



THE CONTRIBUTION OF ALL-DAY SCHOOLS TO THE DEVELOPMENT OF SOCIAL SKILLS OF PUPILS: THE CASE OF TRANSITION FROM PRESCHOOL TO PRIMARY SCHOOL

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Abstract:

The purpose of this study was to investigate the relationship among children's attendance of all-day preschool centers and their social acceptance and popularity in the first, second and third grade of primary school. The results were collated using a combination of two methods, a sociometric nomination test and the Teacher-Child Rating Scale (TCRS). 281 students from the first, second and third grade of public primary schools from the region of Western Macedonia in Greece, participated in the study. The analysis of variance showed that children who attended all-day preschool centers displayed more developed social skills and abilities than those who attended half-day preschool centers. Moreover, the children from all day preschool centers were more independent, had better working habits and fewer learning difficulties compared to those who attended half day pre-school centers. Finally, they had higher level of social acceptance and popularity from their peer group in comparison with their fellow students.

Keywords: all-day pre-school, all-day school, social skills, sociometric status, transition

1. Introduction

Schools today are called to redefine their framework and priorities in order to adjust to the forthcoming societal, family and financial challenges. One of the dimensions that can contribute significantly to the improvement of an educational system is to highlight and utilize more effectively the all-day school programs.

During the last two decades, various efforts were made in the Greek educational settings, with the support of the European Commission (Thoidis & Chaniotakis, 2012) to implement various types of the all-day schools. Especially the last years, educational

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policies applied both in educational and lifelong learning programs, aimed at upgrading the quality of education in the all-day school and establishing an integrated and coherent curriculum for all-day schools, lasting from preschool to primary school. The rationale behind these policies was the lack of coherence and planning for all-day schools within different educational levels, which had a negative impact on the smooth transition from one type of school to the next (Aleuriadou et. al., 2008; Birbili, 2011).

1.1 The all-day preschool and the all-day primary school in Greece

In Greece, The all-day preschool and primary school in the Greek educational settings fall within the parameters of the “integrated” all-day school models (Allemann-Ghionda, 2003) and within the “open”, all-day school type (Holtappels, 1997). In both preschool and primary settings, the “afternoon program” is optional and characterized by its pedagogical and social goal setting.

Initially, the introduction of all-day schools was necessitated by social, pedagogical and political reasons. Its main goals were the provision of a safe environment for pupils at the end of the compulsory school program, their participation in academic, cultural and athletic activities, and the opportunity to complete their homework. A recent study (Thoidis & Chaniotakis, 2015) showed that the all-day school constitutes an important aid for parents, when it comes to childcare, particularly during the economic crisis that the country is undergoing.

During the 2016 -17 school year, all-day preschool and all-day primary schools had assumed a homogenized framework and format across the country. The all-day preschool is accessible to all children aged 4-6 years. The compulsory program runs from 8:30 to 13:00, while the optional all-day program runs from 13:00 until 16:00. The basic compulsory program is flexible and gives priority to the interests and needs of the students. The daily program is guided from the Interdisciplinary National Curriculum and it includes activities like organizing a project, and free or structured play activities that aim at improving children’s learning and socialization. The all-day program also includes lunch, relaxation, sleep, free play and learning engagement (corners centers) and continue until 15:40. Usually, from 13:40 to 15:20 structured learning activities occur. From 15:20 to 16:00 the program usually includes free and organized play (ΦΕΚ τ. Β' α.φ. 2670, 26-08-2016). During the 2015-16 school year, almost 40% of preschool children were attending all-day preschool programs.

The after school optional all-day primary school program (13:20 to 16:00) includes lunch, which is part of the educational process, reading, preparing the next day's lessons and in the third section of the program, teaching optional subjects (Sports, English, Visual Arts, Music, Theatre treatment group cultural activities and information and communication technologies) (ΦΕΚ 1324 τΒ, 11-5-2016). Apart from the compulsory program, additional teaching staff for specific subjects (e.g. physical educators) also participate in the afterschool program. However, it is only children of working parents and vulnerable groups that are entitled to enroll in the all-day program.

