



PLANNING AND EVALUATING THE EDUCATIONAL PROCESS OF PLAY WITHIN GREEK PRESCHOOL LEARNING ENVIRONMENTS - A COMPARATIVE STUDY ON PRESENT AND FUTURE EDUCATORS

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Abstract:

Despite the importance of play as an instructional medium and its contribution on children's learning, development and creativity at all levels of education, research data extracted from Greek literature demonstrate that teaching does not depend on play at the extend that it should. The current study was conducted during the 2019 academic year and investigates on the views of current Kindergarten Educators (N:100) working on faculties of the Region of Epirus as well as Senior Students (N:100) at the Department of Early Education of the University of Ioannina, and it scrutinizes on the planning and evaluation of the educational process in terms of play within preschool cognitive environments and also on the role play holds in the Kindergarten's educational procedure. The findings of this research pointed out the significance of play's role towards learning and development of preschool aged children. Nonetheless, the current Educators do not acknowledge the importance of children's participation in the actual planning of play scholar environments in opposition to the prospective Educators who deem such as vital. Both groups, Educators and Students show an encouraging attitude towards their pupils when it comes to them desiring to design play activities, however the Students show limited confidence on educational planning issues, due to their lacking teaching experience within actual Kindergarten faculties. Educators as well as Students who have undertaken training courses regarding the educational merit of play, evaluate children's learning through play to a higher degree than their colleagues who have not attended such courses. Finally, the current research points out the pedagogical expertise of the Instructors needed towards a more comprehensive use of play in the educational praxis.

Keywords: play, planning, evaluation, kindergarten, current educators, prospective educators

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1. Introduction

Personal and social development of preschool aged children evolve through play which holds a dual role in their lives (Veiga, Neto, & Rieffec, 2016). On one hand it constitutes an innate need since through play they are able to externalize their vitality but on the other hand it is a fundamental right that discerns children from adults. On the domain of Preschool Pedagogics play is defined as a basic feature of a child's smooth development as well as a highly significant learning process that provides kids with the opportunity to learn inside a secure, free and joyful environment, experience a plethora of emotions, express views, evolve a creative way of thinking and obtain useful for-life abilities (Bredenkamp & Copple, 2009; Gal-Szabo, Spinrad, Eisenberg & Sulik, 2019; Johnson & Wu, 2019; Loizou & Avgitidou, 2014; Loizou & Loizou, 2019; Sakellariou & Banou, 2020; Wood, 2014).

Over the last years a thorough interdisciplinary approach regarding play and play learning within the preschool education Curricula is observed, which constitutes the research object of numerous studies on a worldwide scale (Einarsdottir, 2014; Jagoda, Gilliam, McDonald & Russell, 2015; Loizou, Michaelides & Georgiou, 2017; Lynch, 2015). This is because the position held by play in the Curricula gives off an issue concerning its role and value as well as its connection to learning and teaching (Fennimore & Vold, 1992; Kieff & Renee, 2017; VanHoom, Nourot & Alward, 1999).

Play learning is widely acknowledged as a crucial qualitative indicator during the formation of a cognitive environment or the implementation of learning strategies. The terms "play learning" and "play teaching" are neither used as degradations for any of the learning acts or the schools' objectives nor as an upgrade of play's role inside the learning and developing realities. On the contrary, the use of such terms is on the purpose of directing one's attention towards the common nature of tasks and play in the lives not only of the children, but of the adults who are responsible of their nursing and teaching, as well (Kieff & Renee, 2017).

Every time an Educator utilizes play approach in the learning process, it is important that he considerably takes on account the three phases of teaching which are: planning, implementation and evaluation (Ntoliopoulou & Gourgiotou, 2008). Planning is the first phase of teaching, in which the educator sets a goal, selects a teaching strategy, organizes the learning activities and collects supporting material (Jacobsen, Eggen & Kauchak, 2011). The Educators, ought, during this phase, to encourage their pupils' learning through beforehand planned play activities and make sure that those activities fully meet the children's needs and interests (Aypay, 2016; Bourke & Sargisson, 2014; Ernst, 2014). They also ought to consider whether the planned play environments offer children the opportunity of practicing their existing skills, evolving new ones and gaining access to a rich variety of play categories (Sakellariou & Rentzou, 2012a).

Careful and frequent planning of indoor and outdoor play school environments facilitates children's learning and development (Christidou, Tsevreni, Epitropou &

Kittas, 2013). School classes with different learning play settings and plenty of playthings contribute to the (a) holistic development of children (for instance, the Lego-block area enhances children's logical-mathematical intelligence). School yards that offer a variety of materials like sand, stones, trees and diverse play equipment (e.g. climbing walls) enable children to participate in a wide range of play activities (for example, children pretend to be warriors holding a wooden sword, climb trees or the climbing wall), to experiment and to learn in a joyful way (Birbilis & Kontopoulou, 2016; Hughes, 2010; Jarrett, French-Lee, Bulunuz & Bulunuz, 2010; Sarama & Clements, 2009).

Research has proven that the participation of children in the very process of planning play environments contributes to the development of their critical thinking ability, their imagination, as well as to the evolution of their cognitive and communicational skills (Christidou, Tsevreni, Epitropou & Kittas, 2013; Loizou, Michaelides & Georgiou, 2017; Singer, Nederend, Penninx, Tajik & Boom, 2014; Wood, 2009).

Implementation constitutes the second phase of teaching, during which the Educators, after they have selected the purpose and the means suitable for its accomplishment, commence their strategy. The success of this phase depends on the clarity of the goals determined during the planning phase.

Assessment is the third phase of teaching and a key feature of learning. In this particular phase, the educator tries to gather information in order to determine as well as on what extend this level of learning has truly been reached. In addition, the educator examines if the aim set during the phase of planning has been achieved (Jacobsen, Eggen & Kauchak, 2011). According to Gullo & Hughes (2011), there are three core principles pertaining to assessment: (a) assessment should be a continuous process within kindergarten classrooms and should be integrated into teaching and learning periods, (b) assessment should take various forms, including observations of learning and conversations, so as appropriately and adequately diverse learners are assessed, and (c) assessment should focus on both academic standards and developmental milestones.

