

Teacher Factors Influencing Use of Play as a Teaching Strategy in Pre- Primary Schools in Kiambu County, Kenya

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Abstract: *The study aimed at examining the teacher factors influencing use of play as a teaching strategy, in public pre-primary schools in Ruiru Sub-county, Kiambu County, Kenya. The objectives of the study were: To examine teachers' use of play as a teaching strategy, the influence of teachers' attitudes, experience and training on the use of play as a teaching strategy in pre-primary schools. The study was guided by the Theory of Reasoned Action. The study applied correlational research design. The target population for this study comprised of Pre-primary School Teachers from the 36 pre-schools in Ruiru Sub-county, Kiambu County. Simple random sampling was applied. The research instruments were questionnaire and observation checklist guide. Qualitative data was analyzed thematically along the study objectives and presented in narrative forms. Quantitative data was analyzed using descriptive statistics techniques; frequency distribution and percentages while chi-square goodness of fit and Pearson correlation were used to establish the degrees of association between teacher factors and use of play as a teaching strategy. Statistical Packages for Social Science (SPSS 23) was used to aid the analysis. Findings were presented using tables and charts. It was revealed that use of play as a teaching strategy was moderately present in most of the preschools. The findings of the study established that teachers' attitude was significantly correlated with use of play. Teachers with positive perception were more likely to use play. Moreover, there was a significant association between teachers training and use of play, where teachers with higher training were more likely to incorporate play in their teaching. Finally, there was a significant association between teachers' experience and use of play, where teachers with more experience were more likely to use play compared to those with less experience. All the three-null hypothesis under study were therefore, rejected. The study recommended that there is need for the education administration and the school heads to cultivate a positive attitude among teachers in pre-school to ensure that the teachers develop positive attitude towards the use of play as teaching strategy in their classes. There is also need for training in emotions management and attitude development to ensure that the teachers have the right attitude and a positive attitude in towards the use of play as a teaching method. On the other hand, there is need for the teachers to try and gain the required knowledge and experience in the use of use of play as a teaching method among young learners in pre-school. There is also need to ensure that the teachers in the pre-primary schools get properly training and equipped with the right skills*

Key Words: *Teacher's Attitude, Use of Play, Teacher's training, teacher's experience, Pre- Primary Schools*

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I. Introduction

Play among young children forms an important component for children holistic development. Globally, play has been found to contribute immensely to holistic growth and development of preschool learners. Play is essential to development because it contributes to the cognitive, physical, social, and emotional well-being of children and youth (Fromberg&Gullo, 2012). Play activities also offers pre-school children with an ideal opportunity to engage fully with their teachers. The contribution of play to learning process especially in early education cannot be overemphasized. Children in early years prefer environment that is playful. Globally, available studies indicate that children learn best in an environment which allows them to explore, discover, and play. Play is an important part of a developmentally appropriate child care program. Hymes (2013) points out that play are also closely tied to the development of cognitive, socio-emotional, and physical behaviors.

A study conducted in the US by Bailey (2002) amongst 111 respondents on playing social chess: children's play and social intelligence revealed that teachers who adopt play as a teaching strategy have their learners' manifest well-developed problem-solving skills, perspective-taking and social skills. It further reported that the use of play in the teaching process in the classroom increased student involvement, motivation, and the development of student's reading, oral language, and communication skills.

In most countries in Sub-Saharan Africa, teachers' use of play is a common occurrence in pre-primary schools and the interest in the perceptions held of play materials continues to rise as play materials play an ever-increasing role in the socialization process of young children. The type of socialization a child undergoes has a

significant role in the child's life (Hadley & Nenga, 2004). For example, a study conducted in Ghana by Steinke, Nickel and Herington (2007) established that play is a tool of socialization amongst children in their early years and thus has an impact on the child's perceptions, personality, role definition and role performance.

Play has been known to build communication and social skills, teaches self-awareness, and can be used to help build social-emotional learning (SEL) skills (Kwan, 2011). A study by Lyabwene (2010) indicated that teachers play an important factor on the use of play as a teaching method in pre-primary schools. As much as the use of play continues to be a popular method of teaching in pre-primary schools, there are crucial teacher factors that need to be improved to ensure effective use of play as a teaching strategy in pre-primary schools.