Before the homogenization of all-day primary schools (2016 -17) in Greece, there were two types of all-day school available. The first was *Optional or classic all-day school*

established in 2002, which did not differ greatly from the current type of all-day school. The second type was the *All-Day Primary School with reformed program* established in 2011 (revised cohesive program) (35% of all-day schools). Attendance was compulsory for all students until 2 p.m., followed by an optional all-day school program. These programs included several new subjects and activities (e.g. music, dance, theater).

Today, all-day primary schools and preschool centers differ in their curriculum, in their expectations and in their goals regarding children's performance and teaching methodology. In contrast to the all-day elementary school, the all-day preschool has a coherent program (Ntoliopoulou, 2004).

1.2 Recent research findings

It is commonly accepted that the all-day school model, both pre and primary, can adequately address children's social and educational needs (Clark & Kirk, 2000; Gullo, 2000; Nowak, Nichol, & Coutts, 2009). At the same time it provides support and helps students who are facing difficulties during the transition from one educational level to the next (Fisher & Klieme, 2013).

Several studies have focused on the long-term benefits of all-day preschool in relation to children's behavior in primary school. Most of the studies carried out the previous years (Cryan et al., 1992; Hough & Bryde, 1996; Elicker & Mathur, 1997; Carnes & Albrecht, 2007) support the conclusion that children's attendance at all-day preschool has a positive effect on the development of their social skills.

Cryan et al. (1992) compared the academic performance and behavior of children enrolled in half-day preschools with that of children in all-day preschool programs. Teachers evaluated 14 dimensions of children's behavior in school. They authors found significant differences between the two groups in terms of originality, independent learning, participation in classroom activities, productivity with peers, failure or stress and so on. According to the findings, the all-day school showed better results.

Other researchers who studied the same phenomenon described that the children who attended all-day preschool developed a greater ability to interact socially with their peers (Hough & Bryde, 1996), and showed a greater degree of social skills within these interactions (Elicker & Mathur, 1997). Similarly, according to the research of Carnes and Albert (2007), both parents and teachers of preschool children reported that the children's social and emotional skills were considerably reinforced by their attendance at all-day preschool.

Researchers seem to agree that the positive effect that attending preschool centers has on children, continuously increases during their time there, reaching a peak in the final preschool year (Elicker & Mathur, 1997; Cooper, Allen, Patell, & Dent, 2010; Cryan et al., 1992). However, this positive effect on social skills and behavior begins to lessen during the first year in primary school. Cannon et al. (2006) found that children who had attended all-day preschool displayed a higher level of social skills on entering the first year of primary school. They found, however, that these skills became increasingly limited as the child progressed through the first three years of primary school.

Nonetheless, there is a number of studies which seem to cast doubt on the long-term benefits of children's attendance at all-day preschool (Cannon et.al. 2006; Walston, West & Rathbun, 2005; Wolgemut et. al. 2006). Other findings indicate no apparent benefits of (universal) all-day preschool (Milligan, 2012), but there may be some benefits under certain circumstances like low-income areas (Brownell, M.D. et. al. 2015; Nowak et. al. 2009). Hence, there is still a controversial picture regarding the effects of all-day preschool programs on children's development, and especially on children's social development.

2. Method

The main purpose of this study is to examine the possible association among children attending all-day preschool programs and the development of specific social skills, such as acting-out behavior, shyness/anxiety, assertive social skills, task orientation, frustration tolerance and peer social skills. The second purpose of the study was to examine the relationship between attending all-day preschool programs and children's sociometric status-social acceptance within their classroom.

More specifically, this study set two specific research questions:

- a) Whether attending an all-day preschool program influences the development of children's social skills compared to children attending half-day preschool.
- b) Whether attending an all-day preschool program is connected to the sociometric status-social acceptance of children in their primary school classroom (Hough & Bryde, 1996; Elicker & Mathur, 1997).

2.1 Participants

Two hundred eighty-one (281) students (153 boys, 28 girls) from 18 public primary schools of three regions of Western Macedonia in Greece (Florina, Ptolemaida, Kozani) participated in the study (table 1). More specifically, from the 18 participating classrooms, 42.3% were first grade classrooms, 28.5% second grade and 29.2% third grade. The mean age of the children was 7.4 years of age and the teachers had a mean of 19.8 years of experience.