International literature demonstrates that the evaluation of play activities, toy-objects and educational materials of play by the Educators in the Kindergarten is vital for the amelioration of the quality of learning and the academic skills of the pupils (Hyvonen, 2011; Pantazis, 1997). It is also alleged that play definitely constitutes a major technique for the assessment of the children's learning, development and progress (Hoffman & Glannon, 1993- Wood, 2009). Play, in particular, offers adults the ability to observe children and extract information with regards to their developmental stage, their skills and their emotional status. That been said, teaching and learning must rely on play (Brock, Dodds, Jarvis & Olusoga, 2016; Jantan, Hamdan, Yahya, Saleh & Ong, 2015; Sivropoulou, 1998).

Apart from assessment, self-evaluation is considered to be of major significance; the process during which pupils themselves come to conclusions about their own

accomplishments and form views on the outcome of the effort they have made during the learning procedure (Sluijsmans, Dochy & Moerkerke, 1999). Self-evaluation is, in general terms, described as a pupil-centered method (Lambert & Lines, 2000) since it enhances the role of pupils and allows them to actively participate in the educational act. International literature underlines the necessity of children to be involved with the evaluation of the educational process concerning play, and this is because thereby children are offered the opportunity to assess their own progress, identify their own strong points but also recognize any obstacles they come across, as well as in depth comprehend the actions they have to take up in order to improve not only their future accomplishments but no less their overall competency and capabilities (Geeslin, 2003; Institute of Educational Policy, Ministry of Education and Religious Affairs, 2014a; Stiggins, 1994).

The purpose of the current research is to investigate on the views of present and future (senior university Students) Educators a) towards planning and evaluation of play didactics within preschool learning environments and b) towards the role of play in the actual educational process. Our study is based on the following inquiries:

- 1) What is the role that play holds in the context of the Kindergarten educational process?
- 2) Do the current and prospective Educators plan play activities in the Kindergarten?
- 3) What is the role of current and prospective Educators every time their pupils wish to plan play activities and design toy- objects in the Kindergarten?
- 4) Do Educators and University Students encourage their pupils to participate in designing indoor and outdoor school play environments?
- 5) Do current and prospective Educators evaluate the kids' learning through play?
- 6) Do current and future Educators evaluate the educational materials of play in school under pedagogical criteria?
- 7) Do Educators and University Students encourage their pupils to proceed on self-evaluation during play activities?

2. The role of the Educator in children's play

Bibliographical consultation demonstrates that play constitutes a thematic domain which has been profoundly scrutinized over the last decades (Brock et al., 2016; Cheng & Johnson, 2010; Oliver & Klugman, 2007). Studies which have been carried out on the issue concerning the present and future Educators' role on play in the act of education, however, are anything but adequate (Jung & Jin, 2014; Klein, 1996; Lee, 2006; Sakellariou & Banou, 2020; Walsh & Fallon, 2019). The vast majority of research, centers upon the Educators' views towards teaching and learning at large (Calderhead & Robson, 1991) but also upon the definition and classification of play (Sherwood & Reifel, 2010). In addition to this, they have omitted to discuss about the Educators' views on planning and evaluating the educational process of play within preschool

learning environments as well as about the roles the Educators could adopt during play.

Investigational data show that the Educators in relevance to their beliefs and pedagogical expertise, tend to utilize play during the educational process in different manners (Hyvonen, 2011; Pui-Wah, 2010; Wallerstedt & Pramling, 2012). It is considered as necessary, though, that they provide children with a plethora of opportunities so as they are truly taught through play (Trawick-Smith, Wolff, Koschel, & Vallarelli, 2015), and, every time the Educators make use of play teaching should bear in mind the following parameters:

- 1) Organization: The Educators should organize and plan the children's play with extreme thoroughness, spirituality and emotionality (Aypay, 2016). Wood (2004), states, however, that a remarkable degree of difficulty is located on the development of a play pedagogics that would ascertain the instructor's role within the planning, backing and expanding children's cognition and evolution through play.
- 2) Feasibility: Play teaching as well as the implementation of play techniques should be aiming for the improvement of a holistic development and behaviour of toddlers, no less for the accomplishment of cognitive goals (Weisberg, Kittredge, Hirsh-Pasek, Golinkoff, & Klahr, 2015; Wood, 2009).
- 3) Orderliness: The Educators should be methodical and support their pupils' play activities with extreme conscientiousness (Jacobsen, Eggen & Kauchak, 2011).
- 4) Inclusiveness: The Educators should encourage their pupils to take part in the play educational process (e.g. designing of games and play school environments) (Lobman, 2006) and
- 5) Atmosphere: The Educators should offer their pupils the opportunity to freely express their concerns as well as to encourage them to choose toy-objects and play activities by themselves (Polymenakou-Papakyriakou, 1988).

Educators should, also, offer an environment thriving with stimuli and educational play materials (Brock et al., 2016) as well as observe children play since observation constitutes a crucial form of assessment of their learning. Observation - mainly a systematic one- helps Educators comprehend and evaluate children's play in order for them to plan, commence and expand suitable experiences which can back learning and development of children on one hand, and on the other alter the play environment in order for the children's needs and interests to be satiated (Birbilis & Kontopoulou, 2016; Brock et al., 2016; Bulunuz, 2012; Losardo & Syverson, 2011; Meckley, 2002; Ridgway & Quinones, 2012; Sakellariou, 2012; Sakellariou & Rentzou, 2012b).

Despite the magnitude of the role the Educators hold in children's play, research data (Vera & Geneser, 2012, Kraus, 2006) distinctly point out that the Educators are indeed insufficient in practically implementing the process of play as well as in taking up the roles mentioned above; this is something that might be caused by inadequate training on educational matters or merely by the Educators' negligence to conduct an

in-depth study of the actual Curricula (Anderson, 2001) or, perhaps, by the fact that they had not received any instruction on play during their University studies' time in the Departments of Education.

Play is the object of study for numerous researchers. The data available within the Greek literature regarding play and play didactics in the context of preschool Education are nonetheless minimal. The present study contributes towards the aim of enriching the investigational data.

