THE IMPACT OF NEIGHBORHOOD ON CHILDREN'S SCHOOL READINESS IN GREECE – THE CASE OF AGIOI ANARGIROI, GREECE

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Abstract:
The factors that influence young children's school readiness, their cognitive skills and socio-emotional development relate to the social context shaped collectively by the individuals and families that live in a specific part of a district, the neighborhood. This study explores, through parents' views, the direct and indirect roles of the neighborhood environment in the development of preschool age children and examines whether there is a direct impact of the neighborhood's role on children's school readiness. More specifically, this paper studies the impact of the neighborhood context of Agioi Anargiroi, and the characteristics – both individual and socioeconomic – of the people of this population, on the school readiness of preschool age children. The data were collected by means of an anonymous written questionnaire, which was distributed to and filled in by the parents of preschool age students attending co-located public kindergartens of the Municipality of Agioi Anargiroi of the prefecture of Attiki.

Keywords: school readiness, preschool education, family – neighborhood characteristics

1. Introduction

Individuals and families living in a neighborhood create collectively a social context that has an impact on the developing child's readiness to learn during school attendance. Seeking to determine the semantic content of the word "neighborhood", this can refer to a part of a district but also to the grid of relationships created among people living close to one another. The need to clarify the meaning points also to the term "community". F.

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Toennies defines as community the form of human society in which individuals are interconnected with true sociability, have a will of substantial coexistence and do not coexist in the same place only to serve their interests (Toennies, F., 1955).

The guidance of young people by adults and the systematic effort to shape their character according to role models with full value approved by adults takes place in the narrow but also in the broader context of the family environment, and is dependent upon social factors, determining thus also the result of the education process.

According to Bronfenbrenner (Bronfenbrenner, 1994), the second most direct environment after family as well as the factors that render children "cognitively ready" for their school performance regarding their cognitive skills and socio-emotional proficiency and therefore have an impact on the school readiness of young children, relate to neighborhood.

According to Gourgiotou & Gliaou (2016:50), one of the factors that provides an additional indicator for the assessment of the children's learning readiness and at the same time has an impact on the children's school readiness for a successful school progress is the "readiness of local community". More specifically, the above-mentioned researchers refer to the desired appropriate response of communities – neighborhoods and the social services they provide, so that, on the one hand, they are "ready" to respond to the needs and characteristics of all children they receive, and, on the other hand, they offer them the necessary learning and development opportunities. The decisive and practical presence of neighborhood in young children's life can emerge from its social facilities and the social support it provides to families with young children, as well as from the availability, quality and financial support of the offered programmes that have an impact on the development of their school readiness.

There are only few studies that explore the impact of the neighborhood context on the school readiness of preschool age children (Klebanov, Brooks-Gunn, Chase-Lansdale & Gordon, 1997). Moreover, while there are several studies examining the correlation between the disadvantages of a neighborhood and the developmental health of its people (Browning & Cagney, 2002), the studies dealing with preschool age children are still quite limited.

Therefore, it is important to study in this paper the direct and indirect roles of the neighborhood context in the development of preschool age children, above and beyond the family environment and disadvantages. It is also advisable to examine whether there is or not a direct impact of the role of neighborhood on the school readiness of children.

2. Purpose and Research Questions

This paper investigates the relationship between the characteristics – both individual and common socioeconomic – of the population of a district and school readiness of kindergarten children. In other words, the paper studies the impact of the context of Agioi Anargiroi neighborhood, the characteristics of the people and their activities on the school readiness of preschool age children.

The specific research questions (R.Q) are the following:

RQ1: What are the basic individual and socioeconomic characteristics of the people of the neighborhood where the child lives and how do they relate between them?

RQ2: Do the neighborhood socioeconomic characteristics have an impact on children's school readiness?

3. Research Theoretical Background: Impact of neighborhood on children's school readiness

Neighborhoods and their impact on children's development constitute an additional micro-system in the ecological systems theory (Bronfenbrenner, 1977; Shonkoff, Phillips & National Research Council, 2000). The historical course of the ecological system development model was initiated by Bronfenbrenner (1992), who saw the child as a part of an interactive process that influences the child's development. Bronfenbrenner mentions that the "*characteristics of the individual at a particular moment of the individual's life are a common function of the characteristics of the individual and the individual's environment throughout the individual's life until that moment*" (Bronfenbrenner, 1992:190). By adopting a broader perception about human development, the creator of the model is not interested that much in the description of the individual's development, as other developmental theories do, but mainly in the "contexts" in which this takes place and the role they play in the developmental process. This is the central and most attractive point of his approach, namely the relationship of critical importance between the developing biopsychological human organism and social environment, as well as the quality of the dynamics of interconnections and interactions between the social systems (Bronfenbrenner, 1992; Petrogiannis, 2001a, 2003; Gourgiotou, 2016).

