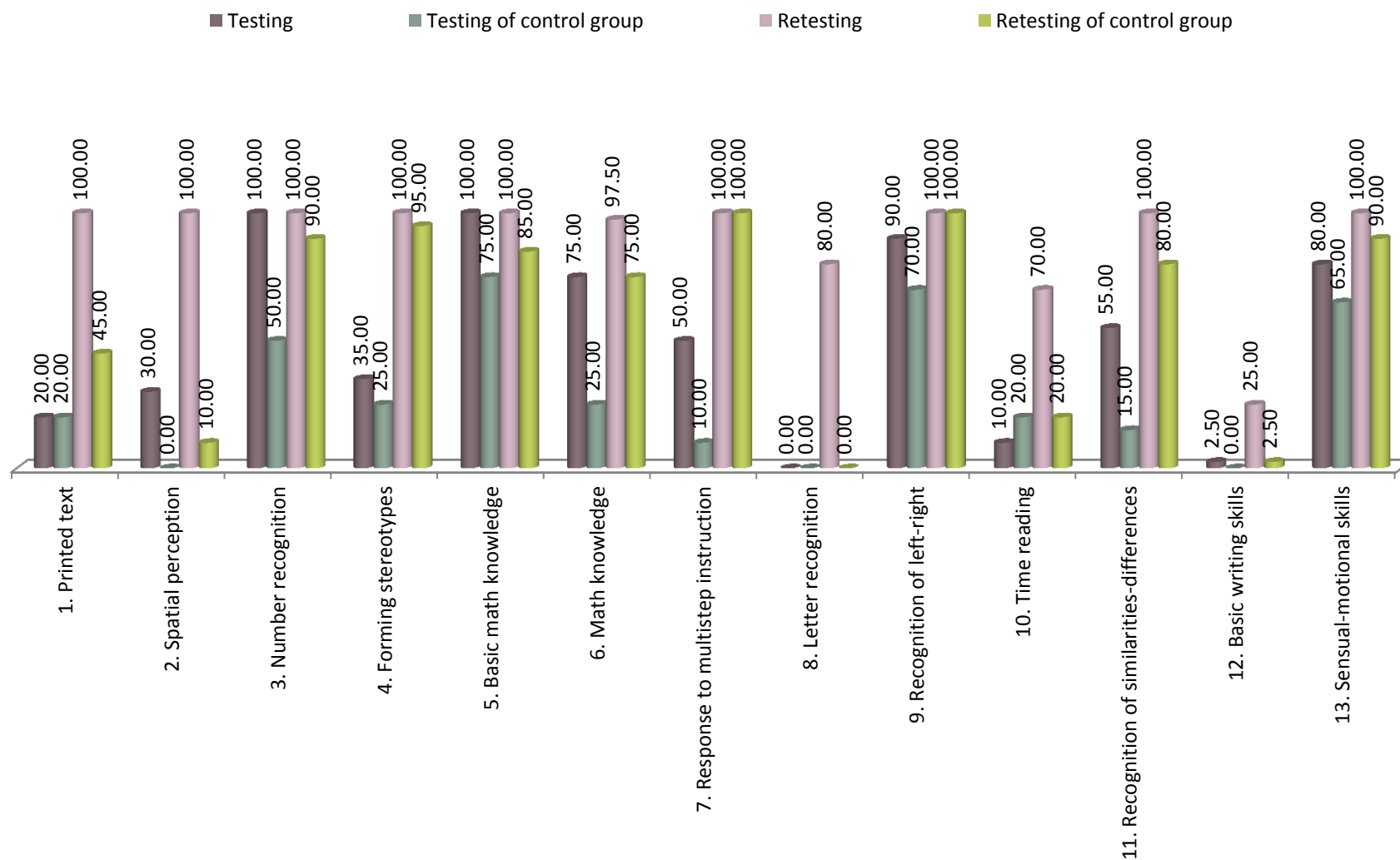
Figure 16. Analysis of class observation results in Getap preschool



When analyzing the testing and retesting results of the children in the Getap community preschool (Figure 17), we can see that there is an increase in almost all the indicators, except for the (3) number recognition /100.00%/ and (5) basic math knowledge /100.00%/ indicators of *general math knowledge* subfield, which have not changed. The most significant increase have been recorded in respect of (1) printed text /20.00%→100.00%/ and (8) letter recognition /0.00%→80.00%/ indicators of *early reading* subfield.

The analysis of testing and retesting results of children not attending preschool shows that no difference has been recorded in case of (8) letter recognition /0.00%/ indicator of *early reading* subfield and (10) time reading /20.00%/ indicator of *general math knowledge* subfield. The most significant increase have been recorded in (7) *Response to multistep instructions* /10.00%→100.00%/ indicator of the *Oral speech perception* subfield, and then in (4) *Forming stereotypes* /25.00%→95.00%/ indicator of *Logic and thinking* subfield.

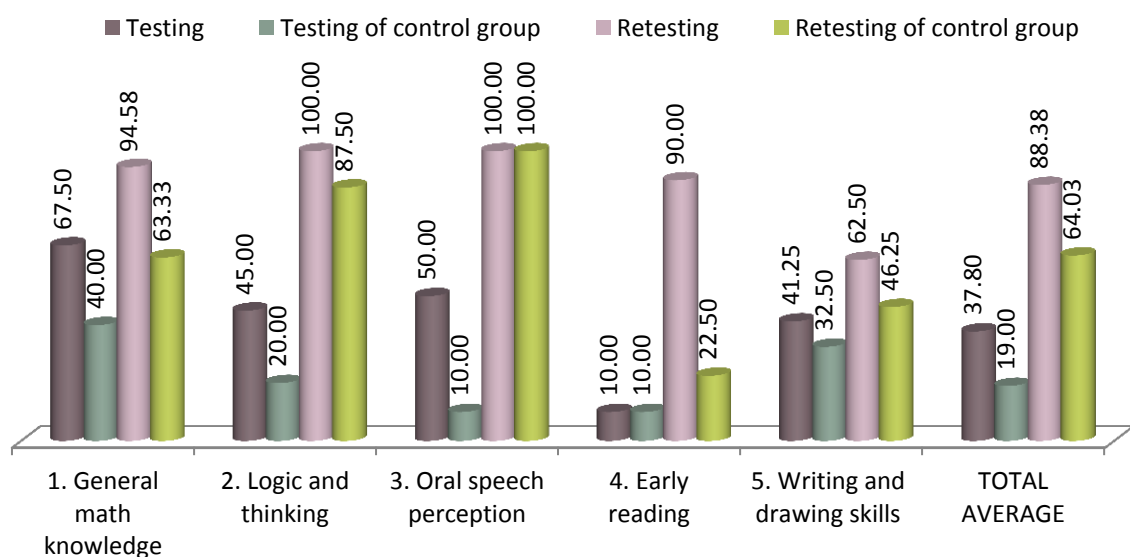
Figure 17. Analysis of testing and retesting results of children in Getap community



When looking at the Figure 17, we see that the testing results of the preschool children mostly exceed the testing results of the children not attending preschool, except for the (10) Time reading /10.00%/ indicator of the *General math knowledge* subfield. The most significant difference has been noticed in (3) *Number recognition* /50.00%/ and (6) *Math knowledge* /50.00%/ indicators of *General math knowledge* subfield. Equal results have been recorded in respect of (1) printed text /20.00%/ and (8) letter recognition /0.00%/ indicators of *early reading* subfield.

When looking at the retesting results of children attending and not attending the preschool, we see that the results of children attending preschool are higher than the results of children not attending preschool in respect of all the indicators. The most significant difference has been recorded in case of (2) *Spatial perception* /90.00%/ indicator of *General math knowledge* subfield and (8) letter recognition /80.00%/ indicator of *early reading* subfield. No difference has been recorded in case of (9) Recognition of left-right /100.00%/ of *general math knowledge* subfield and (7) *Response to multistep instructions* /100.00%/ indicator of the *Oral speech perception* subfield.

Figure 18. Comparison of Getap children results per subfields.



We can see from the Figure 18 that the testing and retesting result of Getap community preschool children mostly differ regarding (4) *early reading* subfield /10.00%→90.00%/.

When analyzing the testing and retesting results of Getap community children not attending preschool (Figure 18), we see that the most significant increase has been recorded in respect of (3) *oral speech perception* /10.00%→100.00%/ and (2) *logic and thinking* /10.00%→90.00%/ subfields.

When looking at Figure 18, we can see that the testing results of the children attending preschool exceed the testing results of the children not attending preschool in respect of all subfields, except for the (4) *early reading* subfield /10.00%/, which presents equal results in both groups. The target

group results mostly exceed the control group results in case of the (3) *oral speech perception* subfield /40.00%/.

Comparing the retesting results of the children attending and not attending preschool, we see that the target group children present higher results than the control group children, except for the (3) *oral speech perception* subfield /100.00%/, where the results are equal. The most significant difference has been recorded in case of the (4) *early reading* subfield /67.50%/.

5.3.2. “Gladzor secondary school” SNCO

The preschool has been established on the school basis and has one group of children. According to the budget foreseen by the microprogram for one group, the community preschool is classified in the region as one having “large” resources (financial criteria for community classification of the region included in the sample).

During the visits the preschool was working under the following *model*:

- 5 days in a week,
- part-time working regime - 09:00-13:00,
- one tutor was working in the preschool,
- the tutor was trained,
- One hot meal was provided daily at the preschool,
- the preschool had central heating system,
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, play room, wardrobes and water-closet (the toilet bowls were separated, but they did not have doors).
- Group room, play room, and water-closet were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (see Pictures 31 and 32).
- The preschool was provided with permanent cold water supply.
- The preschool was heated through the school’s boiler house.



Picture 31. Beginning of year, Gladzor, water-closet



Picture 32. Beginning of year, Gladzor, group room

Conditions of the group room and work centers matched the requirements of defined norms, and what concerns the availability of work centers, cooking, role play, and biology centers were missing (See pictures 33 and 34). The literacy and art centers were the best equipped work centers. The preschool had wardrobes, carpet, tables and chairs, cabinets, board, TV, sofa, etc. The group room and play room were quite light. The preschool used the school's outdoor playground and canteen.



Picture 33. Beginning of year, Gladzor, technical center



Picture 34. Beginning of year, Gladzor, cabinet

The head master mentioned that there was a kindergarten in the community, however it did not cover all the children of preschool age, and many parents took their children to the neighboring community kindergarten, and then to the school of the same community. Thus, according to the head master, the creation of a preschool enabled the community children to receive preschool education in their community, avoiding certain transportation and financial problems.

According to the head master, the strength of the preschool is that children get prepared for school, and that the tutor has English language and teacher education; and the weakness of the preschool is organizing meal provision the burden of which they have taken on.

She also said that “If the program had just started, I would like to change some of the items related to upbringing and the curriculum, since we did not include subjects related to arts or crafts; it would be good if we could get finance and have another tutor for that very purpose.”

The head master noted that the building conditions of the preschool were good. During the *focus group discussion*, parents mentioned that of the preschool conditions they were not satisfied only with the chairs (initially they had chairs with iron legs and soft seats, which they liked very much, but the program manager did not accept them because they had not complied with safety and hygiene norms; as a result, they were replaced by wooden chairs). Parents express their dissatisfaction making a comparison, and it should be noted that the preschool has complied with the established norms. All other conditions in the preschool (building, security, property sizes, availability of accessories, etc.) are very satisfying to parents, but they have expressed a desire to increase the number of work centers and enrich their equipment.

The *work centers* have not been yet separated in the group room. The preschool was not fully equipped with learning materials and didactic supplies. Of the preschool’s not separated work centers, the math, construction, and sports centers needed to be replenished. It should also be noted that there was only a TV set in the technical center, but this was not used because the internet was weak and there was no digital media. At the same time, the tutor said that during the training they were told not to pay much attention to the TV as the children use it at home as well. The tutor mentioned during the interview that there is a lack of educational supplies, for example, playing cards, posters on various topics.

Head master and one tutor worked in the preschool. The head master previously worked as a Russian language teacher for 34 years. The tutor previously worked as an English teacher at another community school, then changed her profession and entered masters degree program in elementary education and methodology to work in preschool. The tutor also mentioned during the interview that an alternative painting specialist also works at the preschool two days a week, who is paid by the school principal.

The tutor mentioned that the training was very interesting and well-organized. There were both practical and theoretical classes. New knowledge was acquired for working with children. According to the tutor, there were no drawbacks, but she wished the trainings were continuous. And the advantage of the training was that the trainers treated the trainees like little ones, organized practice games, taught children's songs to make the taught material more accessible.

The tutor had a summary plan, and she made daily planning for the classes (the tutor believed that organization of lessons with a clear plan would make the work more difficult). The lessons were conducted with the use of didactic and visual materials, invigorating games, game elements and methods; she gave small tasks but did not take into account the time factor; she applied individual approach towards the children, asked questions that had been formulated according to the children's level. During classes the tutor encouraged the children, ensured mobility in the group room. No gender difference was made between the children.

The tutor conducted lessons using mainly integrated approach, applied games, group work (in which case children become more enthusiastic for learning). In the educational process she focused on physical training, speech development, and math. To inspire the children, the tutor made individual and group assessments through encouragement with smiles, starlets, flags, triangles.

The tutor mentioned that the strongest child knew the numbers composition, adjacent numbers, concept of big and small; the child could tell fairy tales by role playing. The weak child initially did not know the colors, but its abilities changed a lot during the first few days of work, and the tutor hoped that by the end of the year the child's abilities would reach a medium level. Children with average abilities are a little difficult to orient and understand questions compared with the strong children, they know the concept of big and small, numbers composition up to five, the comparison symbols. According to the tutor, the abilities of children do not differ by gender.

During the *focus group discussion*, the parents mentioned that they often visit the preschool and attend classes. The tutor mentioned during the interview that parents helped her in the rooms arrangement (hanging curtains, decorating corners, making posters, etc.) prior to opening the preschool, and that the preschool activities were organized through parents meetings. The tutor and head master sometimes gave advices to parents, and they always followed those advices. The tutor also mentioned that if she saw the child failing to absorb the material presented, she provided the material to the parent to work with the child at home and give explanations in daily life. Thus, it can be said that in this preschool the child-parent-tutor relationship is quite close.

The community inhabitants are mainly engaged in agriculture, have a job in local labor market or do outgoing work.

According to the head master, the socio-economic situation of the community families is unsatisfactory, as there are no other jobs here, the only one being the school and local administration. She specifically stated: "For a community with 3,000 inhabitants, 40 people will be provided with jobs in the school, 10 - in the community administration, another 5 have a shop, but what will be doing the others? We are far from the market, and farming does not provide much benefits...".

According to the tutor the *socio-economic situation of the community* does not affect the children's development.

Participants of focus group discussion agreed that the first important factor affecting child development is parental influence, and the second factor - socioeconomic conditions.

During the focus group discussion with the *parents*, the participant families consisted of 4-7 people, none of the 6 families was beneficiary. Only in one of the five families there were working persons. All the families were engaged in agriculture, mainly in farming. There were families that also kept animals. Only one parent mentioned that her child helps the grandmother in the garden (watering, picking fruit, etc.).

The main purpose of the children to attend preschool was to be educated and ready for school. The parents also mentioned that they were satisfied with all the conditions of the preschool.

The children of the involved families were mainly doing simple housework at home, cleaning up after themselves. The grandmother of a *child with special needs* mentioned during the interview that the mother asked the child to bring a diaper for the sister to make the child walk, and the child goes and brings the diaper (the child has motor skills and mental problems). Parents believe that children should be allowed to be free and independent so that they can do some activities on their own (dressing, washing, eating, etc.) under the parent's control, but so that the children do not feel that control.

Mothers and grandmothers were mainly responsible for taking care of the children, and the responsibility for the child's upbringing was on all family members. In the absence of mothers, mainly grandmothers were taking care of the children (and in one of the families - nursemaid). Absences of mothers were for a short time for shopping and work (in one case) reasons. The child's daily life was planned mainly by mothers, taking into account the child's wishes if possible.

The mothers mainly found that the parents' decisions and requirements should have been explained to the children. Parents present certain requirements to the children, in particular, to be attentive, listen to the adults, learn the assigned material. The grandmother of a *child with special needs* mentioned that the child is very obstinate (probably because of health problems), and they are looking for a specialist to help them. According to the grandmother, it is a pity that the child has certain knowledge but cannot say something / respond.

A child might be punished for hitting younger siblings, not respecting adults and listening to them, lying, etc. The punishment was mainly in the form of forbidding the child's favorite occupation and putting in a corner. The grandmother of a *child with special needs* mentioned in this respect that they do not punish the child, they may say angry words, but always adapt to the child's wishes.

Unlike the head master, the parents mentioned that there was a kindergarten in the community and all the children attending the preschool had attended the kindergarten. They also mentioned that the kindergarten was quite far away and that was a big problem for them, especially during the winter months (it should be noted that there is actually a kindergarten in the community, which is only 1km away from the school). One parent also mentioned that her child could not adapt to the kindergarten because of sleeping there. The groups in the kindergarten were very large, and the educators could not be equally attentive to the children; on the contrary, there are few children in the preschool, and the tutor is able to give everyone equal knowledge and individual attention. *The paid parent*, that is the tutor, said that she was very pleased with the kindergarten; the children were brought up there, they were learning to be disciplined, respect and communicate with each other, they were coming out into society. And the grandmother of a child with special needs stated that their child cannot be left alone, cannot use the toilet on its own, and no one would be there to help the child; the toilet in the preschool is for children, and the grandmother helps the child.

In order to teach children something, parents persuaded, encouraged them, and engaged the older siblings. In this regard, the grandmother of a child with special needs said that at home they usually do physical exercises and massages, the mother is mainly involved in knowledge matters; although the child has learning disability, however occasionally repeats the phrases.

The parents during the focus group discussion stated that they did not want to have additional classes for the children in the preschool because everything was satisfying so far. At the same time they mentioned that they pay 1500 drams a month for food.

The grandmother of a *child with special needs* stated about her expectations from preschool: "It would be desirable to have a specialist who could make the child at least to say what it knows".

The head master considered only emigration as the main problem for the program continuity.

The description of the end of year visit is presented below:

The head master of the preschool noted at the year end that it is desirable to extend a little bit the daily regime. During the in-depth interview, she also noted that they had a number of lesson listenings which were satisfying, as they had shown very high results.

The head master mentioned as strength of the preschool that the children do not drop out of the collective, they get adapted to school and realize that this is their school and, actually, integrate into the school. The head master also noted that children in the preschool learn and acquire new knowledge, in particular, in mother tongue and mathematics, as well as deal with foreign languages and get writing skills.

In terms of *building conditions*, parents said at the end of the school year that everything was pleasing, moreover, the heating functioned very well in the winter months, and the children were

given a hot meal at lunch. The parents also mentioned that they had paid 1,500 drams monthly for the children's food, and the children were provided with quality food.

The head master mentioned that the licensing process for the facility was underway, and next year, after the licensing, the food would be provided in the preschool within the framework of the UN Food Program.

During a visit at the end of the school year, the tutor noted that it was necessary to increase the staff adding an assistant, as the tutor could not simultaneously teach and care for the needs of the children. The building conditions of the institution the tutor evaluated as very good as well, and she found that there was no need for improvement.

All *work centers* were set up at the end of the year, however the tutor and the head master mentioned that there was a need for education materials, in particular, didactic materials, stationery, posters, pictures, and so on.



Picture 35. End of year, Gladazor, blackboard



Picture 36. End of year, Gladazor, handwork

According to the tutor, in general, children are ready to go to school. The strongest children have learned to add, subtract, solve problems, and they have recognized letters. And the weakest child has not learned some colors yet. In general, the group can be considered ready. The tutor also noted that the children's abilities do not differ by gender.

Parents said they could do other housework during the children's preschool hours, and one parent said she tried to start working, but it was impossible because of the distance. The parents highly appreciated the preschool activities and stated that they were very pleased with it because the progress of the children was obvious and the children would be ready for the first grade.

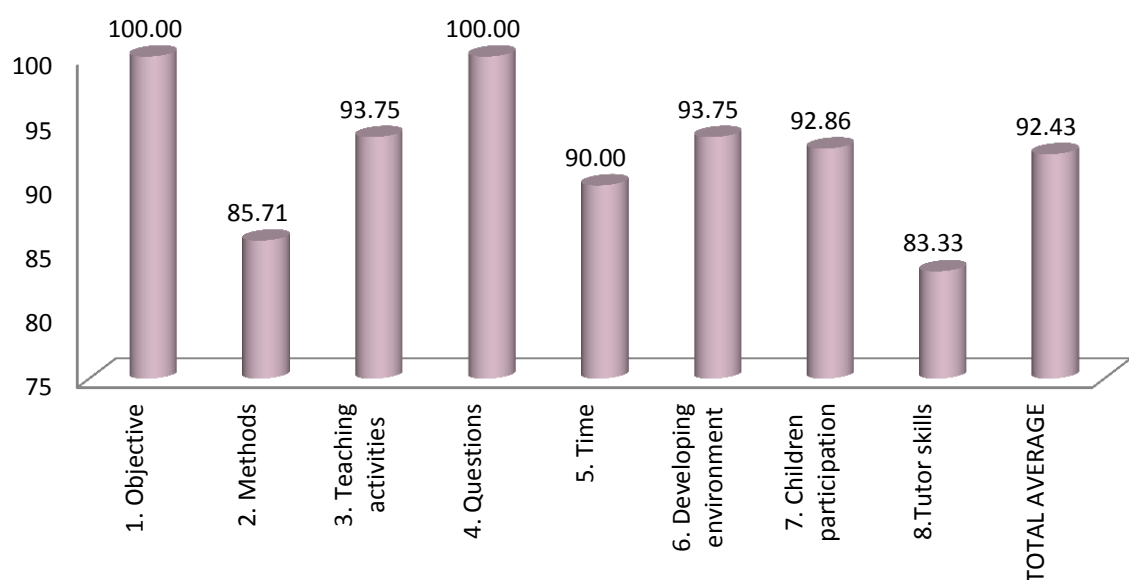
The parents said they were in close contact with the preschool tutor and expressed their willingness to help her. The parents attended the events and assisted the tutor in making posters. At the same

time, the tutor also mentioned that not all the parents were active and there were parents who did not participate in the child's education process at home and spent little time with the children.

The school has developed and introduced a support mechanism for children from needy families, and the head master mentioned that the school and parents provide clothes to the families in need, and that preschool children have been greatly assisted by high school students, in particular, the Student Council regulates the issues related to using the school lunchroom by the children from needy families.

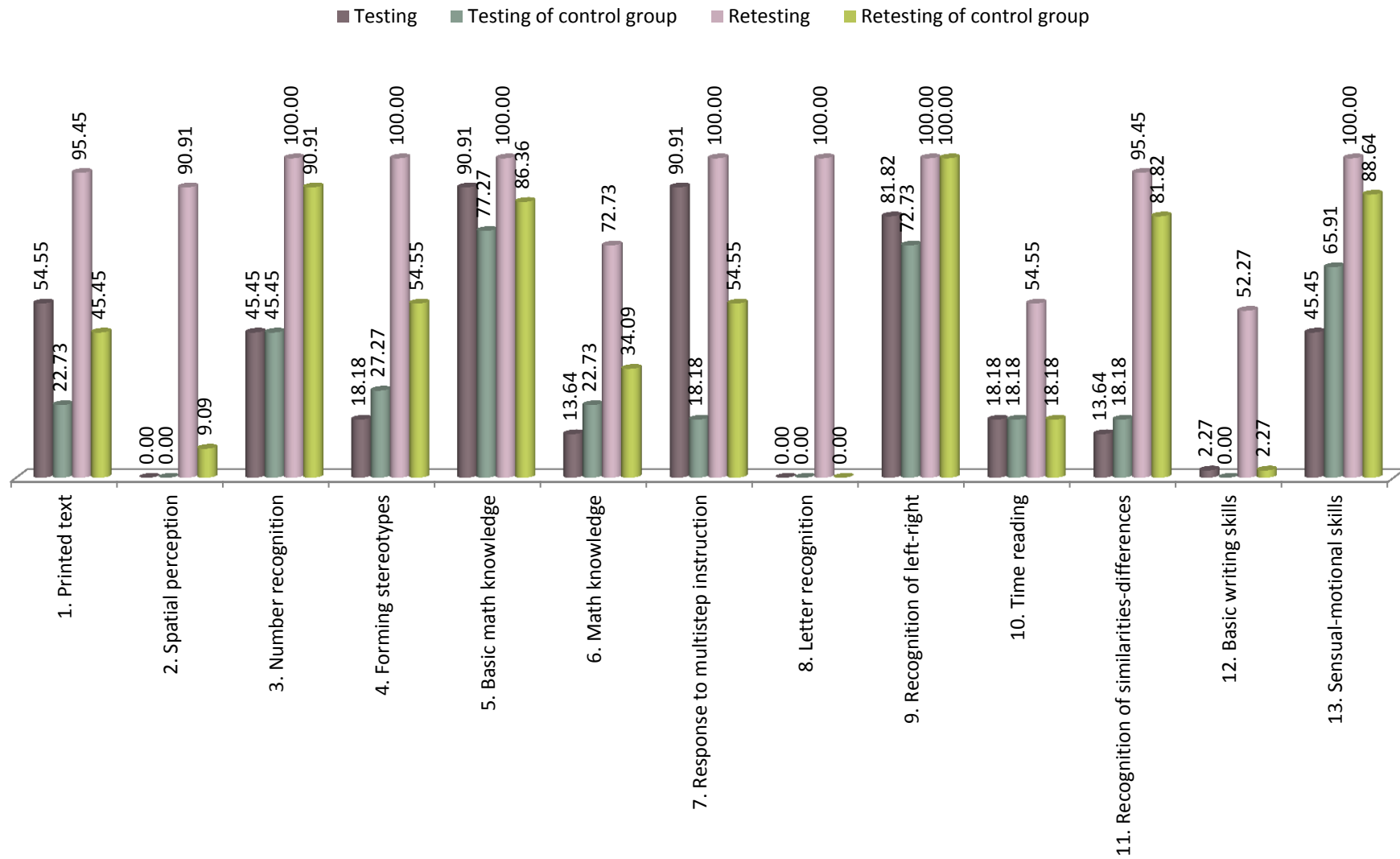
Figure 19 presents the Gladzor preschool classes observation data, where we can see that the overall average score for the criteria was 92.43%. Here the Objective /100.00%/ and Questions /100.00%/ criteria have the highest representation, and the lowest representation relates to Tutor skills /83.33%/ and Methods /85.71%/ criteria. The other criteria are in the range of 90.00%-93.75%.

Figure 19. Analysis of class observation results in Gladzor preschool



The figure 20 presenting the testing and retesting results of Gladzor community preschool children shows that the most significant increase has been observed in respect of (8) Letter recognition /0.00%→100.00%/ indicator of *Early reading* subfield, and then (2) *Spatial perception* /0.00%→90.91%/ indicator of *General math knowledge* subfield.

Figure 20. Analysis of Gladzor children testing and retesting results

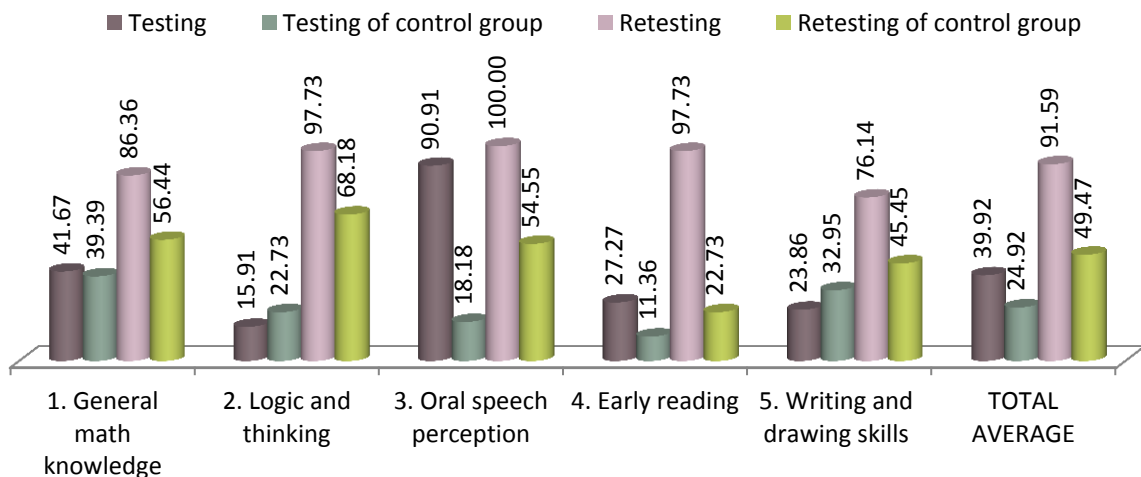


When looking at testing and retesting results of the control group children, we see that there are no changes in (10) *Time reading* /18.18%/ indicator of the *General math knowledge* subfield and (8) *Letter recognition* /0.00%/ indicator of *Early reading* subfield. The most significant increase has been recorded in case of (11) recognition of similarities-differences indicator /18.18%→81.82%/ of *logic and thinking* subfield and (3) number recognition /45.45%-90.91%/ indicator of the *general math knowledge* subfield.

Looking at the Figure 20 we can see that the most part of testing results of the Gladzor community preschool children exceed the control group children testing results, except for (6) *Math knowledge* /9.09%/ indicators of *General math knowledge* subfield, (4) forming stereotypes /9.09%/ (11) recognition of similarities-differences indicator /4.55%/ of *logic and thinking* subfield, and (13) *Sensual-motional skills* /20.45%/ indicator of *Writing and drawing skills* subfield. There were no differences in respect of the following indicators: (2) *Spatial perception* /0.00%/, (3) number recognition /45.45%/, and (10) *Time reading* /18.18%/ indicators of *General math knowledge* subfield, and (8) *Letter recognition* /0.00%/ indicator of *Early reading* subfield. The most significant difference has been recorded in respect of the (7) *Response to multistep instructions* /72.73%/ indicator of the *Oral speech perception* subfield.

Looking at the retesting results of the target and control groups children, we see that the target group children's results exceed the results of the control group children. Most significant difference has been observed regarding the (8) *Letter recognition* /100.00%/ indicator of *Early reading* subfield. No difference has been observed only in case of (9) Recognition of left-right /100.00%/ indicator of *general math knowledge* subfield.

Figure 21: Comparison of Gladzor children results per subfields



When looking at testing and retesting results of the Gladzor community preschool children (Figure 21), we see that the most significant increase was recorded in case of the (2) *Logic and thinking* /15.91%→97.73%/ subfield.

From the Figure 21 we can see that the testing and retesting results of the control group children have increased as well, and most significantly - in respect of the (2) *Logic and thinking* /22.73%→68.18%/ subfield.

Looking at the Figure 21 we can see that the testing results of the preschool children exceed the testing results of the children not attending preschool except for the (2) *Logic and thinking* /6.82%/ and (5) *Writing and drawing skills* /9.09%/ subfields. The most significant positive trend has been displayed in case of the (3) *Oral speech perception* /72.73%/ subfield.

When comparing the retesting results of the children attending and not attending the preschool, we see that the target group children's results exceed the results of the control group children. The most significant difference relates to the (4) *Early reading* /75.00%/ subfield.

5.3.3. “Yeghegis secondary school” SNCO

The preschool has been established on a school basis and has one group of children. According to the budget foreseen by the microprogram for one group, the community preschool is classified in the region as one having “small” resources (financial criteria for community classification of the region included in the sample).

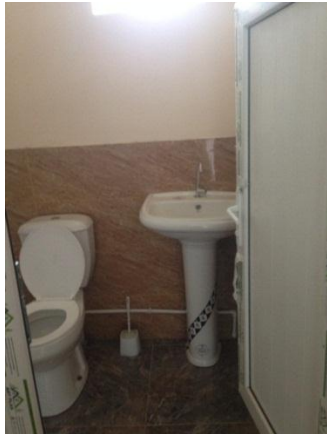
During the visits the preschool was working under the following *model*:

- 5 days in a week,
- short-day working regime - 09:00-13:00,
- one tutor was working in the preschool,
- the tutor was trained,
- the preschool did not provided meal,
- the preschool was heated through the electric heaters,
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, playroom, wardrobe-corridor, and water-closet (the toilet bowls were in separate cabins)

- Group room, wardrobe-corridor, playroom, and water-closet were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (see Pictures 37 and 38).
- The preschool was provided with permanent cold water supply.
- The preschool was heated through the electric heaters.



Picture 37. Beginning of year, Yeghegis, water-closet



Picture 38. Beginning of year, Yeghegis, group room

Conditions of the group room, playroom and working centers matched the requirements of defined norms. Accessories for the following work centers were available in the preschool: literacy, math, arts, sports, technical, but the centers were not separated (see picture 40). From the foreseen centers, the construction, cooking, biology, and role play centers were missing. The preschool had wardrobes, carpet, tables and chairs, toy cabinets, board, TV, etc. The group room and dressing room were quite light.



Picture 39. Beginning of year, Yeghegis, dressing room



Picture 40. Beginning of year, Yeghegis, cabinet

According to the *head master*, the main purpose of the program was providing preschool education to children. Establishment of a preschool was of great importance for the community, as there were no other establishments, neither entertainment nor educational, in the community; there was no kindergarten as well.

According to the *head master*, parents raised an issue regarding only the insufficiency of educational materials and organization of feeding.

Building conditions of the preschool were good. At the time of the visit, heating was realized through electric heaters. The mentioned problem was out of the program framework, since it related to the school in general. One parent noted` that they had difficulties regarding the road, as their home was very far from the preschool, and during the winter months the roads became almost impassable; at that time the child may not attend the preschool.