3. Methodology

3.1 Research Sample

For the current study the aspects of 100 Kindergarten Educators (N:100) who are currently working on State Kindergarten faculties of the Region of Epirus, Greece, as well as 100 Senior Students at the Department of Early Childhood Education of the University of Ioannina (N:100) were examined regarding planning and evaluating play didactics within preschool learning environments as well as on the role play holds during the educational process during the 2019 Academic Year. The sample selection was random while the participation of all current and prospective Educators was optional and anonymous. The study was carried out from September 2019 until December 2019.

3.2 Demographics of Kindergarten Educators and University Students comprising the sample number of the research

Regarding the group of Kindergarten Educators, 90% of them are females while 10% are of male gender. Respectively, the group of University Students consists of 85% being females whereas 15% are males (Chart 1).

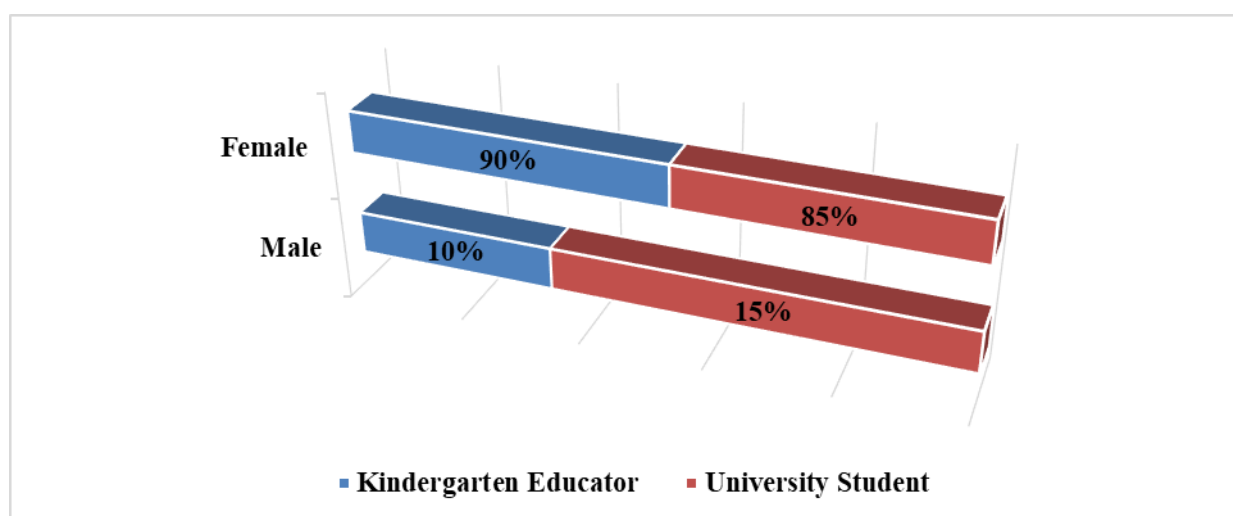


Chart 1: Gender-based arrangement of Kindergarten Educators and University Students

Regarding the subjects' groups, 73% of the Kindergarten Educators and 70% of the University Students have taken up courses during their undergraduate studies on

the pedagogical value of play, as opposed to 27% of Kindergarten Educators and 30% of the University Students who have not done so (Chart 2).

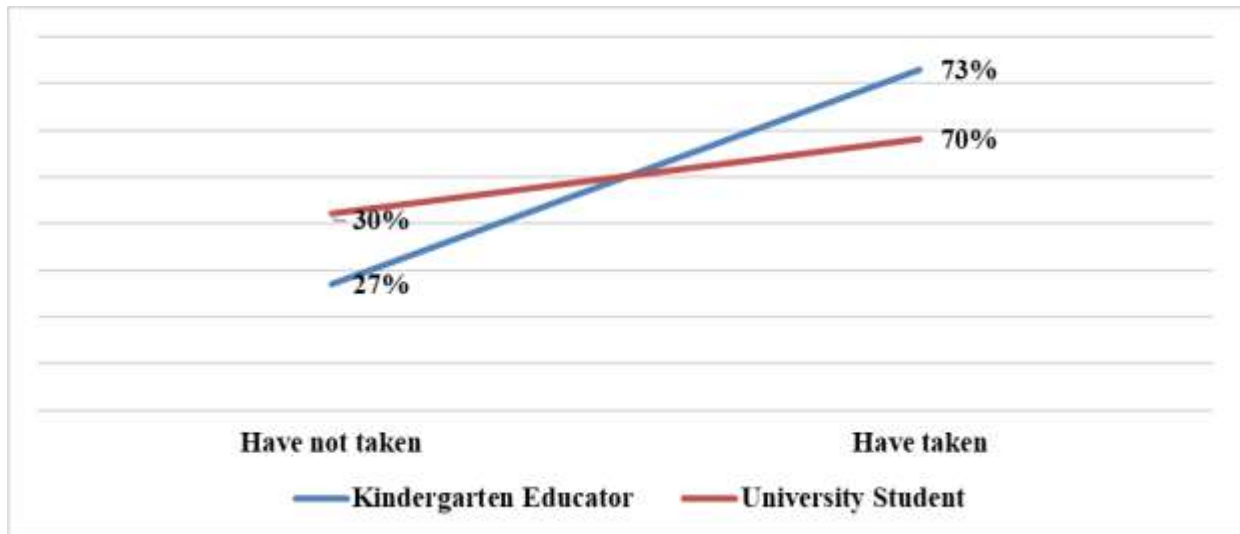


Chart 2: Training on Courses about play pedagogics

63% of the Kindergarten Educators and 58% of the University Students have attended further training seminars on play, while 37% of the Kindergarten Educators and 42% of the University Students have not done so (Chart 3).