Another study (Kinuthia, 2009) on the determinants of pre-primary teacher's attitudes towards teaching established that through the Ministry of Education, the government ensured that pre-primary teachers/caregivers acquired necessary skills, information and knowledge on how pre-primary school children should actively learn.

Play is an important activity in the early education of a child as it contributes to holistic growth and development of preschool learners. When play is incorporated with the learning process it provides all elements that help engage the children's brain in pre-primary school and keep them healthy. The role of teachers cannot be over emphasized in the implementation of play as a teaching method in pre-primary schools. A study Njoroge by (2015) on the state of education since the implementation of free education indicated that pre-primary school teachers with few years of teaching experience are less likely to apply various teaching methods effectively, while another study by Kinjiwira (2013) advised many teachers related factors must be addressed if this method of teaching in pre-primary schools is going to be effective in improving grades.

Lynn and Valette (2012) describes four major components of attitude are that include affective or emotions or feelings; cognitive or belief or opinions held consciously or conative that can be referred to as inclination for action. The other major component of attitude that would influence how teachers perceive teaching includes positive or negative response to stimuli that is based on the evaluation of idea, object, person, or situation. Lapinski and Franklin (2011) while discussing the indicators of a positive attitude among teachers in Kindergarten stated that first and foremost, the teacher must be passionate about the subject he's teaching. A really passionate teacher can be highly influential for the students to pursue their passion too and must be a continuous learner. Students like the teachers who learn things with them. On the other hand, the teachers must be humble, and a stated by Hasalaka (2013) they must realize that the students know something that they do not know and that they must not discourage any student if they had failed in exams. One of the other qualities that are influenced by teachers' attitude is teachers' realization of their responsibility. Russell and Olson (2009) advises that each and every teacher in the country is responsible for the students they teach and that each and every criminal activity that a student involves in the future falls directly in the hands of the teacher. On the other hand a student coming out of an institution must not have only the technical education; the teachers must be good with their attitudes. Many are of the position that teachers' attitudes play a critical role in the use of play as a strategy in teaching and learning at the early childhood education centers. Safavi (2016) warns that the nature of attitude which teachers have towards play can either inhibit or promote efforts to effectively use play activities as a tool for instruction in pre-primary school settings.

Early learning involves learning through stimulating play activities with appropriate adult support to provide young children with essential foundations for later learning. Biukwayo (2013) pointed out that a combination of real and imaginary experiences is needed to encourage young children to learn. Kebaabetswe (2013) while emphasizing on the need of teachers in preschool to impart the right knowledge among the pre-school in Kampala, Uganda advised that teachers should be experienced enough. To ensure that as children use play opportunities to encourage and extend the problem-solving abilities that are essential to developing their intellectual process, they are also able to impart the knowledge required by the curriculum.

In Kenya, increased proportion of experienced teachers with regard to using play and outdoor activities are attempts by the Ministry of Education to provide quality education (Republic of Kenya, 2009). Although the policy of the Ministry of Education is to maintain a low student-teacher ratio as a measure of maintaining quality of pre-primary school education, that appears too expensive to sustain (Republic of Kenya, 2009). Another study conducted in Kiambu County, by Njoroge (2015) on the state of education since the implementation of free education indicated that pre-primary school teachers with few years of teaching experience are less likely to deliver on quality education. While there are various studies that include the ones above that have covered the teachers experience and aspects of play as a method of teaching, the studies setting and location are different to local setting and therefore cannot form the basis for generalization. The finding of the study does not fit the contextual relevance and the location similarities. On the other hand, all the studies including the local ones though indicate the significance of teachers' experiences in teaching; the study did not cover the effects of teachers experience and use of play in teaching in pre-primary schools.

Despite the existence of the studies on use of play and its importance in pre-primary education, there is little literature on their role in implementing this method as a strategy in teaching. While teachers continue to use other less effective methods of teaching young children, little has been established on their role on the use or none usage of this method as a strategy in teaching preschoolers. Notably, the findings in previous studies

present a general aspect of the use of play as teaching strategy and not on the influence of teachers' factors on use of play as a teaching strategy in pre-primary schools. This study therefore sought to establish the teachers' factors that influence use of play as a teaching strategy among pre-primary schools in Ruiru Sub-County, Kiambu County, Kenya.