Work centers were not separated yet in the group room. The most equipped centers in the preschool were the literacy and art centers. During the in-depth interview the tutor said that there was a lack of toys. Head master also commented on this issue.

Head master and one *tutor* were working in the preschool. The head master previously worked as an educator, then – as an acting principal, and then – as a head teacher; and the tutor did not work previously, but she was trained and mastered the specifics of the preschool curriculum.

During the interview the tutor mentioned that the training was very informative; it was well-organized, was started and completed in due time. They had both theoretical and practical lessons. During the training the tutor got acquainted with the child-centered approach. She expressed a wish to have a longer training.

The tutor had a *summary plan*. The lesson planning was made quarterly and daily (the tutor believed that organization of lessons with a clear plan would make the work more difficult). During the classes they performed an individual or group work, carried a research; the material was presented with explanations, storytelling and demonstrations. Short and simple questions were raised, but their logical continuance was not ensured. An individual approach was applied towards the children, all the children were involved in the classes. During the classes the tutor ensured mobility, she did not make an assessment. The tutor did not make gender differences among the children.

During the interview the tutor said that she applied both approaches during the classes; at the same time she noted that she could not “collect” the children without using the child-centered approach. Both preferred an integrated education; however she applied the child centered

approach. She conducted lessons through games and exercises. She mainly concentrated on linguistic, cognitive and self-help aspects.

The tutor mentioned that the child with greatest abilities was able to count, knew colors in English; and the weak child was aggressive, but succeeded when directed. She stated that the abilities of children differ depending on gender, and the girls are more developed.

According to the tutor, she used to talk to the parents daily to inform them of the children's progress; she held meetings twice and gave advices.

The head master stated about the communication with the parents that the preschool doors are always open, and the parent has permission to attend the classes for some time after bringing the child to the preschool in the morning. Parents do not participate in the child's education. The tutor had presented the working plan to the parents and asked them for their support, but they did not receive it and did not expect that generally.

The main source of income for most of the surveyed families in the community was agriculture, cattle breeding and farming, and there were also cases of hired labor.

According to the tutor's assessment, the socio-economic condition of the community families was unsatisfactory, and the head master stated that the socio-economic status of the community / family had an impact on children's development; it is easier to teach the child from educated family, as the parent would teach something at home as well; and in their case (in case of the preschool) everything is done by the tutor. The tutor had already mentioned that no one worked with children at home; they used street language in their speech, and when the children entered the preschool, they did not know standard forms of words.

The head master mentioned that they do not have means to support needy families, but if there are problems, they turn to the community and solve the problem through the community.

During the *focus group discussion with the parents*, the participant families consisted of 4-7 persons, two of the four families were beneficiary. Families were engaged in agriculture (mainly farming and cattle-breeding, and one parent operated agricultural machinery) and outgoing work. Children were not involved in these works (in only one case the child reported the return of the herd). Parents want their children to become literate. The main expectations of parents from preschool are related to the knowledge the children receive there, and their being fully prepared for school. According to them, all the conditions offered are available, and they are very satisfied because the children get enough knowledge.

Children in these families have no responsibilities, sometimes they pick up their scattered things and clothes. For the most part, the children are self-sufficient in dressing, washing, and feeding; one parent mentioned that her child cannot do anything independently.

Mainly mothers and fathers bear the responsibility for the care and upbringing of the child. Mothers do not leave home, as the children cannot stay at home without them and are to be taken with them, if going somewhere. Parents themselves plan for children's daily lives, but sometimes they also take into account the children's wishes. They generally found that the children need to have an explanation of the parents' decisions in their respect, and the parents always provide the explanation. Children may be punished for lying and not listening to adults. In such cases, parents try to explain and frequently punish children by depriving them of their favorite occupation (for example, using computers, phones, etc.).

The preschool children did not attend kindergarten as there was no kindergarten in the community.

The parents thought that the children development was greatly affected by factors like the environment, influence of the parents, and other children's influence.

The head master considered the emigration as a threat for the program continuity, and she noted that in the past month, three families left the community, taking ten children of different ages with them.

Description of the end of year visit is presented below:

Concerning building conditions, parents mentioned at the end of the school year that water supply was poor and heating was weak during the winter months, even though three electric heaters were on. According to the parents, the problem was that the first room of the preschool did not have an inter-room door and suggested to add it. Also the tutor mentioned that the heating was not sufficient and they added another electric heater, as it was not possible to move to the second room of the preschool. In this respect the head master noted that it was not possible to heat the classroom for the first grade students in the school because of technical problems, and that they had to carry out the classes for the first grade in the preschool's second room; she expressed the hope that there would be no such problems in the coming years.

The *work centers* have been additionally equipped with certain accessories as compared to the beginning of the year; what concerns the outdoor playground, it was not been built yet as of the end of the year. The tutor mentioned that there was a shortage of materials in the centers (see Figure 42), in particular, sports equipment and toys were insufficient. It should

also be noted that there was a television set in the preschool, but there was no internet in the preschool during our visit. Also the parents mentioned that the educational materials in the preschool were insufficient, and there was a need for replenishment.

During the interview, the head master noted that various events were arranged to integrate the children into the school, in particular, the preschool children together with the first graders participated in the events.



Picture 41. End of year, Yeghegis, posters



Picture 42. End of year, Yeghegis, cabinet

At the year end, the tutor noted that the time to be provided to child development areas was not planned in advance, and she paid attention to all the areas equally, with no special focus on any area. According to the tutor, teaching methods and the influence of parents and the environment are among the factors having the greatest impact on children's development.

According to parents, their expectations from the preschool were fully justified, and due to preschool attendance the children first of all became friendly and gained knowledge that could not be provided at home. According to the tutor, children are already able to count, paint, draw; some of them are able to write and are ready for school.

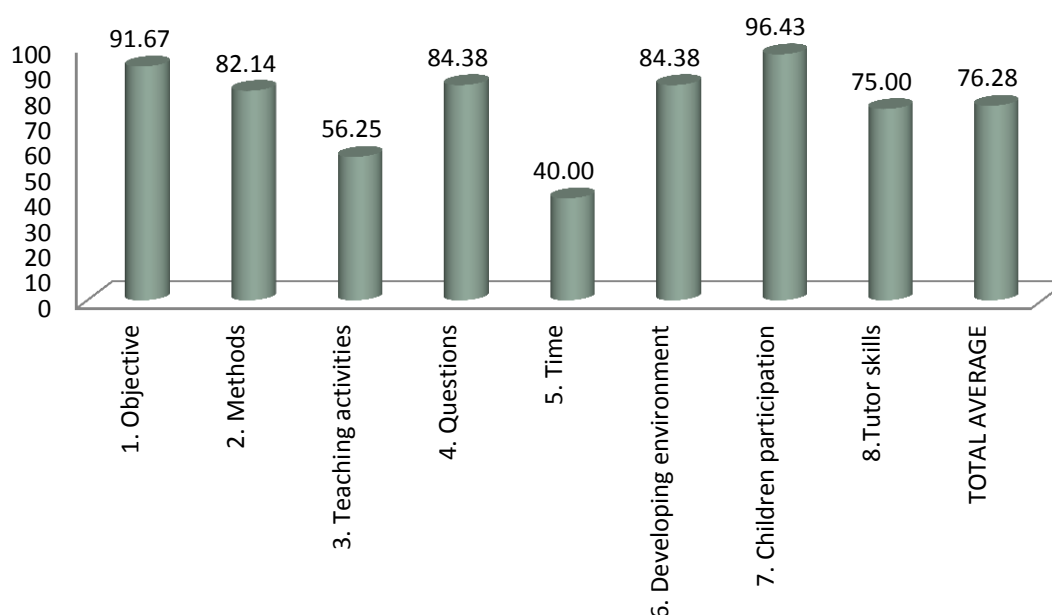
Parents also assured that preschool children differ from the children not attending preschool by their development level and noted, that of the children of the same age, those attending preschool were more knowledgeable.

The parents mentioned that they collect 700-1000 drams (depending on the children's attendance) each month to provide food for the children in the preschool, and with the money raised the parent committee buys uniform food for the children.

According to the head master, the community water supply is a top priority issue, and in the current year they have applied to benefactors for the support provision to the community as during a long time they cannot afford to solve the problem through the budget means.

Classes observed in Yeghegis preschool were assessed relatively low (Figure 22). There are no criteria with maximum representation. Relatively higher representation relates to the *Children participation* criterion /96.43%/, and relatively lower representation – to *Teaching activities* /56.25%/ and *Time* /40.00%/ criteria; the other criteria are in the range of 75.00% - 91.67%. The overall average score for these criteria has been 76.28%.

Figure 22. Analysis of class observation results in Yeghegis preschool

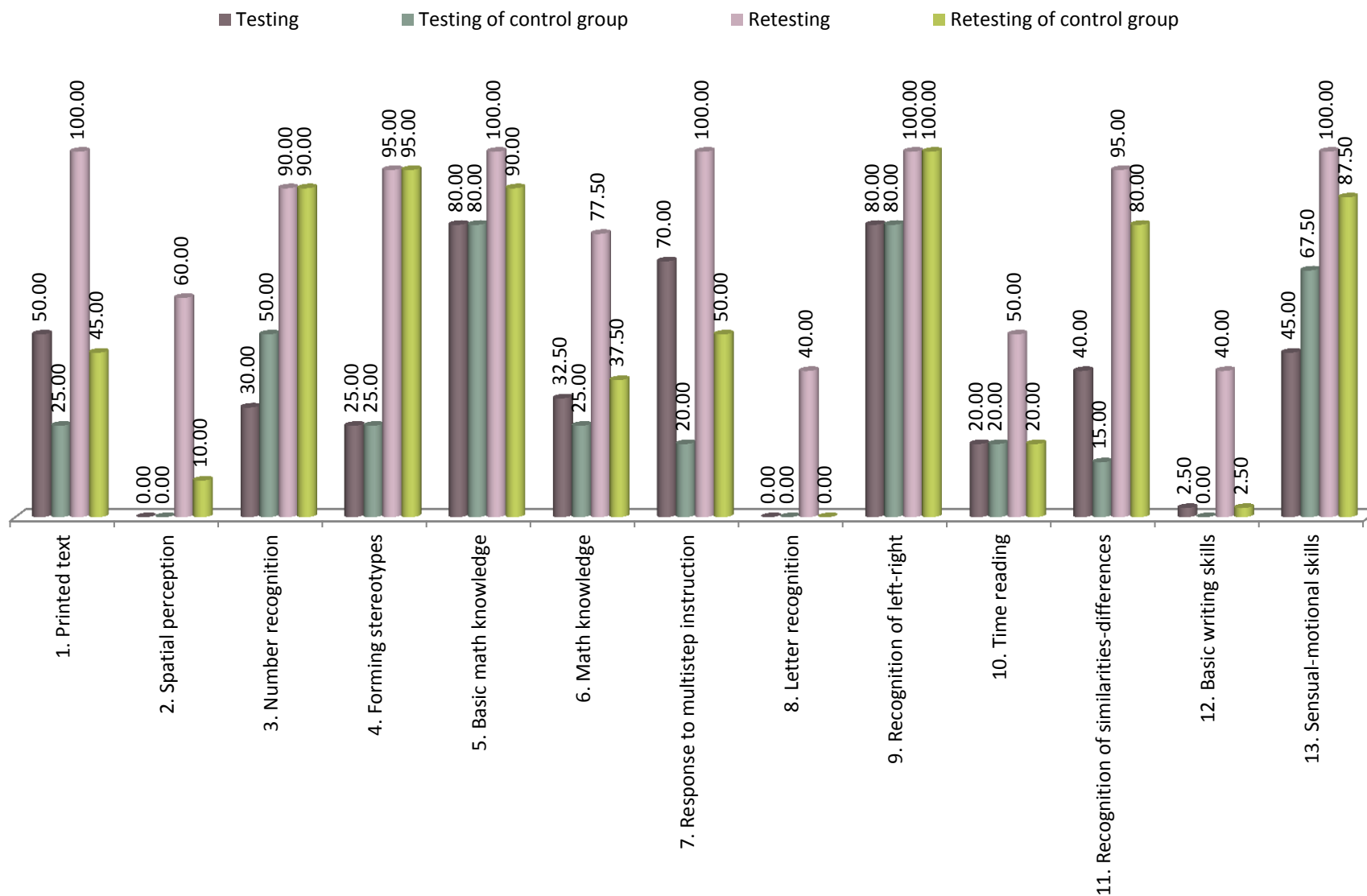


When looking at the testing and retesting results of Yeghegis community preschool children in the Figure 23, we see that the retesting results are mostly exceeding the testing results. The most significant increase has been noticed in respect of (2) *Spatial perception* /00.00%→60.00%/ and (3) number recognition /30.00%→90.00%/ indicators of *General math knowledge* subfield, and (4) *Forming stereotypes* /25.00%→95.00%/ indicator of *logic and thinking* subfield.

The control group children retesting results of Yeghegis community exceed the testing results, in particular, the most significant increase is noticed in respect of (4) *Forming stereotypes* /25.00%→95.00%/, and then in (11) *Recognition of similarities-differences* /15.00%→80.00%/ indicators of *Logic and thinking* subfield. There were no changes in two indicators: (10) *Time reading* /20.00%/ indicator of the *General math knowledge* subfield and (8) Letter recognition indicator /0.00%/ of *Early reading* subfield.

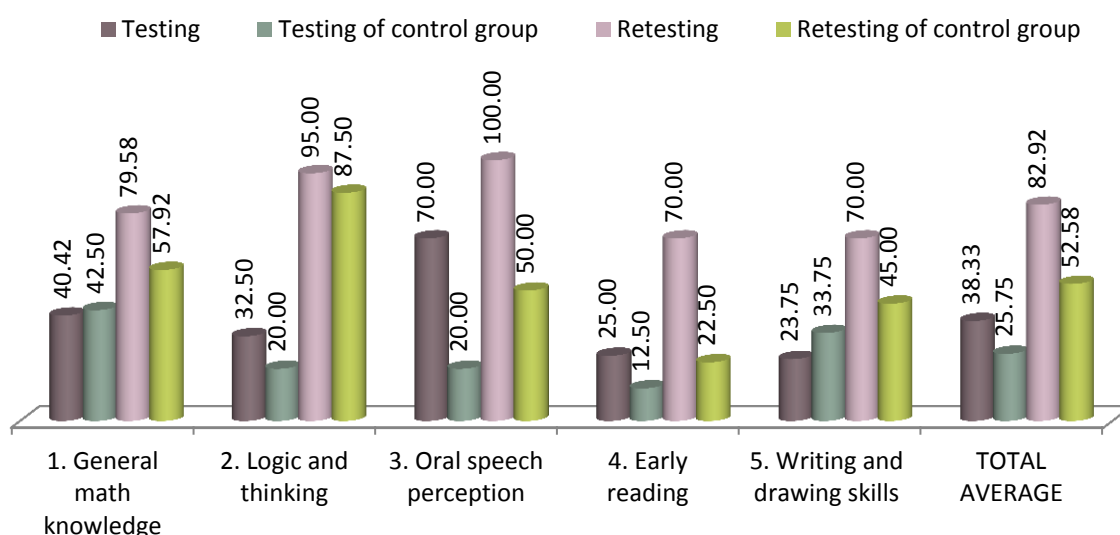
Looking at the Figure 23, we can see that the testing results of Yeghegis community preschool children exceed the testing results of control group children regarding all the indicators, except for (3) number recognition /20.00%/ indicator of *General math knowledge* subfield and (13) *Sensual-motional skills* /22.50%/ indicator of *Writing and drawing skills* subfield. There have been no difference in respect of the following indicators: (2) *Spatial perception* /00.00%/, (5) basic math knowledge /80.00%/, (9) Recognition of left-right /80.00%/, and (10) *Time reading* /20.00%/ indicators of *General math knowledge* subfield, (4) *Forming stereotypes* /25.00%/ indicator of *Logic and thinking* subfield, and (8) Letter recognition indicator /0.00%/ of *Early reading* subfield.

Figure 23. Analysis of Yeghegis community children testing and retesting results



The retesting results of the preschool children mostly exceed those of the control group children regarding the (1) *Printed text* /55.00%/ indicator of *Early reading* subfield, (2) *Spatial perception* /50.00%/ indicator of *General math knowledge* subfield, and (7) *Response to multistep instructions* /50.00%/ indicator of the *Oral speech perception* subfield. There have been no differences regarding the following indicators: (3) number recognition /90.00%/ and (9) Recognition of left-right /100.00%/ indicators of *General math knowledge*, and (4) *Forming stereotypes* /25.00%/ indicator of *Logic and thinking* subfield.

Figure 24: Comparison of Yeghegis community children results per subfields



Looking at the testing and retesting results of the Yeghegis community children (Figure 24), we see that the most significant increase has been displayed regarding the (2) *logic and thinking* /32.50%→95.00%/ subfield.

When looking at the testing and retesting results of the control group children (Figure 24), we see that again the most significant increase has been displayed regarding the (2) *logic and thinking* /20.00%→87.50%/ subfield.

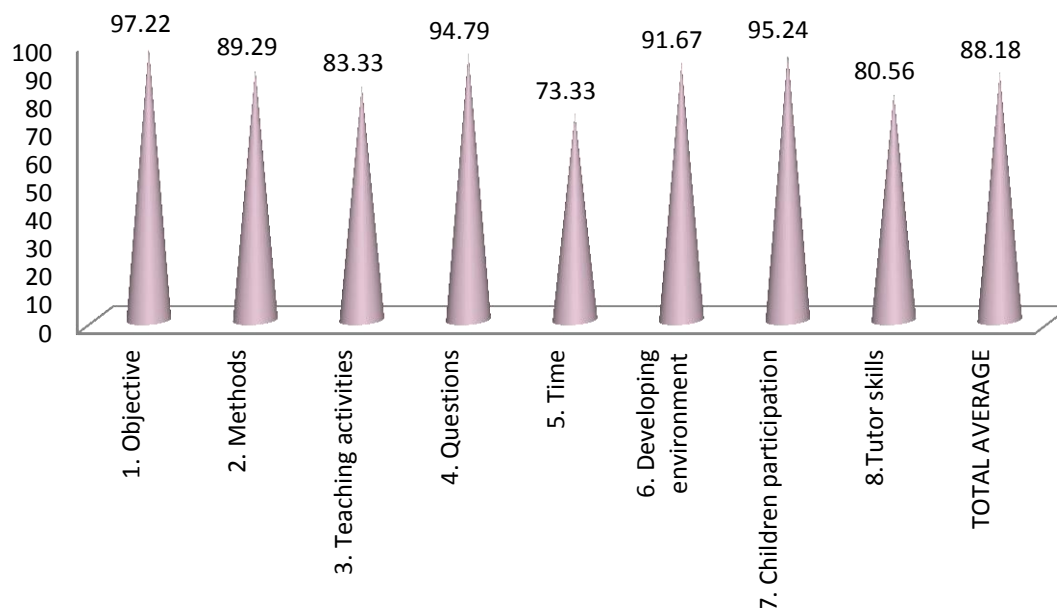
The Figure 24 shows that the testing results of the preschool children mostly exceed the testing results of the children not attending preschool (except for the (1) *General math knowledge* /2.08%/ and (5) *Writing and drawing skills* /10.00%/ subfields) especially regarding the (3) *Oral speech perception* /50.00%/ subfield.

When comparing the retesting results of the children attending and not attending preschool, we see that again the results of the preschool children exceed the control group children results. The most significant difference relates to the (3) *Oral speech perception* /50.00%/ and (4) *Early reading* /47.50%/ subfields.

5.3.4. Generalized analysis

The program was mostly successfully implemented at Getap preschool among the three preschools of Vayots Dzor region. Analysis of class observations in the preschools presents that there are no maximal performance results. However, has the highest performance /97.22%/ was observed in Objective criteria, relatively low performance was observed in Time criteria /73.33%/. The remaining criterion were in the range of 80.56% - 95.24%. The average is estimated at 88.18%.

Figure 25. Generalized analysis of class observation results in preschools in Vayots Dzor region



Analysis of testing and retesting results of preschool children in Vayots Dzor region (Figure 26) shows that the retesting results exceed the results of testing. Significant increase was recorded in (2) spatial perception /10.00%→83.64%/ indicator of general math knowledge subfield, (4) forming stereotypes /26.06%→98.64%/ indicator of Logic and thinking subfield, and (8) letter recognition indicator /0.00%→73.33%/ of early reading subfield. The maximal performance was observed in (5) basic math notions /90.30%→100.00%/ and (9) recognition of left-right /83.94% -> 100%/ indicators of General

math knowledge subfield, (7) response to multistep instructions /70.30%-100.00%/ indicator of the Oral speech perception subfield, and (13) sensual-motional skills /56.82% -> 100.00%/ indicator of Writing and drawing skills subfield.

The retesting results of children not attending preschool mostly exceed the testing results, with the exception of (8) letter recognition /0.00%/ indicator of Early reading subfield that remained unchanged. A significant increase has been recorded in the (11) recognition of similarities-differences /16.06% -> 80.61%/ indicator of Logic and thinking subfield. The maximal performance has been observed in (9) recognition of left-right /74.24% -> 100.00%/ indicator of General math knowledge subfield.

Looking at the figure 26, we can see that in Vaoyots Dzor region the testing results of the children attending preschool are higher than the testing results of the children not attending preschool, except for (10) time reading /3.33%/ indicator of General math knowledge subfield, (13) sensual-motional skills /9.32%/ indicator of Writing and drawing skills subfield. There are no changes regarding the indicator (8) letter recognition /0.00%/ indicator of *Early reading* subfield. The difference is especially significant regarding (7) response to multistep instructions /54.24%/ indicator of the *Oral speech perception* subfield.

The retesting results of children attending and not attending preschool in the region are the same. The difference mostly relates to the following indicators: (2) spatial perception /73.94%/ indicator of General math knowledge subfield, and (8) letter recognition /73.33%/ indicator of Early reading subfield. No difference is observed only in (9) recognition of left-right /100.00%/ indicator of General math knowledge subfield.

Figure 26. Comparison of children results in Vayots Dzor region by subfields

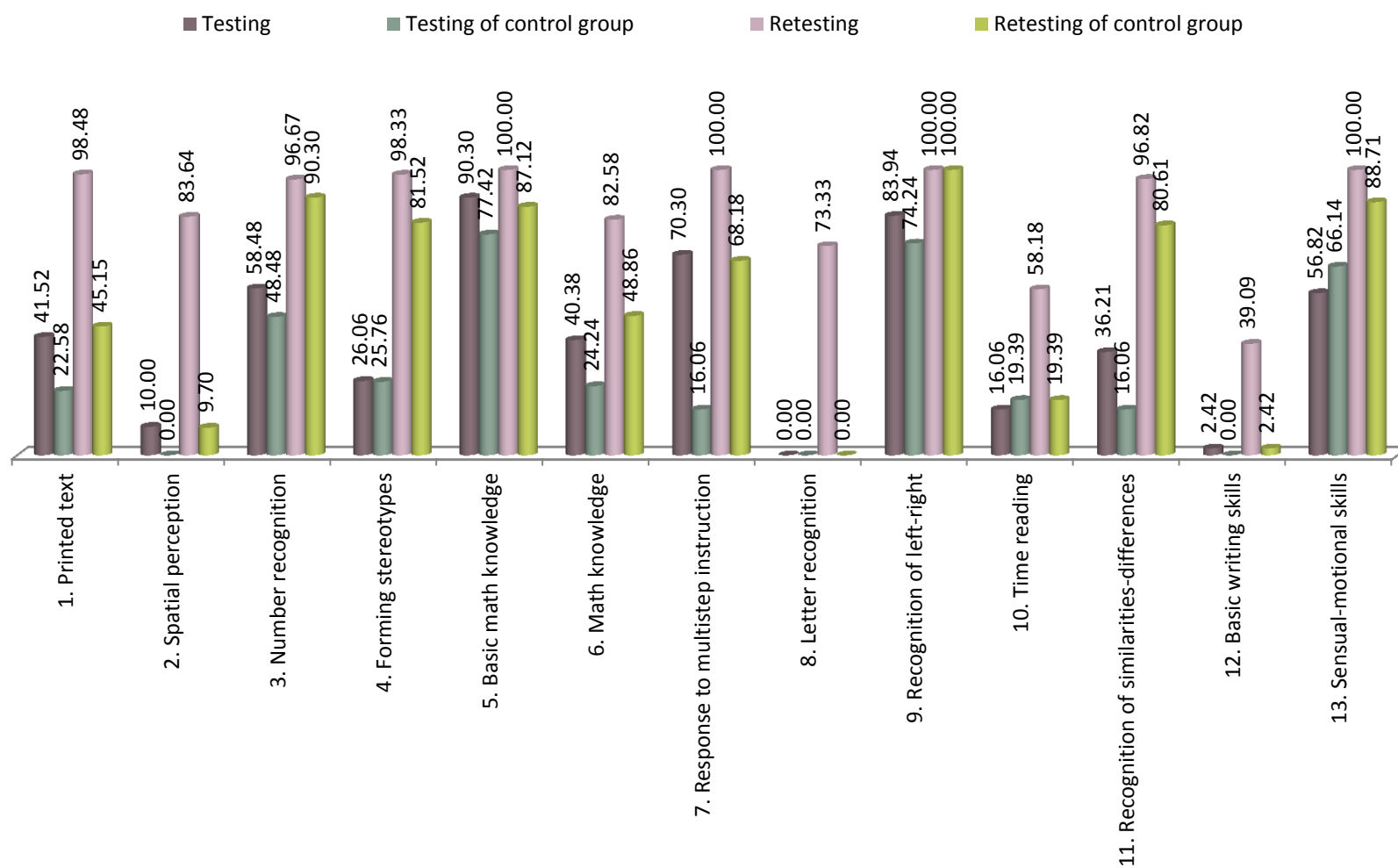
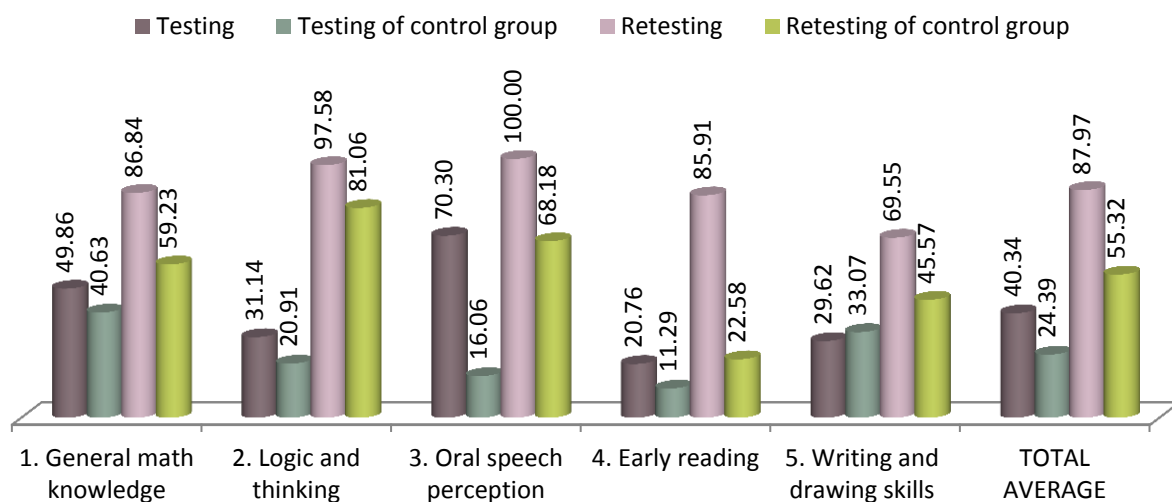


Figure 27. Analysis of children testing results in Vayots Dzor region by subfields



Looking at figure 27 we see that the preschool program in Vayots Dzor region is implemented effectively. Moreover, there is a positive dynamics in the development level of children involved in the program.

5.4. Yerevan

Three communities have been selected in the region, and all three are based on school.

5.4.1. «Yerevan Secondary school No. 66 after Al. Myasnikyan» SNCO (Yerevan 1)

The preschool was established on the school basis and has one group of children. According to the budget foreseen by the micro project for one group, the community preschool is classified in the region as one having “large” resources (financial criteria for community classification of the region included in the sample).

During the visits the preschool was working according to the following model:

- 5 days in a week;
- part-time working regime - 09:00-13:00;
- one tutor was working in the preschool during the visits;
- the tutor was trained;

- the children were provided with one meal a day brought from home;
- the preschool was equipped with centralized heating, however was heated with an electric heater;
- the preschool did not have sleeping facilities.

General description of preschool conditions is as follows:

- The preschool has been provided with group rooms, playroom, water closet.
- Group room, playroom, wardrobe and water-closets (there were separator walls) were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (see Pictures 43 and 44).
- The preschool was provided with permanent cold water supply.
- The preschool was heating by electric heater.



**Picture 43. Beginning of year, Yerevan 1,
water closet**



**Picture 44. Beginning of year, Yerevan 1,
group room**

Conditions of *group room, playroom, and working centers* matched the requirements of defined norms. They were equipped good enough. There were no absent working centers (See Picture 46). The preschool had wardrobes, tables and chairs, sofa, cabinets, blackboard, TV, etc. The group room was light enough. No outdoor playground was present.



Picture 45. Beginning of year, Yerevan 1, wardrobe



Picture 46. Beginning of year, Yerevan 1, cabinet

According to the head teacher, the main objective of the micro project is integrating the children in the school education process. They applied for the project taking into account the terms and the quality of the preschool's educational program. Establishment of the preschool provides for integration of children of preschool age in the educational system, especially for those children who are not attending kindergarten and who want to attend preschool and are not registered in the queue for the kindergarten. Establishment of the preschool is also important in increasing the role of the school and getting the children ready for school life.

According to the head teacher the strength of the preschool was the children are tutored by tutors who have been trained and they manage to teach the children getting them ready for the school. The head teacher noted that the chosen model has good methodology that are also appreciated by the parents. As it relates to the weaknesses, she pointed at the absence of meal. She also added that if the meal program is started it will significantly increase the effectiveness of the preschool. According to the tutor the preschool had children from socially vulnerable families who could not attend other institutions due to fee they require, and this fact also adds to the strength of preschool.

The preschool's *building conditions* were satisfactory; the parents noted they are very satisfied with the general conditions in the preschool during focus group discussions. A parent from a socially vulnerable family stated that everything is available and in enough quantities. For the child it was important that

the building conditions are satisfactory, and for the mother, in addition to building conditions, the quality of educational conditions was also important.

All necessary *work centers* were present, except for the biology center. There were separated by cabinets.

During an in-depth interview the head teacher stated that there was no shortage for didactic and teaching materials, toys, stationary, sports inventory. She also noted that it is desirable to get methodological support related to methodological literature, and she added that as of current date all is satisfactory and by the end of year a need for recommendation of changes might arise.

The head teacher and one tutor were available at the preschool. The tutor used to work at a clinic for 12 years as a speech therapist, afterwards, as a tutor at school for another 12 twelve years. She had trainings and is skilled in the preschool program. Before 2019 the head teacher used to work at the same school as a teacher of geography and as a deputy director for teaching. From 2009 to 2017 has worked as a director at the Yerevan school No. 31, and in October 2017 she was elected as the director of school No. 66.

The tutor mentioned that the training was very effective. The lectures were organized well enough, she got new knowledge regarding the integrated teaching method. The knowledge acquired is fully applicable in the community / Yerevan. There were no practical training sessions, only lectures that included vast amount of material on preschool. She was of opinion that 5 days was not enough for the training and longer period should have been used for the training sessions.

The tutor had a plan-summary. She was planning on a daily basis (according to her, if there were a specific detailed program that would have made everything much difficult for her to implement). During the sessions the tutor was using methods for keeping up children's involvement in the learning process. She used to formulate the questions in a simple manner and make them short. She used didactic materials and provided for involvement of children in the process. She did not apply individual approach and she did not allow for free movement in the work group. She did not use progress tracking questionnaires to document the progress in learning, she did not segregate the children based on gender.

The tutor mentioned that she used child centric approach, since they get better results when the work is performed individually. It became clear during the interview that the tutor paid attention to all areas of

child development, researched the indicators, and on a daily basis she worked on physical development and cognitive areas.

According to the tutor, the strong children listen and learn immediately, the weak ones get results only when they repeat. The tutor describes the capabilities of the strongest child as attentive, grasps fast, can reproduce the heard material and reproduce the poem after 2-3 time repetition. The weakest child's capabilities are described as inattentive and requires individual work. The tutor evaluates the group as having above average capabilities. According to the tutor, the child's capabilities are not dependent on their gender.

The head teacher was of an opinion that the socio-economic condition of the community is satisfactory and she sees a direct dependence between the socio-economic conditions of the community and the level of development of children, since Shengavit community has used to be area for working class and service workers. The source of income for the community workers has been the employment income.

According to the head teacher to support the socially vulnerable families there is a specific program developed. It can be used also for children of the preschool, for example, for purchase of stationary.

During the focus group discussion with the parents it turned out that the families of the 7 participants were composed of 4-8 members, and no family was enrolled in the list of people getting social benefit. The socially vulnerable family was also not in the list of people getting social benefit since it regularly received income from its aunt from the USA. The parents were taking their children to the preschool since they were getting the necessary knowledge, and since the building conditions and the quantity and quality of materials of the preschool were satisfactory both for the parents and the children. The parent from socially vulnerable family noted that all is very well, everything necessary is available. The parents were satisfied very much.