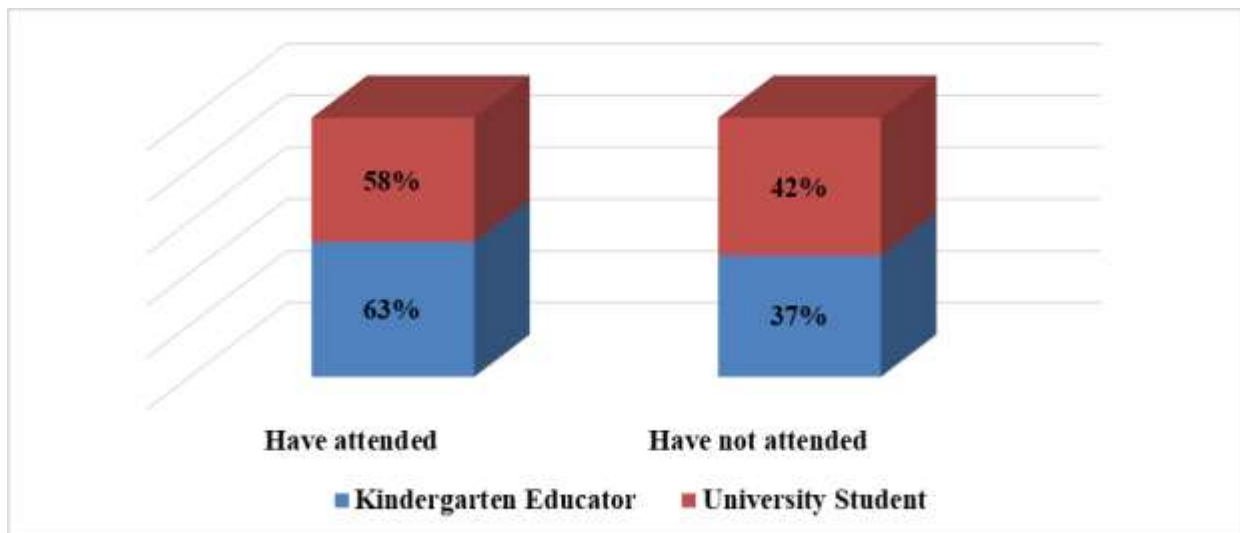


Chart 3: Attendance of further training seminars concerning play

3.3 Research Tool

Our research tool for collecting data was Questionnaire. Carrying out the research with the use of questionnaires was deemed as the most appropriate way of collecting the data regarding the views of the Kindergarten Educators and the University Students on planning and evaluation of play didactics within preschool cognitive environments. The questionnaire was formed on "open" and "closed" type inquiries after an exhaustive study of relevant bibliography. In total, 100 forms were handed out on

Kindergarten Educators and 100 on University Students in September 2019. The forms were gathered back in November 2019 and were analyzed in December of the same year.

3.4 Limitations of the study

On the purpose of the present study Kindergarten Educators holding a professional experience of 11 to 20 years took part, all of whom had taken up a University education programme during their studies' years, and had been currently working in State Kindergarten faculties of the Prefecture of Ioannina, Epirus, Greece. In addition, Senior Students at the Department of Early Childhood Education of the University of Ioannina who had previously completed their internship in Kindergartens also participated. We, nonetheless, consider that further investigation is necessary -on a national level- so that the conclusions of this study are generalized on higher certainty.

3.5 Data analysis

The responses to the questionnaire inquiries were gathered, coded and processed with the use of SPSS 20 statistical analysis package. They were also analyzed on any case this was considered as appropriate.

The answers concerning open-ended questions were gathered, recorded and categorized in accordance to their content; the purpose was to integrate similar answers within the same category avoiding thus possible loss of information.

3.5.1 Pearson chi square test

On the purpose of inspecting whether a correlation between two qualitative variables occurs, we implemented a χ^2 independence check. A respective to the absolute frequency of the recorded answers Pearson's asymptotic check was implemented so that the significance level p would be observed. On a significance level for $p > 0,05$ we must accept that the answers do not demonstrate any statistical difference in both cases, whereas for $p < 0,05$ a difference is indeed present.

4. Presentation of the Study Results

In the following section we present the findings of our research as they were recorded from the views of the Educators and the Students, concerning the role of play in the educational process as well as the designing and evaluation of play didactics in preschool learning environments.

4.1 The role of play in the educational process of the Kindergarten

Table 1: Aspects of Kindergarten Educators and University Students
 on the role of play in the Kindergarten's educational process

			Position you hold		Total
			Kindergarten Educator	University Student	
Role of play in the educational process of Kindergarten	Entertainment	Count	9	22	31
		% within Position you hold	9,0%	22,0%	15,5%
	Socialization	Count	31	29	60
		% within Position you hold	31,0%	29,0%	30,0%
	Learning and development	Count	60	42	102
		% within Position you hold	60,0%	42,0%	51,0%
	Acquisition of knowledge	Count	0	7	7
		% within Position you hold	0,0%	7,0%	3,5%
Total		Count	100	100	200
		% within Position you hold	100,0%	100,0%	100,0%

Both groups were inquired about the role of play in the context of the Kindergarten educational process. The majority of the Educators (60%) and that of the Students (42%) replied that play contributes on children's learning and development, 31% of the Educators and 29% of the Students responded that play contributes in children's socialization, 9% of the Educators and 22% of the Students answered that it contributes on children's entertainment while only a 7% of the Students' group answered that play contributes on kids' acquirement of knowledge. The above results are confirmed by the use of χ^2 , where $\chi^2 = 15,695a$, $df = 3$ and $p = 0,001$. From the χ^2 control (Pearson chi square test) a statistically significant difference between the aspects of the Educators and those of the Students ($p = 0,001$). This difference concerns the high percentage of Educators who deem learning and development as being the major role which play holds for children, in opposition to a 42% of Students who share the same aspect (Table 1).

4.2 Planning of the educational process of play in the Kindergarten

Table 2: Aspects of the research subjects
 on planning the educational process of play in the Kindergarten

			Position you hold		Total
			Kindergarten Educator	University Student	
Planning of educational process of play in Kindergarten	Rarely	Count	0	26	26
		% within Position you hold	0,0%	26,0%	13,0%
	Occasionally	Count	25	40	65
		% within Position you hold	25,0%	40,0%	32,5%
	Frequently	Count	60	16	76
		% within Position you hold	60,0%	16,0%	38,0%
	Always	Count	15	18	33
		% within Position you hold	15,0%	18,0%	16,5%
Total		Count	100	100	200
		% within Position you hold	100,0%	100,0%	100,0%

The Educators as well as the Students were asked about how often do they plan play activities in the Kindergarten. Data show that 60% of the Educators frequently plan activities on play, 25% occasionally, 15% always while none of the Educators rarely plan such activities. Out of the Students group, 40% of them occasionally plan activities regarding play, 26% rarely do so, 18% always whereas 16% frequently plan such activities. From the χ^2 (Pearson chi square test) checking, a statistically significant difference ($p = 0,000$) occurs between the participants' aspects. This difference correlates to the fact that the Educators by majority frequently plan play activities as opposed to a mere 16% of the Students (Table 2). The aforementioned results are confirmed with the use of χ^2 where $\chi^2 = 55,208a$, $df = 3$ and $p = 0,000$.