The system with the greatest influence on the development of children during the period of early childhood is the micro-system and more specifically micro-systems such as family, neighborhood, school, as direct experience of young children with broader systems are limited. It is considered that the second most important environment after home that influences school readiness of young children is neighborhood (Shonkoff, & Phillips, 2000). The term neighborhood as for its physical and topological dimension includes both the place located precisely outside the residence, the pavement or street, and public spaces, parks, squares, playgrounds, within the borders of a district (Kaisari, 2005). The neighborhood has also a social and emotional dimension, which is enriched with a multitude of concepts, values and meanings stating the relationships and feelings created in space, which are indicative of the subjective character of neighborhood as a lived space (Kaisari, 2005).

Research has shown that neighborhood constitutes a vital micro-system (Bronfenbrenner, 1977; Shonkoff, Phillips, 2000) that influences in a decisive way the child's learning and development through factors linked with the characteristics of the places around which it is organized but also with the characteristics of people and their activities within it. Such factors include the permanence and duration of the child's

residence in the neighborhood, available open spaces, public spaces (pavements, streets, landscaped and non-landscaped green spaces, residual spaces) and semi-public spaces (pilotis, backyards) of the neighborhood, common activities and interests, distance from centers and people playing an important part in the child's life, easy or non-easy access to other areas of the city and the level of safe living in the neighborhood. The neighborhood's quality level has a direct impact on the children's perception of self and others, their interest in learning and exploring, their sense of belonging and their interest in participating in social life (Edwards, 2005; Edwards, & Bromfield, 2009).

Non-ideal circumstances in a neighborhood (criminality, children exposed to violence, exploitation of children, family violence and low living standard (poor neighborhood) hamper children's development, lowering the quality of learning experiences first within the family and then in the neighborhood, which, through its institutions, serves the children. A natural consequence of all this is reduced caring for children in general and school regulations in particular (Kohen, Leventhal, Dahinten & McIntosh, 2008). Young children living in particularly disadvantaged neighborhoods had more problems externalizing and internalizing conduct compared to the ones raised in richer neighborhoods. Moreover, long-term consequences of disadvantaged local environments seem to influence the children's linguistic and cognitive development (Lloyd & Hertzman, 2010). The correlations between neighborhood problems and negative results in the child may be due to the impact of peers, to the lack of positive role models and appropriate supervision and to the limited available resources in the neighborhood. On the contrary, appropriate neighborhood infrastructure such as libraries and childcare facilities offer more learning opportunities to children. Moreover, the possibility of supervision and positive role models have a positive impact on children's development (Chase-Lansdale, Gordon, Brooks-Gunn & Klebanov, 1997). Although the family context has been broadly acknowledged as an important factor for the development of young children, there are limited studies examining the impact of the neighborhood contexts on the school readiness of preschool age children, as mentioned also in the previous section (Klebanov, Brooks-Gunn, Chase-Lansdale & Gordon, 1997; Xue, Leventhal, Brooks-Gunn & Earls, 2005).

4. Sample and Methodology

The study was conducted during the second semester of school year 2017-2018 in preschool age students attending co-located public kindergartens of the Municipality of Agioi Anargiroi of the prefecture of Attiki, through the use of an anonymous written questionnaire, which was distributed to and filled in by the students' parents. A total of 200 questionnaires were distributed to an equal number of parents of students of the specific kindergartens and 163 parents of students aged 5-6 years old responded (response rate 84%).

The Municipality of Agioi Anargiroi was chosen as research field for the following reasons: first, because this municipality covers 21.31% of the number of children

attending the public kindergartens of the prefecture of Attiki, providing a safe percentage for the representativeness of the socioeconomic stratification and, second, because due to internal migration, all country regions are represented anthropologically regarding the country's traditions and cultural specificities (Hellenic Statistical Authority, 2011).

The research data were statistically processed with SPSS 20; Cronbach's internal consistency indicator was calculated, and the following statistical techniques were applied: one-way frequency tables to describe the variables and contingency tables (two-way frequency tables) to search correlations between variables. Two variables are defined as independent when the knowledge of one does not affect the value of the other. Alternative hypotheses can therefore be formulated: H0 (null hypothesis), the variables are independent, and Hi (alternative hypothesis), the variables are not independent. The above hypotheses are tested with the statistical Pearson Chi-Square Test (test x2). The test is performed by comparing a predetermined significance level (a=0.05) with the significance resulting from the test.

5. Data

The demographic data of the parents that participated in the survey are presented and then the data that resulted from their responses are analyzed (question 1-6):

Regarding family status (question 1), the majority of asked parents (question 1), percentage 76.1% (n=124) stated that they are married, while 11.7% (n=19) stated that they are divorced and 12.3% (n=20) stated that they are separated.

Regarding mother tongue (question 2), 84.7% (n=138) of the asked parents replied that their mother tongue is Greek and 15.3% (n=25) replied that their mother tongue is other than Greek.