The duties of the children of these families were limited to learning the material that was assigned, plus they were helping in tiny matters (organizing their stuff at home, help their mother, etc.). One of the children could make shopping from the outlet close to their house. The parents noted that after their children attended the preschool they have become more independent, in particular, could get dressed, play, draw, wash themselves, use water closet and taking food.

The parents were responsible for children's care, and sometimes grandmothers helped them. In the absence of mothers, the grandmothers were mainly taking care of the children. The non-working

mothers mostly were not absent from home. The parents' absences were not of frequent nature. The child's daily life was planned by mothers, taking into account the child's wishes if possible.

Parents generally found that their decisions should be explained to the child. As it relates to the requirements, they require from the child to be attentive to their lessons and always behave per instructions of their parents. A child may be punished for lying, conflicting, behave badly. The punishment was mainly in the form of forbidding the child's favorite occupation (for example forbidding playing on the computer, no internet, etc.). A socially vulnerable family's parent noted that the child used to be locked down in his room so that no lies next time.

The parents participating in the discussion noted that there are kindergartens in the community. Four children attending the preschool also attended kindergarten from 3 days to 3 months, and since the period of time was very short they did not manage to learn anything. They could not get used to the kindergarten and stopped attending it. They got used to preschool very fast. One child attended other kindergarten and the parent was satisfied with it. However due to child's illness they stopped taking their child to the kindergarten. Parent of the socially vulnerable family stated that his child attended the kindergarten only 2 days since the child used to cry every day there.

For the half of the parents, the education, social-economic conditions and physical environment has a great effect on the child's development, for the other half, the family, education, the environment, and for the socially venerable family – the teaching methodology. The parents used to teach their children by an example, by means of playing, drawing and conversation.

During the focus group discussion with the parents it turned out that no money contribution for operating the preschool was paid by them and they are ready to help the preschool. One parent noted that he wanted to bring in toys and he was told that there is no such need. The parents wanted that foreign languages are also taught, dance studios are formed and additional psychological support is demonstrated for the children at the preschool, and meantime they expressed their readiness to pay for that.

During the in-depth interview, a *socially vulnerable family's* parent noted that he wishes that his child is provided with books and workbooks. He also noted that the parents bought books for children at their will, although it is worth mentioning that during the focus group discussions no one mention about that.

With regard to the continuity of the program, the director did not see any danger, as there was a demand for the preschool supported by the growth of the population of the community.

End of year visit can be described as follows:

According to the head teacher the advantage of the preschool was that the children are prepared for and integrated to the school. The weakness of the preschool has not been identified yet, however she noted for the necessity of an assistant tutor and a cleaner.



Picture 47. End of year, Yerevan 1, cabinet



Picture 48. End of year, Yerevan 1, music center, tape recorder

Materials at the working centers were increased in quantity compared to the beginning of the year (See Pictures 47 and 48) and the tutor noted that the centers are regularly supplied with materials, and as of the visit we did not note a necessity for additional supplies.

According to the tutor the children got skilled in many areas, learned much, became more independent and have become ready for the school. In general the average capabilities of children were assessed by the tutor as good and she noted that, with the exception of one child, there are positive results. In the case of that one child, there were no results as the child refused to attend the preschool. She also noted that they have talked with the parents and learned that the child has the necessity for getting inclusive education and has decided to start attending the preschool in the next year.

The parents noted that the children became disciplined, more social, acquired enough knowledge that could not be obtained at home. Per the parents, the children have become letter literate, could count and to some extent to write, also they could split the words to parts, etc. One parent noted that before attending the its child used to have a bad habit, and as a result that habit was gone.

The parents noted also that they have participated in the open lessons quite regularly, and they were satisfied with them, in particular with the attitude of the tutor and the teaching method. The parents also noted that compared to their other children in the same age these children demonstrated a positive pace in development.

According to the head teacher the social-economic conditions of the community affects the development of the children to some extent. To decrease that effect the preschool utilizes a mechanism for support if children from vulnerable families. For example, when necessary children get books free of charge.

In the end of year the head teacher noted that she had received many praises from the parents for the operation of the preschool. She is of an opinion that the parents expectations towards the preschool were met and the children are ready for the school.

The parents mentioned at the year-end their satisfaction and noted that during this one year the children demonstrated significant progress and they have acquired enough knowledge.

The communication and the bond with the parents is strong enough at this preschool. The parents have participated in the events and have helped in preparing flyers. The head teacher noted that the parents were provided with materials and literature regarding the development of their children. Both the head teacher and the tutor provided the parents with recommendations, and where necessary, provided free psychological and looped services.

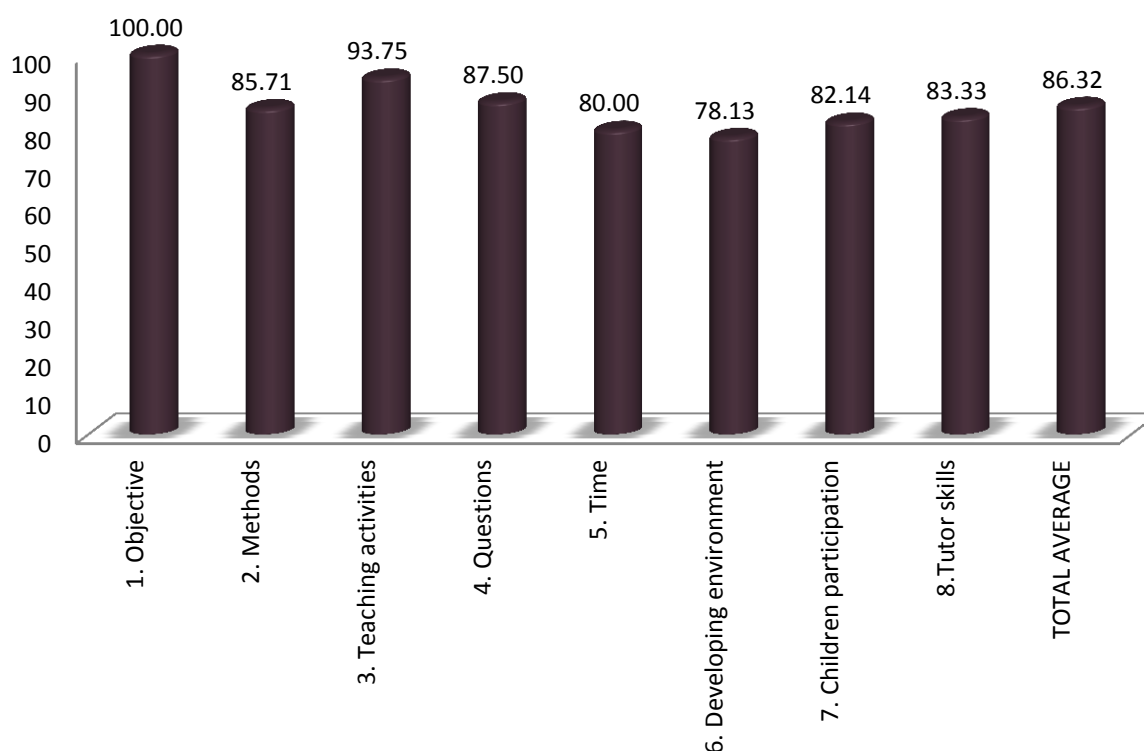
The head teacher noted that she does not see any threat to the continuity of activities of the preschool. Moreover, stated that in January 2019 they have applied to the Ministry of Education and Science for a license and received a license for performance of preschool activities.

In the end of discussions of the focus group, as a recommendation, the parents noted that they wish that foreign languages are taught and art groups are formed, and they are ready to pay for them.

During the discussions with the parents of children not attending the preschool it became obvious that the issue of absence of information is very keen in this community. All the parents noted that they do not have the capability, and they do not take their children to the preschool. Two of these parents noted other reason for not taking their children to the preschool. In particular, they mentioned that they teach their children themselves and there is no need to take them anywhere.

Figure 28 indicates that Yerevan 1 preschool training criteria observed demonstrate the maximal performance for the Objective indicator /100.00%/. Relatively low results are observed in Developing environment indicator /78.13%/. The remaining indicators are in the range of 80.00%-93.75%. The average of the indicators at this preschool was 86.32%.

Figure 28. Analysis of Yerevan 1 preschool's observation of trainings



When looking at the testing and retesting results of Yerevan 1 preschool Figure 29, we can see that an increase has been observed for all indicators. The most significant increase was observed in (3) number recognition /50.00% -> 100.00%/ indicator of General math knowledge subfield, and in (11) recognition of similarities-differences /28.57% -> 82.14%/ indicator of Logic and thinking subfield.

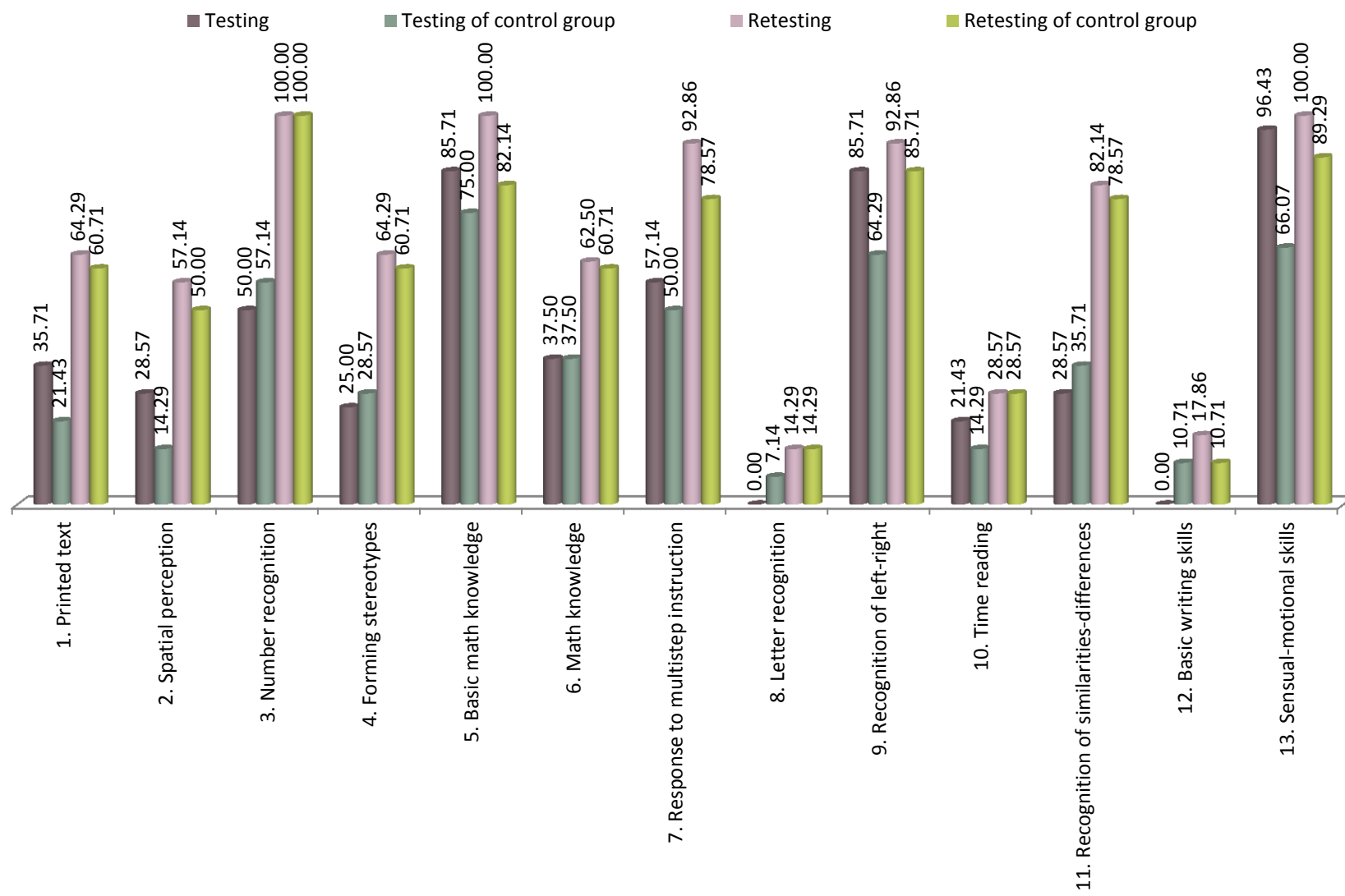
When looking at the testing and retesting results of children in control group, we see that most significant increase was observed in (3) number recognition /57.14% -> 100.00%/ indicator of General math knowledge subfield and in (11) recognition of similarities-differences /35.71% -> 78.57%/ indicator of Logic and thinking subfield. No change was observed in (12) basic writing skills /10.71%/ indicator of Writing and drawing skills subfield.

When looking at Figure 29 we can see that at Yerevan 1 preschool the children attending the preschool have significant advantage compared to children not attending the preschool in terms of the same

indicators. In particular, in (13) sensual-motional skills /30.36%/ indicator of Writing and drawing skills subfield. No change is observed for (6) math knowledge /37.50%/ indicator of the General math knowledge subfield. The testing results of children not attending preschool are significantly lower in (12) basic writing skills /10.71%/ indicator of Writing and drawing skills subfield.

Comparing the results of children attending and children not attending the preschool we see that the results of the former are significantly higher, except for in (3) number recognition /100.00%/ indicator of General math knowledge subfield, (10) time reading /28.57%/ indicator of General math knowledge subfield, and (8) letter recognition /14.29%/ indicator of Early reading subfield, where no difference is noted. The increase has been observed mostly in (5) basic math notions /17.86%/ indicator of General math knowledge subfield.

Figure 29. Analysis of Yerevan 1 testing and retesting results

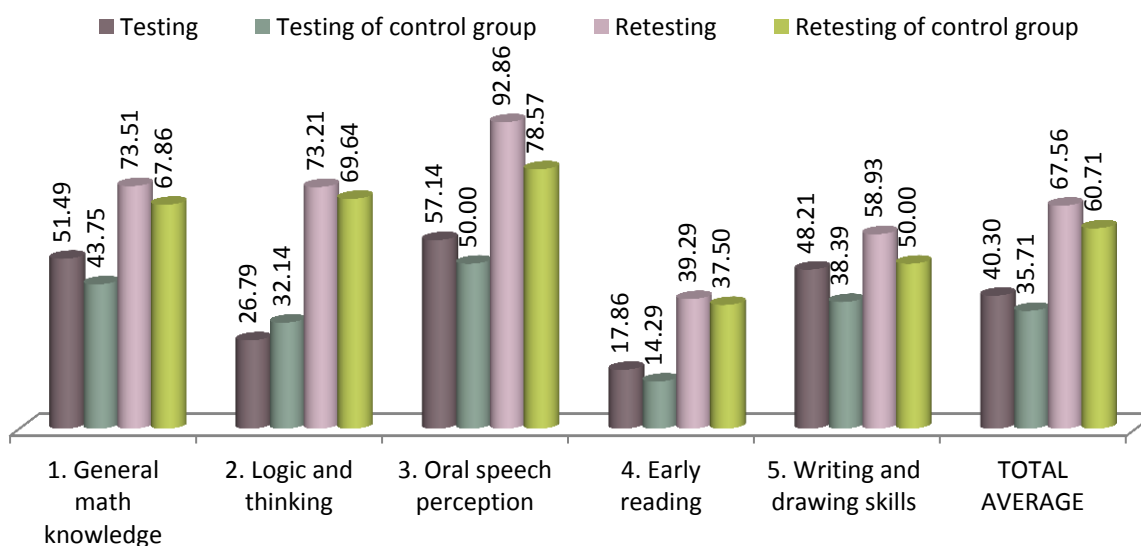


Looking at Figure 30 we see that at Yerevan 1 preschool the testing and retesting results mostly increased in (2) logic and thinking /29.79% -> 73.21%/ subfield.

The testing and retesting results of children not attending the preschool (See Figure 30) we see that the most significant increase is recorded again in (2) logic and thinking /32.14% -> 69.64%/ subfield.

Looking at Figure 30 we see that at Yerevan 1 preschool the testing results of children attending the preschool exceed those of children not attending preschool with the exception of (2) logic and thinking /5.36%/ subfield. Most significant difference is observed in (5) writing and drawing skills subfield.

Figure 30. Comparison of Yerevan 1 children's results by subfields.



Comparing the retesting results of children attending and not attending preschool institutions we can see that children attending preschool institutions get higher results than children in the control group. Significant difference is observed in the (3) *oral speech perception* /14.29%/ subfield.

5.4.2 «Secondary school No. 13 after E.Telman» SNCO (Yerevan 2)

The preschool is created on the basis of school, has one group. According to the budget foreseen by the micro project for one group, the community preschool is classified in the region as one having “average” resources (financial criteria for community classification of the region included in the sample).

During our visits the preschool was working according to the following model:

- 5 days in a week,
- part-time working regime - 09:00-13:00,
- one tutor was working in the preschool during the visit,
- the tutor was trained,
- children were having one hot meal a day brought from home,
- the preschool was heated through central heating system;
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, wardrobe and a water-closet
- Group room, wardrobe and water-closets were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (see Pictures 49 and 50).
- The preschool was provided with permanent cold water.
- The preschool was heated through central heating system.



**Picture 49. Beginning of year, Yerevan 2,
water closet**



**Picture 50. Beginning of year, Yerevan 2, group
room**

Conditions of the group room and working centers were mainly satisfying the defined norms, and were equipped with all necessary items (See Pictures 51). The preschool had wardrobes (See Pictures 52), carpet, tables and chairs, sofa, etc. The group room was light enough. No meal program at the

preschool. The children were served with meal from home once a day. No open playground was available at the preschool.



Picture 51. Beginning of year, Yerevan 2, cabinet



Picture 52. Beginning of year, Yerevan 2, wardrobe

According to the *head teacher* the main purpose of the program was preparing the children for school. Head teacher said that creation of the preschool very important, as no kindergarten in the community was available.

Part time regime was identified by the head teacher as the weakness of the preschool, since the parents were in need of full time regime. Readiness for the school was indicated as the strength of the preschool.

The preschool's building conditions were good. During an in-depth interview the head teacher mentioned that the preschool's renovation was done perfectly, all rooms were utilized and met all required norms. During the focus group discussion the parents mentioned that they were very satisfied with the general conditions of the preschool. As factors supporting the development of the children the building conditions and equipment level in addition to educating were mentioned by them. The tutor mentioned that was a drastic need for an open playground.

The work centers had separated rooms. All centers were equipped. The head teacher mentioned during the in-depth interview that all the centers were supplied with necessary supplies under the program using the websites of the Ministry of Education and Science and the National Institute of Education.

Head teacher and a tutor were working at the preschool. The tutor had a specialization in teaching and psychology. Before becoming a tutor she did not work at all, however she was trained and was skilled in basics of preschool program. The head teacher previously worked as teacher for years, later she was

assigned as acting head teacher and afterwards – was elected as the head teacher. The tutor mentioned that she took part in the training for 5 days, during which both practical and theoretical lessons were held. The training was performed perfectly. She also noted that no new knowledge was obtained, instead she repeated her knowledge once again.

The tutor had summary plan, but she planned the lessons on quarterly basis (according to her, if there were a specific detailed program that would have made everything much difficult for her to implement). She was taking into account the factor of time. The tutor was not providing time for thinking and answering, did not provide connection between the obtained knowledge and real life experiences, she was not assigning tasks to be performed in group. However the tutor was demonstrating individual approach towards the children, all the children were involved in the lesson. The tutor was demonstrating mobility, was praising when children were helping each other. No differences were made among the children regarding gender issues.

The tutor applied a child-centered approach and integrated education approach during the lessons, focusing on games and workout methods. Anyway, she preferred the child centered approach. The tutor was conducted the classes using individual and general approach.

She used to focus on sensory and was paying attention to development of emotional aspects. As of the time of our visit the tutor did not assess the children, she was waiting for more adaptation of children, after which the assessment would have been done.

She noted that the group included both strong and weak children. For the weak children she allowed for self-expression, and the strong ones were helping the weaks.

On a daily basis the tutor was informing the parents regarding the progress of their children. They even had a Facebook page where she was uploading photos and video clips of the lessons, also informing regarding any issues arisen. There was a board for notices in the group room. The tutor was putting the assignments on the board, so that the parents could work with their children at home. The tutor was providing the parents with recommendations on development of the child, and the parents were implementing them.

According to the head teacher, the parents used to be active in the matters related to education of their children, repeating the lessons at home. The head teacher also noted that the Armenian office of Save

the children» provided them with materials regarding how to treat and tutor a child, and the parents were using that literature. Besides, the tutor was also providing the parents with related literature.

The head teacher noted that there is no meal provided at the preschool, and she planned to apply for the meal program to the UN.

The social-economic conditions of the population of the administrative unit is below average. The tutor is of an opinion that the social-economic condition of the family affects the level of development of children. The head teacher was of an opinion that it does not affect at all, since the children are a fantastic. Irrelevant of the fact what is social economic condition of a family, the parents always wanted that their children were better than themselves.

According to the head teacher the trade union of the school was providing a support to the children from socially vulnerable families.

During the focus group discussions held with parents it turned out that the families of participants were composed of 4-7 members. None of six families were enrolled in the list of people getting social benefit. In general, these families were engaged in entrepreneurship and worked at government bodies. The main purpose of children attending the preschool was getting prepared to school and they expressed their gratitude for the fact that the preschool was created, as there was no such institution operating before in the neighborhood. The parents appreciated the building conditions, availability of necessary materials and equipment, the level of education and the attitude of the tutor.

The children of these families were mainly involved in simple housework, were self-sufficient in nutrition, dressing, and washing issues. The parent of the socially vulnerable family noted that their child was teaching his younger brother the material that he used to learn at the preschool.

Mainly mothers were responsible for taking care of the. In the absence of mothers, the grandmothers were caring for the child. The mothers were absent mostly for shopping, taking the older children to trainings, and visiting doctors. The child's daily life was planned by the parents, taking into account the child's wishes if possible.

Parents generally found that their decisions and requirements should have been explained to the child. Any requirement the parents could impose were around discipline, being attentive, and learning with extra effort. A child may be punished for lying, disobeying the adults, conflicting with others, not eating food. Parents often required the children to explain the reason of their faults and were depriving

them from their beloved activity for time being (for example, forbidding from going out to the yard, playing computer games, etc.). The parent of socially vulnerable family noted that they are used to punish through beating the child's face, locking in the room, and in most cases by getting angry on the child.

Since there was no kindergarten in the surroundings almost none of the children attended it. Only one child attended kindergarten, however the parent noted that they were not satisfied due to the fact the child could not socialize there and before attending the kindergarten the child had difficulties in socialization.

According to the parents, the child's development was greatly affected by the parents, the physical surroundings, the education. When teaching their children the parents used to explain and play games.

The parents noted that the conditions of the preschool (building condition and equipment) met the norms and they were very satisfied with it. The teaching materials were available at the preschool and used to be updated regularly. The taught subjects and the methods were satisfactory, and everyone expressed their gratitude for the attitude of the tutor. The parents were only wishing that the day regime was increased in hours, and naturally, provide meal to children. The main reason for that was that many parents could not get job due to short day regime at the preschool. The parents sometimes were providing with materials and food for the lessons, were also helping the tutor with events.

The parents including the parents of socially vulnerable family were not providing any financial support to the preschool, since there was no such need.

According to the head teacher there was no issue of continuity of the preschool.

End of year visit can be described as follows:

The building conditions were satisfactory. Several items, didactic materials, literature were added in the work centers compared to the beginning of the year. The tutor mentioned that she wishes that sewing center and military center was also added (See Picture 53). The head teacher noted regarding the general conditions that everything is in good shape, there is no need to upgrade, or making better, anything. Meantime the head teacher noted that she has applied the municipality for getting support for building an open playground and she is waiting for an answer.

She noted regarding the community the following: "the population of the community is mostly jobless, since the neighborhood consists of working class mostly, and currently no factory is operating". The

parents take their children to the preschool to get them busy, since no kindergarten is available around, and the preschool provides an education and gets the children ready for school.

According to the tutor they have become more disciplined and are ready for the school, they can count. The weakest child has difficulties in perception that was affected by rare attendance of the preschool. The tutor also noted no difference among children based on gender, and added that the group includes both strong and weak boys and girls.

The tutor has paid attention to all areas, however she focused mostly on language since there was an issue for correct pronunciation in the group. The tutor noted that the children are mostly affected by the parents and the surroundings. Less effect is coming from social economic environment and the educational methods and themes.

According to parents due to attending the preschool their children have become literate, disciplined, and socialized. Attending the preschool helped the parents plan their own time more effectively. Two parents noted that they are attempting to find job, however the short day regime does not allow them to find one.



Picture 53. End of year, Yerevan 2, cabinet



Picture 54. End of year, Yerevan 2, water closet

During the interview, parents noted that the children have become more independent, for example, they follow the day regime and know at what time what activity is to follow. The parents noted that at the preschool the materials were rendered in a manner that was understandable and acceptable for the children, as opposed to teaching the children at home. The parents noted that when compared to children not attending preschool their children were more developed.

The parent-preschool connection is also very strong here. Both the head teacher and the tutor noted that the parents are very helpful. The parents participated in the education of the process helping the children learn and repeat the material at home and participated in all events and helped the tutor with organizational matters.

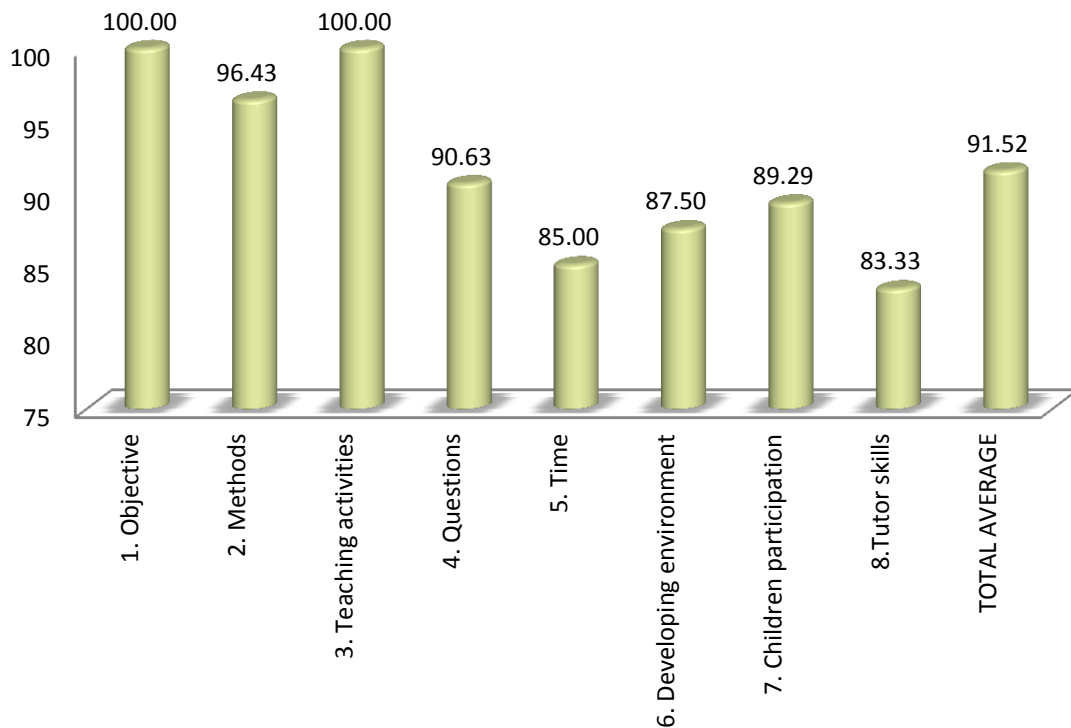
The head teacher did not see any danger to the continuity of the preschool operations and noted that the demand for the preschool gradually increased. She also noted that the trainings should become regular and constantly support the preschool, since the children were educated and got integrated into school at the preschool.

As a recommendation the parents noted that the day regime was to be prolonged and meal was to be served, in addition to establishing new groups for arts, foreign languages, etc.

We learnt from the interviews with the parents of children not attending the preschool that there is a lack of information among the population of this municipal unit. Most of them noted that they do not take their children to the preschool due to unavailability of finance for that.

The Objective and the Teaching activities indicators had the highest values /100.00%/ at the Yerevan 2 preschool. Relatively low results were recorded for the Time indicator /85.00%/ and the Tutor skills /83.00%/. The remaining indicators were in the range of 87.50%-96.43%. The average result for this preschool was recorded at 91.52%.

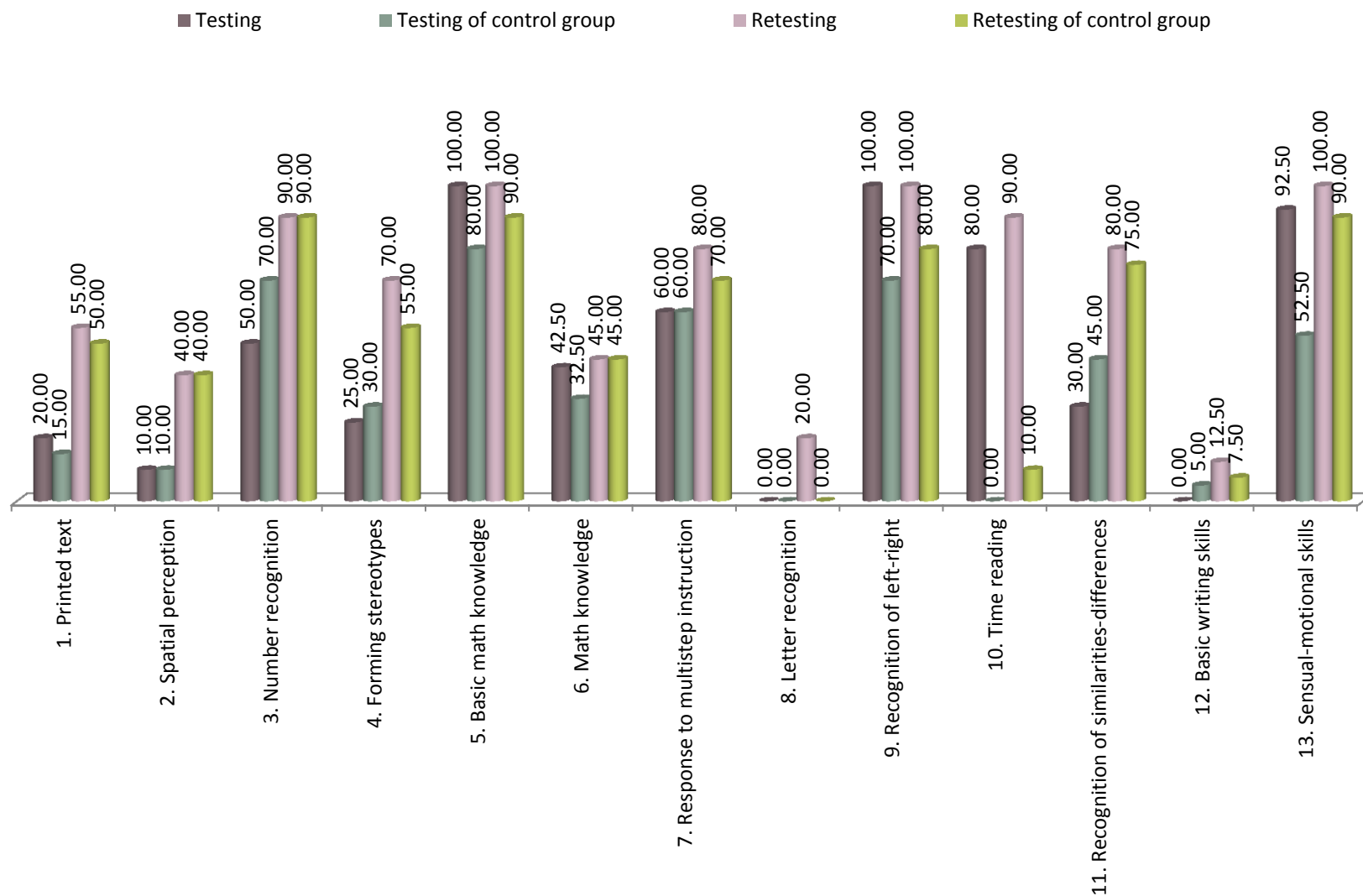
Figure 31. Analysis of observation results of classes at Yerevan 2 preschool



When looking at the testing and retesting results of the preschool children in Yerevan 2 in Figure 32, we can see that a significant increase has been observed in almost all indicators, except for (5) basic math notions /100%/ indicator of General math knowledge subfield, (9) recognition of left-right /100.00%/ indicator of General math knowledge subfield that were assessed at maximum. The most significant increase was recorded in (4) forming stereotypes /25.00% -> 70.00%/ indicator of Logic and thinking subfield, and in (11) recognition of similarities-differences /30.00% ->80.00%/ indicator of Logic and thinking subfield.

According to the analysis of testing and retesting results of children not attending preschool, there is no difference only for (8) letter recognition /0.00%/ indicator of Early reading subfield. The maximal increase was observed in (1) printed text /15.00%->50.00%/ indicator of the Early reading subfield, and in (13) sensual-motional skills /52.50% -> 90.00%/ indicator of Writing and drawing skills subfield.