4.3 The teachers' role on planning play activities in the Kindergarten

Table 3: Views of Educators and Students on their role towards planning activities related to play as well as towards designing toy-objects in the Kindergarten

			Position you hold		Total
			Kindergarten Educator	University Student	
Teachers' role on planning play activities and toy-objects	Passive	Count	0	1	1
		% within Position you hold	0,0%	1,0%	0,5%
	Guiding	Count	13	27	40
		% within Position you hold	13,0%	27,0%	20,0%

in Kindergarten	Advisory	Count	23	23	46
		% within Position you hold	23,0%	23,0%	23,0%
	Encouraging	Count	64	49	113
		% within Position you hold	64,0%	49,0%	56,5%
Total		Count	100	100	200
		% within Position you hold	100,0%	100,0%	100,0%

The Educators along with the Students were inquired about the role they actually hold when children wish to design play activities and toy-objects in the Kindergarten. A 64% of the Educators and a 49% of the Students answered that they hold an encouraging role, 23% of the Educators and 23% of the Students have an advisory role, 13% of the Educators and 27% of the Students have a guiding role while only 1% of the Students hold a passive role towards such designing. From the χ^2 (Pearson chi square test) checking, no statistically significant difference seems to occur ($p = 0,048$) between the groups' views on this matter whatsoever (Table 3). The aforementioned results are confirmed with the use of χ^2 where $\chi^2 = 7,891a$, $df = 3$ and $p = 0,048$.

4.4 Provision of children with educational material in order for them to create their own toys-objects not only indoors but outdoors as well

Table 4: Views of the Educators and the Students on the provision of children with educational material so that they are able to create their own toys-objects not only indoors but also outdoors

			Position you hold		Total	
			Kindergarten Educator	University Student		
Provision of children with educational materials in order to create their own toy-objects indoors and outdoors	Rarely	Count	8	0	8	
		% within Position you hold	8,0%	0,0%	4,0%	
	Certain times	Count	21	50	71	
		% within Position you hold	21,0%	50,0%	35,5%	
	Almost always	Count	56	27	83	
		% within Position you hold	56,0%	27,0%	41,5%	
	Always	Count	15	23	38	
		% within Position you hold	15,0%	23,0%	19,0%	
	Total		Count	100	100	200
			% within Position you hold	100,0%	100,0%	100,0%

Regarding the Educators' group, 56% of them almost always provide their pupils with educational materials in order for them to create their own toy-objects ("I very frequently offer to my pupils, materials such is play-dough and Lego bricks so that they

can make their own toy-objects. Kids can actually create robots or flowers with such materials and use their creations in their imaginary games”), 21% certain times, 15% always, while only 8% rarely do so. Among Students 50% of them certain times provide kids with educational play materials, 27% almost always, 23% always (“I would be most keen on providing my pupils with various materials, especially raw-natural ones on order for them to form their own toy-objects. I really believe that natural materials are those which contribute more substantially to children’s creativity and learning”) while none of the Students rarely provide such materials. From the χ^2 (Pearson chi square test) checking, a statistically significant difference occurs ($p = 0,000$) between the aspects of the Educators and those of the Students. This difference is due to the highest amount of Educators who almost always provide children with educational material in opposition to a 27% of the Students who do so (Table 4). The above-mentioned results are confirmed by the use of χ^2 where $\chi^2 = 31,662a$, $df = 3$ and $p = 0,000$.

4.5 Designing indoor and outdoor school play environment along with the children

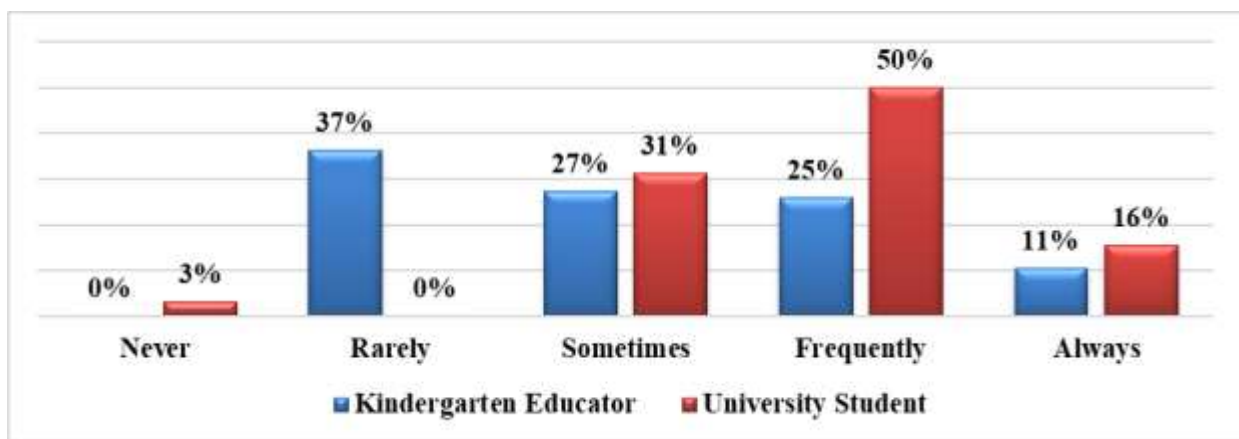


Chart 4: Views of Educators and Students on designing indoor and outdoor play environments along with children

A 37% of the Educators rarely motivate children to actively participate in the designing of school play environment, 27% sometimes, 25% frequently while 11% always do so. Of the Students, 50% frequently motivate children to take part, 31% sometimes, 16% always whereas a mere 3% never motivate them. From the χ^2 (Pearson chi square test) checking, a statistically significant difference ($p = 0,000$) occurs between the views of the participants and this is due to the fact that 50% of the Students frequently motivate children to involve themselves with the play environment as opposed to only 25% of the Educators who do so (Chart 4). The results reported above are confirmed by the use of χ^2 where $\chi^2 = 49,535a$, $df = 4$ and $p = 0,000$.