Regarding the education of the mother (question 3), 15.3% (n=25) of asked parents replied that the children's mothers have completed mandatory education, 47.9% (n=78) have completed upper secondary education (lyceum), 23.3% (n=38) have completed tertiary education (AEI-TEI) and finally, 13.5% (n=21) of the mothers of the sample replied that they hold a master's degree or a PhD.

Regarding the education of the father of the students (question 4), 14.7% (n=24) of asked parents replied that they have completed mandatory education, 38.7% (n = 63) have completed upper secondary education (lyceum), 27.0% (n = 44) have completed tertiary education (AEI-TEI) and 19.6% (n=32) stated that they hold a master's degree or a PhD.

Regarding family income of the students (question 5), 28.8% (n=47) of asked parents stated that they have a family income from 0 to 12,000 euros, 41.7% (n=68) from 12,000-20,000 euros, 27.0% (n=44) from 20,000-40,000 euros and only 2.4% (n=4) stated that their family income is above 40,000 euros.

Regarding nationality (question 6), 84.0% (n= 138) of asked parents replied that they have Greek nationality and 15.3% (n= 25) of the sample replied that they have "other" nationality.

The replies of asked parents (questions 7-24) about the characteristics of school readiness, such as cultivation of language, reasoning, writing, expression, logical and mathematical reasoning, emotional balance, social interaction, contact with school and relationship between parent and young child, are presented in the below table (Table 1):

Table 1: Replies of asked parents

1. I read stories, fairytales, or other books to my child					
		Frequency	Percent	Valid Percent	Cumul. Percent
Valid	Not at all	2	1,2	1,2	1,2
	Little	22	13,5	13,5	14,7
	Fairly	47	28,8	28,8	43,6
	A lot	35	21,5	21,5	65,0
	Very much	57	35,0	35,0	100,0
2. Do you share an affectionate and warm relationship with your child?					
Valid	Fairly	10	6,1	6,1	6,1
	A lot	49	30,1	30,1	36,2
	Very much	104	63,8	63,8	100,0
3. I help my child listen to and understand a narration, a game rule or other simple texts that someone reads aloud					
Valid	Little	8	4,9	4,9	4,9
	Fairly	27	16,6	16,6	21,5
	A lot	55	33,7	33,7	55,2
	Very much	73	44,8	44,8	100,0
4. I teach my child how to receive information from various sources such as posters, films, signs, works of art, in which written words and images coexist					
Valid	Not at all	3	1,8	1,8	1,8
	Little	31	19,0	19,0	20,9
	Fairly	56	34,4	34,4	55,2
	A lot	38	23,3	23,3	78,5
	Very much	35	21,5	21,5	100,0
5. I encourage my child to "make use" of the library of his/her room, his/her classroom and his/her neighborhood and make specific choices of books, corresponding to his/her interests and the subject he/she is involved in each time					
Valid	Not at all	11	6,7	6,7	6,7
	Little	12	7,4	7,4	14,1
	Fairly	24	14,7	14,7	28,8
	A lot	56	34,4	34,4	63,2
	Very much	60	36,8	36,8	100,0
6. I reinforce my child's effort to understand the relationship between oral and written discourse					
Valid	Not at all	3	1,8	1,8	1,8
	Little	11	6,7	6,7	8,6
	Fairly	57	35,0	35,0	43,6
	A lot	38	23,3	23,3	66,9
	Very much	54	33,1	33,1	100,0
7. I create conditions of reflection cultivating my child's mathematical reasoning					
Valid	Not at all	6	3,7	3,7	3,7

	Little	38	23,3	23,3	27,0
	Fairly	46	28,2	28,2	55,2
	A lot	44	27,0	27,0	82,2
	Very much	29	17,8	17,8	100,0
8.		**I discuss with my child about his/her mistakes, about what is good and evil, true and false, beautiful and ugly**			
Valid	Little	3	1,8	1,8	1,8
	Fairly	8	4,9	4,9	6,7
	A lot	20	12,3	12,3	19,0
	Very much	132	81,0	81,0	100,0
9.	**I support my child in becoming responsible**				
Valid	Fairly	12	7,4	7,4	7,4
	A lot	43	26,4	26,4	33,7
	Very much	108	66,3	66,3	100,0
10.	**I encourage my child to try new things/activities**				
Valid	Little	2	1,2	1,2	1,2
	Fairly	28	17,2	17,2	18,4
	A lot	58	35,6	35,6	54,0
	Very much	75	46,0	46,0	100,0
11.	**I help my child get to know his/her familiar environment**				
Valid	Fairly	5	3,1	3,1	3,1
	A lot	45	27,6	27,6	30,7
	Very much	113	69,3	69,3	100,0
12.	**Is your child dependent on you to a great extent?**				
Valid	Not at all	32	19,6	19,6	19,6
	Little	61	37,4	37,4	57,1
	Fairly	38	23,3	23,3	80,4
	A lot	28	17,2	17,2	97,5
	Very much	4	2,5	2,5	100,0
13.	**Is it easy for you to understand your child's feelings and behave accordingly?**				
Valid	Little	34	20,9	20,9	20,9
	Fairly	32	19,6	19,6	40,5
	A lot	35	21,5	21,5	62,0
	Very much	62	38,0	38,0	100,0
14.	**Is your child willing to help you in some of your tasks?**				
Valid	Not at all	1	,6	,6	,6
	Little	9	5,5	5,5	6,1
	Fairly	53	32,5	32,5	38,7
	A lot	71	43,6	43,6	82,2
	Very much	29	17,8	17,8	100,0
15.	**Do you have free time to take your child to parties, playgrounds and in general gatherings with other children?**				
Valid	Little	10	6,1	6,1	6,1
	Fairly	29	17,8	17,8	23,9
	A lot	56	34,4	34,4	58,3
	Very much	68	41,7	41,7	100,0
16.	**Do you have a hobby the whole family enjoys?**				
Valid	Not at all	16	9,8	9,8	9,8