The participating children were randomly from each primary school classroom. 77.6% of the participating children attended an all-day preschool program and 22.4% a half-day preschool program, when they were at kindergarten age.

The teachers and the parents were informed about the rationale of the study and consent forms were collected from all of them. In addition, the children were informed about the purpose of the study, the anonymity of the collected data and their right to stop participating anytime they desired.

Table 1: Demographic description of participants ($n = 281$)

		n	%
Class	A'	119	42.3%
	B'	80	28.5%
	C'	82	29.2%
Types of pre-school	Half-day Pre-school	218	77.6%
	All-day pre-school	63	22.4%

2.2 Instruments

Two measures were used in the current study for the data collection. The first was the teacher reported questionnaire Teacher-Child Rating Scale and the second was a child reported sociometric nomination technique.

(a) Teacher-Child Rating Scale

The Teacher-Child Rating Scale (TCRS) is a 38-item teacher-report measure of children's behavior problems and competencies at school, appropriate for use in elementary school. Eighteen items measure problem behaviors (acting-out behavior, shyness/anxiety, learning problems) on a 5-point scale ranging from 1 = not a problem to 5 = very serious problem. Twenty items measure child competencies (assertive social skills, task orientation, frustration tolerance, peer social skills). Each item is rated on a 5-point scale for how well it describes the child, ranging from 1 = not at all to 5 = very well. Total problem behaviors and competencies scores, and a number of subscale scores, are generated. Cronbach's coefficient alpha ranging from .85 to .95 (median = .91) for the TCRS subscales (Hightower et.al., 1986).

Measures of internal consistency were just as high for the questionnaire ($a = .93$) as they were for the subscales (*Behavioral problems: a = .90, Skills and abilities: a = .87*).

(b) Sociometric nomination technique

The sociometric nomination technique was used in order to examine the social acceptance and the sociometric status of peers in the classroom group (Bikos & Gregoriadis, 2012; Gregoriadis & Grammatikopoulos, 2014; Stadler, 2013). The sociometric questionnaire which was administered to students included two questions to which the children were asked to write the names of three classmates (a) with whom they like to cooperate in groups in their classroom, and (b) with whom they did not want to cooperate in groups in their class.

2.3 Procedure

The collection of the data occurred from February to April in order to examine classrooms that had ample time of classroom life and a clearly formulated peer relationships network. Both the TCRS questionnaire and the sociometric test were administered in the school premises. Children were assured about the anonymity of the collected data and were given a 10 minute period to complete the test. Teachers were asked to complete the TCRS for every one of their students and return the questionnaire by the end of the next day.

2.4 Data analysis plan

In order to examine the factor solution and item structure of the TCRS, an exploratory factor analysis was applied. In addition, in order to examine the relation among attending an all-day preschool program and children's social skills, an analysis of variance (one-way ANOVA) was applied. Similarly, a one-way ANOVA was used to examine the relationship between the grade level of children and the "Social skills problems and introversion" factor. In addition, chi squared tests were applied to examine whether there is a statistically significant difference between the three grades in terms of learning problems of students. Chi squared test were also run to examine the relation between attending an all-day preschool program and the sociometric status-social acceptance in the classroom.

3. Results

3.1 Teachers' perceptions of elementary school children's behavioral problems and competencies in the classroom

In order to examine the factor solution of the TCRS, and accordingly teachers' perceptions about their student's social skills and their behavior, an exploratory principle component analysis (with varimax rotation) was applied, which revealed a total of seven factors with eigenvalue above one.

An analysis of the First Subscale (p1) within the questionnaire (*measure problem behaviors*) revealed three factors, which accounted for 71.74% of the total variance, and four for the Second Subscale (p2) (*measure child competencies*), -which accounted for 67.19% of the total variance. The factors met a series of criteria: (a) the diagram of eigenvalues shows a fall after the third and fourth factor respectively, for each subscale, (b) each factor shows a high internal consistency (Cronbach's $\alpha \geq .70$), and (c) these findings are supported by the results of a corresponding application of the specific scale to preschool children (Gregoriadis, 2005).