4.6 Evaluation of children’s learning through play

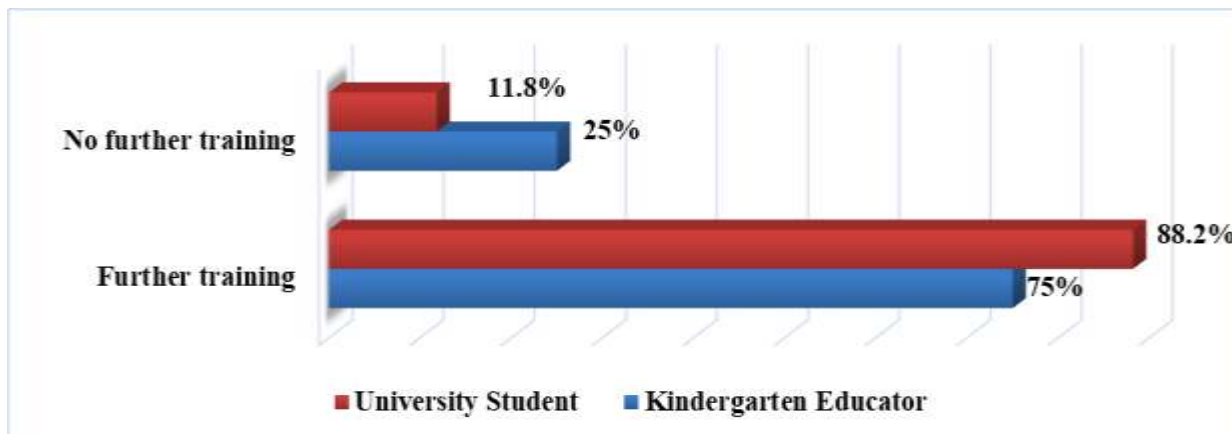


Chart 5: Views of Educators and Students on evaluating children’s learning through play, based on the teachers’ further training

From the data it is clear that the Educators (75%) and the Students (88.2%) who have undertaken further training on the value of play, make assessments of their pupils’ learning through play in a much higher amount than the Educators (25%) and the Students (11.8%) who have not undergone such training (Chart 5).

4.7 Self-evaluation of pupils during play activities

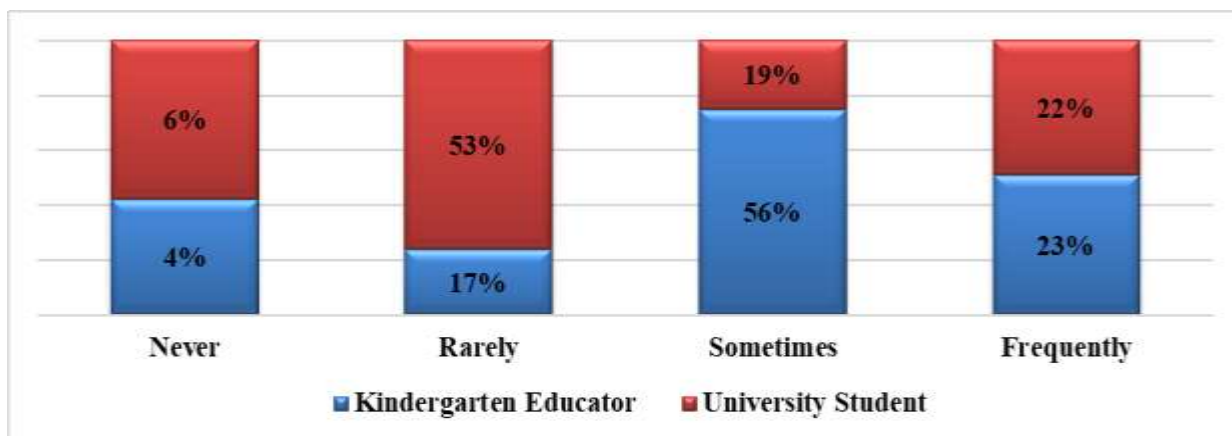


Chart 6: Views of Educators and Students on self-evaluation of pupils during play activities

The majority of Educators (56%) sometimes motivate kids to evaluate their achievements during play activities, 23% frequently motivate them, 17% rarely whereas only 4% never do so. The Students by majority (53%) rarely motivate children to self-evaluate 22% frequently motivate them, 19% sometimes, while only 6% never do so. From the χ^2 (Pearson chi square test) checking, a statistically significant difference ($p = 0,000$) is observed regarding the aspects of the subjects on the issue. This is due to the fact that a relatively great amount (56%) of Educators sometimes motivate children to self-evaluate, as opposed to the limited 19% of the Students (Chart 6). The above findings are confirmed by the use of χ^2 where $\chi^2 = 37,190a$, $df = 3$ and $p = 0,000$.

4.8 Qualitative Aspects of the Educators' and Students' views regarding the evaluation of the educational procedure in the Kindergarten

Question: Do you evaluate under pedagogical criteria the educational play materials in the Kindergarten? If so, please justify your answer.

Present and future Educators were asked whether or not they evaluate under pedagogical criteria the educational play materials in the Kindergarten; they were also asked to explain the reasons for proceeding into such evaluation.