	Little	14	8,6	8,6	18,4
	Fairly	69	42,3	42,3	60,7
	A lot	28	17,2	17,2	77,9
	Very much	36	22,1	22,1	100,0
17. Does your child express openly his/her feelings?					
Valid	Not at all	1	,6	,6	,6
	Little	51	31,3	31,3	31,9
	Fairly	33	20,2	20,2	52,1
	A lot	22	13,5	13,5	65,6
	Very much	56	34,4	34,4	100,0
18. I create the appropriate conditions so that my child perceives the interaction of the environment with human activities					
Valid	Little	5	3,1	3,1	3,1
	Fairly	40	24,5	24,5	27,6
	A lot	39	23,9	23,9	51,5
	Very much	79	48,5	48,5	100,0

The correlations between the basic socioeconomic characteristics of the neighborhood where the child lives with the cognitive areas of development, such as language, reasoning, writing, expression, logical and mathematical reasoning, emotional balance, social interaction, contact with school and relationship between parent and young child, elements related to the evaluation of the development and progress of children and school readiness, are presented below.

The findings from the response of the participants in our survey to question (7) "**I read stories, fairytales, or other books to my child**" in combination with "**family status**" (question 1) reveal that there is a relationship between the variables "family status" and "I read stories, fairytales, or other books to my child" (see Table 2). This table classifies biaxially the total of the observations as to these two variables. From the reading of the content of the table, it results that married parents read (a lot and very much) stories, fairytales, or other books to their child, at a percentage of 67%, while the respective percentage is 47.4% for divorced parents. The independence test X² of the variables is presented in Table 2.

Table 2: The independence test X² of the variables

I read stories, fairytales, or other books to my child			Not at all	Little	Fairly	A lot	Very much	
Family status	Married	Count	2	15	24	26	57	124
		% within Οικ. Κατ	1,6%	12,1%	19,4%	21,0%	46,0%	100,0%
		% of Total	1,2%	9,2%	14,7%	16,0%	35,0%	76,1%
	Divorced	Count	0	0	10	9	0	19
		% within Οικ. Κατ	0,0%	0,0%	52,6%	47,4%	0,0%	100,0%
		% of Total	0,0%	0,0%	6,1%	5,5%	0,0%	11,7%
	Separated	Count	0	7	13	0	0	20
		% within Οικ. Κατ	0,0%	35,0%	65,0%	0,0%	0,0%	100,0%
		% of Total	0,0%	4,3%	8,0%	0,0%	0,0%	12,3%
Total		Count	2	22	47	35	57	163

		1,2%	13,5%	28,8%	21,5%	35,0%	100,0%
% within Οικ. Κατ		1,2%	13,5%	28,8%	21,5%	35,0%	100,0%
% of Total		1,2%	13,5%	28,8%	21,5%	35,0%	100,0%

Chi-Square Tests	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	55,064[a]	8	,000
Likelihood Ratio	69,363	8	,000
Linear-by-Linear Associate	25,560	1	,000
N of Valid Cases	163		
a. 7 cells (46,7%) have expected count less than 5. The minimum expected count is ,23. **Table 2.** The independence test X² of the variables.			