An analysis of the first sub-scale (p1) "Behavioral problems", revealed the following factors: The first factor (p1.1), which accounted for 40.97% of the total variance, includes all the questions connected with learning difficulties (3, 6, 9, 12, 14, 15 and 18), that children are facing in the school classroom (Table 2). The factor p1.1, "Learning difficulties", had a high alpha coefficient of $a = 0.93$.

The second factor (p1.2) accounted for 24.12% of the total variance, and loaded the questions (1, 4, 7, 10, 13 and 16) that referred to behavioral problems that students face in the school classroom. This factor was named "Behavioral problems" and had a high alpha coefficient ($a = 0.91$).

The third factor (p1.3), was named "Social skills problems and introversion", accounted for 6.65% of the total variance. This factor mainly concerned questions (5, 8, 11 and 17) connected to social skills problems and introversion, which appeared in primary school children ($a = 0.73$).

For the Second Subscale (p2) "Competencies", the factor analysis revealed four factors: (a) social skills (p2.1), (b) working habits (methods) (p2.2), (c) personality

characteristics, and d) endurance of failure/disappointment (p2.3). The first factor, “social skills” (p2.1), which accounted for 34.12% of the total variance, includes all the questions (4, 6, 8, 12, 14, 16 and 20) connected with social skills and social status that pupils face in the school classroom. For factor p2.1, “Social skills”, the alpha coefficient was high ($\alpha = .86$).

The second factor p2.2 accounted for 17.15% of the total variance, and loaded the questions (1, 5, 7, 9 and 11) connected with working habits (methods) that pupils face in the school classroom. This factor was named “Working habits/ Independence” and the alpha coefficient was satisfactory ($\alpha = .72$).

The third factor p2.3, titled “Personality characteristics”, accounted for 10.4% of the total variance. This factor mainly concerned questions (2, 3, 10, 15, 18 and 19). The alpha-coefficient for this factor was high ($\alpha = .80$).

The fourth factor (p2.4) accounted for 5.51% of the total variance and loaded the questions (13 and 17) connected with (resilience to) adjustment to failure/disappointment that pupils face in the school classroom. This factor was named “Adjustment to failure/disappointment” and the alpha coefficient was high ($\alpha = .87$).

In the First Subscale “Behavioral problems”, item 2 “Isolated” cross-loaded in two factors and was therefore not included in the following statistical analysis. The mean score for each factor and subscale was calculated to examine possible individual differences.

Table 2: Factor analysis on the questionnaire of elementary children’s school behavioral problems and competencies (TCRS)

Items	Factor			
	1	2	3	4
FIRST SUBSCALE (p1) - Behavioral problems				
18. Learning academic subjects	.898			
6. Poor work habits	.894			
15. Poorly motivated to achieve	.833			
12. Difficulty following directions	.833			
3. Under achieving	.772			
9. Poor concentration, limited attention	.713			
14. Does not express feelings	.612			
1. Disruptive in class		.889		
7. Disturbs others while they are working		.871		
4. Fidgety, difficulty sitting still		.835		
13. Overly aggressive to peers (fights)		.811		
16. Defiant, obstinate, stubborn		.806		
10. Constantly seeks attention		.759		
11. Nervous, frightened, tense			.782	
5. Shy, timid			.727	
17. Unhappy, depressed, sad			.600	
8. Anxious, worried			.598	
Percentage of explicable variance (%)	40.9	24.12	6.65	
Eigenvalues	6.97	4.10	1.13	

SECOND SUBSCALE (p2) - <i>Competencies (skills and abilities)</i>				
12. Makes friends easily	.850			
4. Has many friends	.838			
20. Well-liked by classmates	.742			
16. Tries to help others	.662			
14. Expresses ideas willingly	.611			
8. Well behaved in school	.604			
6. Comfortable as a lender	.544			
9. Accepts imposed limits		.779		
11. Mood is balance and stable		.759		
1. Accepts things not going his/her way		.698		
5. Has a good sense of humor		.563		
7. Well organized		.518		
19. A self-starter			.778	
2. Defends own views under group pressure			.638	
15. Works well without adult support			.598	
3. Completes work			.564	
10. Participates in class discussions			.539	
18. Questions rules that seem unfair/unclear			.530	
17. Copes well with failure				.901
13. Functions well in unstructured situations				.893
Percentage of explicable variance (%)	34.12	17.15	10.4	5.51
Eigenvalues	6.82	3.43	2.08	1.10

* All loading factors under .400 are missing.