Objectives of the study

The study will be guided by the following objectives;

- i. To establish the extent to which teachers use play as a teaching strategy in pre-primary schools.
- ii. To find out the influence of pre- primary school teachers' attitudes on use of play as a teaching strategy in pre-primary schools.
- iii. To determine teachers' teaching experience on use of play as a teaching strategy in pre-primary schools.
- iv. To examine teachers' level of training on use of play as a teaching strategy in pre-primary schools.

II. Methodology

The study applied correlational research design. Mugenda and Mugenda (2013) states that correlation design entails collecting data to determine the relationship between two or more variables. It also determine the degree as to which the variables are related. This study aimed at investigating teacher factors influencing use of play as a teaching strategy. Therefore the relationship between teacher's factors and use of play were established. A computation of correlation coefficient was done to show the relationship's strength and direction.

Target population

The research study was carried out in Ruiru Sub-county in Kiambu County. The sub-county has an approximate population of 230,379 persons and covers an area of 321.4 km², that is, a population density of 717 persons per km² (KNBS, 2009). The Sub- County has 8 administrative wards. The main economic activities in the Ruiru Sub-county includes; dairy, crop farming and trade. The area has about 4675 pre-school going children. Ruiru being a semi- urban area is likely to portray the situation of use of play as a teaching strategy in both urban and rural set-ups.

Sampling technique

The study focused on the Pre-primary School Teachers and Learners of pre-primary schools Ruiru Sub-county, Kiambu County. There are 36 pre-primary schools in Ruiru Sub-county, Kiambu County. Since the schools are spread in all the administrative wards in the sub-county. The researcher picked a total of 12 schools from each of the 8 administrative wards depending on the number of schools in each administrative ward. The study adopted simple random technique to give every respondent an equal chance to participate. Bartlett et al., (2001) stated that simple random technique gives every respondent an equal chance to be selected. All the 36 primary schools in Ruiru Sub-County were listed and assigned a number using a computer then selected randomly. A sample is a part of the target population that is procedurally selected to represent the population Cooper and Schindler (2001). The study then proceeded to proportionately distribute the target population to each pre-primary school selected for the study. The study used simple random sampling to select the study participants that is pre-school teachers. Two PP2 grades were picked from each selected pre-schools in each of the sampled schools in the eight wards in the sub-county as displayed in table 1.

Table 1: Sample size

Category	Population	Sample Size	Sampling Procedure
Pre-primary School Teachers	96	32	Simple Random

Data collection instruments

Questionnaires were a set of few questions asked in a logic sequence. A self-administered and structured questionnaire was used in this study to collect quantitative data from the pre-school teachers. The questionnaire was divided into two sections. The first section consisted of information on respondents' demographic profiles, while the second part consisted of 5-point Likert type of structured question. Drop and pick method was used to administer the questionnaires to the respondents. The respondents will also be assured of their confidentiality.

The study also used observation method to collect data from the sampled class units. The method was based on observation checklist technique which in this case was appropriate and helped in the gathering of information from learners in pre-primary schools. The checklist was based on the observation made on the selected PP2 classes which included the observation of pre-primary teachers' use of play.

Data Collection

The researcher asked for an introductory letter from Kenyatta University Graduate School which used to seek Authorization Letter and Research Permit from National Commission for Science, Technology and Innovation. The researcher sought an authorization letter from the County Commissioner and County Director of Education, Kiambu. These letters introduced the researcher to different respondents to carry out the study in Ruiru Sub-county. The researcher then booked appointments with head teachers to conduct interviews and with teachers to administer questionnaires to collect prerequisite data for the study. The researcher administered the questionnaires to the respondents. The duly filled questionnaires were collected for data analysis. Observation schedules were conducted by the researcher in person.