In addition, for "**family status**" (question 1) in combination with question (question 11) "**I encourage my child to "make use" of the library of his/her room, his/her classroom and his/her neighborhood and make specific choices of books, corresponding to his/her interests and the subject he/she is involved in each time**", the survey showed that mostly the asked parents that are divorced (93.7%) or separated (75%) encourage their child to "make use" a lot and very much of the library of his/her room, his/her classroom and his/her neighborhood and make specific choices of books, corresponding to his/her interests or the subject he/she is involved in each time (see Table 3). The independence test of the variables is also presented in the following table:

Table 3: The independence test of the variables

I encourage my child to "make use" of the library of his/her room, his/her classroom and his/her neighborhood and make specific choices of books, corresponding to his/her interests and the subject he/she is involved in each time			Not at all	Little	Fairly	A lot	Very much	
Family status	Married	Count	8	10	23	36	47	124
		% within Οικ. K	6,5%	8,1%	18,5%	29,0%	37,9%	100,0%
		% of Total	4,9%	6,1%	14,1%	22,1%	28,8%	76,1%
	Divorced	Count	0	0	1	10	8	19
		% within Οικ. K	0,0%	0,0%	5,3%	52,6%	42,1%	100,0%
		% of Total	0,0%	0,0%	0,6%	6,1%	4,9%	11,7%
	Separated	Count	3	2	0	10	5	20
		% within Οικ. K	15,0%	10,0%	0,0%	50,0%	25,0%	100,0%
		% of Total	1,8%	1,2%	0,0%	6,1%	3,1%	12,3%
Total		Count	11	12	24	56	60	163
		% within Οικ. K	6,7%	7,4%	14,7%	34,4%	36,8%	100,0%
		% of Total	6,7%	7,4%	14,7%	34,4%	36,8%	100,0%

Chi-Square Tests	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15,556[a]	8	,049
Likelihood Ratio	20,632	8	,008
Linear-by-Linear Association	,018	1	,894
N of Valid Cases	163		
a. 6 cells (40,0%) have expected count less than 5. The minimum expected count is 1,28.			

The findings from the reply of the participants in our survey to question (16) "**I encourage my child to try new things/activities**" in combination with "**Education of Mother**" (question 3) (see Table 4) are presented next. From the reading of the content of the table it results that mostly mothers who have completed tertiary education (TEI AEI), at a percentage of 52.6%, and are holders of a master's degree, percentage 89.5%, encourage very much their child to try new things or activities, stories, fairytales, or other books, in relation to mothers who have completed upper secondary education (lyceum), percentage 39.7%, and mandatory education, percentage 24%. The independence test X^2 of the variables is presented in Table 4.

Table 4: The independence test X^2

I encourage my child to try new things/activities			Little	Fairly	A lot	Very much	
Education of mother	Mandatory education	Count	0	4	15	6	25
		% within Μόρ. Μ	0,0%	16,0%	60,0%	24,0%	100,0%
		% of Total	0,0%	2,5%	9,2%	3,7%	15,3%
	Upper secondary education (lyceum)	Count	2	17	28	31	78
		% within Μόρ. Μ	2,6%	21,8%	35,9%	39,7%	100,0%
		% of Total	1,2%	10,4%	17,2%	19,0%	47,9%
	Tertiary education (TEI – AEI)	Count	0	4	14	20	38
		% within Μόρ. Μ	0,0%	10,5%	36,8%	52,6%	100,0%
		% of Total	0,0%	2,5%	8,6%	12,3%	23,3%
	Master's degree	Count	0	1	1	17	19
		% within Μόρ. Μ	0,0%	5,3%	5,3%	89,5%	100,0%
		% of Total	0,0%	0,6%	0,6%	10,4%	11,7%
	2nd degree	Count	0	2	0	1	3
		% within Μόr. Μ	0,0%	66,7%	0,0%	33,3%	100,0%
		% of Total	0,0%	1,2%	0,0%	0,6%	1,8%
Total		Count	2	28	58	75	163
		% within Μόr. Μ	1,2%	17,2%	35,6%	46,0%	100,0%
		% of Total	1,2%	17,2%	35,6%	46,0%	100,0%

Chi-Square Tests	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	31,743[a]	12	,002
Likelihood Ratio	33,385	12	,001
Linear-by-Linear Association	6,438	1	,011
N of Valid Cases	163		
a. 10 cells (50,0%) have expected count less than 5. The minimum expected count is ,04.			

Moreover, the findings are analyzed regarding the reply of the participants in our survey to question (13) "**I create conditions of reflection cultivating my child's mathematical reasoning**" in combination with "**Education of Father**" (question 4) (see Table 5). From the reading of the content of the table, it results that mostly fathers who have completed tertiary education (TEI – AEI), percentage 47.8%, who are holders of a master's degree, percentage 89.5% as well as the holders of a PhD, percentage 100%, create very much conditions of reflection cultivating their child's mathematical reasoning, in relation to fathers with mandatory education, percentage 25%, and upper secondary education

(lyceum), percentage 25.4%. The independence test X² of the variables is presented in Table 5.