3.2 Relationship between attending all-day preschool program and children's social skills in the primary school classroom

In order to investigate whether attending an all-day preschool program was related to children's social skills, an analysis of variance (ANOVA) was carried out on the average scores for each factor (seven factors) and their relationships to the independent variable -type of preschool.

The results showed that there was a statistically significant relationship between attending an all-day preschool program and the following factors: *learning difficulties* (p1.1) ($F = 3.87, df = 279, p = .05$), *Social skills* (p2.1) ($F = 8.33, df = 279, p = .022$), *Working habits/independence* (p2.2) ($F = 8.45, df = 280, p = .004$) and to the second subscale (p2) *competencies (Skills and abilities)* ($F = 5.29, df = 275, p = .022$).

More specifically, the analysis of variance showed that the children who attended an all-day preschool program had more developed social skills (p2.1) ($M. = 3.85, S.D. = .78$) than those who attended a half-day program ($M. = 3.53, S.D. = .79$). For the factor "Working Habits/ Independence" (p2.2), higher scores were noted for children who had attended an all-day preschool program ($M. = 3.72, S.D. = .72$), while lower scores for this factor were noted for those who had attended a half-day program ($M. = 3.40, S. = .77$)

For the children who had attended an all-day preschool program, a higher average score was noted for the second subscale (p2) "Competencies - skills and

abilities" ($M. = 3.60, S.D. = .59$), in comparison with children who had attended a half-day preschool program ($M. = 3.41, S.D. = .57$), (Table 3).

Table 3: Compare the attendances in all-day preschool and half-day preschool with the factors

Factor	Type of pre-school				F	df	p
	All-day		Half-day				
	M.	S.D.	M.	S.D.			
Learning difficulties	4.24	.85	3.98	.98	3.87	279	.05
Social skills (p2.1)	3.85	.78	3.53	.79	8.33	279	.004
Work habits/Independence (p2.2)	3.72	.72	3.40	.77	8.45	280	.004
Competences–skills and abilities (p2)	3.60	.59	3.41	.57	5.29	275	.022

3.3 The social skills of children in the first three grades of primary school

The analysis of variance (ANOVA) revealed a statistically significant relationship between the grade level of children and the "Social skills problems and introversion" factor (p1.3) ($F = 6.87, df = 278, p = .001$). The lowest averages were observed in the third class ($M. = 3.97, S.D. = .78$) where most problems with social skills and introversion were observed, while in first grade the highest averages ($M. = 4.32, S.D. = .70$) were recorded.

The Kruskal-Wallis non-parametric chi squared test (Levene's test $p < .001$) showed a statistically significant difference among the three school grades (First, Second and Third grade) in terms of learning problems of students (p1.1) ($\chi^2 = 19.36, df = 2, p = .000$).

According to teachers, first-grade students displayed the highest averages ($M. = 4.27, S.D. = .85$). The students of the second grade showed lower averages ($M. = 3.95, S.D. = 1.12$) than those of the first grade, and third grade students showed the lowest averages ($M. = 3.78, S.D. = .86$) among the three grades.

Also, statistical control χ^2 for factor behavioral problems (p1.2) showed a statistically significant difference between the three grades in regard to the behavior problems of students ($\chi^2 = 9.16, df = 2, p = .010$). The highest averages for the factor "conduct problems" was noted for the students of the first grade ($M. = 4.27, S.D. = .62$) (Table, 4).

Table 4: Averages for "behavioral problems" and its subscales for the 1st, 2nd and 3rd grades of primary school

Factors	Class						Kruskal – Wallis test		
	A'		B'		C'		χ^2	df	p
	M.	S.D.	M.	S.D.	M.	S.D.			
Learning difficulties	4.27	.85	3.95	1.12	3.78	.86	19.36	2	.000
Behavioral problems	4.27	.62	4.06	.86	4.05	.55	9.16	2	.010
Social skills problems and introversion (p1.3)	4.32	.70	3.98	.88	3.97	.78	F	df	p
							6.87	278	.001

3.4 The relationship between attending an all-day preschool and children's sociometric status in the primary school classroom

Statistical control χ^2 showed a statistically significant relevance ($\chi^2 = 8.52, df = 3, p < .05$) between attending an all-day preschool and sociometric status-social acceptance in the classroom.