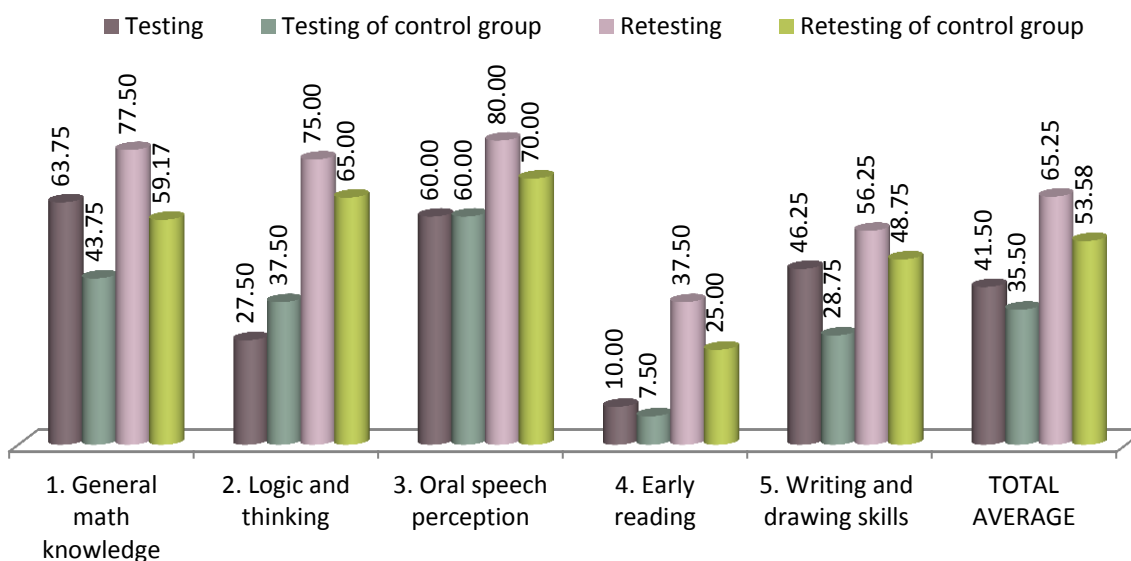
Figure 32. Analysis of results of testing and retesting of Yerevan 2 children



Based on the Figure 32, the testing results of children attending Yerevan 2 preschool mostly exceed the testing results of children not attending preschool with the exception of (2) spatial perception /10.00%/ indicator of General math knowledge subfield, (7) response to multistep instructions /60.00%/ indicator of the Oral speech perception subfield, (8) letter recognition /0.00%/ indicator of Early reading subfield. A significant difference was noted in (10) time reading /80.00%/ indicator of General math knowledge subfield. Some of the indicators of children attending the preschool were lower than the results of the children not attending the preschool. In particular, the most significant difference was observed in (3) number recognition /20.00%/ indicator of General math knowledge subfield.

Comparing the retesting results of children from target and control groups, we see that at the year end the performance of the target group regarding all the indicators is higher than that of the control group. Difference has been mainly observed in (10) time reading /80.00%/ indicator of General math knowledge subfield. No change recorded for 3 indicators, i.e. (2) spatial perception /40.00%/ indicator of General math knowledge subfield, (3) number recognition /90.00%/ indicator of General math knowledge subfield, and, (6) math knowledge /40.00%/ indicator of the General math knowledge subfield.

Figure 33. Comparison of Yerevan 2 children testing results by subfields



When looking at the testing and retesting results of children attending the Yerevan 2 preschool (Figure 33), we can see all subfields demonstrated an increase. Most significant difference has been observed in (2) spatial perception /27.50% -> 75.00%/ indicator of General math knowledge subfield.

In Figure 33 we can see that again all subfields demonstrated an increase in testing and retesting results of control group at Yerevan 2. Most increase was observed in (1) printed text /37.50%->65.00%/ indicator of the Early reading subfield.

Looking at Figure 33, we can see that testing results of children attending preschool exceed testing results of children not attending preschool institutions for all subfields, except for (2) spatial perception /10.00%/ indicator of General math knowledge subfield. Target group results mostly exceeded control group results regarding (1) printed text /20.00%/ indicator of the Early reading subfield.

Comparing the retesting results of children attending and not attending preschool, we can see that the results of the children attending preschool are higher than the result of the children not attending preschool for all indicators.

5.4.3. «Yerevan secondary school No. 55 after A. Chekhov» SNCO (Yerevan 3)

The preschool was established on the school basis and has one group of children. According to the budget foreseen by the micro project for one group, the community preschool is classified in Yerevan as one having “large” resources (financial criteria for community classification in Yerevan included in the sample).

During our visits the preschool was working according to the following model:

- 5 days in a week,
- part-time working regime - 09:00-12:30,
- one tutor was working in the preschool,
- the tutor was trained,
- the meal was provided by the parents from home,
- the preschool was heated through central heating system,
- the preschool did not have sleeping facilities.

General description of the preschool conditions is as follows:

- The preschool has been provided with a group room, a playroom, wardrobes and a water-closet (the toilet bowls were located in separate cameras).
- Group room, playroom, wardrobes, and water-closets were in correspondence with the established requirements of renovation, security, children size, accessibility and cleanliness (as no tutor assistant was envisaged in the preschool within the Program framework, the tutor during the classes was not able to keep track of the hygiene of children after using the toilet) (see Pictures 55 and 56).
- The preschool was provided with permanent cold water.
- The preschool was heated through central heating, however on the visit day there was no heating due to an incident with the tube.



Picture 55. Beginning of year, Yerevan 3, water closet

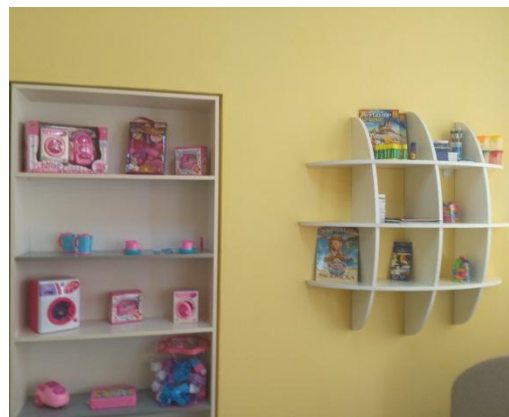


Picture 56. Beginning of year, Yerevan 3, group room

Conditions of the group room, playroom, and working centers were satisfying the defined norms and were mostly equipped enough. As it relates to availability of centers only biology center was not in satisfactory shape (See Picture 58). The preschool had wardrobes, armchair, tables and chairs, blackboard, TV set, etc. The preschool did not have open playground.



Picture 57. Beginning of year, Yerevan 3, wardrobes



Picture 58. Beginning of year, Yerevan 3, cabinet

According to the head teacher the main purpose of the program was involving the children of preschool age since as it was mentioned in the program development of the project that the purpose was to become an educational complex, and the preschool is the first step for preparing for the school as part of inclusive educational system. The preschool carries the requirements and methods set by school as the children attending the preschool go through environment similar to school and as a result they become ready for the first class and the teacher's work will require less effort. Creation of the preschool makes it reachable for the local community as the community population is high density. There are institutions for daycare and fee based kindergartens in the surroundings of Antarayin, Zarubyan and Sarmen area, however no state financed kindergarten is available.

According to the head teacher it is too early to mention any weakness of the preschool and the time will show.

The preschool's building conditions were good. The tutor mentioned that the building conditions (i.e. renovation, heating, water supply, cleanness) are excellent. During the focus group discussion the parents mentioned that they were very satisfied with the general conditions of the preschool. They noted that the only issue was the absence of meal at the preschool, the meal was brought from home. One of the tutors told that the heating was to be provided by one heater in winter.

All necessary work centers were available at the preschool. The most equipped ones were the art and construction centers, except for biology center where was only one item available, i.e. a globe.

Head teacher and a tutor were working at the preschool. The tutor was working at school as a teacher and was working in both places on part time bases. She was trained and was skilled in basics of the educational program. The head teacher previously worked at secondary school No. 51 as an Armenian language and literature teacher, then as a deputy director for tutoring. In June 1994 she was elected as the principal of the school after Chekhov.

The training was very interesting and knowledgeable. The tutor mentioned that the training was well organized, she liked the lectures very much. She received new knowledge (games, workouts, songs on weekday and seasons names, etc.).

The tutor had *summary plan*, the lessons were planned on daily basis. She mentioned that it would be much easier if she was provided with clear program, with detailed themes, games and lessons to organize. She was applying lesson presentation methods, was explaining and showing pictures, cards, and using game elements and methods. The tutor also applied group work and the methods used during the class were successfully utilized. She applied an individual approach towards the children. The timing norms were not followed by the tutor during the lessons and she did not apply subsequent use of techniques directed to perception of the same element. No differences were made among the children regarding gender issues.

The tutor applied both the child-centered approach and the integrated teaching approach during the lessons. She focused on sensory, emotional, and motoric fields. She was praising the children with words and was not using materials with tutor observations.

The strongest child of the group according to the tutor was grasping very fast and knew the digits, and for the weakest child she was of an opinion that it was too early to make an assessment. The average capabilities of the group was assessed as good and she noted that there is no difference in the level of capabilities based on gender of the child.

According to the head teacher, she cannot assess the social economic situation of the families of community since she does not have any indicator relating to getting any assistance, involvement and provision of financial assistance. As it relates to the effect of social economic conditions on the level of development of children, she mentioned that logically speaking it should affect, however as she does not have any measured indicators with this regard, she cannot provide any answer on it. The tutor said that she cannot tell if there are socially vulnerable families at the preschool yet, since she have not

noted so far. The tutor assessed the social economic situation on the community as good and noted that it does not have any effect on the level of children's development.

The main source of income in the families was employment and entrepreneurship. The parents mentioned in the focus group discussions that none of them were included in the social benefit program of the government and all expressed their readiness for helping the preschool.

According to the head teacher no meal was provided by the program, however some of the parents applied to her with such request and she found out that since the day regime of the preschool is short it is not allowed to organize meal serving. She noted that meal serving is wishful however it is not a must. Two different opinions regarding the meal serving were in the preschool: one was that the parents wanted the meal and were ready to pay for it, and the other was that there is no need in it. In the meantime, the parents were ready to pay for foreign language lessons if introduced.

During the focus group discussions held with *parents* it turned out that the families of participants (six parents) were composed of 3-4 members. The main purpose of children attending the preschool was getting education, since the parents were of an opinion that the children would get the necessary knowledge at the preschool. The parents were satisfied with the tutor and her attitude, and with the conditions at the preschool. They noted that the preschool facilities and the level of equipment and materials meets the norms. They have not noted any weaknesses and drawbacks, and noted the children are treated very warmly and attentively.

The children of these families were mainly involved in simple housework, were cleaning after themselves. One parent noted that her child was cleaning after himself with difficulty. In most cases, they were self-sufficient in nutrition, dressing, washing, using water closet. The children could not tie their shoes, make shopping and take bath on their own, since they were of small age and the parents would not allow to.

Mainly mothers were responsible for taking care of the children, and for tutoring – the both parents. The non-working mothers were mostly present at home. In the absence of mothers, as was also the case with working mothers, mostly the grandmothers were caring for the child.

Parents generally found that their decisions and requirements should have been explained to the child and the needed to talk to the children all the time. One fresh example mentioned by a parent was related to taking a toy from an apartment where they went as a guest, where the parent explained the

child that this was not acceptable behavior and the child understood it. Although the parents were not used to punishing, a child may be punished for lying, baiting people, playing games on computer excessively, playing on a smartphone, etc. Parents often punished the child through not allowing the child to do what they liked to do for sometimes.

The parents participating in the discussion noted that all the children of the preschool attended a kindergarten or a college, from one week to two years. The parents of children who attended for a short period of time noted that the children could not get used to the kindergarten and that was the reason that they took the children to the preschool. Those who attended kindergarten or college for long period of time used to learn digits, letters, and English there, however the parents decided to take the children to this preschool due to the fact that he planned to take their children to this school and it would be useful that the children had an opportunity to get to know each other before the start the first class there.

According to the parents, the child's development was greatly affected by physical environment and the parents. Less effect was mentioned for teaching methods. The parents used to demand from their children to behave, not conflict, be attentive and socialize with other children.

In general, the parents were very satisfied with this preschool's condition and the tutor, and noted that the preschool met their expectations, and even exceeded those. Except for getting their children ready for the school, the parents had no other expectations.

During the focus group discussions it became clear that the parents were using game method to teach their children. This was mostly done due to the wish of their children, as they were the initiators of the process.

The parents noted that there is a need for groups for learning foreign languages, and they were ready to pay for it. Part of the parents wished that meal was served at the preschool, and they were ready to pay for it.

According to the head teacher, there was no issue of continuity of the preschool. However, she noted, there might be a need for extra area for the preschool as the demand for it was constantly increasing.

End of year visit can be described as follows:

Adding to what was mentioned at the beginning of the year the head teacher mentioned that no weaknesses can be identified and the project is justified and can be continued. In the meantime, it is

necessary to mention that there was a significant risk for continuity related to getting a license for operations. She noted that during the year their application for licensing of the preschool established at the secondary school No. 55 after A.Chekhov were declined two times. She noted that after the first decline they took corrective measures and applied the second time, however, after they were declined the second time, the preschool was not allowed do anything further, and the activities of the preschool would be halted soon: “Currently, as the application for licensing was declined, we consider that the activities are to be terminated and no newcomers are accepted anymore, and when the project end will come, we will declare that the preschool is closed down”.

The head teacher could not answer regarding what was the reason for not issuing the license as the research made before the preschool was established indicated positive results for starting the project at the school. The head teacher also wished that there were guarantees before the preschool was created, as it happened that the preschool successfully operated during a year without having an idea that the project could be terminated soon.

To avoid such situations the head teacher suggested that the licensing agency researches the school building conditions beforehand before the project starts and that it provides support in directing for further operations. In case there are such guarantees no institution would face similar problems and the population of the community would not be disappointed.

In the year-end items were added at the work centers, including didactic materials, literature, flyers (See Pictures 59 and 60). In the meantime, both the head teacher and the tutor mentioned that the work centers need to be replenished regularly to keep up with the progress.

The head teacher that there is a need for replenishment of supplies of literature materials.

The tutor mentioned that capabilities of the children are not different based on their gender. The strongest child of the group was fully literate and could count, could differentiate the pairs and odds, start of the sentence and end of sentence, and the weakest child could was partly literate and could not back count. As it relates to the average development level of children the tutor assessed it at above average level as the children are mostly literate, know digits, are disciplined and are fully ready for the school.

The parents noted in the year-end that all their expectations were met and they are very satisfied with the preschool since during the year huge changes were observed in the level of development of their

children. In particular, the children learned the letters, digits, to form sentences, poems, sing, dance, became social and friendly and were fully integrated in the school and were already familiar with the school requirements and environment: “the school has become a friendly and comfortable environment for the children”. They noted also that as a result of taking the children to the preschool they obtained spare time and were secured that their children were in a secured environment.



Picture 59. End of year, Yerevan 3, cabinet



Picture 60. End of year, Yerevan 3, equipment center

The parents noted huge differences. Previously they were self-contained, afterwards they become open minded and behaved correctly. The parents noted significant difference in development in the children attending and children not attending the preschool.

The link between the parents and the preschool was strong enough and the parents used to participate in the teaching and tutoring, in the open classes, different events, and helped the children repeat the materials at home. The parents noted that during the events they attended the preschool and helped the tutor decorate the scene and prepare flyers.

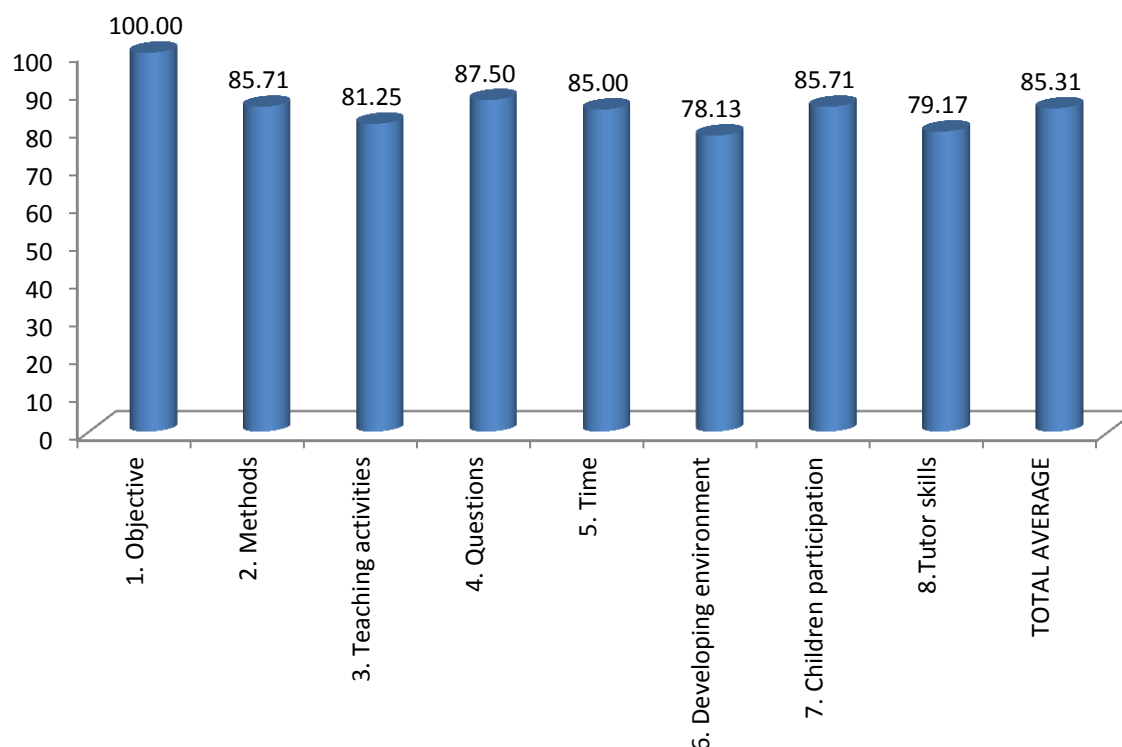
The parents suggested that the next year the preschools day regime was prolonged little bit so that they could start employment.

During the interview with parents of children not attending preschool it became clear that lack of information was also a problem in this case as well, as all the interviewed parents mentioned that they

had no capability to take their children to a preschool from financial perspective. Only one of these parents mentioned another reason for not taking the child to the preschool, i.e. no need for it at all.

In Figure 34 one can see Yerevan 3's results of observation of classes. Objective criteria have maximum representation /100.00%/. The lowest result is with Developing environment criteria /78.13%/. The remaining criteria are in the range of 79.17%-87.50%. The average result is 85.31%.

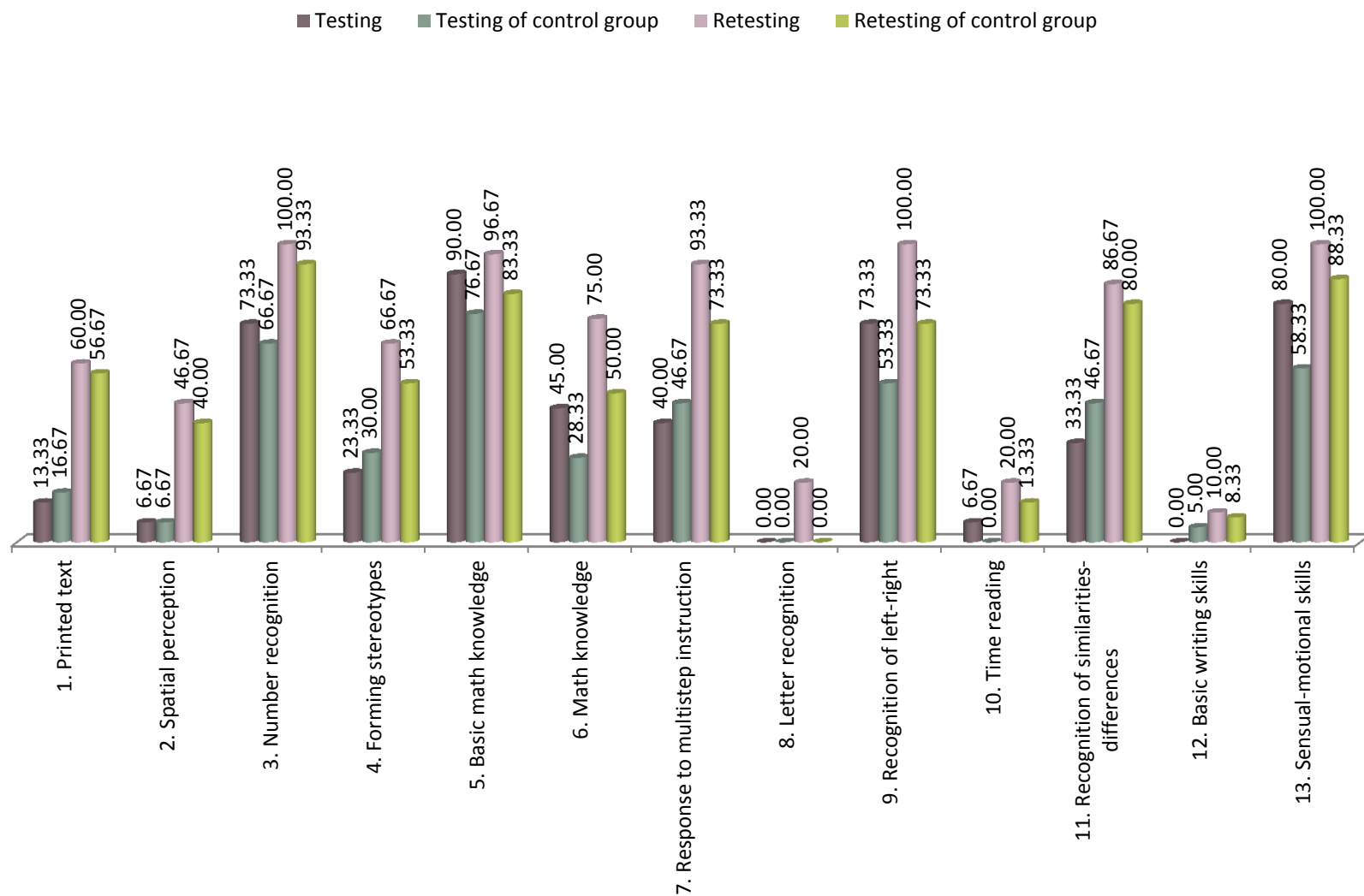
Figure 34. Analysis of observation results of classes at Yerevan 3 preschool



When looking at the testing and retesting results of the preschool children at Yerevan 3 in Figure 35 we can see that a significant increase has been observed in (7) response to multistep instructions /40.00% -> 93.33%/ indicator of the Oral speech perception subfield, and (11) recognition of similarities-differences /33.33% ->86.67%/ indicator of Logic and thinking subfield.

The retesting of children of the control group at Yerevan 3 indicate that the retesting results mostly exceed the testing results (with the exception of (8) letter recognition /0.00%/ indicator of Early reading subfield) in (1) printed text /16.67%->56.67%/ indicator of the Early reading subfield, (2) spatial perception /6.67% -> 40.00%/ indicator of General math knowledge subfield, and (11) recognition of similarities-differences /46.67% ->80.00%/ indicator of Logic and thinking subfield.

Figure 35. Analysis of Yerevan 3 children testing and retesting results



Looking at Figure 35, we can see that the testing results of children Yerevan 3 exceed the testing results of children not attending preschool regarding all indicators, except for (2) spatial perception /6.67%/ indicator of General math knowledge subfield, (8) letter recognition /0.00%/ indicator of Early reading subfield which are the same. The most positive deference was observed in (13) sensual-motional skills /21.67%/ indicator of Writing and drawing skills subfield. The results of children attending the preschool are mostly lower of the results of the control group in (11) recognition of similarities-differences /13.33%/ indicator of Logic and thinking subfield

Analysis of testing and retesting results of preschool children at Yerevan 3 (Figure 35) shows that maximum increase was recorded in (7) response to multistep instructions /40.00% -> 93.33%/ indicator of the Oral speech perception subfield, and (11) recognition of similarities-differences /33.33% -> 86.67%/ indicator of Logic and thinking subfield.

The retesting results of children in control group mostly exceed the testing results (with the exception of (8) letter recognition /0.00%/ indicator of Early reading subfield) in (1) printed text 16.67% -> 56.67%/ indicator of the Early reading subfield, (2) spatial perception /6.67% -> 40.00%/ indicator of General math knowledge subfield, (11) recognition of similarities-differences /46.67% -> 80.00%/ indicator of Logic and thinking subfield. There was no change in (4) *early reading* /20.00%/ subfield.

Figure 35 shows that the testing results of children attending Yerevan 3 exceed the testing results of children not attending preschools, except for (2) spatial perception /6.67%/ indicator of General math knowledge subfield, and (8) letter recognition /0.00%/ indicator of Early reading subfield that are the same in both cases. The most positive change is obvious for (13) sensual-motional skills /21.67%/ indicator of Writing and drawing skills subfield. The results of children attending the preschool are lower of the results of the control group in (11) recognition of similarities-differences /13.33%/ indicator of Logic and thinking subfield

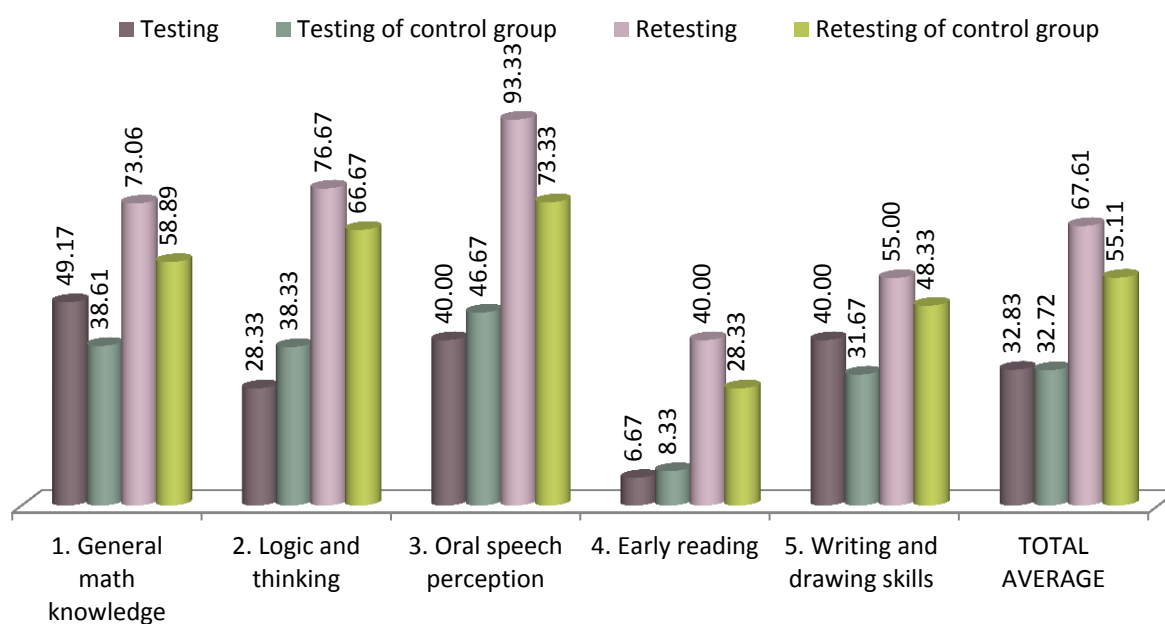
Comparing the retesting results of children from target and control groups, we see that the performance of the target group is higher than that of the control group. The biggest difference is in (6) math knowledge /25.00%/ indicator of the General math knowledge subfield, and ((9) recognition of left-right /26.67%/ indicator of General math knowledge subfield.

Analysis of testing and retesting results of preschool children at Yerevan 3 (Figure 36) shows that maximum increase was recorded in (3) oral speech perception /40.00%→93.33%/ subfield.

The testing and retesting results of children in control group (Figure 36) have mostly increased in (2) *logic and thinking* /38.33%→66.67%/ subfield. There was no change in (4) *early reading* /20.00%/ subfield.

Figure 36 shows that the testing results of children attending Yerevan 3 exceed the testing results of children not attending preschools, except for (1) general math knowledge /10.56%/ and (5) writing and drawing skills /8.33%/ subfields. The most positive change is obvious for (2) logic and thinking /10.00%/ subfield.

Figure 36. Comparison of Yerevan 3 children results by subfields

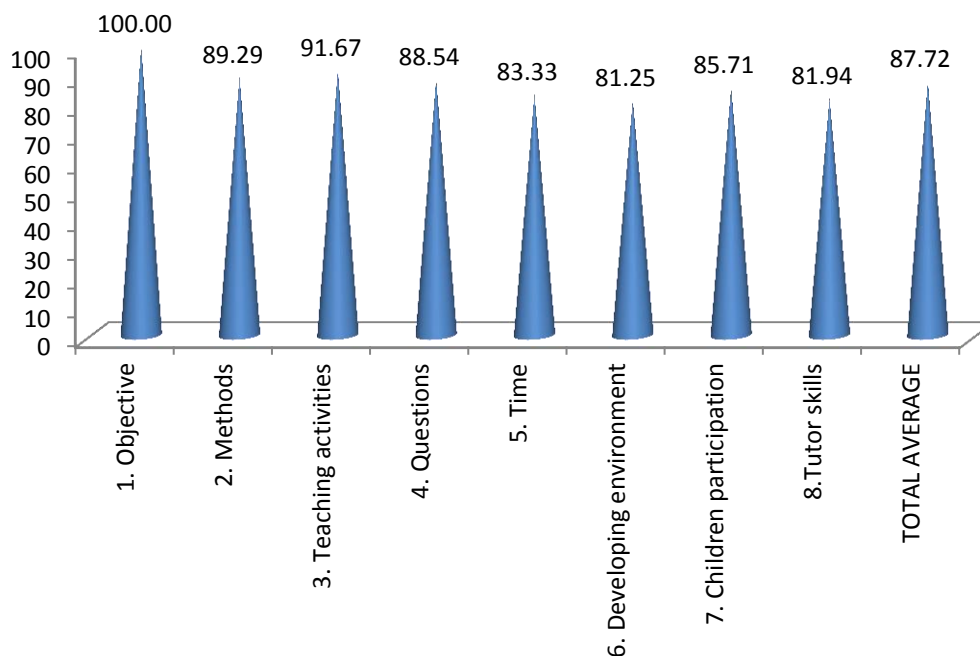


Comparing the retesting results of children from target and control groups, we see that the performance of the target group is higher than that of the control group.

5.4.4. Generalized analysis

Of the three preschools in Yerevan the highest results were recorded in Yerevan 2. In general, the program was quite successfully implemented in all three preschools. The Objective criterion has the highest performance level /100%/. The lowest result was recorded in Developing environment criterion /81.25%/. The remaining were in the range of 81.94%-91.67%, and the overall average was 87.82%.

Figure 37. Generalized analysis of class observation results in the preschools of Yerevan

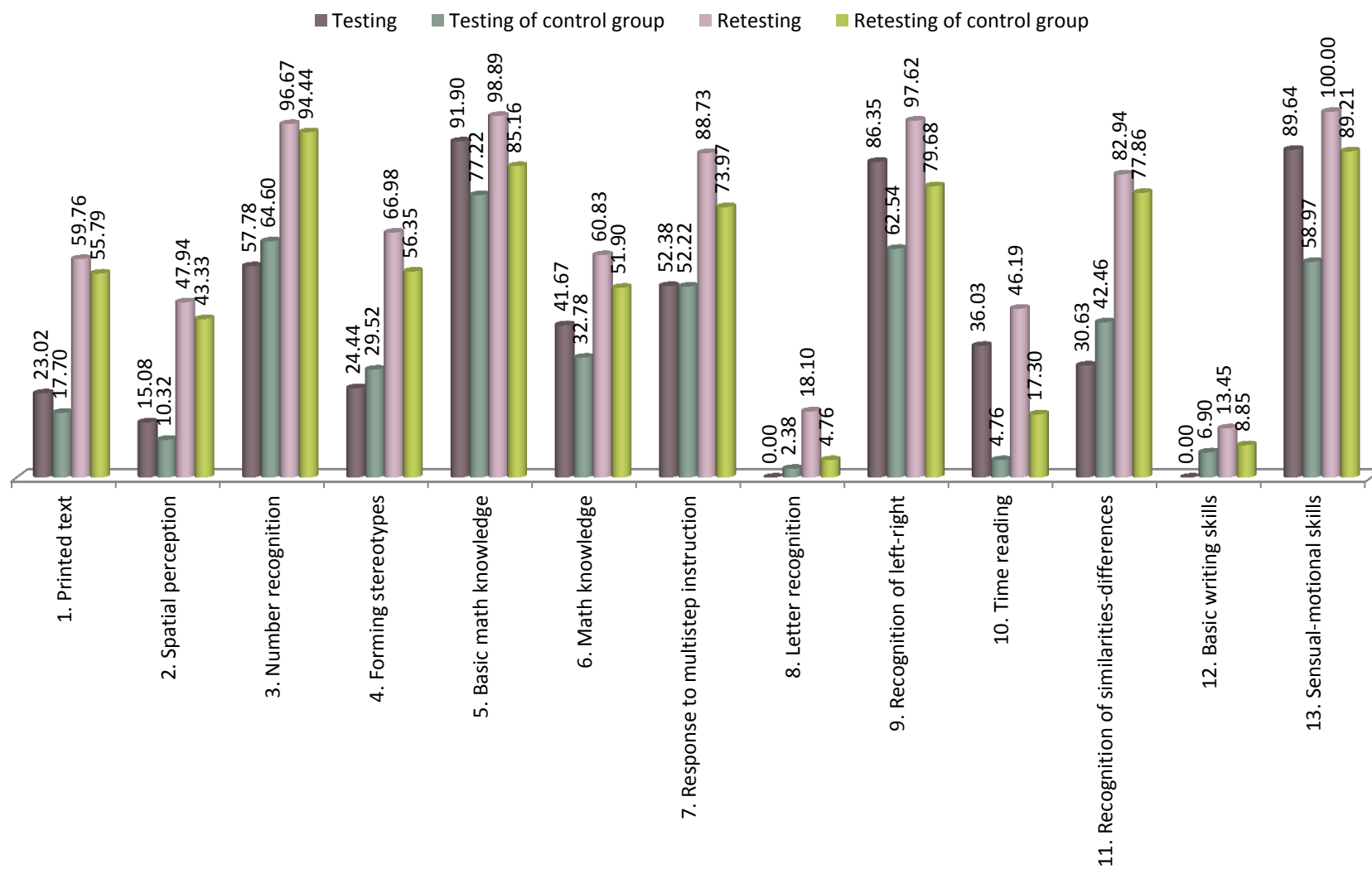


The analysis of the testing and retesting results of preschool children in Yerevan (figure 38) shows that there is an increase in all the indicators. The most significant increase has been recorded in (4) forming stereotypes /24.44% -> 66.98%/ indicator of Logic and thinking subfield and (11) recognition of similarities-differences /30.63% ->82.94%/ indicator of Logic and thinking subfield.