Table 5: The independence test X² of the variables

I create conditions of reflection cultivating my child's mathematical reasoning			Not at all	Little	Fairly	A lot	Very much	
Education of father	Mandatory education	Count	0	13	5	6	0	24
		% within Μόρ. Π	0,0%	54,2%	20,8%	25,0%	0,0%	100,0%
		% of Total	0,0%	8,0%	3,1%	3,7%	0,0%	14,7%
	Upper secondary education (lyceum)	Count	3	19	25	14	2	63
		% within Μόρ. Π	4,8%	30,2%	39,7%	22,2%	3,2%	100,0%
		% of Total	1,8%	11,7%	15,3%	8,6%	1,2%	38,7%
	Tertiary education (TEI – AEI)	Count	3	6	14	16	5	44
		% within Μόρ. Π	6,8%	13,6%	31,8%	36,4%	11,4%	100,0%
		% of Total	1,8%	3,7%	8,6%	9,8%	3,1%	27,0%
	Master's degree	Count	0	0	2	7	16	25
		% within Μόρ. Π	0,0%	0,0%	8,0%	28,0%	64,0%	100,0%
		% of Total	0,0%	0,0%	1,2%	4,3%	9,8%	15,3%
	PhD	Count	0	0	0	1	6	7
		% within Μόρ. Π	0,0%	0,0%	0,0%	14,3%	85,7%	100,0%
		% of Total	0,0%	0,0%	0,0%	0,6%	3,7%	4,3%
Total		Count	6	38	46	44	29	163
		% within Μόρ. Π	3,7%	23,3%	28,2%	27,0%	17,8%	100,0%
		% of Total	3,7%	23,3%	28,2%	27,0%	17,8%	100,0%

Chi-Square Tests	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	96,367ᵃ	16	,000
Likelihood Ratio	93,699	16	,000
Linear-by-Linear Association	51,970	1	,000
N of Valid Cases	163		
a. 11 cells (44,0%) have expected count less than 5. The minimum expected count is ,26.			

Next, the findings are presented from the reply of the participants in our survey to question (21) "**Do you have free time to take your child to parties, playgrounds and in general gatherings with other children?**" in combination to "**Nationality**" (question 7) (see Table 6). From the reading of the content of the table, it results that mostly parents with Greek nationality have a lot and very much free time to take their child to parties, playgrounds and in general gatherings with other children, percentage 81.9%, in relation to parents who have a different nationality, percentage 44%. The independence test X² of the variables is presented in Table 6.

Table 6: The independence test Χ² of the variables

Do you have free time to take your child to parties, playgrounds and in general gatherings with other children?			Little	Fairly	A lot	Very much	
Nationality	Greek	Count	3	22	48	65	138
		% within Υπηκ.	2,2%	15,9%	34,8%	47,1%	100,0%
		% of Total	1,8%	13,5%	29,4%	39,9%	84,7%
	Other	Count	7	7	8	3	25
		% within Υπηκ.	28,0%	28,0%	32,0%	12,0%	100,0%
		% of Total	4,3%	4,3%	4,9%	1,8%	15,3%
Total		Count	10	29	56	68	163
		% within Υπηκ.	6,1%	17,8%	34,4%	41,7%	100,0%
		% of Total	6,1%	17,8%	34,4%	41,7%	100,0%

Chi-Square Tests	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	31,040[a]	3	,000
Likelihood Ratio	24,901	3	,000
Linear-by-Linear Association	24,838	1	,000
N of Valid Cases	163		
a. 2 cells (25,0%) have expected count less than 5. The minimum expected count is 1,53.			

6. Discussion

As it was already mentioned, the main purpose of this study was to explore how the basic socioeconomic characteristics of the neighborhood where the child lives impact on the child's cognitive / development areas (language, reasoning, writing, expression, logical and mathematical reasoning, emotional balance, social interaction, contact with school and relationship between parent and young child) that evaluate the development / progress of children, with a view to using the resulting responses to make suggestions for further reflection in the specific field.

Based on the qualitative analysis of the personal details of the asked parents regarding their family status (question 1), it results that an important percentage (24%) of the parents of young children are divorced or separated. This element does not only show that the family institution is in crisis, but also that it influences negatively the mentality of young children. Besides, it is mentioned that family works as the primary stage of experiences of a child and is inextricably linked with neighborhood, namely with the environment of interaction of creative expression and quest of experiences of a child (Germanou, Papadimitriou, 2011:27; Gourgiotou & Gliaou, 2016).

Regarding the parents' mother tongue, the study showed that one out of ten parents is an economic immigrant, since Greek is not his/her mother tongue. This is reinforced also by the result of question 6, according to which 15.3% of the asked parents stated that they have some "other" nationality.

Regarding the education of mother (question 3), the survey has shown that the majority (62.6%) of asked mothers comes from the first two levels of education. This result does not come as a surprise since, as mentioned earlier, several economic immigrants

from other countries live in the area of Agioi Anargiroi. Moreover, our finding is confirmed also by a relevant study (Asimaki, Kyriazopoulou, Vergidis, 2016), according to which 'Second chance schools' in Agioi Anargiroi are attended by a quite large share of mothers whose nationality is other than Greek.

Regarding the education of father (question 4), the data of the survey showed that the majority (53.4%) of asked fathers replied that they hold a degree of completion of primary and secondary education. Comparing this result with that of question 3 about the education of mother, we can see that the increased requirements and multiple roles of mothers have a greater impact on women in the field of education.