The majority of primary school students who were popular had attended an all-day preschool program, while the majority of primary school students who were experiencing social rejection and neglect had attended a half-day preschool program.

Table 5: Social status and attendance at all-day preschool

Social status in the primary school classroom	Type of pre-school	
	All-day	Half-day
Popular	38.1%	20.6%
Average/ controversial	39.7%	46.8%
Neglected	3,2%	6,4%
Rejected	19%	26,1%

3.5 Sociometric status and social skills of children in the school classroom

According to the perception of the teachers in this study, the more popular students also had more highly developed social skills and abilities in comparison with the controversial, average and neglected children who had the lowest levels of social skills and abilities.

In regard to *Work habits/Independence factor*, the popular students had the advantage over the controversial average students. The neglected and rejected children displayed lower quality of work habits (Table 6). The same results were observed within the other factors and also within the subscale category of "competencies/skills and abilities".

Table 6: Sociometric status in the primary school classroom and TCRS factors

Social status	Subscale						Factors					
	Competencies/ Skills and abilities (p.2)		Social Skills (p2.1)		Working habits/ independence (P2.2)		Learning difficulties (p1.1)		Behavioral Problems (P1.2)		Social skills problems and introversion(P1.3)	
	M.	S.D.	M.	S.D.	M.	S.D.	M.	S.D.	M.	S.D.	M.	S.D.
Popular	3.76	.52	4.01	.63	3.80	.71	4.48	.70	4.45	.50	4.40	.62
Average	3.54	.57	3.67	.73	3.53	.67	4.35	.67	4.43	.51	4.35	.75
Controversial	3.50	.54	3.67	.75	3.55	.70	4.09	.88	4.12	.66	4.10	.72
Neglected	3.25	.60	3.21	.86	3.09	.86	3.50	.99	4.03	.56	3.88	1.03
Rejected	3.10	.48	3.14	.78	3.09	.77	3.46	1.18	3.71,	.76	3.81	.90
	F = 14.58		F = 13.91		F = 9.72		$\chi^2 = 45.9$		$\chi^2 = 46.97$		$\chi^2 = 22.15$	
	df = 275		df = 279		df = 280		df = 4		df = 4		df = 4	
	p < .05		p < .05		p < .05		p < .05		p < .05		p < .05	

4. Discussion

The results of the present study (with regard to the first question of our research) showed that the development of social skills is positively influenced by all-day preschool attendance, but that this influence lessens as students' progress to higher classes in primary school.

There was a difference between children who attended all-day preschool programs and those who attended half-day programs in regard to their levels of specific social skills. More specifically, the analysis of variance showed that children who attended all-day preschool programs had more highly developed social skills than those who attended half-day programs. Moreover, the children from all-day preschool were more independent and displayed higher quality of working habits and fewer learning difficulties than those who attended half-day preschool programs.

A comparison of the first three grades of primary school showed that the students in the third class had a tendency to be more introverted, to face increased social and behavioral problems as well as to have more learning difficulties. The findings of a number of previous studies investigating the benefits of attending an all-day preschool program support the results of the present study (Cryan et al., 1992; Hough & Bryde, 1996; Hildebrand, 1997; Elicker & Mathur, 1997; Carnes & Albrect, 2007). The results of these previous studies strongly support the effectiveness of the role of the all-day school in improving pupils' social behavior in the classroom. However, apart from the possible influence an all-day preschool program, another factor that could be contributing to the gradual decline of sociometric status of children who attended a half-day preschool program, could be the aging-maturing towards pre-adolescence procedure itself.

Overall, the results of the present study (with regard to the second question of this study) showed that the children from all-day preschool programs held a comparatively higher social position in the class in relation to their fellow students. There seems to be a relationship between the type of preschool program a child attended and the level of peer social acceptance it is experiencing in the classroom. According to teachers and the results of sociometric test, children who had attended an all-day preschool program had a greater number of social interactions with their peers and a larger number of friends.