The retesting results of children not attending preschool in Yerevan also exceeded the testing results. A significant increase has been recorded in (1) printed text /17.70%->55.79%/ indicator of the Early reading subfield, and (11) recognition of similarities-differences /42.46% ->77.86%/ indicator of Logic and thinking subfield.

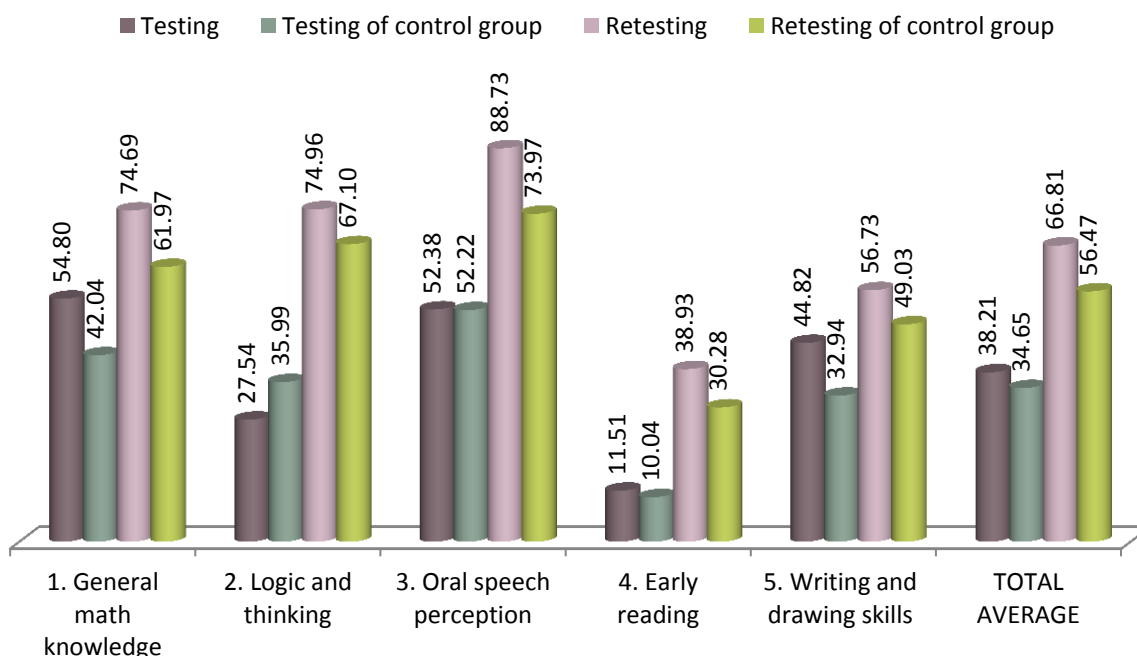
Looking at the figure 38, we can see that the testing results of the children attending preschool are mostly higher than the testing results of the children not attending preschool, except for (3) number recognition /6.83%/ indicator of General math knowledge subfield, (4) forming stereotypes /5.08%/ indicator of Logic and thinking subfield, (11) recognition of similarities-differences /11.83%/ indicator of Logic and thinking subfield, (8) letter recognition /2.38%/ indicator of Early reading subfield, (12) basic writing skills /6.90%/ indicator of Writing and drawing skills subfield. The difference is especially significant regarding (10) time reading /31.27%/ indicator of General math knowledge subfield.

Figure 38. Analysis of children testing results in Yerevan by subfields



Comparison of the retesting results of children attending and not attending preschool in Yerevan shows that children attending preschool have higher results by all the indicators than children not attending preschool. The difference is significant regarding the (10) time reading /28.89%/ indicator of General math knowledge subfield.

Figure 39. Analysis of children testing results in Yerevan by subfields



Looking at figure 39, we see that the preschool program in Yerevan is implemented effectively. There is a positive dynamics in the development level of children involved in the program, however the difference in development level between the children attending and not attending preschool is not significant.

6. ANALYSIS BY INDICATORS

This subsection will introduce more detailed analysis of quantitative research, presented by the main criteria of children testing and class observation.

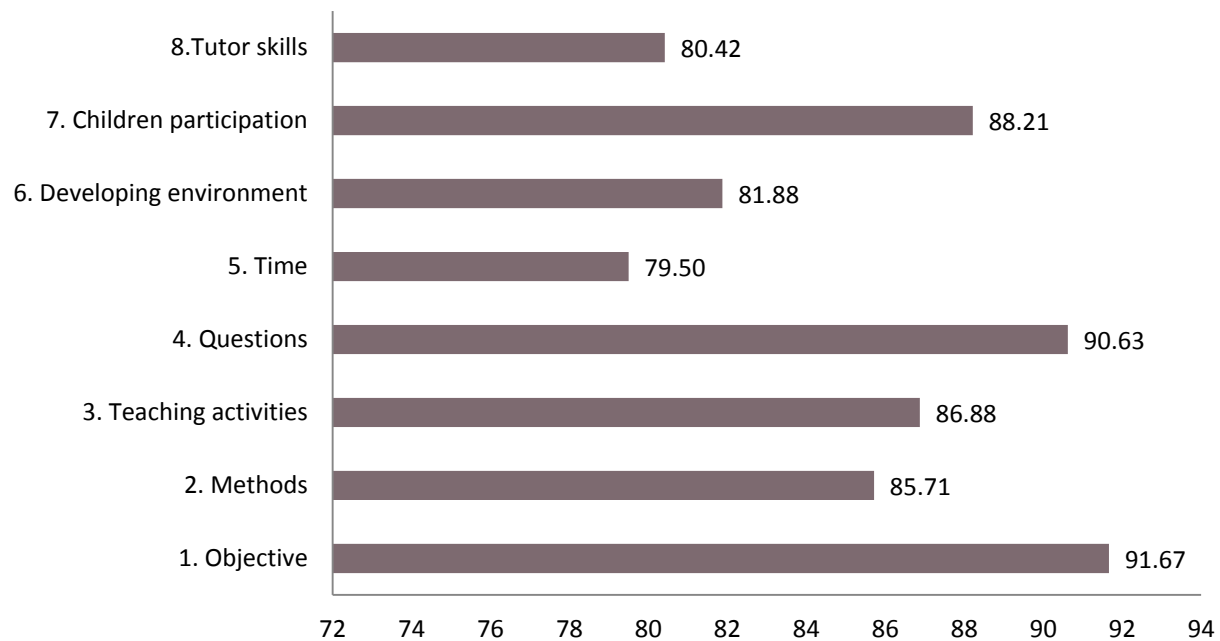
The results of Gegharqunik region include only the results of preschool of Tsaghkunk, the only preschool in the region. The remaining three regions' results include the average results of three preschools created in each of those three regions. Therefore, no comparison analysis will be presented between Gegharqunik and those three regions.

6.1. Analysis of class observation by criteria

The analysis of class observation cards was implemented by eight criteria included in the card. Firstly, we present the averaged factors of criteria formation for all the preschools.

Based on the Figure 40, all criteria are highly performed in the preschools and are in the range above 80.42%, except for Time criterion /79.50%/. Objective criterion /91.67%/ has the highest level of performance.

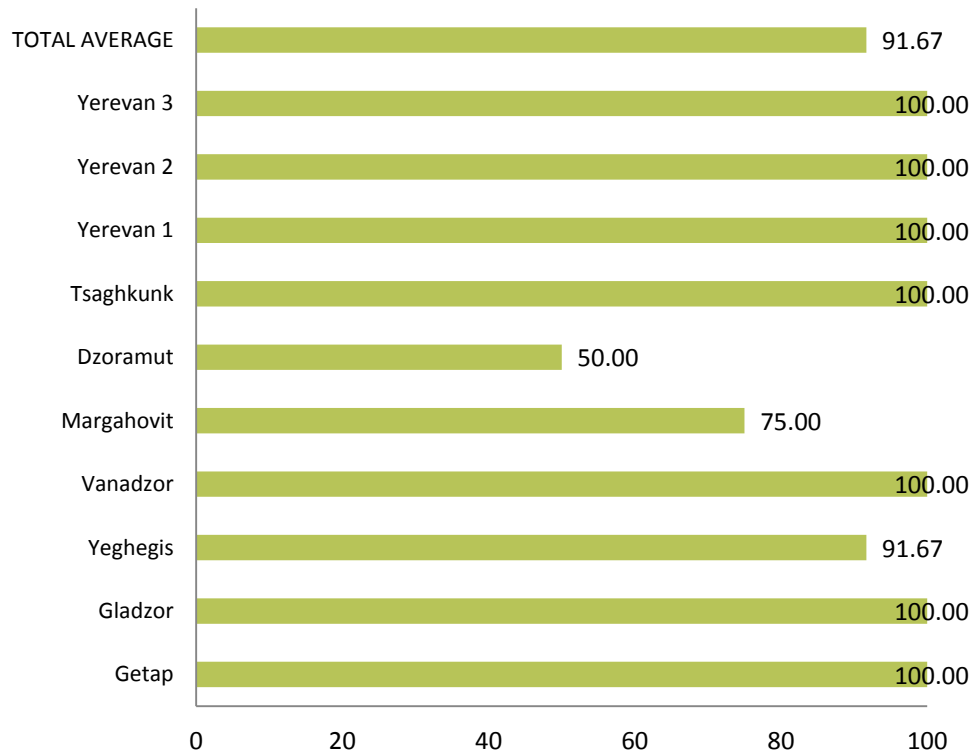
Figure 40. General analysis of all the criteria



The presented first criterion is *Objective*. During the analysis of class observations, the following was taken into consideration: clarity of the objective, its formulation, simplicity, structural compliance of a class with the objective set, compliance with criteria and peculiarities of children age, as well as exact planning of a class/lesson and availability of a teaching agenda.

The Figure below introduces the analysis of *Objective* criterion for ten preschools.

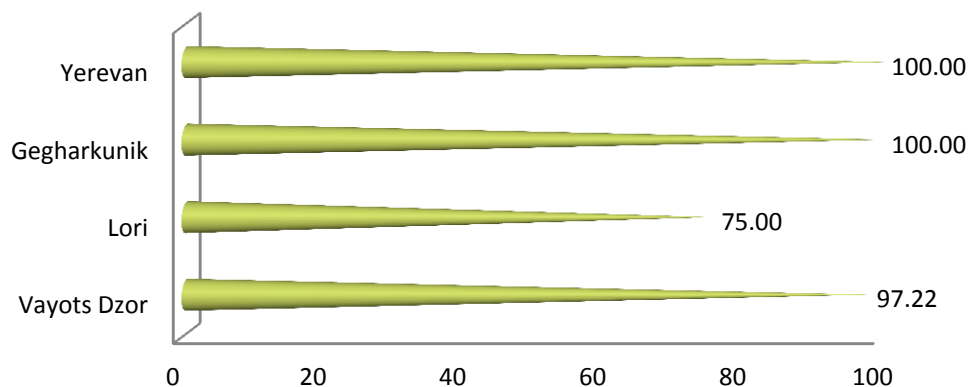
Figure 41. Analysis of *Objective* criterion by all preschools



According to Figure 41, Objective criterion has the highest level of performance /100.00%/ in Getap, Gladzor, Vanadzor, Tsaghkunk, Yerevan 1, Yerevan 2, and Yerevan 3. The lowest result was recorded in Dzoranut /50.00%/, Margahovit /75.00%/ and Yeghegis /91.67%/.

The next Figure presents Objective criterion by regional analysis.

Figure 42. Analysis of *Objective* criterion by regions

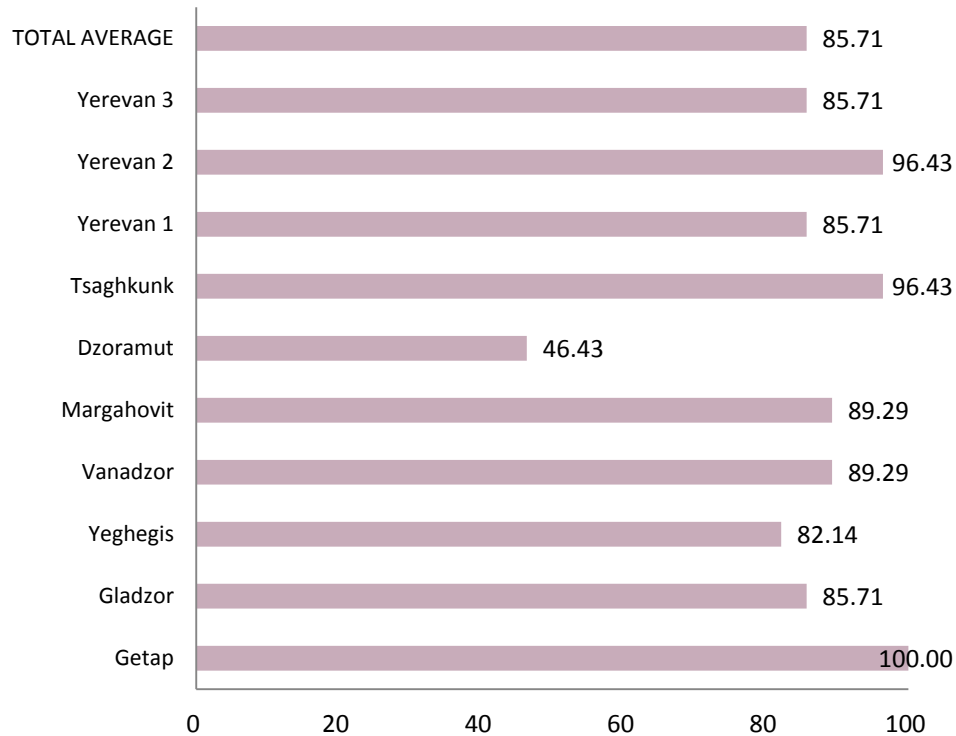


Based on the Figure, this criterion is highly performed in Yerevan /100.00%/. Comparatively lower level of performance is in Vayots dzor /97.22%/ and the lowest – in Lori /75.00%/.

The second criterion observed during the classes was *Methods*. During the analysis of class observations, the following was taken into consideration: compliance of methods with the class objective, content, peculiarities of children age, their level of preparedness, combination of different approaches during classes, provision of didactic materials, game elements, etc.

The following Figure introduces the analysis of Methods criterion for all ten preschools.

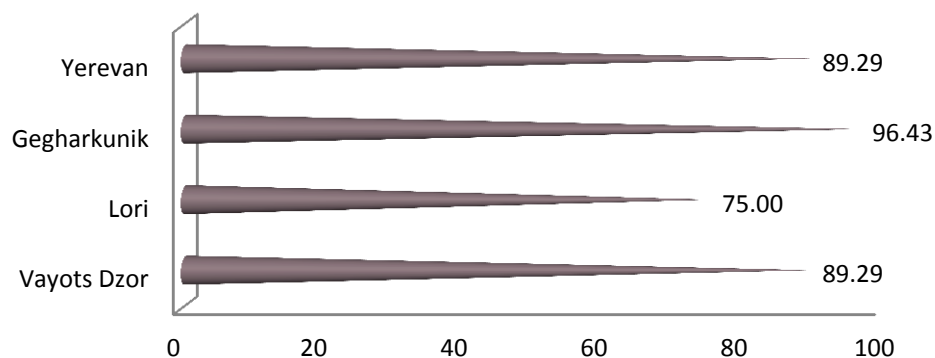
Figure 43. Analysis of *Methods* criterion by preschools



According to the presented figure, this criterion has maximum performance in Getap. It has been highly performed in the preschools of Yerevan 2 and Tsaghkunk /96.43%/, while the lowest level of performance is recorded in the preschool of Dzoranut /46.43%/.

The next Figure presents *Methods* criterion by regional analysis.

Figure 44. Analysis of *Methods* criterion by regions

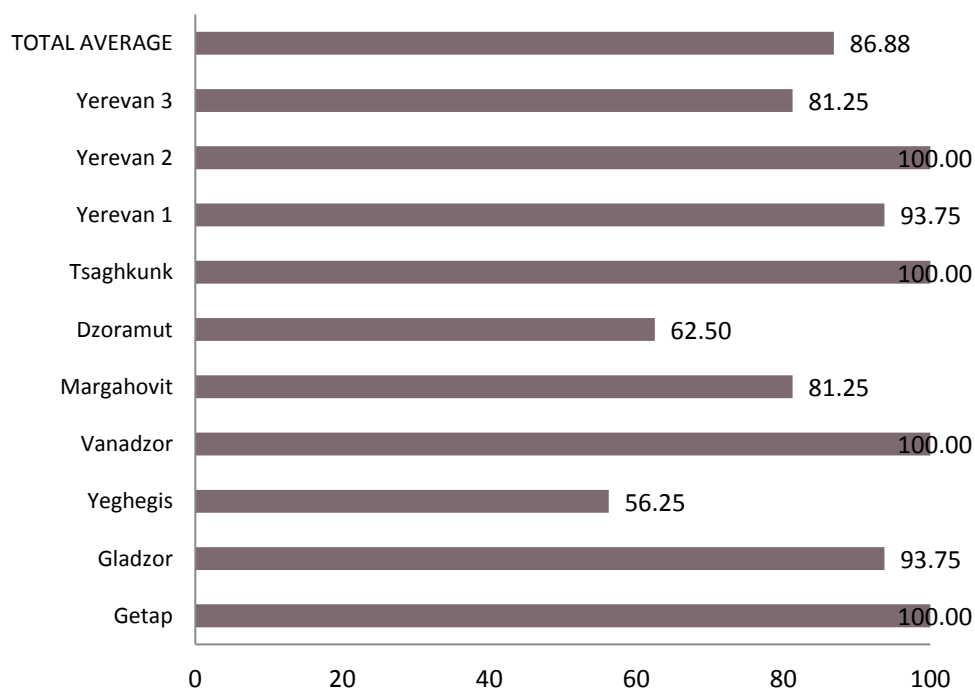


According to Figure 44, none of the regions has the maximum level of performance for *Methods* criterion. The highest level of performance has been recorded in Vayots Dzor and Yerevan /89.29%/, while the relatively lowest one has been in Lori region /75.00%/.

The next criterion is *Teaching activities*, during the analysis of which, the following was taken into consideration: planned variety and shifts of actions, implementation of various exercises and assignments, activation of different senses for the most complete understanding, etc., intended for in-depth perception of the learning material.

The following Figure introduces analysis of *Teaching activities* criterion for all ten preschools.

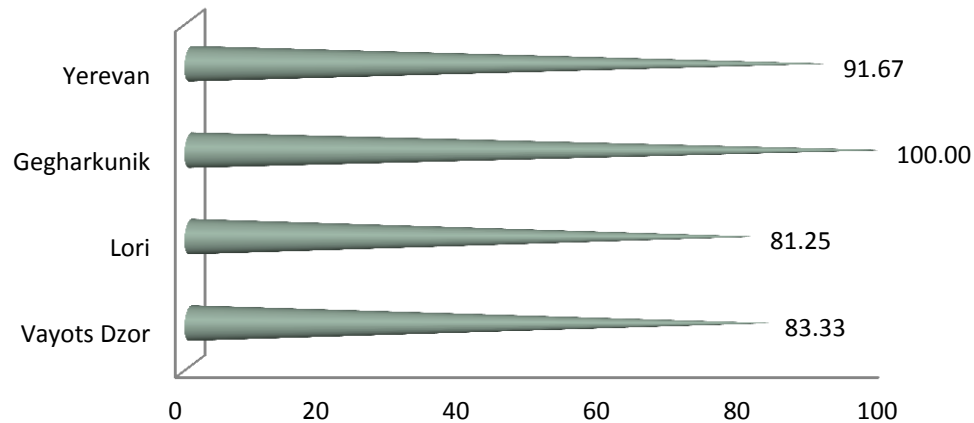
Figure 45. Analysis of *Teaching activities* criterion by preschools



According to the Figure 45, the maximum level of performance for *Teaching activities* criterion has been recorded in Getap, Vanadzor and Yerevan 2 preschools /100.00%/. A relatively lower level of performance has been recorded in the preschools of Yeghegis /56.25%/ and Dzoramut /62.50%/.

The next Figure presents *Teaching activities* criterion by regional analysis.

Figure 46. Analysis of *Teaching activities* criterion by regions

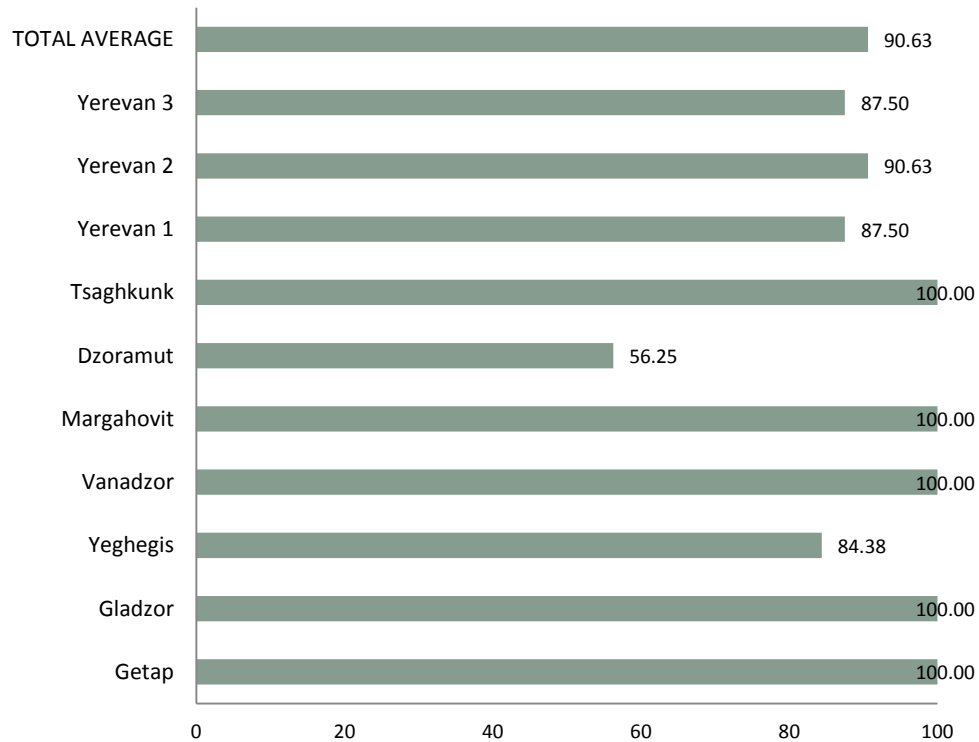


Based on the Figure above, *Teaching activities* criterion has quite high level of performance in all three regions /above 80.00%/. The maximum level of performance has been recorded in Yerevan /91.67%/, and the lowest - in Lori /81.25%/.

The next criterion of class observation card is *Questions*. During the assessment of this criterion, the following was taken into consideration: peculiarities of formulating questions /clarity, simplicity, correspondence to the material, etc./, correspondence to children age, logical structure, direction towards promoting analyzing, expressing and thinking abilities, etc.

The following Figure introduces analysis of *Questions* criterion for all ten preschools.

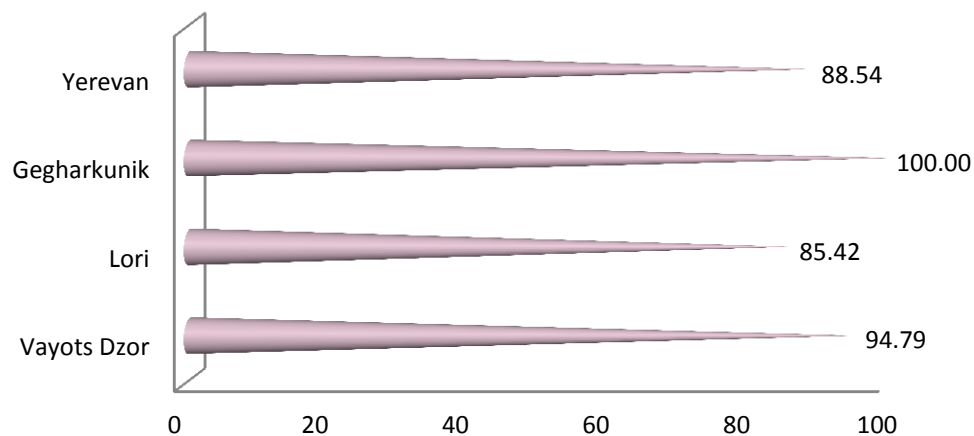
Figure 47. Analysis of *Questions* criterion by preschools



According to the Figure, *Questions* criterion has the maximum level of performance in Getap, Gladzor, Vanadzor, Margahovit, Tsaghkunk preschools /100.00%/. The lowest was in Dzoramut /56.25%/. In the other preschools the performance level is in the range of 84.38% - 90.63%.

The next Figure presents *Questions* criterion by regional analysis.

Figure 48. Analysis of *Questions* criterion by regions

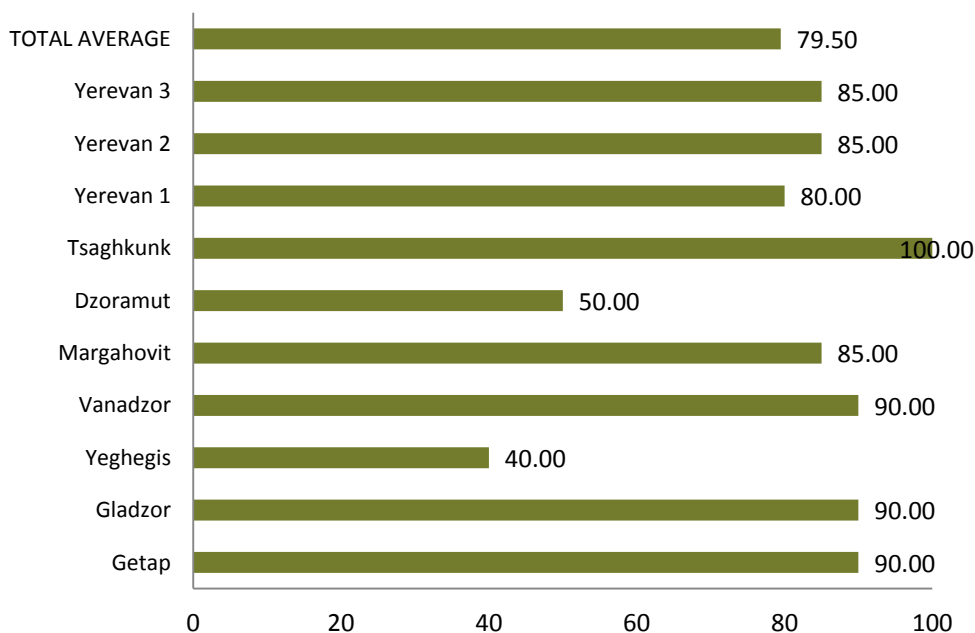


Based on the analysis of *Questions* criterion by regions, it has high level of performance in Vayots Dzor /94.79%/, and the lowest – in Lori /85.42%/>.

The next criterion observed during the class observations was Time. During the analysis of this criterion, the following was taken into consideration: meeting the time limits for the class, planning and following exact time limits for each assignment and exercise, efficient use of time for each phase of the class, etc.

The following Figure introduces the analysis of *Time* criterion for all ten preschools.

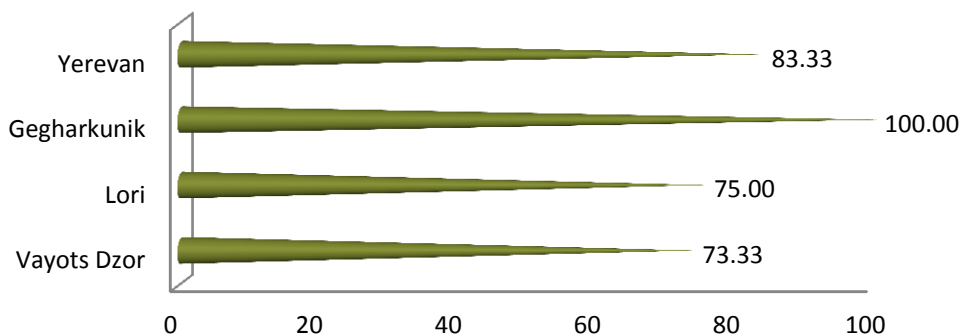
Figure 49. Analysis of *Time* criterion by preschools



Based on the Figure 49, this criterion performed differently, for example, the highest was in Tsaghkunk /100.00%/, the lowest in Yeghegis /40.00%/, followed by Dzoramut /50.00%/. The remaining are in the range of 79.50% - 90.00%.

The next Figure presents *Time* criterion by regional analysis.

Figure 50. Analysis of *Time* criterion by regions



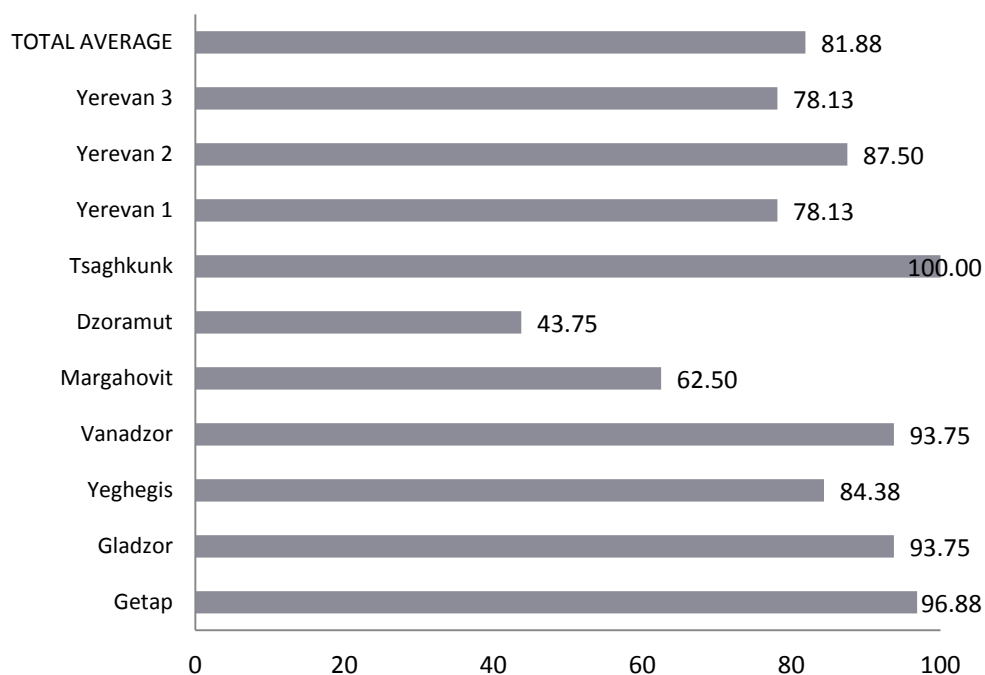
Based on the Figure 50, this criterion is performed lowest in Vayots Dzor region /73.33%/ and Lori / 75.00%/, and relatively higher in Yerevan /83.33%/.

The next criterion is *Developing environment*. The latter ensures comprehensive and harmonious development of a child, evokes a child to some actions, contributes to a child's independent and creative development, as well as to development of a child's subjective position. During the analysis of this criterion the following was taken into consideration: availability of didactic, illustrative, natural accessories and materials, their correspondence to the content of the class, peculiarities of children's age, opportunities of independently analyze and observe, etc.

The mentioned criterion is the most extensive one by its characteristics and it is a prerequisite for a child's development and teaching.

The following Figure introduces the analysis of *Developing environment* criterion for all ten preschools.

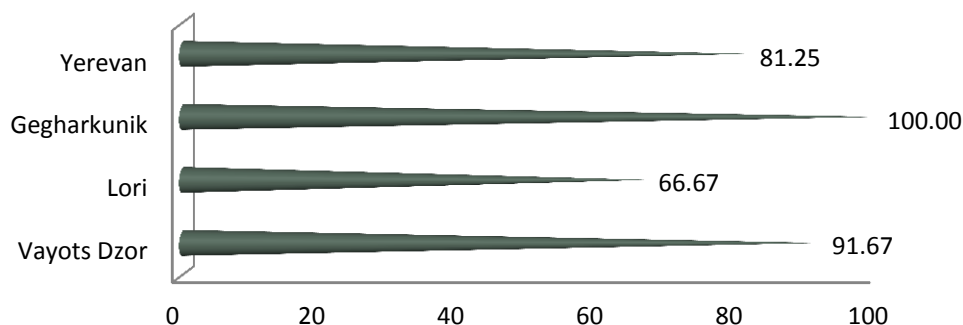
Figure 51. Analysis of *Developing environment* criterion by preschools



According to the Figure 51, this criterion has above average level of performance. The lowest level has been recorded in Deghhdzut /71.88%/. The highest level of performance has been observed in Tsaghkunk /100.00%/. Lowest levels of performance recorded in the preschools of Dzoramut /43.75%/, followed by Margahovit /62.50%/.