Regarding family income (question 5), the survey sample showed that a considerable share (28.8%) of asked parents replied that their income is from 0 to 12,000 euros, which means that one out of three households in the area of Agioi Anargiroi lives at the poverty line. Moreover, the objective values of the area, according to gov.gr website, are around 900-950 euros; this amount classifies the area within the range of low objective values of Attica. These results come as no surprise since, as already mentioned, the area is characterized by a high unemployment rate. This finding is reinforced by the Hellenic Statistical Authority (ELSTAT) data, according to which "*the area of Agioi Anargiroi belongs to low-income areas*".

The above-mentioned findings are combined with one more basic characteristic of the neighborhood, which is criminality. In the municipality of Agioi Anargiroi, according also to data from the Hellenic Police and Eurostat (http://ec.europa.eu/eurostat/databrowser/view), criminality is around 2.8%, percentage higher by 64.3% in relation to the national average in Greece. Besides, a relevant study (Lignou, 2019) mentioned an increase by 36% of criminality in western Attica in 2016. Moreover, studies have shown that children living in areas with non-ideal social conditions, such as criminality, children's exposure to violence, exploitation of children, family violence and low living standard (poor neighborhood), mark a low-quality level of their learning experiences, at first in family, then in the neighborhood, which serves these children through its various institutions. A natural consequence of all this is the general decrease of the offered level of childcare and more specifically of the school regulations (Kohen, Leventhal, Dahinten & McIntosh, 2008). In addition, one more study (Fedor et al., 2010) found that the behavioral problems of young children were more trivial in neighborhoods with less violence incidents.

Regarding the question if parents read stories, fairytales, or other books to their child, it results that the vast majority (85.3%) of asked parents replied that they "fairly", "a lot" and "very much" read stories, fairytales, or other books to their child (question 7). This result is not stranger, since, as a general rule, parents are the first teachers of their children.

Regarding the correlation of family status and "I read stories, fairytales, or other books to my child" (question 7), it results that mostly married parents read stories, fairytales, or other books to their child. It is worth mentioning the results of the survey (Crych & Fincham, 2001) where it is mentioned that progressively less and less time is

dedicated to children of divorced parents, which has serious consequences on the child's development function. In addition, factors such as lack of free time and independence of women, deprive parents of their contact with children and produce delays in their psychosocial development (Chandola & Coleman, 1999:323).

To question (8) "Do you share an affectionate and warm relationship with your child?", the vast majority (93.9%) of asked parents replied "a lot" and "very much". This result is indicative of the strong affection parents show for their children. But also to the question "I support my child in becoming responsible", (question 15), the vast majority (92.7%) of asked parents replied "a lot" and "very much". Perhaps the interpretation of this result is the same as that of the previous question, as long as we accept that these parents are distinguished for their great affection for their children.

Regarding the correlation of "I encourage my child to try new things/activities" (question 16) with the education of mother, it results that most asked parents with a high education level encourage their child to try new things/activities. As mentioned in a relevant study (Nima, 2008:143), it is well-known that the families of upper socioeconomic classes create more frequently better learning conditions for their children, and the opposite is also true, namely that children of lower socioeconomic layers usually have less opportunities in their family to accept the necessary and appropriate education-creating stimuli. Besides, it is true that parents with a high education level create for their child an environment with intellectual and education opportunities that contribute decisively to the development of the child's cognitive functions (Bezevengis & Pavlopoulos, 1999:57).

To question (11) "I encourage my child to "make use of" the library of his/her room, his/her classroom and his/her neighborhood and make specific choices of books, corresponding to his/her interests and the subject he/she is involved in each time", the majority (70.2%) of asked parents replied positively from "a lot" to "very much". The appropriate infrastructure in neighborhoods, such as libraries and nurseries, offers more learning opportunities to children and has a positive impact on children's development (Chase-Lansdale, Gordon, Brooks-Gunn & Klebanov, 1997). In addition, Dupere et al. (2010) mention that "the existence of the necessary resources for the holistic development of children in every neighborhood, such as available libraries and existing preschool education centers for children, provide children with enriched learning opportunities".

Regarding question (14) "I discuss with my child about his/her mistakes, about what is good and evil, true and false, beautiful and ugly" most of the parents' replies (93.3%) were positive ranging from "a lot" to "very much". This finding can be attributed to the fact that discussion is a very useful tool for parents for the communication with their children. Besides, a relevant study conducted on children aged four to six years old showed that the differences in the number of "switches" in the discussion between parent and child were the main causes for many of the differences in brain physiology and language skills identified among the children (Kotete, 2012:36).