These findings, regarding children's social skills, and their ability for more prosocial and effective interactions with their peers, are supported by previous research (Hough & Bryde, 1996). More specifically, the child's sociometric status in the classroom is connected with the development of social skills and behavior. Similar findings were also reported by studies that investigated the relationship among student's levels of social acceptance, the type of preschool program they attended and their social competencies (Avgitidou, 1997). In addition, according to Verschueren, Buyck and Marcoen (2001), a positive self-image of a five-year-old child is associated with the peer group social acceptance the child is experiencing and it is reflecting the teacher's assessment of that child's adjustment to school. This argument seems to be consistent

with the findings of the current study for the first three classes of primary school. According to Hough & Bryde (1996), the children who do not have close friends, and generally do not hold a strong position within the social network of the classroom, do not tend to have developed social skills.

One limitation of the current study was that it was conducted in a relatively small sample in specific geographical areas of Greece, thus not permitting the drawing of representative conclusions. Another limitation of the study was that the level of social skills development of all-day primary school attendees was not compared with that of half-day school attendees. This would be an area worthy of investigation in a future research project. A third limitation was the relatively small number of female students participating in the study in comparison to the male students. A future research design should achieve a more equal representation of the two genders, thus allowing for examining the gender factor as well.

The findings of this study could have an impact upon current policies and practices regarding the evaluation of all-day school programs. Moreover, the results have important implications for the creation of a comprehensive all-day school system, which caters for student's needs from preschool reception class to 6th grade primary school. Under the financial-political circumstances currently pertaining in Greece, which include substantially increased unemployment, the all-day school could play a role in the creation of social educational support networks, working towards an equality of educational opportunity within the broader social spectrum.

References

1. Allemann-Ghionda, C. (2003). Ganztagschule – ein Blick ueber den Tellerand. Στο S. Appel & H. Ludwig, *Jahrbuch Ganztagschule 2004. Neue Chancen fuer die Bildung* (69-85). Schwalbach: Wochenschau Verlag.
2. Alevriadou A., Vrinoti K., Kyridis, A., Sivropoulou-Theodosiadou, E., & Xrisafidis, K. (2008). *Οδηγός Ολοήμερου Νηπιαγωγείου* (All-day pre-school Guide). Ministry of Education, National Service for the Implementation of Programs ΚΠΣ ΥΠ.Ε.Π.Θ. Athens: Patakis. [in Greek]
3. Avgitidou S. (1997). *Οι κοινωνικές σχέσεις και η παιδική φιλία στην προσχολική ηλικία*. (Social relationships and childhood friendship in preschool age.) Thessaloniki: Kyriakidis [in Greek]
4. Bikos, K., & Gregoriadis, A. (2012). Moral judgments of sociometrically neglected children concerning their bullying experiences in the first grade. *International Journal of Humanities and Social Science*, 2(9), 23-33.
5. Birbili M. (2011). *Σχέδιο δράσης για την εκπόνηση προγραμμάτων σπουδών & την επιμόρφωση εκπαιδευτικών στο νέο σχολείο*. (Action plan for developing curricula and training teachers in the new school). Operational Programme "Education and Lifelong Learning" - ΕΠΕΚΔΙΒΙΜ 2007-2013 National Strategic Reference Framework (ΕΣΠΑ). [in Greek]