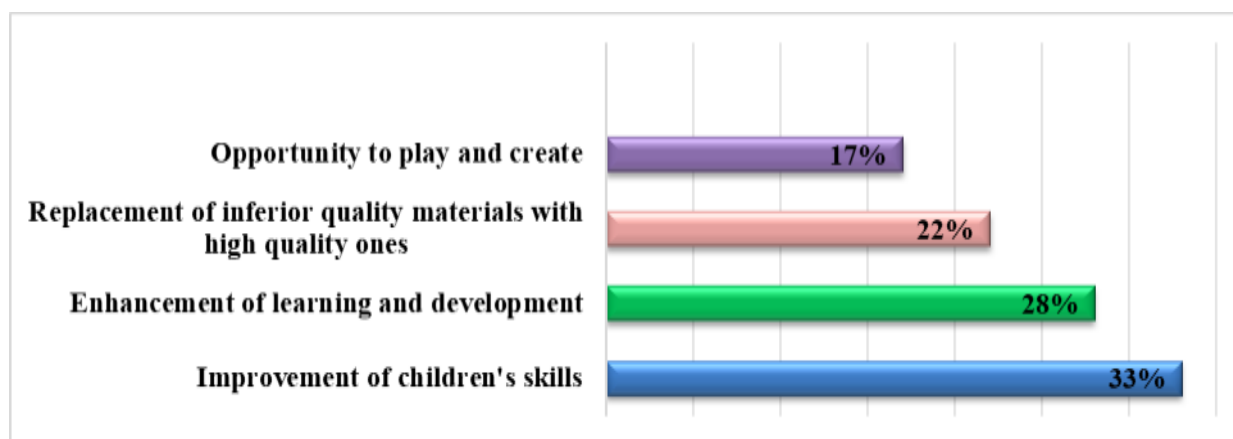


Chart 7: Views of Kindergarten Educators on the pedagogical evaluation of educational material in School

All of the Educators (100%) replied that they do evaluate play educational materials at the Kindergarten under pedagogical criteria since such evaluation contributes a) to the amelioration of children's skills (33%) (*"I regularly evaluate the educational play material of the class and enrich the centres of interest with new, high-quality material which shall help kids improve their social, cognitive, physical and emotional abilities. I believe that with a frequent evaluation of the educational play material children's skills ameliorate"*), b) to the enhancement of learning and development of children (28%) (*"By evaluating the educational play materials under pedagogical criteria, I certainly facilitate children's learning and wholesome development, I am able to better understand their needs and interests thus I can form a more appealing and beneficial environment for them"*, *"Pedagogical evaluation of educational play materials creates more learning opportunities, facilitates exploration, and has a positive impact towards the adequate meeting of children's needs- which are constantly changing and simultaneously increasing"*) c) towards testing of the suitability of toys and replacing lower quality materials with high quality ones (22%) (*"By evaluating the physical settings of the Kindergarten and locating possible 'defections' I get the chance to realize what is not appropriate for the kids therefore aptly replace it"*) and d) towards the provision of more play opportunities, consequently more creativity (17%) (*"When a plethora of high quality educational material in the faculty is available, children are given the ability to evolve their imagination and creativity as well as to design their very own toys"*) (Chart 7).

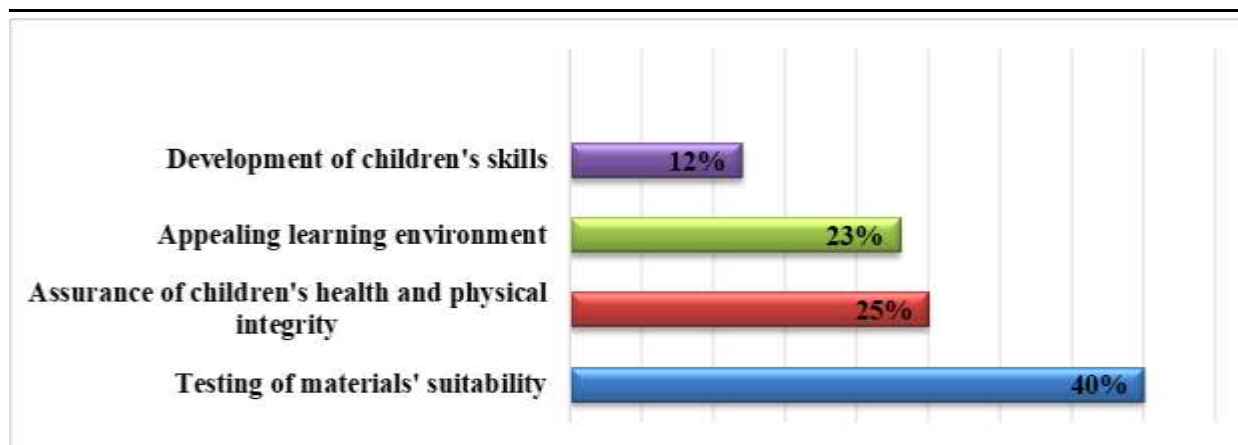


Chart 8: Views of University Students on the pedagogical evaluation of educational play material in the Kindergarten

All of the Students (100%) replied that they would evaluate educational play materials in the Kindergarten under pedagogical criteria, since by such an evaluation a) the suitability of the materials can be checked (40%) (*"Pedagogical evaluation of the physical environment in the Kindergarten aids at the utilization of the most appropriate material used towards the achievement pedagogical goals"*), b) the sanity and physical integrity of the children are assured (25%) (*"I would evaluate the educational play material in the Kindergarten on a regular basis in relevance to its quality, because I believe that health and physical integrity of the children is of uttermost importance"*), c) an appealing and stimuli-rich physical cognitive environment is established (23%) (*"I would regularly evaluate the educational play materials in the Kindergarten; I deem that evaluation helps the Educator achieve the formation of a high-quality and stimuli-rich environment as well as offer new and intriguing cognitive experiences to the children"*) and d) pupils' skills are enhanced and developed (12%) (*"Pedagogical evaluation of the faculty's physical environment contributes on the empowerment of children's skills-abilities, to the development of initiative, inter-personal relations, imagination and creativity"*) (Chart 8).

5. Discussion and Recommendations

Play, according to the international literature, should be utilized on every level of education and constitute an undetached part of the pedagogical action itself, since it is considered as a fundamental means for obtaining experience and skills as well as an asset for children's learning and development (Aypay, 2016; Chowdhury & Rivalland, 2012; Fisher, Hirsh-Pasek, Newcombe & Golinkoff, 2013; Tsai, 2017; Wood & Attfield, 2005). The findings of our present study have pointed out the contribution of play in learning and development of the children they hence come in full alignment with the international literature. Kindergarten Educators, however, in contrast to University Students, seem to acknowledge the role which play holds in learning and wholesome development of children, to a much higher degree, because of their higher experiential and on-hand involvement with play.