Data Analysis

Data analysis procedure includes the process of packaging the collected information putting in order and structuring its main components in a way that the findings can be easily and effectively communicated. After the fieldwork, before analysis, all questionnaires were adequately checked for reliability and verification. Editing, coding and tabulation were carried out. Qualitative data was analyzed thematically along the study objectives and presented in narrative forms. Quantitative data were analyzed using both descriptive and inferential statistics, where descriptive statistical analysis included frequencies, percentages, mean and standard deviation and the findings presented using tables and charts while inferential statistics included Pearson’s correlation coefficient and multiple regression analysis. The study tested the following hypothesis at a significant level of 0.05. ‘Ho1: Teachers’ attitude does not influence use of play as a teaching strategy in pre-primary schools.’ ‘Ho2: Teachers’ experience does not influence use of play as a teaching strategy in pre-primary schools.’ ‘Ho3: Teachers’ training does not influence use of play as a teaching strategy in pre-primary schools.’ Ethical considerations in research involve outlining the content of research and what was required of participants, how informed consent were obtained and confidentiality ensured

III. Findings and Discussions

Use of play

Data were collected through use of an observation checklist. In the check list there were four types of play namely; social dramatic play, play with objects, creative play and role play.

Table 2 Observation findings on use of fun activities

	N	Mean	Std. Deviation
Lesson_1	29	1.93	.704
Lesson_2	29	1.69	.761
Lesson_3	29	1.93	.799
Lesson_4	29	2.00	.886
Lesson_5	29	2.31	.806
Average	29	1.972	0.7912

As the table displays, an average mean value of 1.972 implies that during all the lessons, the teachers used fun activities in lessons sometimes. The average standard deviation of 0.7912 also implies that the use of fun activities in class were slightly varied. Specifically, during the first lesson, second and third lesson, the teachers used fun activities sometimes seen in the mean values of (m=1.93, sd=0.704), (m=1.69, sd=0.761) and (m=1.93, sd=0.799) respectively. During the fourth lesson, a mean value of 2.00 was found which implies that the teachers used fun activities sometimes and rarely. The same case was observed during the fifth lesson where the mean value of 2.31 shows that the teachers rarely used fun activities during their lessons.

Generally, it can be observed that teachers did not majorly incorporate fun activities during their lessons.

Further, the researcher categorized the fun activities that were observed in the classroom and came up with four categories namely social-dramatic play, playing with objects, creative play and role play. The observations findings are displayed in the table 3

Table 3 Teachers’ Use of Play

Use of fun activities in teaching		Often	Sometimes	Rarely
Social-dramatic play	F	7	16	6
	%	24.1	55.2	20.7
Playing with objects	F	9	20	0

	%	31	69.0	0
Creative play	F	7	15	7
	%	24.1	51.7	24.1
Role play	F	10	12	7
	%	34.5	41.4	24.1

As table 3 displays, the majority of teachers sometimes (55.2%) and rarely (20.7%) used social play as a teaching strategy. Regarding use of play objects in the classroom, majority of the teachers (69%) sometimes utilized it as a strategy while 10% often used it as a teaching strategy. It was also observed that the majority of teachers (51.7%) sometimes used creative play and 7% rarely use it during their teaching. Lastly, it was also observed that the majority of teachers (41.4%) sometimes use role play while 24.1% rarely use it as a teaching strategy. Overall, it can be discerned from table 4.1, that the majority of teachers sometimes and rarely utilize the various types of play activities as teaching strategies in their schools. evident in 65.5% of teachers rarely and sometimes using role play, 75.8% sometimes and rarely using creative play, 75.9% sometimes and rarely using social play and 69% sometimes using play with objects.

From these findings, it can be deduced that the teachers underutilize the use of play as a teaching strategy in Ruiru Sub-county which limit the development of crucial skills for pre-schoolers as Aziz and Ali (2015) asserts that the teacher’s use of play methods is an invaluable tool for preschoolers. It exposes the learners to a variety of skills that helps build their creativity, their numeracy and language skills. They commend the teachers who ensure that lessons are integrated with play as it fosters quick learning and comprehension in a fun manner. Tarimo (2014) further argues that different play methods in pre-schools have varying level of effect deadening in the target skill. In this case, use of social activity play methods including babysitting dolls will be effective in improving the learner’s social-interaction skills.