Regarding the correlation of father and question "I create conditions of reflection cultivating my child's mathematical reasoning" (question 13), most asked parents with

tertiary education create conditions of reflection cultivating their child's mathematical reasoning. This result is in compliance with the findings of a relevant study, which mentions that parents with a high economic – educational level create for their child an environment with intellectual – educational opportunities which contribute to the development of the child's cognition, reflection, memory and perception (Kalatzi – Azizi & Bezevekis, 2000). Moreover, parents of a high socioeconomic level involve children in more discussions, read more to them and offer them more teaching experiences (Galizi & Koukouta & Antoniou, 2011:29).

To question (9) "I help my child listen to and understand a narration, a game rule or other simple texts that someone reads aloud" the majority (78.5%) of asked parents replied positively from "a lot" to "very much". Similarly, the replies of parents to question (17) "I help my child get to know his/her familiar environment" corresponded to a high percentage ("a lot" to "very much", 96.9%). The above findings can be attributed to the fact that parents wish to encourage their children to discuss and share personal experiences. This point of view is reinforced by the findings of a relevant study conducted by Glenn-Applegate et al. (2010) on children aged 3,5-5 years old, which reached the conclusion that there is a significant relationship between the creative elements of children's narrations and their performance in weighted tests of narrative skills as well as in their language skills, such as grammar, vocabulary and syntax of sentences.

To question (7) "I read stories, fairytales, or other books to my child" 56.5% of asked parents replied from "a lot" to "very much". These results can be attributed to the fact that, as mentioned earlier, the area of Agioi Anargiroi is a relatively weak / poor area socioeconomically speaking and the assurance of additional books or any other teaching material in addition to that made available to children by the state for free creates an additional economic burden to the young children's parents.

Regarding the correlation of the parents' nationality and the question "Do you have free time to take your child to parties, playgrounds and in general gatherings with other children?" (question 21), it results that most asked parents with Greek nationality (81.9 %) have free time to take their child to parties, playgrounds and in general gatherings with other children. On the contrary, 44% of the parents of children with "other" nationality have free time to take their child to extracurricular activities, according to the point of view expressed by Braveman, Sadegh-Nobari, & Egerter S., (2008). It is therefore obvious that cohesion, trust and good relationships between the inhabitants of neighborhoods is beneficial to the young families, as it plays a critical part in the timely social and cognitive development of their children. This same result is found also in a relevant study mentioning that "*the families of the children of immigrants are cautious in their social interactions because they are worried about preserving their cultural capital, do not wish their alienation, as they consider it is important not to detach from their culture because at a certain point of time they might wish to go back to their country*" (Tsiakalos, 1999). Moreover, this differentiation can be attributed to the limited time the families of economic immigrants have as well as to their limited financial possibilities and their low education level.

To question (24), "I create the appropriate conditions so that my child perceives the interaction of the environment with human activities", the majority (72.4%) of asked parents replied positively, from "a lot" to "very much". This result, which implies the parents' great interest in encouraging their child's contact with natural environment, is in agreement with earlier research studies, which mention that the "window" for shaping bonds with natural environment is open during the early and middle childhood and during this period the contact with nature is strengthened. It is also held that if children do not develop an attitude of respect and caring for natural environment during their early childhood, it is very probable they will never develop such an attitude in their life (Cohen & horm-Wingerg, 1993; Kellert, 2002; Phenice & Griffore, 2003 as mentioned in Koti & Gourgiotou, 2020). There is also the WWF survey "WWF Better Life", in the context of which, through an app installed in mobile phones, a total of 9 000 citizens evaluated 1 700 green spaces, in 126 Greek cities. In this study, the green and entertainment spaces of Agioi Anargiroi were graded with 6.1 out of 10, with 9.2 being the highest rate and 4.4 being the lowest one (www.kalyterizoi.gr, 2016 report "green in your hands").

The research data that have been made available up to now, but also those of other recent studies (Arksey & O'Malley, 2005; Levac et al., 2010; Anita Minh, Nazeem Muhajarine, Magdalena Janus, Marni Brownell, Martin Guhna, 2017), point out, on the one hand, the significant direct or indirect impact of the neighborhood where a child lives on the child's school readiness and, on the other hand, the provide the ground for further research analysis of specific variables, to the extent they influence the development progress of a child of preschool age.

7. Conclusions

As a conclusion, taking into account the results of this study about the characteristics of the neighborhood, such as the financial status of the inhabitants, their citizenship, the socioeconomic and educational level of parents, the criminality level and the offered green and entertainment spaces as well as how these influence the development and progress of the children living there, a need emerges for further synchronous and systematic research of ways of improvement of the basic social provisions of each neighborhood. Targeted interventions by competent authorities, about continuous education programmes for parents, the creation of social care units for single-parent families, the integration of families of different nationality in the neighborhoods, the upgrade of green and entertainment spaces as well as the creation of a sense of security in the inhabitants, will contribute more efficiently to the holistic development of the children living in every neighborhood and will consequently reinforce their school readiness.

Conflict of Interest Statement

The authors declare no conflicts of interests.

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