6. Brownell, M.D., Nickel, N.C., Chateau, D., Martens, P.J., Taylor, C., Crockett, L., Katz, A., Sarkar, J., Burland, E., Goh, C.Y., & PATHS Equity Team (2015). Long-term benefits of full-day Kindergarten: a longitudinal population-based study. *Early Child Development and Care*, Vol. 185, No. 2, 291-316, <http://dx.doi.org/10.1080/03004430.2014.913586>.
7. Cannon, J., Jackowitz A. & Painter, G. (2006). Is Full Better than Half? Examining the Longitudinal Effects of Full-day Kindergarten Attendance. *Journal of Policy Analysis and Management*, 25(2), 299–321.
8. Carnes, G. & Albrecht, N. (2007). Academic and social-emotional effects of full-day kindergarten: The benefits of time. *Emporia States Research Studies*, 43 (2), 64-72.
9. Clark, P., & Kirk, E. (2000). Review of recent research on all-day kindergarten. *Childhood Education*, 76(4), 228-231.
10. Cooper, H., Ashley, B. A., Patall, E. A. & Dent, A. L. (2010). Effects of Full-Day Kindergarten on Academic Achievement and Social Development. *Review of educational research*, 80 (1), 34-70.
11. Cryan, J., Sheehan, R., Wiechel, J., & Bandy Hedden, I. G. (1992). Success outcomes of full-day kindergarten: More positive behavior and increased achievement in the years after. *Early Childhood Research Quarterly*, 7(2), 187-203.
12. Elicker, J., & Mathur, S. (1997). What do they do all day? Comprehensive evaluation of a full-day kindergarten. *Early Childhood Research Quarterly*, 12(4), 459-480.
13. Fischer, N., & Klieme, E. (2013). Quality and effectiveness of German all-day schools. Results of the study on the development of all-day schools in Germany. In J. Ecarius, E. Klieme, L. Stecher, & J. Woods (eds.) *Extended Education – an International Perspective*, 11-27. Leverkusen: Barbara Budrich.
14. Gregoriadis, A. (2005). *Interpersonal relationships in kindergarten: Teachers' and Children's perceptions about their relationships*. Unpublished doctoral dissertation. Thessaloniki: Aristotle University of Thessaloniki. [in Greek]
15. Gregoriadis, A., Grammatikopoulos, V. (2014). Teacher-child relationship quality in early childhood education: The importance of relationship patterns. *Early Child Development and Care*, 184(3), 386-402.
16. Gullo, D. F. (2000). The long term educational effects of half-day vs. full-day kindergarten. *Early Child Development and Care*, 160, 17-24.
17. Hightower, A. D., Work, W. C., Cowen, E. L., Lotyczewski, B. S., Spinell, A. P., Guare, J. C., & Rohrbeck, C. A. (1986). The teacher-child rating scale: A brief objective measure of elementary children's school problem behaviors and competencies. In *School Psychology Review*, 15 (3), 393-409.
18. Holtappels, H. G. (1994). *Ganztagsschule und Schuloeffnung – Perspektiven fuer die Schulentwicklung*. Weinheim: Juventa.
19. Hough, D. & Bryde, S. (1996). *The effects of full-day kindergarten on student achievement and affect*. Conference papers of American Educational Research Association. Elementary and Childhood Education. 8-12 April 1996. New York.

20. Milligan C. (2012). Full-Day Kindergarten Effects on Later Academic Success. SAGE Open 1-11, DOI: 10.1177/2158244912442677.
21. Nowak, J. A., Nichols, J. D., & Coutts, D. (2009). The Impact of Full-day vs. Half-day Kindergarten on Student Achievement of Low Socioeconomic Status Minority Students. *Scholarlypartnershipedu*, 4 (1), 34-47.
22. Ntoliopoulou E. (2004). Σύγχρονες τάσεις της προσχολικής αγωγής (Modern tends in pre-school education) Athens: Typothito. [in Greek]
23. Stadler, C. (2013). Was ist Soziometrie. In C. Stadler (Hrsg.) *Soziometrie*, (31-83) Muenchen: Springer VS.
24. Thoidis, I. & Chaniotakis, N. (2012). The All-day school in Greece: Is it still an open question? International Conference "Education across Borders", Florina October 5-7. Retrieved from <http://www.edu.uowm.gr/site/EduCbr>, s.704-711.
25. Thoidis, I., & Chaniotakis, N. (2015). All-Day School: A School in Crisis or a Social Pedagogical Solution to the Crisis? *International Journal of Social Pedagogy*, V. 4, 1, 137-149.
26. Verschueren, K., Buyck, P., & Marcoen, A. (2001). Self-representations and socioemotional competence in young children: A 3-year longitudinal study. *Developmental Psychology*, 37 (1), 126–134.
27. Walston, J.T., and West, J. (2005). *Full-day and Half-day Kindergarten in the United States: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–99*. In U.S. Department of Education. National Center for Education Statistics. 11-15 April. Washington, DC: U.S. Government Printing Office.
28. Wolgemuth, J. R., Cobb, R. B., Winokur, M. A., Leech, N., & Ellerby, D. (2006). Comparing longitudinal academic achievement of full-day and half-day kindergarten students. *The Journal of Educational Research*, 99(5), 260-270.

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