Teacher’s Attitudes

The study sought to determine the influence of pre- primary school teachers’ attitudes on use of play as a teaching strategy in pre- primary schools in Ruiru Sub-county. The teachers were presented with a Likert scale table and asked to indicate their opinion based on whether they strongly agreed, agreed, neutral, strongly disagreed or disagreed with the parameters of attitudes presented in table 4

Table 4 Teachers’ Attitude on use of Play in teaching

Aspects of Attitude	Agree	Neutral	Disagree	Mean	STDV
	%	%	%		
I believe that play contributes to effective delivery of lessons	69.0	10.3	20.6	2.41	1.240
It is motivational to use play in teaching in pre-primary schools	55.2	20.7	14.1	2.59	1.268
It is Interesting to participate in play activities with the children	55.2	17.2	27.3	2.66	1.421
I am motivated to use play in teaching	55.2	20.7	14.1	2.59	1.268
I have interest in using play activities as a teaching strategy	69.0	6.9	14.1	2.31	1.365

The findings of the study indicated that majority of the respondents (69.0%) believed that play contributes to effective delivery of lessons and have interest in using play activities as a strategy to teach. The findings of the study also indicated that 55.2% were of the opinion that it is motivational to use play in teaching in pre-primary schools. The findings are supported by Bichage (2015) who found that attitude continues to be crucial in the implementation of any teaching strategy or methods and therefore needs to be critically evaluated to establish the extent to which it may influence the use of play as a teaching method in pre-school.

On the use of play as a teaching method in pre-primary only 20.6% of the respondents did not believe that play contributes to effective delivery of lessons. These findings deviate from Yugen (2010) whose study established that there was not much difference in attitude of teachers in different group. This indicated that the study group has predominantly positive attitude for most of the items of service trainees in Gucha Districts. The study established that teachers at all levels had negative attitude as they rendered their services with some feeling that they were not being paid and therefore even if they gave their best, their efforts were not appreciated. Teachers’ attitude continues to be crucial in the implementation of any teaching strategy or methods and therefore needs to be critically evaluated to establish the extent to which it may influence the use of play as a teaching method in pre-school.

Therefore, for learners to perform better and comprehend learning, teacher’s need to adjust their attitudes to ensure that they utilize every strategy available to them including the use of play. The researcher then conducted a correlational analysis to determine the strength of the relationship between the teacher’s use of play as a teaching strategy and their attitudes towards its use. The findings are as displayed in table 5.

Table 5 Correlations between teachers’ attitudes and use of play in teaching

		Use of play in teaching	Teachers attitude
Use of play in teaching	Pearson Correlation	1	-.588
	Sig. (2-tailed)		.003
	N	29	29
Teachers attitude	Pearson Correlation	-.588	1
	Sig. (2-tailed)	.003	
	N	29	29

As displayed in the table 5 there is correlation between the teacher’s use of play as a teaching strategy and their attitudes towards the use of play as a teaching strategy. From the table, it can be seen that teacher’s use of play as a teaching strategy and their attitudes are significantly correlated ($r=-0.588 < 0$, $p=-.003 < 0.005$). Therefore, it can be deduced that the teacher’s attitudes are negatively affecting their use of play as a teaching strategy.

The findings are similar to Safavi (2016) who in his study found that a teacher’s attitudes is crucial for the learning outcomes in class. Attitude is an important factor that motivates or demotivates a teacher from going the extra mile to ensure that the learners get the necessary information. He warns that the nature of attitude which teachers have towards play can either inhibit or promote efforts to effectively use play activities as a tool for instruction in pre-primary school settings.

Teacher’s experience

One-Way ANOVA was used at 95% confidence level to test the hypothesis that ‘There is no significant relationship between teachers’ teaching experience and use of play as a teaching strategy.’ ANOVA was used since there were 4 groups of teaching experience being compared (<1, 1-5, 6-10 and >10).

Table 6 ANOVA of different categories of teaching experience and use of play

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.136	4	.045	.565	.004
Within Groups	2.002	25	.080		
Total	2.138	29			

The ANOVA results displayed shows that there was a statistically significant difference in use of play in teaching based on the teacher’s years of teaching experience at p value ($p=0.004 < 0.05$). Therefore, the results implied that there was a need to establish the nature of the differences observed. LSD post-hoc test was done and the findings displayed in the table 7

Table 7 LSD Test on different categories of teaching experience and use of play

(I) Experience	(J) Experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
<1	1-5 years	-.11111	.13003	.401	-.3789	.1567
	6-10	-.07778	.14915	.017	-.3850	.2294
	>10	-.21111	.17006	.000	-.5614	.1391
1-5 years	6-10	.03333	.14614	.002	-.2676	.3343
	>10	-.10000	.16742	.022	-.4448	.2448
	<1	.07778	.14915	.017	-.2294	.3850
6-10	1-5 years	-.03333	.14614	.002	-.3343	.2676
	>10	-.13333	.18268	.000	-.5096	.2429
	<1	.21111	.17006	.000	-.1391	.5614
>10	1-5 years	.10000	.16742	.022	-.2448	.4448
	6-10	.13333	.18268	.007	-.2429	.5096
	<1	.11111	.13003	.000	.1567	.3789

*. The mean difference is significant at the 0.05 level.