The next Figure presents *Developing environment* criterion by regional analysis.

Figure 52. Analysis of *Developing environment* criterion by regions

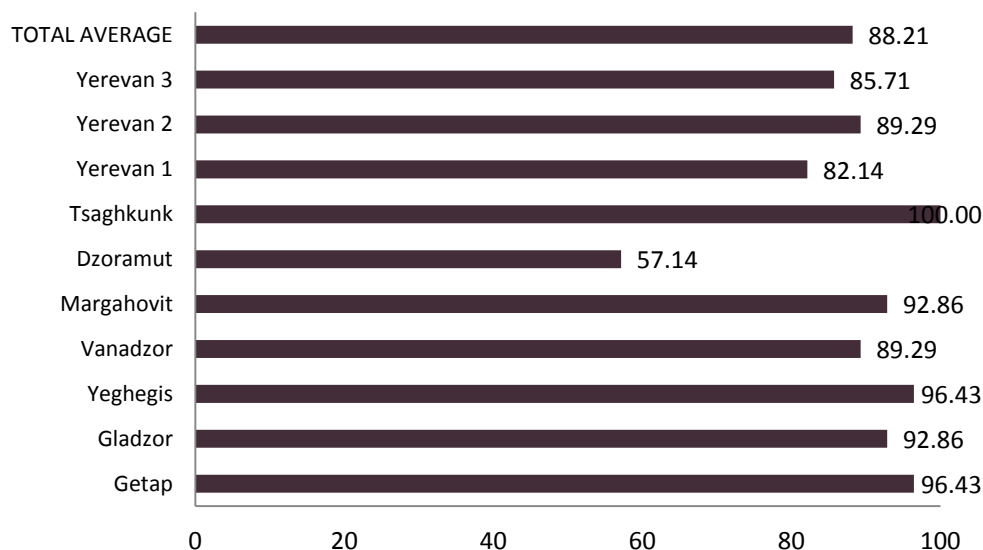


Based on the given Figure, this criterion is performed lowest in Lori /66.677%/, and highest – in Vayots Dzor /91.67%/.

The next criterion of class observation card is *Children class participation (activity and cooperation)*, which assumes analysis of children class participation, establishment of conditions for cooperation, analysis of a child's participation in a play room, etc.

The following Figure introduces analysis of *Children class participation* for all ten preschools.

Figure 53. Analysis of *Children class participation* criterion by preschools

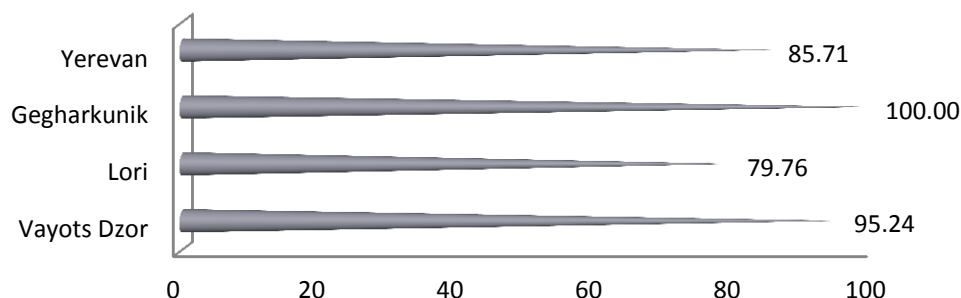


Children class participation criterion is one of the most essential child-centered teaching criteria, which allows organizing teaching in a way to develop a child's person comprehensively during the learning process. Based on the analysis of this criterion, the maximum level of performance

has been recorded in preschool of Tsaghkunk /100.00%/. The lowest was recorded in Dzoramut /57.14%/. The performance level of this criterion in the other preschools is above 82.14%.

The next Figure presents *Children class participation* criterion by regional analysis.

Figure 54. Analysis of *Children class participation* by regions

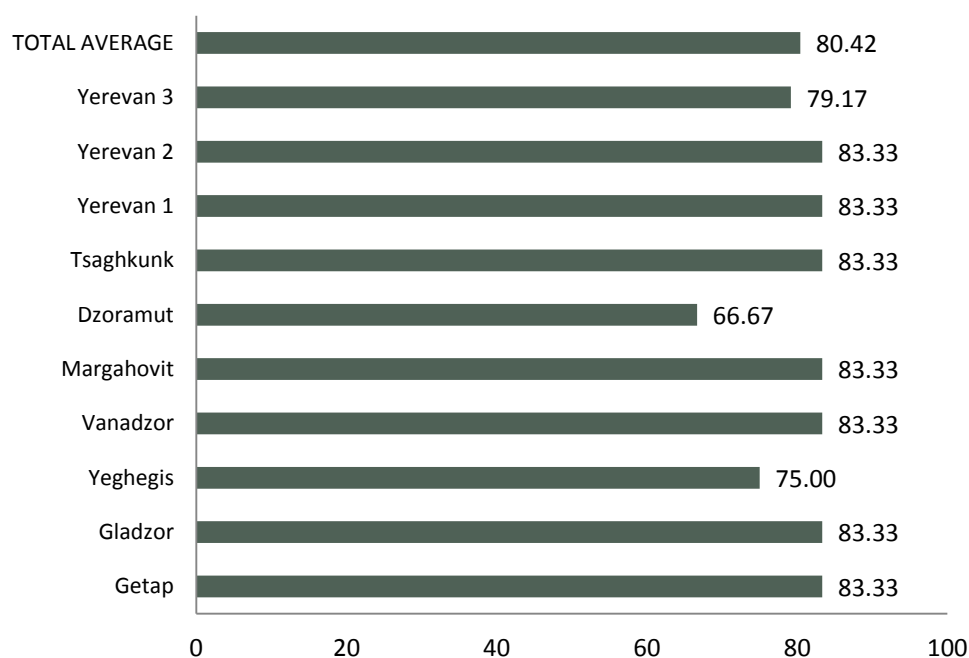


According to the Figure 54, this criterion is highly performed in all three regions /above 79.76%/.

The last criterion which is included in the observation card is *Tutor skills*. During the observation of this criterion the following was taken into consideration: tutor's communication abilities, speech literacy, respectful, acceptable and comprehensible approaches towards a child's personality, cooperation with an assistant, sensitivity towards gender aspects, etc.

The following Figure introduces the analysis of *Tutor skills* criterion.

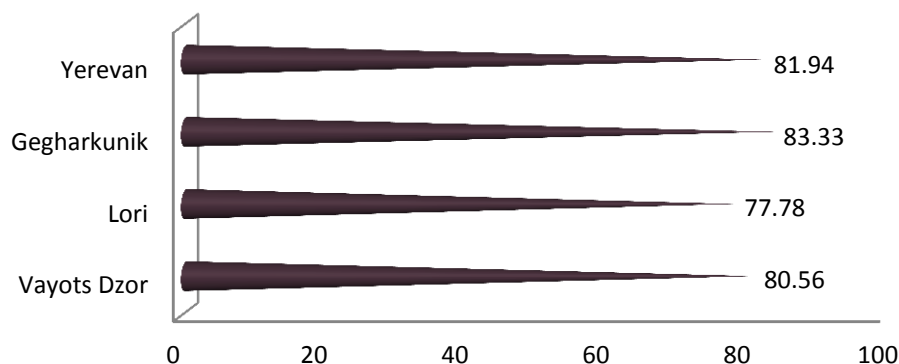
Figure 55. Analysis of *Tutor skills* criterion by preschools



This criterion is considered as one of the key criteria, as it expresses the development level of tutor's both personal and professional skills, which directly impacts the development level of a child's personal, cognitive, emotional and other aspects. Based on the analysis of this criterion, it is almost equally performed in all preschools. The lowest results were in Dzoramut /66.67%/ and Yeghegis /75.00%/.

The next Figure presents *Tutor skills* criterion by regional analysis.

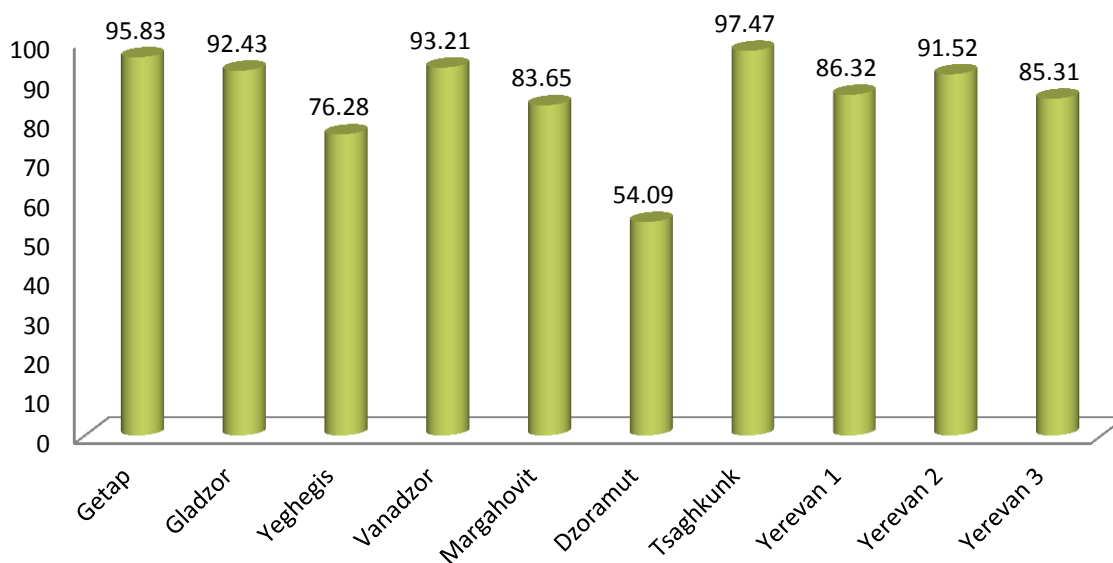
Figure 56. Analysis of *Tutor skills* criterion by regions



Based on the Figure above, this criterion is highly performed in all the regions /above 77.78%/. The highest level of performance has been recorded in Yerevan /81.94%/.

The Figure below introduces average data of class observation implemented in all preschools and reveals efficiency of classes carried out by the observed criteria.

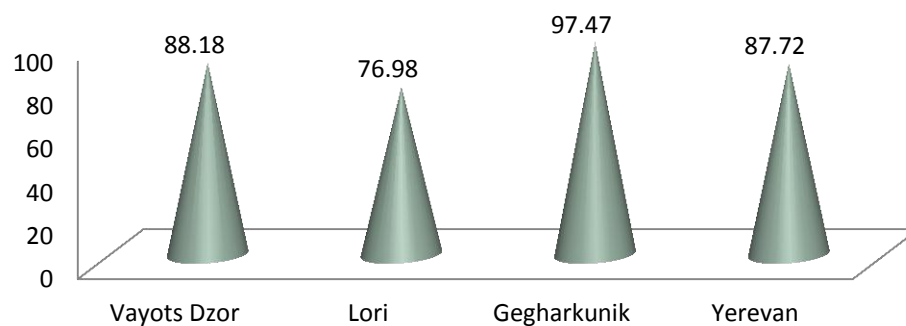
Figure 57. Analysis of class observation results by preschools



The averaged data regarding all the criteria present that classes are implemented efficiently in all preschools, except for Dzoramut /54.00%/. The results in Tsaghkunk /97.47%/ and Getap /95.83%/ are relatively high. The remaining are in the range of 76.28%-93.21%.

Concerning the regional results (Figure 58), it can be stated, that based on the averaged data of all criteria, the general level of efficiency of classes implemented in preschool of Vayots Dzor is the highest and makes up 88.18%, and Gegharqunik – 97.47%.

Figure 58. General description of class observations by regions



6.2. The testing analysis of children by indicators and subfields

Looking at the testing and retesting results of children among all the preschools (figure 59), we see that the most significant increase has been recorded in (4) forming stereotypes /22.90% -> 80.66%/ indicator of Logic and thinking subfield and (8) letter recognition /0.00% -> 53.04%/ indicator of Early reading subfield.

Looking at the testing and retesting results of children not attending preschool, we see that there has been an increase in almost all the indicators. The most significant increase has been recorded in (3) number recognition /46.84% -> 90.03%/ indicator of General math knowledge subfield, and (11) recognition of similarities-differences /38.31% ->82.21%/ indicator of Logic and thinking subfield.

Looking at figure 59 one can see that the testing results of children attending preschool mostly exceed the testing results of those not attending preschool, except for (4) forming stereotypes /5.85%/ indicator of Logic and thinking subfield, (6) math knowledge /2.59%/ indicator of the General math knowledge subfield, (8) letter recognition /0.60%/ indicator of Early reading subfield, (12) basic writing skills /0.85%/ indicator of Writing and drawing skills subfield, and (13) sensual-motional skills /1.73%/ indicator of Writing and drawing skills subfield. The most

significant increase has been recorded in Oral speech perception subfield's (7) Response to multistep instructions indicator /27.30%/.

Comparing the retesting results of children both attending and not attending preschool, we see that children attending preschool have better results at the end of the year than those not attending preschool. Early reading subfield's (8) Letter recognition indicator /45.93%/, and (2) spatial perception /30.14%/ indicator of General math knowledge subfield differ the most.

Figure 59. Generalized testing and retesting results by indicators

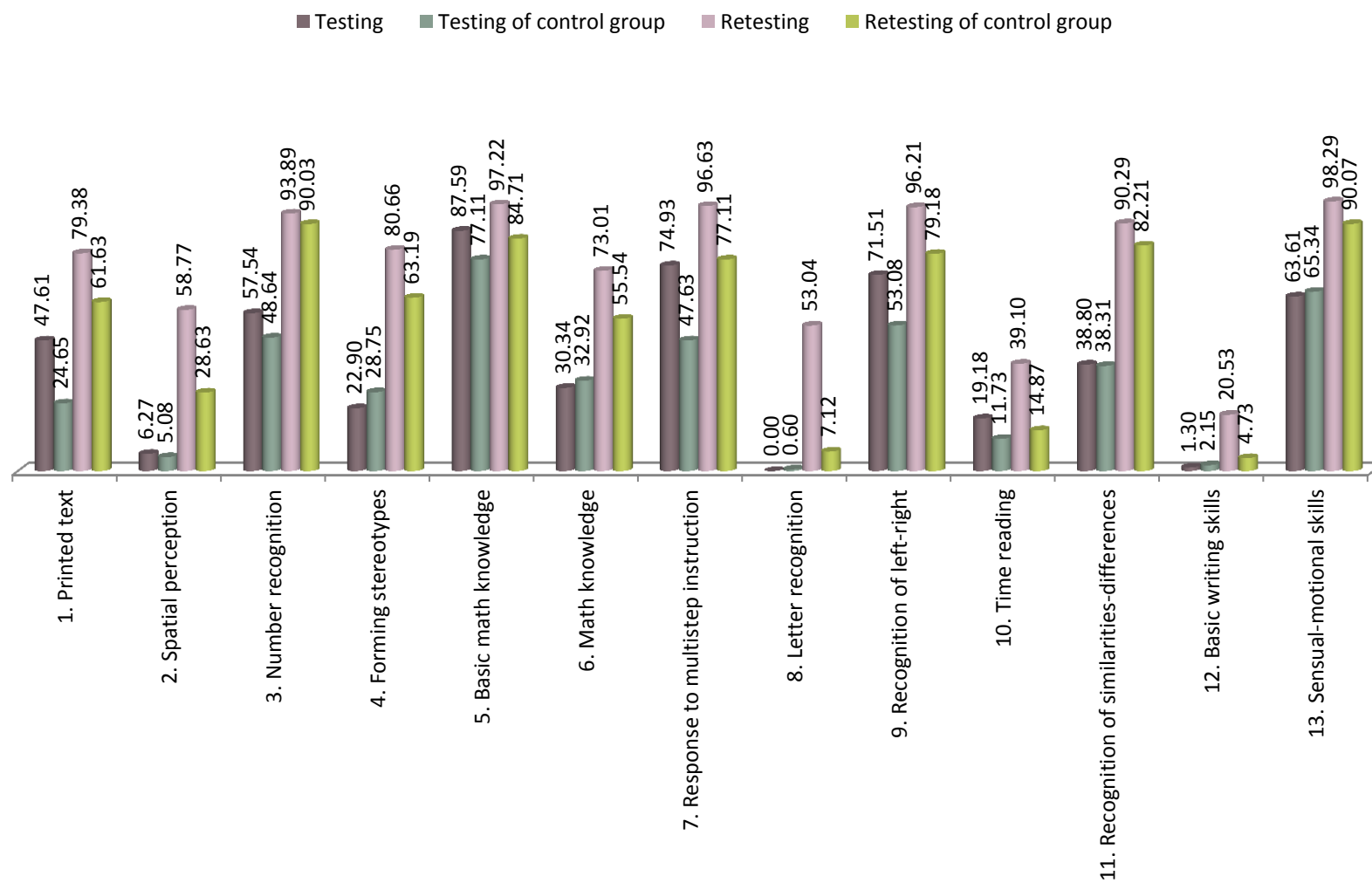
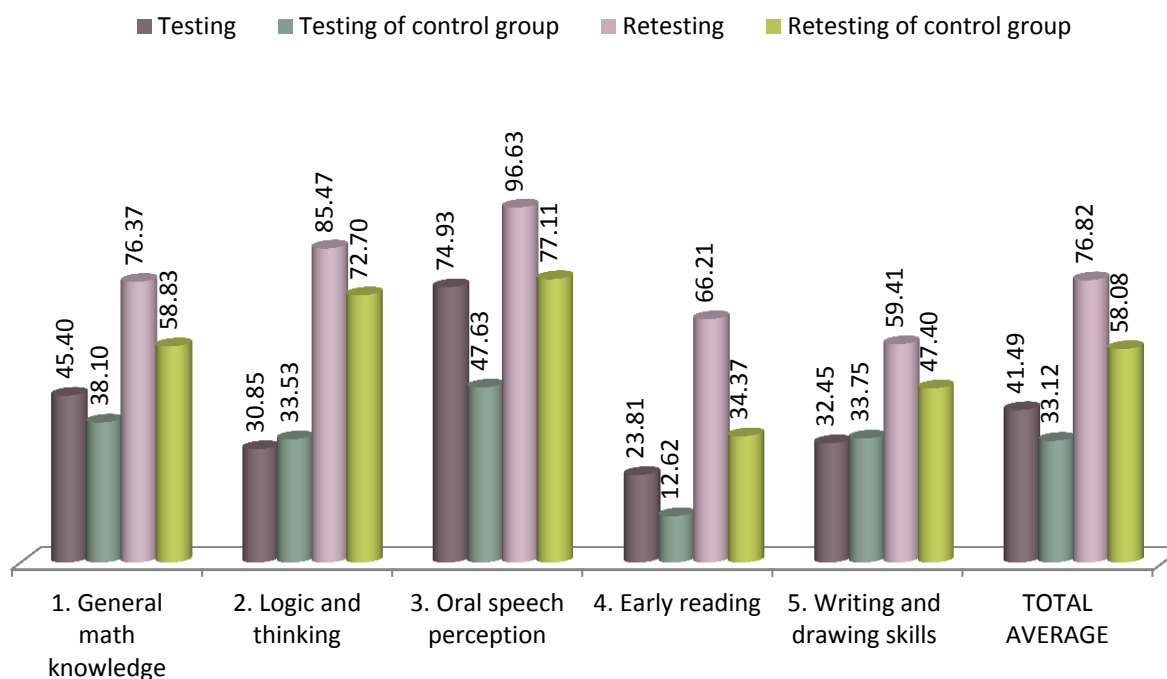


Figure 60 presents the averaged testing data by subfields of all the children. We can see that the maximum increase in the testing and retesting data has been recorded for (2) spatial perception /30.85% -> 85.47%/ indicator of General math knowledge subfield.

Figure 60. Generalized testing results by subfields



The testing results of the control group have also exceeded the retesting results (Figure 60). Maximum increase has been recorded for (2) *Logic and thinking* subfield /33.53% → 72.70%/.

As for testing, Figure 60 shows that the results of the target group children, by all subfields, exceed the results of control group children, except for (2) *Logic and thinking* subfield /2.68%/ and (3) *Oral speech perception* subfield /27.30%/.

Comparing the retesting results of children attending preschool and those not attending preschool, we see that the children attending preschool showed better results than control group children.

Below are presented children development dynamics and differences per subfields for each region.

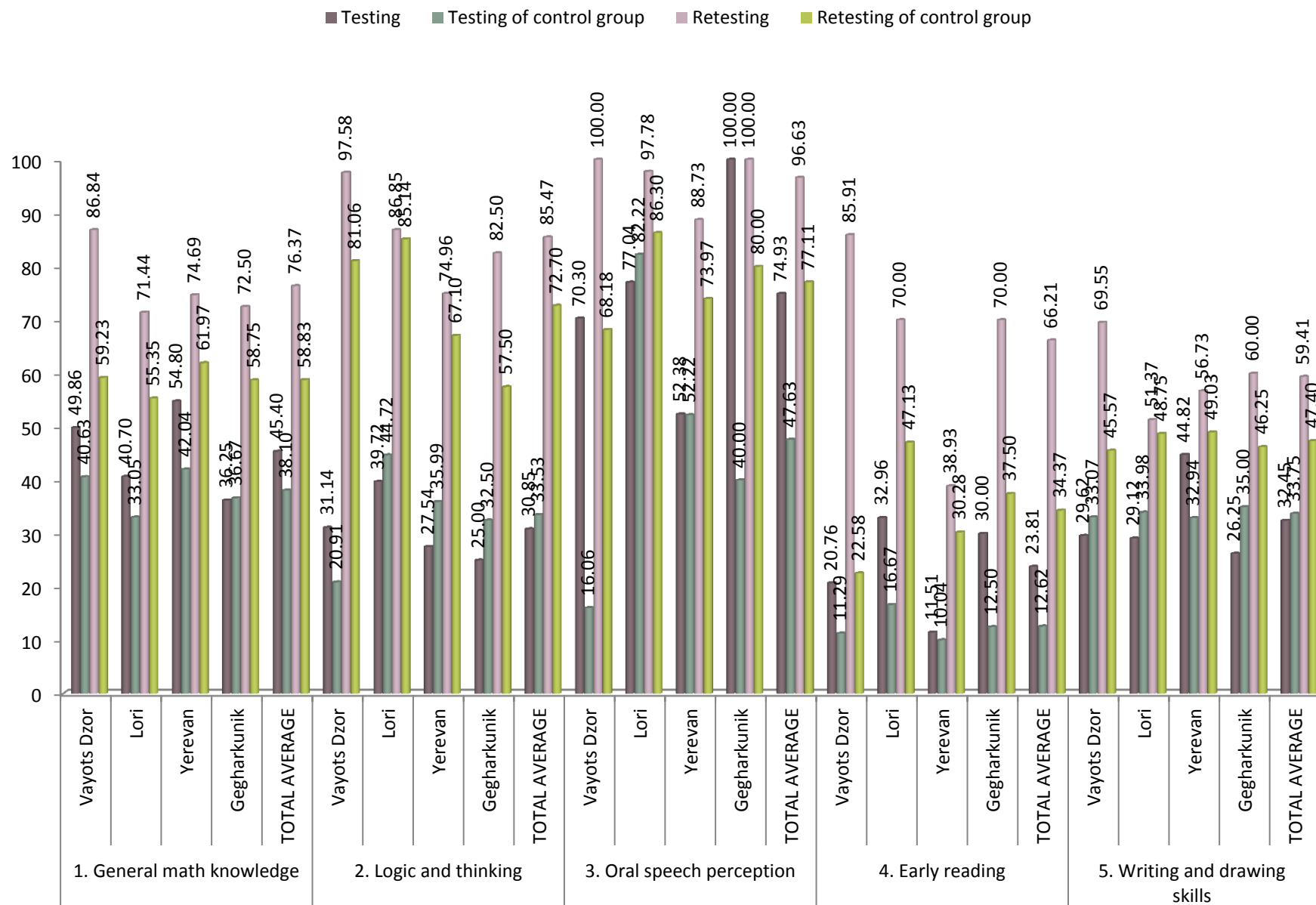
The analysis shows (Figure 61) that the most developed subfield among children attending and not attending preschool is (3) *Oral speech perception* subfield.

Regarding (1) General math knowledge subfield, the retesting results of target group children mostly exceed testing results in Vayots Dzor region /49.86% → 86.84%/. The control group children retesting results largely exceed testing results in Lori region /33.05% → 55.35%/. Regarding (1) General math knowledge subfield, target group testing results largely exceed the same results of the control group in Yerevan /12.72%/, in case of Gegharquink it is lower /0.42%/. Retesting results of target group children mostly exceed retesting results of control group children. The biggest difference is in Vayots Dzor region /27.61%/.

Figure 61 shows that (2) Logic and thinking subfield's target group children retesting results largely exceed testing results, mostly in Vayots Dzor region /20.91% → 81.06%/. The control group children retesting result largely exceeds the testing result, the difference is highest in Yerevan /8.45%/. The results are negative only in Vayots Dzor /10.23%/. Target group retesting result largely exceeds control group's retesting results, the most significant difference was observed in Vayots Dzor region /16.52%/ and Gegharquinik region /25.00%/.

Figure 61 shows that (3) Oral speech perception subfield's target group children retesting results largely exceed testing results. The most significant difference is observed in Yerevan /52.38% → 88.73%/, and in Gegharquinik region no change was observed /100.00%/. Control group children retesting result largely exceeds the testing result Vayots Dzor region /16.06% → 68.18%/. For the same subfield, target group testing result largely exceed the same result of the control group mostly in Vayots Dzor /54.24%/ and Gegharquink /60.00%/, except for they are lower in Lori region /5.19%/. Target group retesting result largely exceed control group retesting result, mostly in Vayots Dzor region /31.82%/.

Figure 61. Regional analysis by subfields



As for (4) Early reading subfield (Figure 61), the retesting result both for control group and target group exceeds the testing result in Vayots dzor region /20.76%→85.91%/. Control group retesting result largely exceeds the testing result again in Lori region /16.67%→47.13%/. For the same subfield, the target group testing result largely exceeds the same result of the control group in Lori region /16.30%/ (in Gegharquinik the difference was 17.50%). The retesting result largely exceeds in Vayots Dzor region /63.33%/.

Figure 61 shows that (5) Writing and drawing skills subfield's target group children retesting result largely exceeds the testing result in Vayots Dzor region /29.62%→69.55%/. Control group retesting result exceeds the testing result mostly in Yerevan /32.94%→49.03%/. (5) Writing and drawing skills subfield's target group testing result largely exceeds the same result of the control group (except for Yerevan/11.88%/) in Lori region /4.86%/ and yields to the same in Gegharquinik region /8.75%/. For the same subfield's retesting result, the target group testing result largely exceeds the result of the control group in Vayots Dzor region /23.98%/.

Figure 62 shows that during the retesting period the results of Vayots Dzor region exceed the other two regions.

Figure 62. Percentage indicators of beneficiary children's dynamics

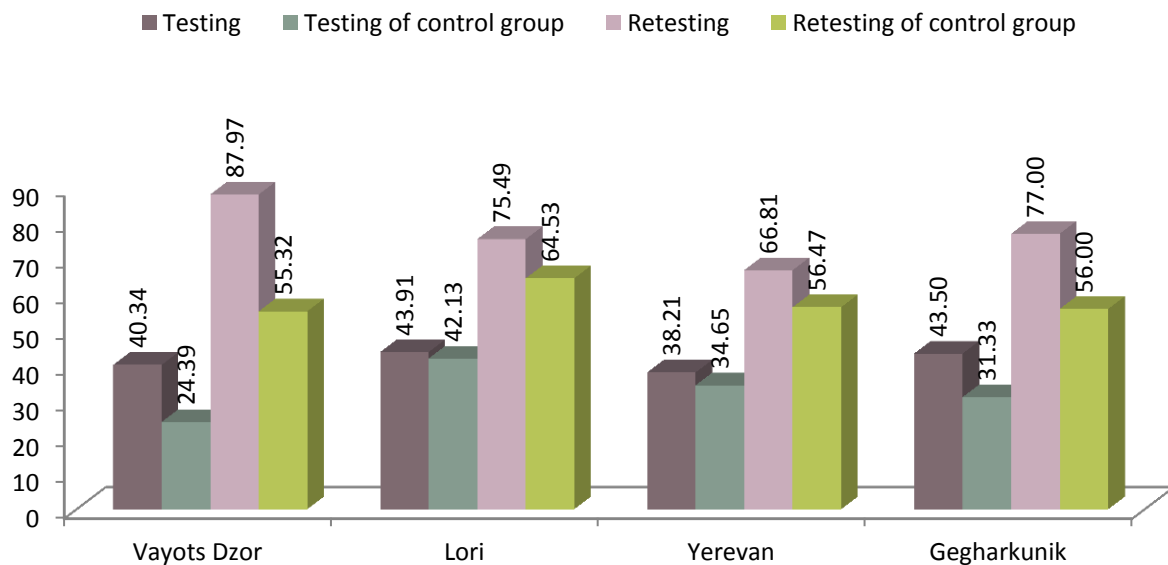
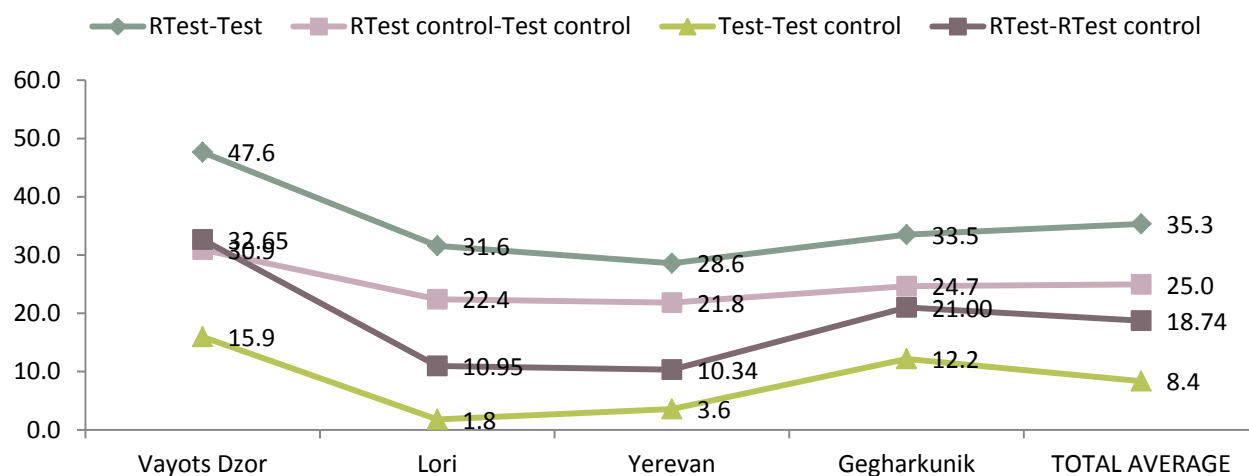


Figure 63 shows, regarding all the development subfields indicators, the difference between averaged data of the results among children included in the program's first and second testing, and the results of children included and not included in the program. We see that target group and control group testing and retesting results largely exceed the testing and retesting results in Vayots Dzor region /15.94% and

32.65% respectively/. For Gegharquinik region the results are the following – 12.17% and 21.00%, respectively.

Figure 63. Percentage indicators of beneficiary children’s dynamics



6.3. Generalised gender results by indicators and subfields

Figure 64 shows gender characteristics of children attending and not attending preschool in all regions per testing indicators.

Looking at the gender testing and retesting results of all the children attending preschools, we see that both at beginning of the year and at the year end, the boys showed better results compared to girls, except for at the beginning of the year the (8) letter recognition /0.00%/ indicator of Early reading subfield where no difference was observed, and (10) time reading /4.64%/ indicator of General math knowledge subfield, and at the end of year (2) spatial perception /4.76%/ indicator of General math knowledge subfield. At the beginning of the year the boys’ advantage was noticed regarding the following indicators: (1) printed text /5.50%/ indicator of the Early reading subfield, (3) number recognition /5.38%/ indicator of General math knowledge subfield, (5) basic math notions /8.70%/ indicator of General math knowledge subfield, and (7) response to multistep instructions /6.87%/ indicator of the Oral speech perception subfield.

At the year-end the boys’ advantage is mostly exhibited regarding *Logic and thinking* subfield's (4) Forming stereotypes /9.23%/, (7) response to multistep instructions /9.85%/ indicator of the Oral speech perception subfield, and (13) sensual-motional skills /8.73%/ indicator of Writing and drawing skills.

The gender testing and retesting results of control group children show that regarding all the indicators both at the beginning and at the end of the year, the boys' results exceeded the girls' results, however girls had an advantage over boys regarding the (8) letter recognition /0.60%/ indicator of Early reading subfield and (9) recognition of left-right /1.79%/ indicator of General math knowledge subfield. At the beginning of the year the boys' most significant advantage was noticed regarding the following indicators: (3) number recognition /13.46%/ indicator of General math knowledge subfield, (11) recognition of similarities-differences /13.73%/ indicator of Logic and thinking subfield, and (13) sensual-motional skills /16.83%/ indicator of Writing and drawing skills subfield; and at the year-end - (3) number recognition /13.10%/ indicator of General math knowledge subfield, (13) sensual-motional skills /13.84%/ indicator of Writing and drawing skills subfield.