Kindergarten Educators often design play activities in class; this is something that proves they feel confident regarding pedagogical planning and can, indeed, connect it to their pupils' learning. On the contrary, University Students do not possess adequate confidence on issues of pedagogical planning, due to their limited teaching experience in faculties. Lasting only for one month, the Students' internship consequently provokes feelings of insecurity towards actualizing play in class. It is essential that the Departments of Education of the Universities ought to prolong their Students' internship period as a part of their Courses of Study, in order the future educators to acquire ability of using play as a means of evaluation of children's learning and development.

Both, the Educators and the Students encourage their pupils to design toy-objects and plan play activities in the Kindergarten, providing them with educational play materials in order for them to be able to create their own toy-objects inside and outside the classroom. Based on investigational data, it is of crucial importance that children take an active part on the planning of play activities as well on the designing of school play environment since this way their development is facilitated (cognitive, linguistic and emotional development that is) (Christidou et al., 2013; Hyvonen, 2011) and that the educators themselves provide a supportive learning setting, thriving with stimuli, materials and high-quality play activities that absolutely correspond to their pupils' age, abilities, needs and interests (Baltas, 2005; Rentzou & Sakellariou, 2014).

From the investigational data it becomes obvious that there exists a statistically significant difference between the aspects of the subjects concerning children's participation in planning the school play environments. This difference is due the majority of University Students who encourage kids to actively have a say on planning the school play environment, as opposed to a large percentage of the Kindergarten Educators. The process of planning is necessary, however, that constitutes an inclusive praxis, between the educators and the kids at school, since it helps children to evolve their personal skills, autonomy and creativity, acquire a timely and substantial experience regarding democratic virtues and contributes on the overall boosting of the educational quality (Eriksson & Sandberg, 2008- Loizou & Charalambous, 2017; Merewether, 2015; Miranda, Larrea, Muela & Barandiaran, 2017; Rentzou & Sakellariou, 2010; Zachrisen, 2016).

Kindergarten Educators and University Students who have been retrained on the pedagogical merit of play, evaluate children's learning through play on a much higher amount than those who have not undertaken such retraining. The University Students, in contrast to the Kindergarten Educators show only limited appreciation to the importance of self-evaluation of pupils during play activities; this could be due to their lacking familiarization with the contents of the Curricula or merely to the fact that they possess but limited teaching experience whatsoever.

The Kindergarten Educators deem that pedagogical evaluation of the educational play material in school mainly contributes to the development of skills and learning of preschool aged children- a view that is supported by worldwide literature

(Hoffman & Glannon, 1993; Hyvonen, 2011; McCaughtry, 2005; Pantazis, 1997; Wood, 2009). On the contrary, none of the University Students seem to correlate the evaluation process with children's learning.

It is clear that both groups, the Educators and the Students vacillate over issues concerning the evaluation of play; this is the reason why the implementation of retraining programmes with play as their basic object, is necessary (Cooper, 2015; Lillard, 2013; Pantazis, 1997; Sakellariou & Rentzou, 2012a). Retraining the educators is a basic priority towards the improvement of the quality and effectiveness of preschool education (Darling-Hammond, 2012). Economic and socio-cultural context of different periods in history form educational necessities that differ from time to time, it is therefore crucial that the Curricula are constantly overhauled in order for them to offer the educators all the methodological and cognitive assets they are in need of, towards their role and educational act (Karagianni, 2018; Sakellariou & Banou, 2020).

It is also deemed as highly significant that the Departments of Education within the Greek Universities take on account the inclusion of a larger number of subjects concerning planning and evaluation/ self-evaluation of the educational process of play within their Studies Courses, in order the prospective educators to learn how to a) plan and evaluate play activities and toy-objects in the school settings and b) regulate their purposes and their methodological approach with accounts to the level of development, interests and needs of their pupils (Rentzou & Sakellariou, 2014).

The current study suggests that the educators should a) take on further training on matters of play and their expertise expand on domains that concern existential investigation on play (e.g. observation during play), b) make an in-depth study of the Curricula (A.P.S./ A.Π.Σ.) and be aware of the position play holds in them, c) be versatile and plan high quality play activities that meet the age, needs and interests of their pupils, not only in class but outdoors as well, d) form, along with their pupils, high quality play settings, which shall allow the kids' involvement with various play categories, encourage interaction among children as well as between children-educators and offer innovative and effective play experiences, e) evaluate the educational play materials, toy-objects and play activities, f) use play as a means of assessment for children's learning and g) promote the participation of children and their parents on planning and evaluating the educational process of play (planning, evaluation and selection of toy-objects and play activities). Finally, the current study suggests that the Curricula should upgrade play's role in the very educational praxis, and that the Departments of Education of the Greek Universities offer courses regarding the pedagogical value of play and the roles the educators could adopt during children's play.

In an upcoming study, our goal shall be to scrutinize on the views that Kindergarten Educators and Elementary School Teachers have concerning planning and evaluating play didactics in preschool as well as in school environments of Greece.

6. Conclusion

Conclusively, play is regarded as a highly significant tool for learning, developing and evaluating the cognition, abilities and deficits of children; for this reason, it must be a part of the educational process. The purpose of the present study was to investigate on the aspects of current and prospective (senior University students) Kindergarten Educators regarding planning and evaluation of the educational process of play within preschool learning environments of Greece, as well as on the role play holds in the Greek Kindergarten.

From the extracted data it became clear that not only current Educators, but the prospective ones as well, fully acknowledge the contribution of play in preschool aged children's learning and spherical development. Nonetheless, the pedagogical specialization and retraining of Greek Kindergarten Educators comes in dire need, in order that they gain adequate awareness on how to practically implement play teaching, obtain confidence on pedagogical planning and evaluation issues, (designing and evaluating toy-objects, planning play activities and school play environments), utilize play as a tool for learning, development and evaluation of children's cognitive level, encourage their pupils' participation on planning and assessing the play educational process, promoting thus the democratic values of learning, as well as provide children with various high- quality, no less appropriate educational play materials not only in class but at exterior parts of the school facility as well.

The aspects of the groups that took part were also investigated in terms of variables- gender, courses on play pedagogics and retraining seminars on issues of play. No statistical differences were reported. However, it is of critical importance that a higher number of similar studies are carried out in other Regions of Greece, so that a much more comprehensive generalization of findings and data becomes available.

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