From the findings in the table, it can be observed that the mean difference between one year’ experiences and 1-5 years’ experience was not statistically significant a p value ($p=.401 > 0.05$). However, the difference between teachers with one year’s experience and between 6 and 10 years at p value was statistically

significant at ($p=0.017<0.05$). Moreover, the difference between the teacher’s use of play was found to be profound in those with one years’ experience and those with more than ten years’ experience at p value ($p=0.000<0.05$). From the findings, it shows that teachers with more than ten tears experience used play activities the most followed by those with six to ten years then those with less than five years’ experience.

Based on the categories of use play observed, a chi-square goodness of fit test was conducted to determine whether use of different types of fun activities was significantly related with teachers’ years of teaching experience. This was also performed at 95% confidence interval.

Table 8 Chi-Square tests on play activities and teachers’ experience

Use of play		Teachers’ experience				X2	p-value
		<1 year F (%)	1-5 years F (%)	6-10 years F (%)	>10 F (%)		
Social dramatic	Often	1(3.45)	3(10.34)	4(13.79)	2(6.90)	9.052	0.032
	Sometimes	6(20.69)	6(20.69)	1(3.45)	1(3.45)		
	Rarely	2(6.90)	1(3.45)	1(3.45)	1(3.45)		
		9	10	6	4		
Creative	Often	2(6.90)	4(13.79)	1(3.45)	1(10.34)	9.052	0.043
	Sometimes	3(10.34)	6(20.69)	5(17.34)	1(3.45)		
	Rarely	4(13.79)	1(3.45)	1(3.45)	0(0)		
		9	11	7	2		
Playing with objects	Often	2(6.90)	1(3.45)	3(10.34)	2(6.9)	6.146,	0.047
	Sometimes	4(13.79)	9(31.03)	6(20.69)	2(3.45)		
	Rarely	0(0)	0(0)	0(0)	0(0)		
		6	10	9	4		
Role play	Often	2(6.9)	2(6.90)	2(6.90)	2(6.90)	4.601	0.868
	Sometimes	4(13.79)	5(17.24)	3(10.34)	2(6.90)		
	Rarely	3(10.34)	3(10.34)	1(3.45)	0(0)		

As the table 8 displays, most of the teachers (20.69%) ’with less than one years’ experience sometimes used social play, those with 1-5 years’ experience sometimes (20.69%) and 10.34% often use social play as a teaching strategy. In regards to teachers with 6-10 years, most (13.79%) often use social play as a teaching strategy. For teachers with over 11 years’ experience (6.90%) often use teaching social play as a teaching strategy among pre-primary school learners. Generally, it can be seen that the use of play often and very often is higher among teachers with more than five years’ experience as compared to those with less than five year experience who sometimes and rarely use social play.

The findings are supported by a statistically significant ($p=0.32<0.05$) relationship which implies that use of social play in the classroom is influenced by a teacher’s level of experience. these findings are supported by Mavhu (2009) in a study to evaluate the teaching content in pre-school curriculum in Malawi established that play-way method is structured on activity-based learning which is meant to encourages creative skills and self-expression among young children. The study expressed fears that while the method is ensuring that playing is the predominant factor in this method, many of the teachers are not experienced enough to directly use this method effectively and sometimes overdo it. The method is meant to reinvigorates children while also enhancing their learning abilities, but with lack of experience, the method can yield negative results.