Although, per the averaged data of all the preschools, mostly the boys were more developed than girls, however, no conclusion on correlation between gender specificities and children's development can be made.

Figure 64. Testing generalized results by indicators and gender

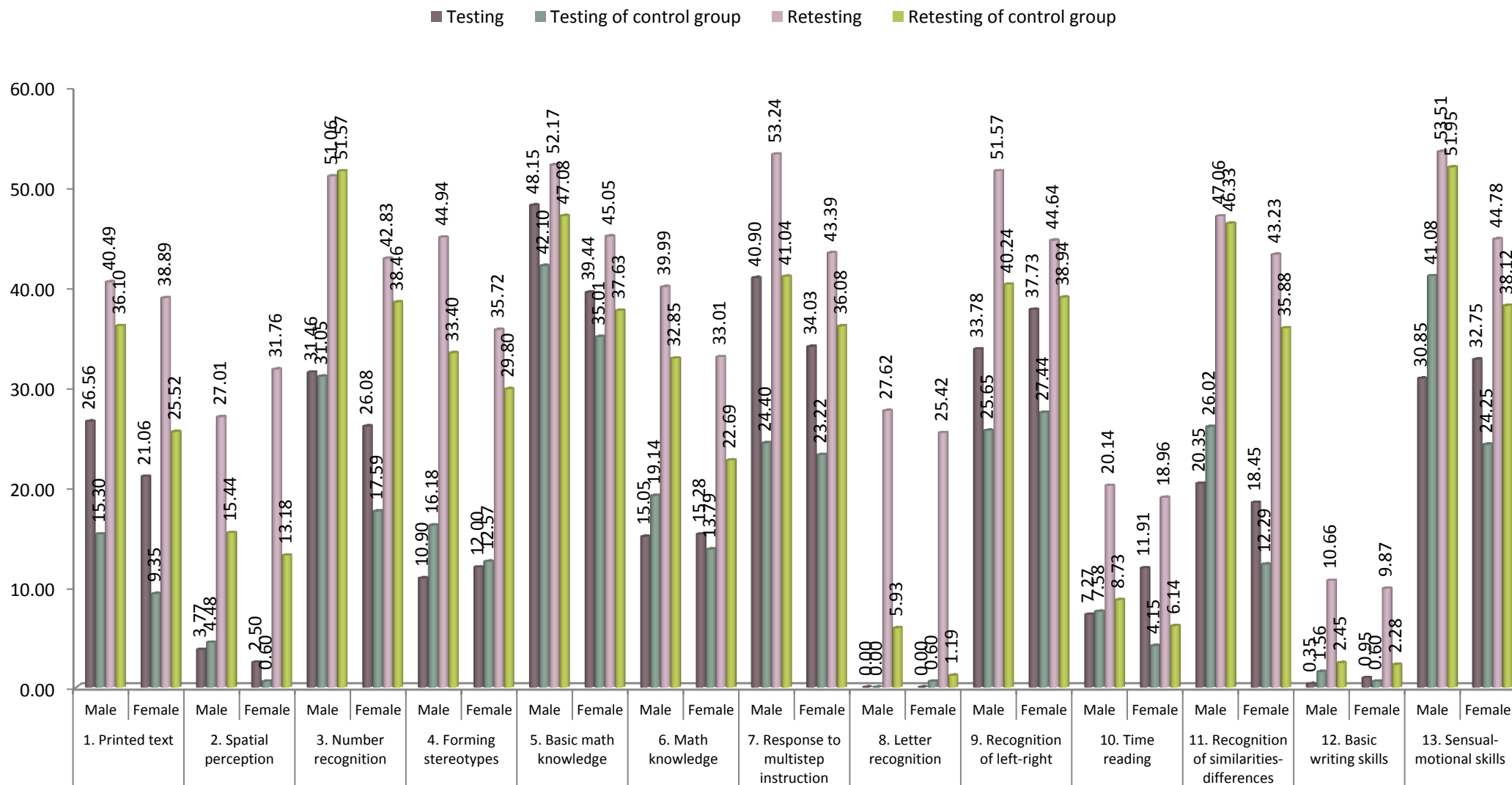
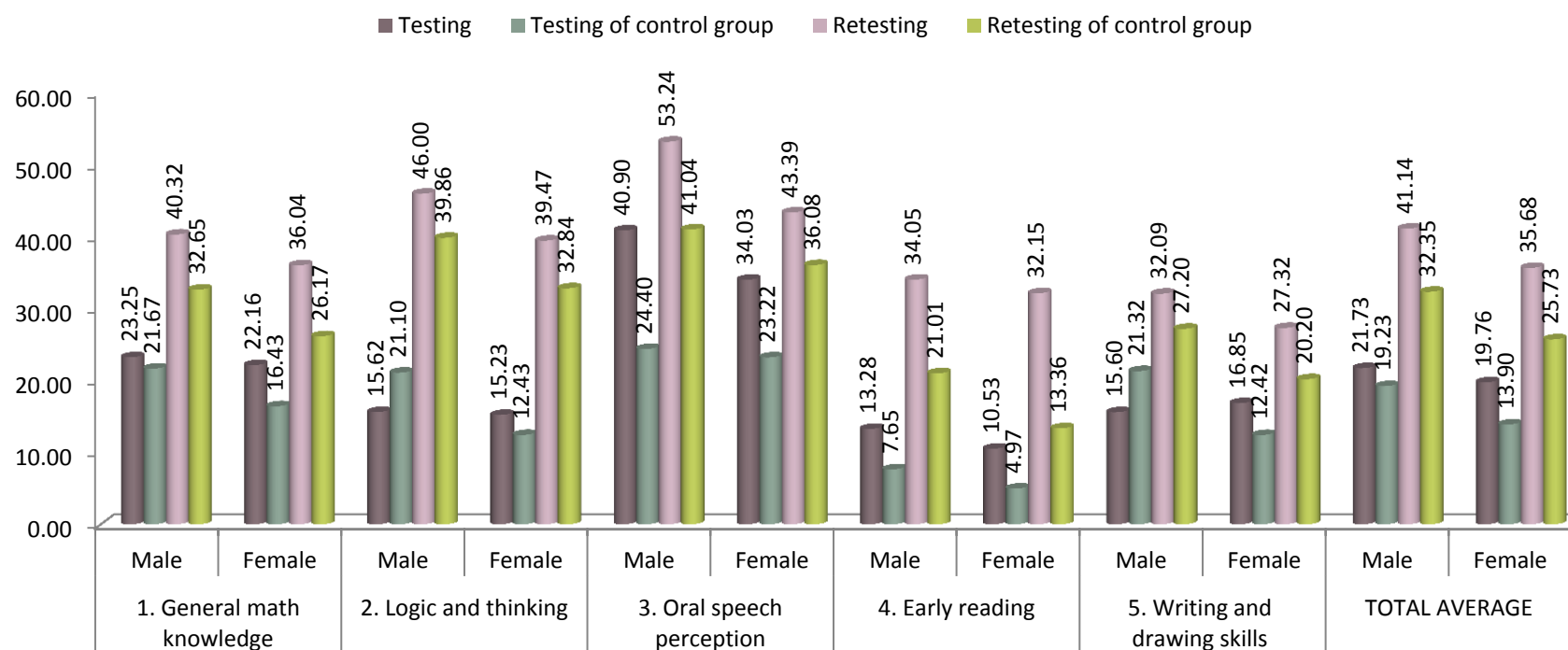


Figure 65 shows the gender characteristics for children attending and not attending preschools for all regions, according to testing subfields.

Looking at the testing and retesting results per gender of children attending and not attending preschools, we see that both at the beginning of the year and at the year-end the boys' results were higher than the girls' results regarding all the subfields, except for the target group testing of (5) Writing and drawing skills subfield /1.25%/. For the target group both for the beginning of the year and for the end of the year, boys had an advantage especially in the following subfield: (3) Oral speech perception /6.87% and 9.85%, respectively/. At the beginning of the year, for the control group, the boys' results overtook in the (5) writing and drawing skills /8.90%/ subfield/; and at the year-end - (4) early reading /7.66%/ subfield/.

Figure 65. Generalized Testing results by subfields and gender



6.4. Socio-demographic description of families whose children both attend and do not attend to a preschool and description of children development dynamics according to gender

Figure 66 shows that in Tsaghkunk of Gegharkunik region no clear difference has been recorded between the correct answers given per child with various socio-economic conditions of families. This means that in Gegharkunik region, children development did not directly link to their families' socio-economic condition and other conclusions cannot be drawn.

However, this does not mean that only socio-economic condition defines the level of child development, because, other than this factor, not less impact has the preschool factor, the family members' occupation on the angle of having free time to spend with a child, and many other possible factors. However, per qualitative data results (according to respondents) the socio-economic conditions affect the children mood, concentration during the class, and socializing.

Figure 66. Description of social demographic conditions of families of children attending and not attending preschool in Ararat region, by children progress

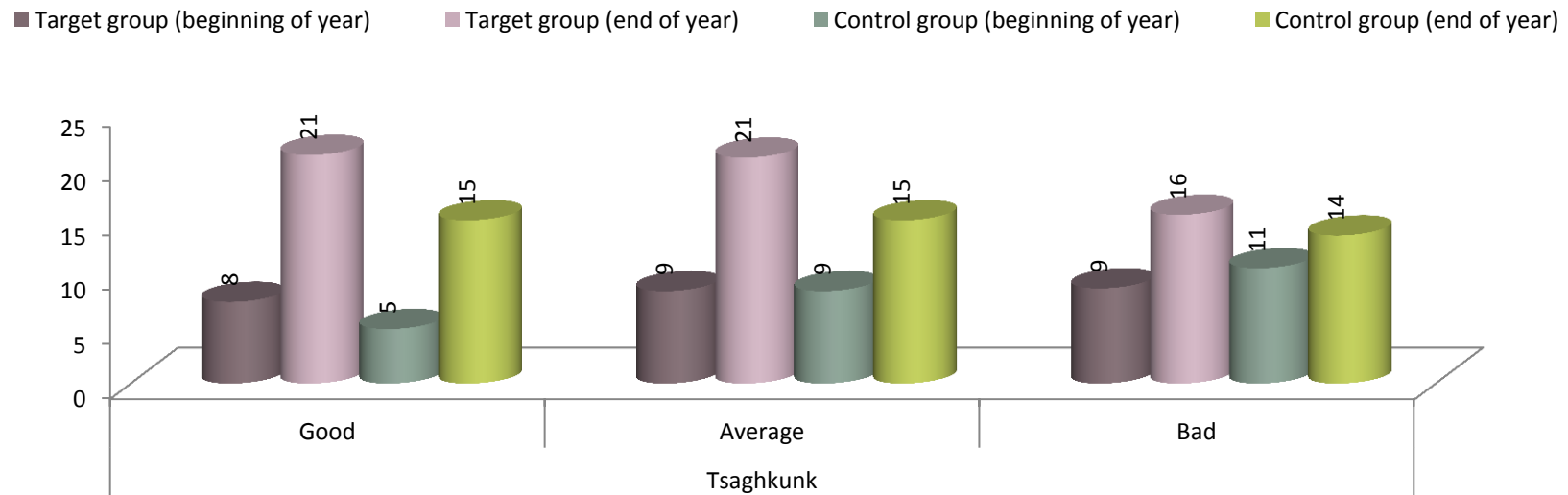


Figure 67 shows the gender description of children attending and not attending to preschool in Gegharqunik region by children progress. In Tsaghkunk, both at the beginning of the year, and at the year end the gender description for a child development varies largely for those who attend to preschool and those who don't.

Figure 67. Gender description of children attending and not attending to preschool in Gegharqunik region by children progress

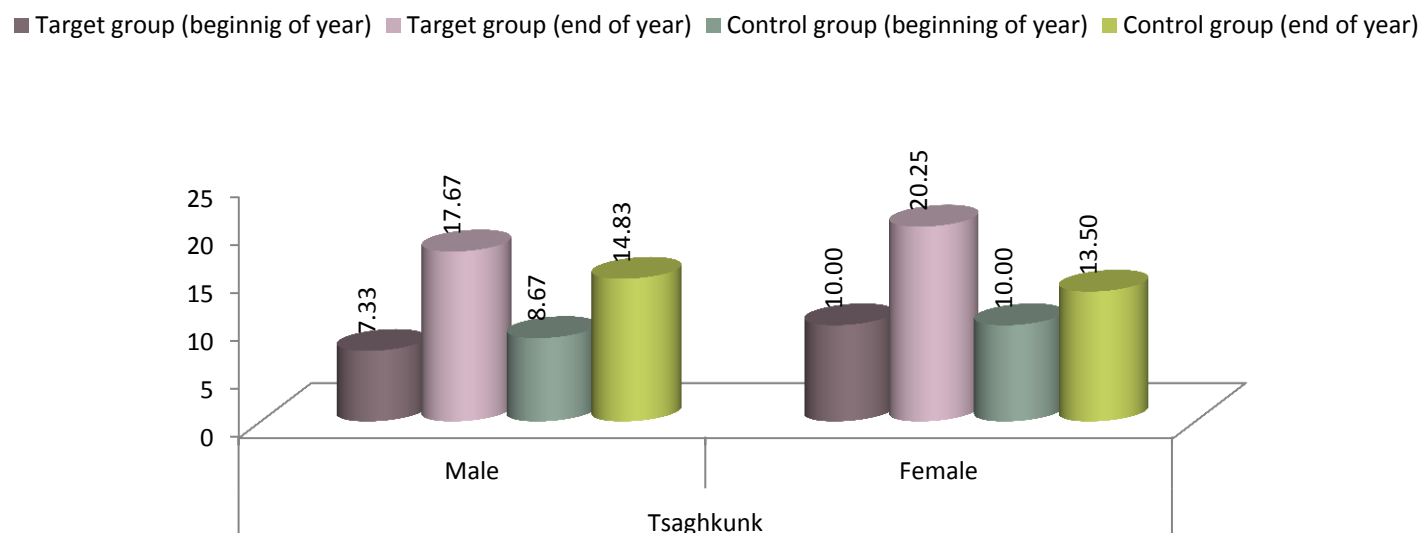


Figure 68 shows that among Lori region only in Margahovit community it is obvious that a family's socio-economic conditions affluence the year end testing results. In this community, children from poor socio-economic families showed the best results of testing. In the other two communities - Vanadzor and Dzoramut, no clear advantage been recorded and the correct answers given per child varied in the above 2 communities with various socio-economic conditions of families. This means that in Lori region, children development did not directly link to their families' socio-economic condition and other conclusions cannot be drawn.

However, this does not mean that only socio-economic condition defines the level of child development, because, other than this factor, not less impact has the preschool factor, the family members' occupation on the angle of having free time to spend with a child, and many

other possible factors. However, per qualitative data results (according to majority of respondents) the socio-economic conditions affect the children mood, concentration during the class, and socializing.

Figure 68. Gender description of children attending and not attending preschool in Lori region by children progress

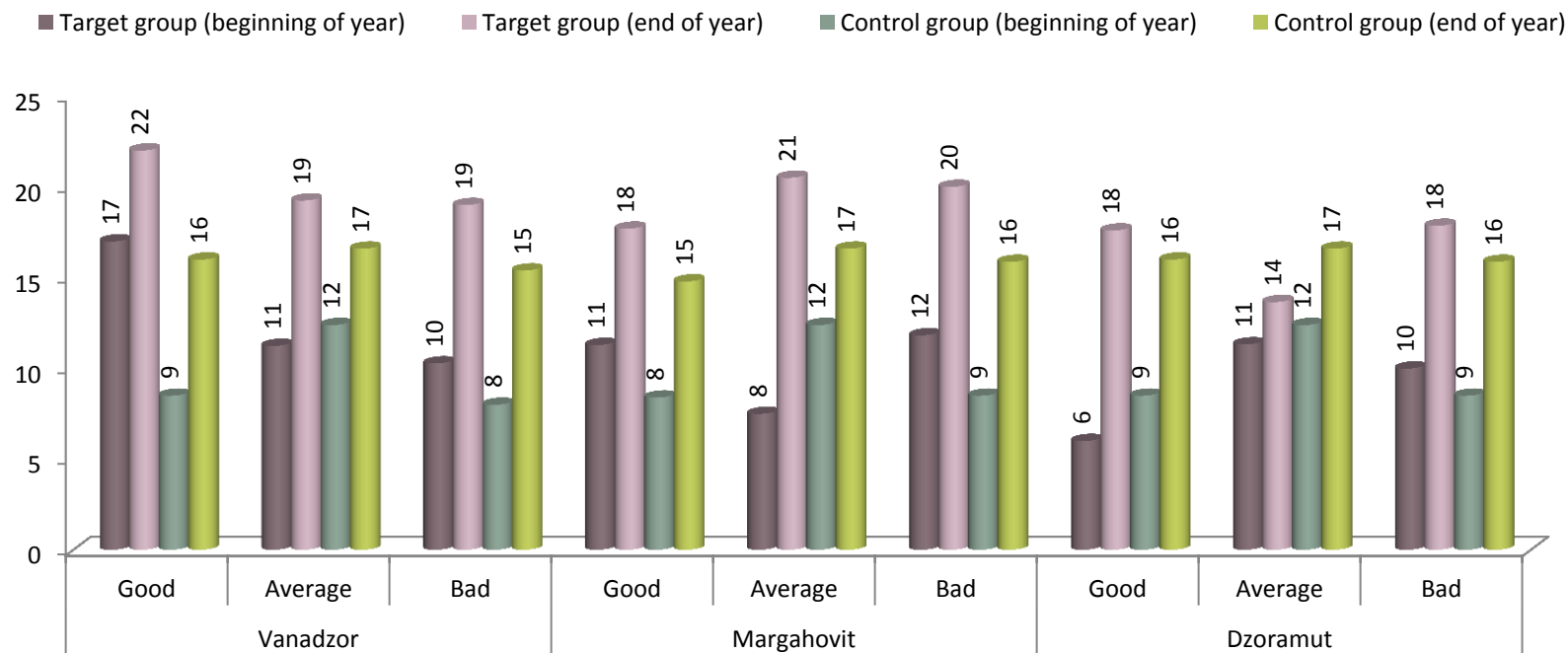


Figure 69 shows the gender description of children attending and not attending to preschool in Lori region by children progress. In the three communities - Vanadzor, MARGahovit and Dzoramut, no clear advantage been recorded and the correct answers given per child varied with various socio-economic conditions of families.

Figure 69. Gender description of children attending and not attending preschool in Lori region by children progress

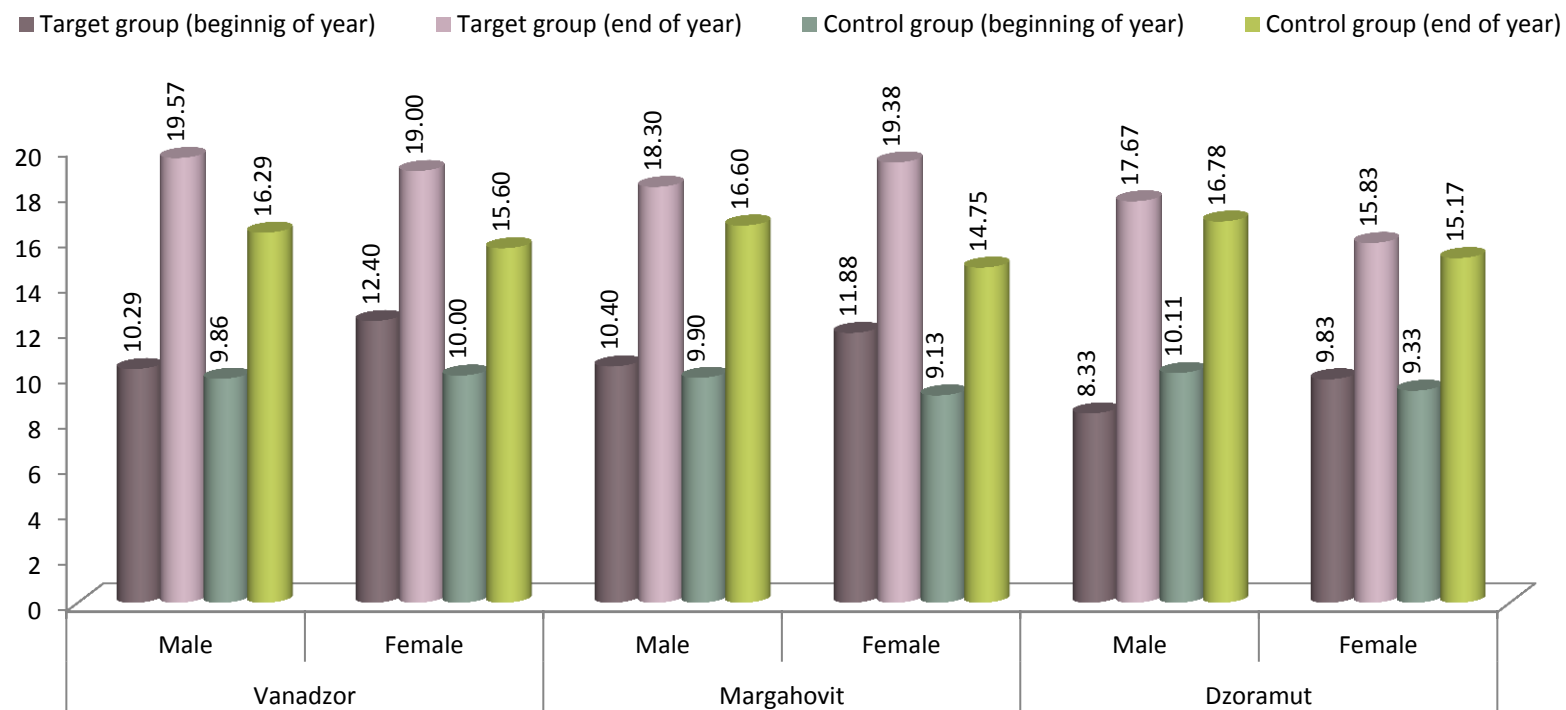


Figure 70 shows that in all three communities of Vayots Dzor region the families' socio-economic conditions are in “good” category for those who attend the preschool, whereas the children not attending preschool represented all three categories (i.e. good, average, and bad). In all three communities in Figure 70 (Getap, Gladzor, and Yeghegis) no clear advantage been recorded and the correct answers given per child varied with various socio-economic conditions of families. This means that in Vayots Dzor region, children development did not directly link to their families' socio-economic condition and other conclusions cannot be drawn.

However, this does not mean that only socio-economic condition defines the level of child development, because, other than this factor, not less impact has the preschool factor, the family members' occupation on the angle of having free time to spend with a child, and many other possible factors. However, per qualitative data results (according to majority of respondents) the socio-economic conditions affect the children mood, concentration during the class, and socializing.

Figure 70. Description of social demographic conditions of families of children attending and not attending preschool in Vayots Dzor

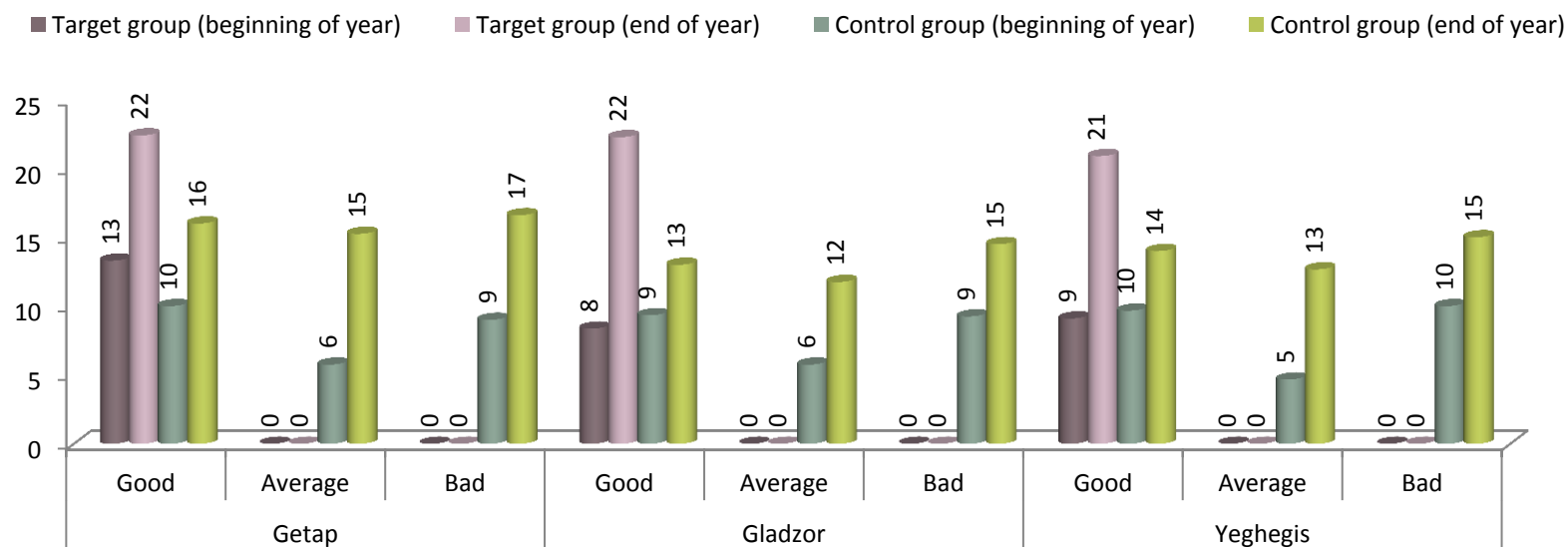


Figure 71 shows the gender description of children attending and not attending preschool in Vayots Dzor region by children progress. In Gladzor community, both at the beginning of the year, and at the year end the boys' development level were higher among children who attend to preschool and who don't. In Getap and Yeghegis community the gender description for a child development varies largely for those who attend preschool and those who don't.

Figure 71. Gender description of children attending and not attending preschool in Vayots Dzor region by children progress

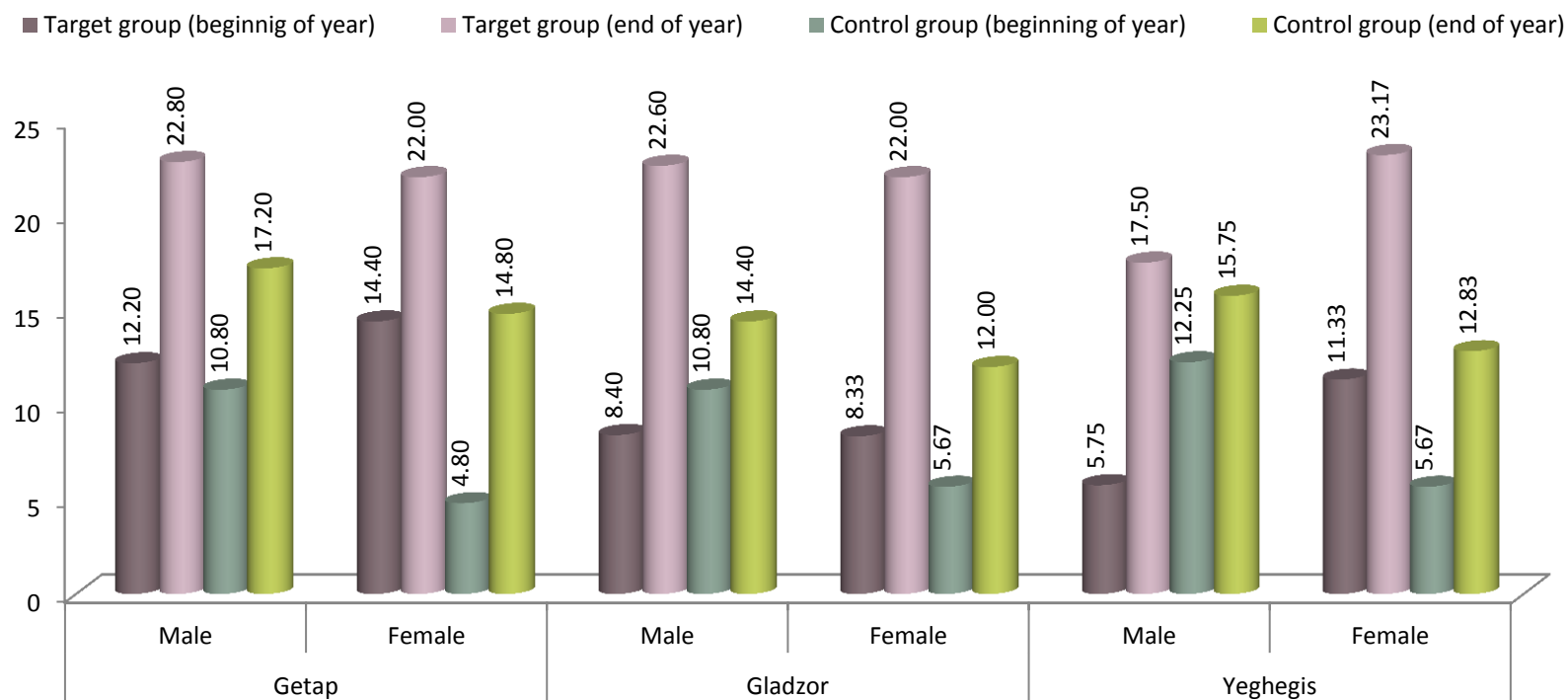


Figure 72 shows that in case of Yerevan 1 families' socio-economic conditions are in “good” and in “average” categories for those who attend the preschool, whereas the children not attending preschool represented all three categories (i.e. good, average, and bad). During the testing at year end the affluence of a family's socio-economic conditions in Yerevan 2 and Yerevan 3 communities was obvious. For the first case the children from families with average social-economic conditions performed with the highest results, in case with the second community – the highest results were performed by those coming from families with bad social-economic conditions. As it relates to Yerevan 3, no clear advantage been recorded and the correct answers given per child varied with various socio-economic conditions of families. This means that in Yerevan, children development did not directly link to their families' socio-economic condition and other conclusions cannot be drawn.

However, this does not mean that only socio-economic condition defines the level of child development, because, other than this factor, not less impact has the preschool factor, the family members' occupation on the angle of having free time to spend with a child, and many other possible factors. However, per qualitative data results (according to majority of respondents) the socio-economic conditions affect the children mood, concentration during the class, and socializing.

Figure 72. Description of social demographic conditions of families of children attending and not attending preschool in Yerevan, by children progress

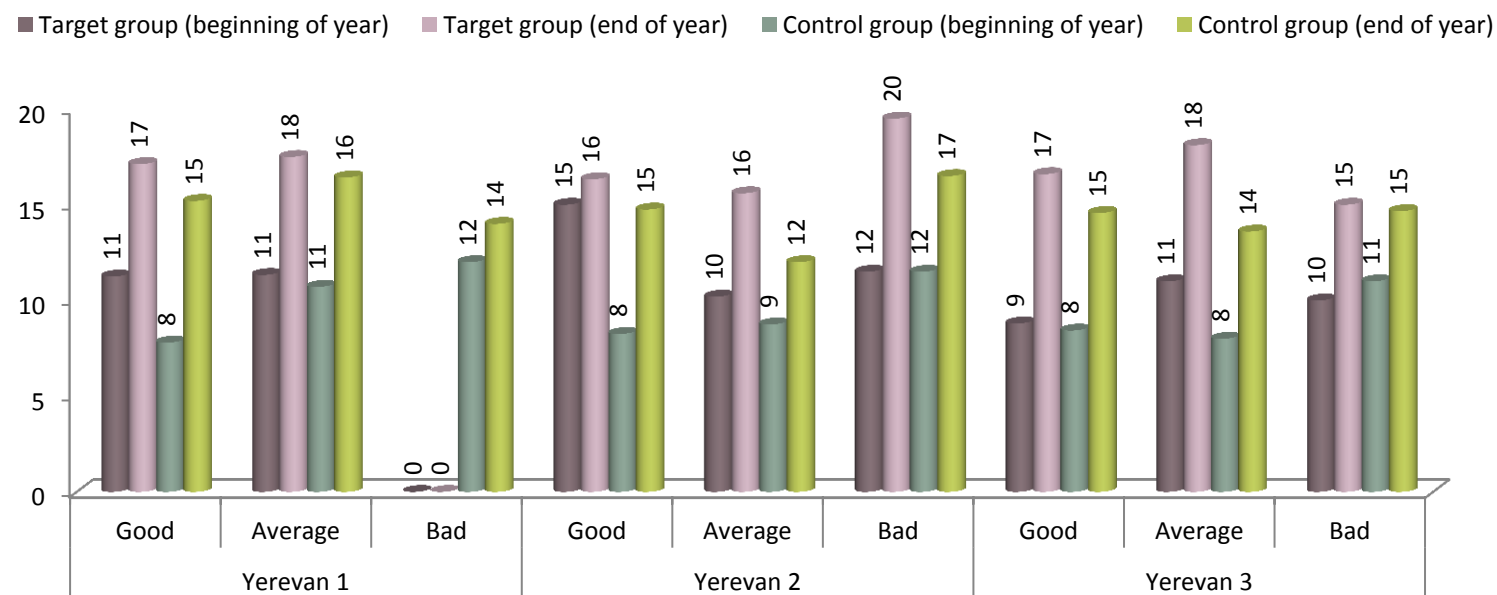
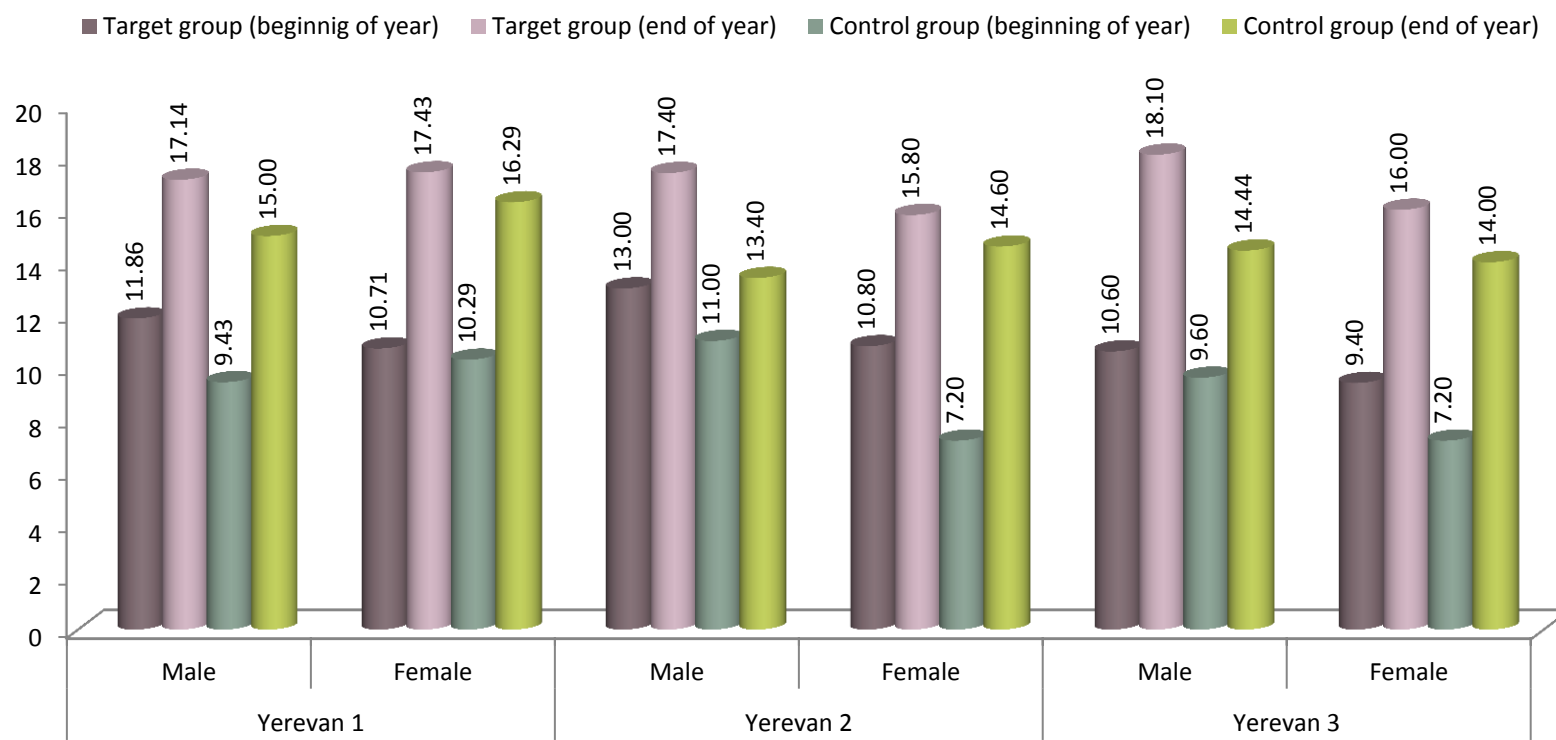


Figure 73 shows the gender description of children attending and not attending preschool in Yerevan by children progress. In Yerevan the gender description for a child development varies largely for those who attend to preschool and those who don't.

Figure 73. Gender description of children attending and not attending preschool in Yerevan by children progress



7. GENERAL OVERVIEW/SUMMARY

This paragraph represents:

- overview of qualitative survey results
- overview of quantitative survey results
 - assessment overview of a child
 - overview of class observations
- conclusions
- ways of solving current problems

In general, executives of the micro program, tutors and parents state that this micro program has its positive influence on children development dynamics.

7.1. Overview of qualitative results

The obtained and generalized results of field visits made at the beginning and at the end of the year are presented below:

- *The general conditions of a preschool*
 - ✓ A community's being urban or rural can have little influence on a preschool: both in terms of organizing the physical environment, limitation of staff member selection and expectations from a preschool.
 - ✓ The head teacher's personal aspirations may have some influence. For example, some head teachers involve school teachers, music and foreign language teachers, who transfer some knowledge to the preschool children.
 - ✓ The building conditions were satisfactory, newly renovated. If the road conditions in winter were bad, one child could not be attending the preschool in winter months (Yeghegis community). All preschools were supplied with cold water, Tsaghkung preschool of Gegharqunik region had hot water supply as well. All preschools were heated during our visits, however two preschools were heated with electric heaters (at Yeghegis there was a heating system and the electric heater was used before the central heating system was started to be utilized to provide for comfortable temperature; and at Dzoramut community no central heating was available and the electric heater was weak enough to provide for comfortable indoor temperature). As to cleanness, only Getap community experienced issues.
 - ✓ In general the preschools worked mainly on short-day regime. In one preschool (preschool of Yerevan secondary school No.13 after E.Telman) the parents wished

that the regime is extended, meal is served as they could not start employment seeking process.

- ✓ There were three preschools (Vanadzor, Margahovot, and Gladzor) that benefited from UN's food program. The amount paid for food, by the parents, varied between AMD 1000 (40 drams a day) to AMD 1500. In six cases (Tsaghkunk, Dzoramut, Getap, and Yerevan preschools) the children brought the food from home which could create problem for the safety reasons and the food being identical. In one case (Yeghegis) the food was not provided.
- ✓ To solve the issue of getting food by children from socially vulnerable families (there were families who could not pay for the meal), the amount to be paid for food was calculated in a way to cover the payment for the socially vulnerable family, and those families who could afford paying were paying also for those who could not.
- ✓ In general, no mechanisms for helping the socially vulnerable families were existent at the preschools (some of the head teachers applied for help to the local municipalities, NGO's, and the trade unions at schools; at Getap the parents were bringing meal for everyone at the preschool).
- ✓ In the beginning of the year of all the 10 centres Tsaghkunk (with two not fully equipped centres), preschool of Yerevan secondary school No. 13 after E. Telman, and preschool of Yerevan secondary school No.55 after A. Chekhov (with one not fully equipped centre) were available and fully equipped. At the preschool of Yerevan secondary school No.66 after A. Myasnikyan and at the preschool of Getap all centres were however were badly equipped. The remaining five preschool were missing with one, three, or four work centres. The least quantity of work centres was observed at Dzoramut preschool (four work centres were not available, and three centres were equipped badly).
- ✓ In the preschools located in towns and cities 5 to 6 year old children were prevailing. This was not the case at villages.
- *Preschool staff, training*
 - ✓ Because all the preschools were newly opened the teaching program also was new for everybody: mainly the tutors did not fully imagine the principles of child-centered and integrated learning methods, applied situational methods, which can be referred to as a lack of experience. At all the preschools the tutors and head teachers had working experience, except for tutors at Yeghegis preschool and the preschool of Yerevan secondary school No66 after A. Myasnikyan.
 - ✓ In all the preschools the tutors work alone. This fact was mentioned as a weakness and drawback by the tutor of Vanadzor preschool. The tutor of Getap preschool could not apply integrated approach due to being alone. The head teacher of Gladzor suggested to involve an additional tutor for tutoring additional subjects.

- ✓ All the tutors had trainings. Every tutor was satisfied with the training provided saying that it was full of new material and they received a lot of knowledge, with the exception of Margahovit's tutor and the tutor of the preschool of Yerevan secondary school No. 66 after A. Myasnikyan. The latter mentioned that there was no practical part in the training, and Margahovit's tutor mentioned both lack of necessary materials and lack of practical part in the trainings. Dzoramut's tutor, in her turn, participated in the training not fully, with absences. The only comment coming from the tutors was that the trainings were short in time and wished that the trainings were periodic.
- *The class provision*
 - ✓ The best working qualities were shown by the tutors of preschool of Yerevan secondary school No. 55 after A.Chekhov, preschool of Yerevan secondary school No. 13 after E.Telman, preschool of Getap, Margahovit, and Vanadzor.
 - ✓ Some preschools did not work in centres because the latter were not formed yet and some were poorly equipped (i.e. cooking, role play, and biology). The tutors mainly concentrate on all the aspects of a child development, with main focus on linguistic and knowledge development areas.
 - ✓ The tutors often used both principles, however, the most used was the child centred principle of teaching during the classes.
 - ✓ Tutors of Dzoramut and Yerevan secondary school No. after A.Chekhov preschools wished that a specific program detailing on daily basis the themes and games for tutoring was provided to them. The remaining tutors were of an opinion that if implemented this would be going to hinder and make their work difficult.
 - ✓ The children were marked both independently, and in group. To evaluate a child progress sometimes preschools were using testing questionnaire, however the tutors were of an opinion that this practice is rather time consuming.
- *Socio-economic conditions of communities, family's lifestyle*
 - ✓ Six of the communities were rural, and four of them were urban. However, for the majority of the families the prime source of income is monthly paid job, both local and abroad, for the other families the main source of income was agriculture, cattle breeding, and farming. In these jobs, often, the children were involved per their will - for example, in Gladzor the children helped their grandmother in the garden to harvest fruits, water the plants.
 - ✓ According to the qualitative results (per majority respondents) the socio-economic conditions in the communities has direct effect on a child development. For example, there has been an opinion that the social economic conditions of the community is very bad since there are no vacancies and the agriculture is low income activity as the agricultural market is far away from their community. One of the respondents was of an opinion that the social economic conditions affect children's level of development and commented that successful families could

provide more time to the education and tutoring their children. However, opposite to this widespread opinion, one head teacher was of an opinion that the level of development of the child is affected by the fact that the parents did not get the relevant education on time and that the social economic conditions do not affect the development level.

- ✓ In the families the upbringing of children lays under both parents responsibility, however, the mother was responsible for the child care. The parents mainly explain their decisions to children. Children were independent in their dining and dressing matters, with the rest, mothers were helping them. The children helped in simple household tasks, and tidy up after themselves. Children were punished for telling lies, disobedience, conflicting, using a computer for a long time, and stealing. Parents often punished depriving their children from their favourite things, putting child in a corner. In some cases violent actions has been observed as well (one parent did not consider a slap to a kids bum as an act of violence, it is required to bring the child into conscience, some parents shout out loud on kids, other parents think that a child should be scared of father's glance
- ✓ There were many children in preschools that attend to kindergarten before, however they moved to preschool for many reasons - either new preschool has opened in their community (at Margahovit the whole elder group in the kindergarten was decided to move to the newly opened preschool), or a child did not get used to it, or the fee was not affordable, or due to the fact that the group was big the tutor could not pay attention to every child, or the parents decided to take their child just to that school and attending the preschool would allow to get knowledge and be prepared for the school. The children who attended to preschool had learned to socialize, to get disciplined, acquired some knowledge (digits, letters).
- ✓ The parents thought that large influence of a kid's development has his/her family (the influence of parents), learning (learning methods, topics) as well as socio-economic conditions of a family.
- *Preschool-parent link*
 - ✓ In all communities, the preschool-parent link was strong enough and the parents were in permanent link and used to be willing to help the tutor in any matter. At Getap and Gladzor the parents prepared flyers and materials for education process. The parents used to take their children to the preschool mainly for getting education, since they were confident that the children would get the relevant knowledge and get pre prepared for the school.
 - ✓ In some preschools except for the money paid for food,. In some preschools the parents expressed their readiness to pay for foreign languages classes, and for hot meal in the preschools where no meal was provided. In Yerevan secondary school No.66's preschool parents wished that a psychologist attends the preschool. The parent of a child with special needs wished very badly that a dance studio is created

at the preschool since their schools teach for music works at different places and could not tutor at the preschool as well.

- ✓ Parent-tutor link was kept up by visits, gatherings and making phone calls. The parents were satisfied with the conditions of preschools (building, security, equipment, accessories, etc.), and, meantime, the parents of children at Gladzor were complaining for the quality of chairs and noted that in the beginning they were with metallic legs and with soft seats and they liked them very much, however the program head did not accept them due to the fact that they were not in compliance with the norms of hygiene and security, and as a result they were replaced with wooden chairs. The parents were expressing their dissatisfaction based on the comparison they made. However we need to note that the preschool observed the requirements of set norms.
- *Gender differences in children's abilities*
 - ✓ The majority of tutors stated that the children abilities did not vary depending on their gender. Only three tutors stated that there is a difference, namely girls are more developed, more capable and brave.
- *The program continuation*
 - ✓ Mainly the head teachers of the preschools did not foresee any danger of the continuation of the program. Worth mentioning, that only Vanadzor, Gladzor, and Yeghegis community preschool's head teachers. Vanadzor head teacher mentioned that there is an issue in tutor's remuneration, and Gladzor and Yeghegis head teachers saw danger in emigration, as its possible future high numbers would bring up issues in the next years creating difficulties in involving children in the preschool.

The registered changes at the end of the year

- Per Yerevan secondary school No. 13 after E.Telman SNCO's preschool head teacher the preschool fostered the school rank in the area and will have greater influence on the rise of the children numbers.
- Some expenses were not included in the budget, or were not foreseen during the planning process, which created some problems at later stages. The head tutors tried to cover it with their own means or with the help of the community of the parents. Specifically, the remuneration of the tutor (secondary school No. 30 of Vanadzor SNCO), the costs of the purchase of current teaching materials, and purchase of didactic materials.
- Another organisational issue could arise in the preschools if the tutor is absent, for example, is on a sick leave. The problem is that when the tutor is the only one and in such cases she is being replaced by a trained person who does not work at the preschool and issues related to unavailability of remuneration arises.

- In some preschools the parents filled in anonymous questionnaires relating to some issues and omissions that arose. The preschool staff tried to find solutions for these problems.
- The preschools' staff used to give advice to parents on how to bring up children, their development, and solutions on psychology and other matters.
- As for the general conditions, in some preschools the food supply is still a problematic area (according to parents), however in some preschools, at the end of the year, the food supply problem was solved, in others- was planned to be solved for the next year.
- The need for hot water been spotted in Dzoramut preschool, according to its tutor. The room temperature there was very low due to insufficient heating. As a result the preschool was closed for the month of January.
- There are issues related to water supply and heating at Yeghegis. Water supply issue is related to the whole community itself, and the community tries to solve it by means of charity organizations and sponsors. As it relates to heating, although all three electric heaters were used at the preschool, the children got cold anyway. And used to get sick often. The head teacher noted that no such issues are expected to arise in the next years.
- The head teachers felt the need of having a open air playground as the absence of it makes decrease in children's' physical activity. The current playgrounds are not safe enough, especially when the weather conditions were hot (there were crawlers in the area). Where there is no playground, the head teachers try to solve this issue.
- The changes of physical environment of the preschools, can be said that at the end of the year the handmade accessories, colourful wallpapers have been added and some working centres were separated. In many preschools there has been shortage of many accessories (didactic, visual, toys, literature, methodology materials) which is a result of not being at all, or it broke down, or worn out. Often those accessories were bought by the head teacher, tutor, or parent. As for the centres, it can be said that at the end of the year sewing and military working centres were wished to be added.
- At the end of the year the tutors mastered the new teaching methods, became more experienced and gained some confidence. Many events were provided by tutors. During the classes various methods and principles were applied.
- In general the parents were satisfied by the tutors' attitude, the knowledge they gave and the general conditions of the buildings.

- The preschool gave valuable knowledge, the children learned to speak politely, became literate, learned the numbers, can count, can do simple tasks with numbers, know the basics of socialising, gave up difficulties they had, can tell tales and poems, became more active, became friendly, and some of them can write their names. Children with linguistic barriers have progressed a bit.
- There are some knowledge/skills that a child can learn only in preschool: for example, socializing with other children, friend making process, etc.
- Per the majority of tutors, depending of the sex of a child, their development level does not vary, however, they mentioned that girls were weaker for sport games.
- Children attending to a preschool have more knowledge compared to their sister or brother at the same age.
- Parent-preschool link got better and they started to frequently visit to preschool to know the child's daily life, provided handmade accessories during events, and in some preschools they even provided daily duties (because of the absence of an assistant tutor, or cleaner). Parents did class hearings and organised excursions.
- Due to the preschools, the parents have more free time and could better use it (in some cases they could spend more time with their younger kids), and some parents could start employment (employed job, self-employed), and several parents tried to and did not succeed due to short day working regime of the preschool.
- It can be said that the preschool graduates are ready for the school per the respondents. The preschools with school base provided better environment for the kids to integrate to school life, provided that the events happened at school created the perfect environment for the teachers to get to know the kids, to pass them some knowledge and to have co-op events with first graders.
- There is a project continuity threat for the preschool of Yerevan secondary school No. 55 after A.Chekhov SNCO, since it did not get the respective license for its operations.

7.2. Quantitative analysis summary

7.2.1. Summary of Child Testing

Thus, analyzing the development dynamics of children attending to preschools, micro projects implementation institutions, during one academic year, as well as comparing the results of the

children included and not included in the program at the beginning and the end of the academic year, we can state the following conclusions:

- As a result of the project implementation, the results of testing and retesting of children included in preschools, significant increase was recorded in (4) forming stereotypes /22.90%→80.66%/ indicator of Logic and thinking subfield, and (8) letter recognition /0.00% → 53.04%/ indicator of Early reading subfield;
- Control group children testing and retesting results show that mostly an increase was in (3) number recognition /46.84% → 90.03%/ indicator of General math knowledge subfield, and (11) recognition of similarities-differences /38.31% →82.21%/ indicator of Logic and thinking subfield
- In general, children who attend to preschool have better results compared to those not attending to preschool. The difference is most significant in (7) response to multistep instructions /27.30%/ indicator of the Oral speech perception subfield.
- The retesting results of children attending preschool differ from testing results of children not attending preschool. The difference is most significant in (8) letter recognition /45.93%/ indicator of Early reading subfield and (2) spatial perception /30.14%/ indicator of General math knowledge subfield.
- For all the children, the testing and retesting results showed maximal increase in Logic and thinking subfield /54.62%→39.17%/.
- Data analysis per each region:
 - ✓ The testing and retesting results in Gegharqunik region preschool, show that mostly an increase was in (4) forming stereotypes /10.00% → 80.00%/ indicator of Logic and thinking subfield, and (8) letter recognition /0.00% → 70.00%/ indicator of Early reading subfield, and (6) math knowledge /7.50% → 75.00%/ indicator of the General math knowledge subfield.
 - ✓ The testing and retesting results in Lori region preschool, show that mostly an increase was in (2) spatial perception /17.78% → 67.96%/ indicator of General math knowledge subfield, and, (8) letter recognition /0.00% → 50.74%/ indicator of Early reading subfield.
 - ✓ The testing and retesting results in Vayots Dzor region preschool, show that mostly an increase was in (2) spatial perception /10.00% → 83.64%/ indicator of General math knowledge subfield, and (4) forming stereotypes /26.06% → 98.33%/ indicator of Logic and thinking subfield, and (8) letter recognition /0.00% → 73.33%/ indicator of Early reading subfield.

- ✓ The testing and retesting results in Yerevan preschools, show that mostly an increase was in (4) forming stereotypes /24.44% -> 66.98%/ indicator of Logic and thinking subfield, and (11) recognition of similarities-differences /30.63% -> 82.94%/ indicator of Logic and thinking subfield
- ✓ The testing results of children attending preschool in Vayots Dzor region exceed the results of the other two regions, whereas the retesting results in Vayots Dzor and Lori regions' results prevail (not considering Gegharqunik region).
- ✓ In general the testing and retesting results of children who attend to preschool exceed the testing and retesting results of those children who do not attend to preschool.
- ✓ In Vayots Dzor region the average results of retesting of all the child development subfields' largely exceed the results of testing both for those children who attend to preschool and those who do not attend. The target group results of testing and retesting largely exceed control group result in Vayots Dzor region (not considering Gegharqunik region).
- ✓ Although per the average results of all the preschools the boys were more developed than girls (the majority of tutors did not mentioned this), still we cannot draw any conclusion for the development correlation of a child and their gender. Though, it's worth mentioning that children attending to preschool and those not attending, per each region and community, the boys' results mainly exceed the girls' results.
- ✓ In Vayots Dzor and Gegharqunik regions no clear correlation between the children's level of development and their families' social economic conditions was observed, and, therefore, no clear comment for the effect can be done. The analysis made for Margahovit of Lori region shows that children coming from families with average social economic conditions showed the maximal results of testing. A similar picture was observed at Yerevan 1; as to Yerevan 2, children coming from families, categorized as in bad social economic conditions, scored the maximal results of testing. It is worth mentioning that the social economic conditions of a family is not the only factor affecting the development of a child. The factor of the preschool, employment of family members for having time to tutor the children at home and other possible factors also affect it. In the meantime, per the results presented by the qualitative analysis (according to the majority of respondents), the social economic conditions affect children's mood, ability to concentrate on lessons and socialization process.

7.2.2. Summary of classes observed

Thus, analysing the observation cards at the beginning and end of the year in the institutions implementing preschool micro projects, one can conclude the following:

- All the factors in the observation card have very high representation - 80.42% and more except Time factor with only 79.50%, and the maximum is Objective factor with 91.67%.
- The Time factor appeared at its lowest in Yeghegis preschool 40.00%, in Dzoramut - 50.00%, the remaining were above 79.50%.

- In general, the classes in all preschools had high efficiency, except for Dzoramut /54.09%/ and Yeghegis /76.28%/ preschools. Gegharqunik region is represented by one preschool, i.e. Tsaghkunk, which had higher average results compared with average results of other communities /97.47%/. Out of other three regions the leader is Vayots Dzor, namely Getap preschool /95.83%/. The lowest results were registered in Lori region, namely Dzoramut preschool with only 54.09%.
- The class analysis of Vayots Dzor region preschool shows that the highest result had Getap preschool with 95.83%. In the region the highest result was observed in Objective factor /97.22%/.
- Among three preschools in Lori region, the class observations showed that the highest results had Vanadzor preschool with 93.21%. The class rendering indicators had higher average values, the highest was assessed at 85.42% for Questions indicator.
- Yerevan three preschools performed well. All indicators had high values, with the highest of 91.67% for Objective indicator.
- In general, the classes were successfully organized at Getap, Gladzor, Vanadzor, Tsaghkunk, and Yerevan-2 preschools.

CONCLUSIONS AND RECOMMENDATIONS

In the preschools observed, in practice, all the conditions for learning were met. However, it's important to mention that, to increase the organisation of work efficiency at preschools, there are few questions to look at.

- *General conditions of preschools*
 - ✓ The preschools assisted in rising a schools image and will have impact on the child numbers rise.
 - ✓ The analysis allows to think, that in some way, the type of community had influence on the organisation of the physical environment.
 - ✓ For the optimum operation of a preschool, the basis of it played some rol, since in schools, during the learning process sometimes the teachers get involved, namely, the foreign languages teachers, singing teachers who pass some knowledge to the preschool kids and get to know them.
 - ✓ The building conditions were good, recently renovated.
 - ✓ The following problems happened in the preschools - scheduled water supply, non-appropriate temperature (dressing rooms, on the way to cafeteria), the location (the location of preschool being at the edge of the community, and the road conditions). The need for long day regime was vital.
 - ✓ In the mixed age groups, it had been hard to combine the topics by age and work with one tutor.
 - ✓ The program does not provide the supply of food and in some preschools needed organizing food supply. In some preschools where the food problem was solved by UN's Food Program, the children were receiving full supply of food in a school's cafeteria. The parents' investment in various preschools were different. In some preschools the food was brought from home or the parent committee was purchasing identical food for everyone in the group.
 - ✓ Some financial difficulties arose, which are described below:
 1. There are cases where inefficient planning/spending of the budget happened. As a result, the head teachers were forced to replenish the supplies by means of the school, the community, the parents, or merely no replenishment was done.

2. Organisational one other problem could rise in preschools, when there is one tutor at the preschool and the head teacher does not comply with all the requirements of the labor Law of RA when a replacing trained tutor is invited to replace the tutor on a temporary basis.
- ✓ It's worth mentioning that the preschools mainly were not equipped with enough learning materials, didactic and visual accessories, toys. A small portion of the budget was dedicated in purchasing learning stuff, and the current purchases was made by philanthropists, or by the means of school. At the end of the year handmade accessories and flyers have been added.
 - *Preschool staff*
 - ✓ Due to the fact that the preschool was newly established the educational program was new to everyone, the tutors mostly were fully aware of child centered and integrated education principles and methods, the situational application methods. At all preschools, except for tutors at Yeghegis preschool and the preschool based on Yerevan secondary school No. 66, the head teachers and the tutors had prior work experience.
 - ✓ Only tutors work in all the preschools. This was mentioned as a drawback at Vanadzor preschool by its tutor, Getap preschool's tutor mentioned that due to being the only tutor she could not apply the integrated education approach. Gladzor head teacher suggested that another tutor is employed to teach foreign languages.
 - ✓ All tutors had trainings. They all were satisfied by the trainings provided as it were full of new material, and they gained a lot of knowledge, with the exception of tutors at Margahovit preschool and the preschool based at Yerevan secondary school No.66. The latter only mentioned that no practical part was offered during the trainings, and Margahovit's tutor mentioned both the shortcomings in the training materials, and the absence of practical part. And Dzoramut tutor did not participate the trainings fully. The only comment coming from all tutors was that the trainings were short and wished that the trainings were continuous and periodic.
 - *Socio-economic conditions of communities and family lifestyles*
 - ✓ Six of the communities observed were rural and four of them were urban. The main source of income for the families was agriculture, i.e. farming and land cultivation (in these works, sometimes, the kids were also involved per their will). A significant portion was families with source of income coming from paid jobs both locally and abroad.

- ✓ According to the qualitative results (per majority respondents) the socio-economic conditions in the communities has direct effect on a child development, particularly, there was an opinion that in such families the parents pay less attention to their children's education.
- ✓ Fathers and mothers were equally engaged in upbringing the child, however mothers were involved more in the caring process of a child. Parents mainly described their decisions to their children. Children were mostly unaided in their dining and dressing activities, but for other activities the mothers were coming handy. Children were helping at the household activities, for example tidying up after themselves. Children were punished for telling lies, disobedience, using a computer for a long time, aggression, making themselves dirty, taking toys from others' houses, and stealing. Parents often punished depriving their children from their favourite things, putting child in a corner.
- ✓ There were many children in preschools that attend to kindergarten before, however they moved to preschool for many reasons - either senior group in a kindergarten moved to preschool, or a child did not get used to the kindergarten, or a new preschool has opened in their community, or elder brother or sister who went to a school walked youngsters to preschool, or the parents wished that their children attend the same school in the future, etc.
- *Parents' expectations from preschool*
 - ✓ Parents thought that the family (parents) has greater impact on child development, teaching (teaching methods, topics), socio-economic condition of a family, as well as the influence coming from other children.
 - ✓ At the beginning of the year the parent-preschool link was not strong enough but it got better at the end of the year due to efforts of the staff of the preschools. The parents started to frequently visit preschool to know the child's daily life, provided handmade accessories during events, and in some preschools they even provided daily duties (because of the absence of an assistant tutor, or cleaner). Parents did class hearings and organised excursions.
 - ✓ The main objective of parents taking their children to preschool was to be ready for the school. At the end of the year the parents' expectations were met - they are satisfied with both preschool, and tutors' attitude, and the knowledge that their children got. Children with speaking problems have advanced little bit.

- ✓ Due to a child visiting to preschool, the parents had more time and could better manage it (in some cases parents spent more time with their younger kids). Some of the parents started employed works, or became self-employed, some of them tried to find job and could not succeed due to short day regime of the preschool.
- *Children integration with school*
 - ✓ The children who attend to school-based preschools, can be said that they are integrated with school. To this process the events organised in school played major role as the teachers got to know the kids, passed some knowledge, and with the first graders the kids attended to various other events.
- *Program financing*
 - ✓ Mainly the head teachers of the preschools did not foresee any danger of the continuation of the program, except for the head teacher of the preschool at Yerevan secondary school No.55 after A.Chekhov SNCO, where there is a threat for continuity of the project due to not receiving a license for operations, and after the project is completed the preschool would be closed down.
- *Class provision*
 - ✓ Tutors did concentrate on every aspect of child development, however in rural communities mostly lingual area was focused on, as the children heavily used regional dialect vocabulary.
 - ✓ In general the efficiency of the class provision was high, except for Dzoramut /54.09%/ and Yeghegis /76.28%/ preschools. Among most effective was the preschools of Tsaghkunk /97.47%/ and Getap /95.83%/. All the tutors could effectively direct the lesson with the right questions, and could provide the necessary level of activity by the children at the playrooms and were applying the correct learning methods.
 - ✓ The lowest representation had the Time factor /79.50%/, lowest in Yeghegis preschool /40.00%/, and the highest representation had the Objective factor /91.67%/, with the lowest recorded at Dzoramut preschool /50.00%/.
- *Children development*
 - ✓ According to the tutors and the parents, the preschool gave valuable knowledge, the children learned to speak politely, became literate, learned the numbers, can count, can do simple tasks with numbers, know the basics of socialising, gave up difficulties they had,

can tell tales and poems, became more active, became friendly, and some of them can write their names.

- ✓ The parents states that the children attending to preschool have more knowledge compare to their brother or sister at the same age.
- ✓ The testing and retesting results of children attending to preschool, exceed the results of those not attending to preschool. This allows to state that the preschool had major role in a child development.
- ✓ During the testing period the results at Vayots Dzor region exceeded the other two regions, while at the retesting period Vayots Dzor and Lori regions were the leader (not considering Gegharqunik region).
- ✓ As to the average values of indicators of all subfields for a child development, the retesting results of children attending preschool exceeded the testing results in Vayots Dzor region.
- ✓ For Vayots Dzor and Gegharqunik regions, the analysis made clear that there is no link between a family's socio-economic conditions and their children development. In Margahovit of Lori region children coming from families having average social economic condition demonstrated highest results for testing. Similar picture was observed in Yerevan 1. In case of Yerevan 2 children coming from families with bad social economic conditions scored the highest results of testing. At the same time, the socio-economic conditions does not define child development, and there is a need to take into account the preschool factor, the family members occupation - having time to spend with a child, and many other possible factors. Therefore, as for socio-economic conditions of a family we can only state, based on the analysis of the qualitative results, that the socio-economic condition directly affects the child mood, the ability to concentrate on a lesson, and the child's socialization attitudes and behaviour.
- ✓ The tutors in the observed preschools stated that a child's learning abilities are not dependent on their gender, however, they stated that the girls were weaker in sports game activates.
- ✓ The children development depending on their gender varied, therefore, a significant conclusion cannot be drawn. However, we need to mention that mostly the development level of boys were higher for children attending and not attending the preschools in the observed regions and preschools.

Recommendations

For community:

- Create unified model of assistance for the low income families to ease the purchase of current learning materials, the expenses for additional paid lesson, and food supply.
- To level the approach for the food supply of all the preschools so that every child gets the same conditions.
- If possible support the preschool with:
 - ✓ creating and equipping open air playgrounds
 - ✓ periodic addition of the classrooms with necessary accessories - literature, equipment, toys, didactic means and sports property.
 - ✓ organising a long-day regime and support creating sleeping amenities in preschools where there is a need and dedicated location for the above to be implemented.
 - ✓ the preschools need an assistant tutor because with the busy schedule the tutors cannot pay appropriate attention to a child hygiene.
 - ✓ in case a preschool have a child with special needs, an additional staff is needed to assist the child
- If possible, organise additional groups. For example, at the expense of reducing the tutor's working hours, accept the group tutor and pay on hourly basis, because not all the parents have the means to pay for additional group.
- To spend the budget in the most optimal manner, each region could organise wholesale purchase of furniture and teaching and training materials. As a result all the preschools will have similar furniture with the same price, will match the child's development standards (quality, colour, etc.). Other than that, while purchasing wholesale, the price would obviously be cheaper.

For the program:

- Keep on maintaining the micro project's model of being financed from state budget.
- Before the project is started in the communities, an analysis of the possibility of preschool operation is performed to be confident that no threat is existent for the continuity and to avoid problems related to possible non provision of license from the state authority for the preschool operations.

- To establish standards for the evaluation of the tutors' work. Make monitoring and based on the outcomes, encourage tutors with leading and high indicators in all existing preschools, which will promote healthy competition
- Experience has shown that just training for tutors is not enough and there is a need for trainers to provide class hearings, provide recommendations, keep up the link between the trainer and the tutor as long as the tutor becomes confident and is ready to work.
- Organize regular trainings for the staff of preschools, in addition to increasing the practical part.
- As it was last year, this year also the need to ensuring the availability of sufficient educational materials is present. For this reason, more importance should be given to educational and training materials line, while forming the budget: providing sufficient quantity of educational and training materials as it has large impact in providing better environment for child development.
 - ✓ It is necessary to detail the above said line included in the budget, to include all the necessary items for the effective organization of the classes and the effective use of the means and if possible to rise that budgeted amount for that line.
 - ✓ To exclude the burden on parents and the collection of money for the purchase of *teaching and learning materials*, it is necessary that the budget allocation for these materials is planned by the head teachers for the whole year.