As displayed on the table, most of the teachers with less than one year experience rarely (13.79%) use creative play as a strategy while teachers with 1-5 years’ experience sometimes (20.69%) use creative play as a teaching strategy. Teachers with 6-10 years’ experience sometimes (17.34%) use creative as a teaching strategy while those with over 11 years’ experience often (10.34%) use creative play as a teaching strategy. It can be deduced that the more experience a teacher has, the more he or she will often use creative play as a teaching strategy. The findings are supported by the chi-square findings which show that a statistically significant relationship ($0.043<0.05$) which shows that a teacher’s experience influences their ability to use creative play as a teaching strategy. The findings are similar to Kebaabetswe (2013) who emphasizes on the need of teachers in preschool to impact the right knowledge among the pre-school in Kampala, Uganda advised that teachers should be experienced enough. To ensure that as children use play opportunities to encourage and extend the problem-solving abilities that are essential to developing their intellectual process, they are also able to impact the required knowledge required by the curriculum.

Further, as displayed in the table, teachers with less than one-year experience (13.79%) sometimes used objects play as a teaching strategy. On the other hand, those with 1-5 years’ experience sometimes (31.03%) used objects play during their instruction as observed by the researcher. Among those with 6-10 years experiences (20.69%) sometimes used objects play while those with over 11 years (6.9%) often used them. Basically, most of the teachers who used objects play as a teaching strategy used them sometimes, with those who used them rarely being very few. It can therefore be explained that teachers with more experience were

more likely to use objects play as part of the teaching strategies compared to those with less experience. This is can also be underscored from the chi-square test findings which show a statistically significant relationship ($p=0.047<0.05$) between teacher’s use of objects play and their experience. The findings show that the influence of teachers experience on their use of objects play as a teaching strategy was significant and cannot be assumed to be a matter of chance. Play-method is a strategy meant to improve teaching and learner’s comprehension. However, the play methods listed in the curriculum require understanding and prior exposure for them to achieve its desired effects. Therefore, depending on the teacher’s experience, the method can be effective or not. Parten (2012) concurs with the findings claiming that experienced teachers had more positive attitude towards the subject than the less experienced teachers. The level of experience gives the teacher the confidence necessary to execute the play something most inexperienced teachers’ lack.

In regards to role play as a teaching strategy, most of the teachers with less than one-year experience (13.79%) sometimes and 10.34% rarely use role play. While those with 1-5 years’ experience sometimes (17.24%) use role play. teachers with 6-10 years, experience (6.9%) often and 10.34% sometimes use roe play as a teaching strategy while those with over 11 years’ experience often (6.9%) use role play as a teaching strategy. The findings indicate that use of role play as a teaching strategy is not statistically significant ($p=0.868>0.05$) which implies that teacher’s experience does not significantly influence their use of role play though a relationship was identified. Play-method is a strategy meant to improve teaching and learner’s comprehension. However, the play methods listed in the curriculum require understanding and prior exposure for them to achieve its desired effects. Therefore, depending on the teacher’s experience, the method can be effective or not (Parten, 2012).

Teacher’s Training

The researcher used One-way ANOVA at 95% confidence interval to test the hypothesis that ‘there is no significant relationship between teachers’ teaching experience and use of play as a teaching strategy.’ ANOVA was preferred since there were 4 groups of teachers based on their years of teaching experience

Table 9: ANOVA on different levels of training and use of play

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.309	3	.103	1.407	.002
Within Groups	1.829	25	.073		
Total	2.138	28			

The ANOVA results displayed in the table 9 shows that there was a statistically significant difference in the teacher’s training and use of play activities at p value ($p=0.002<0.00$). The results therefore imply that there was a need to establish the nature of the difference seen. The researcher then conducted LSD post-hoc test displayed in the table 4.10.

Table 10 LSD Test on different levels of training and use of play

(I) Highest level of education	(J) Highest level of education	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Certificate	Diploma	-.10000	.16002	.538	-.4296	.2296
	Degree	.00909	.15793	.005	-.3162	.3344
	Postgraduate	-.30000	.19126	.000	-.6939	.0939
Diploma	Certificate	.10000	.16002	.538	-.2296	.4296
	Degree	.10909	.11818	.365	-.1343	.3525
	Postgraduate	-.20000	.16002	.022	-.5296	.1296
Degree	Certificate	-.00909	.15793	.005	-.3344	.3162
	Diploma	-.10909	.11818	.365	-.3525	.1343
	Postgraduate	-.30909	.15793	.062	-.6344	.0162
Postgraduate	Certificate	.30000	.19126	.000	-.0939	.6939
	Diploma	.20000	.16002	.022	-.1296	.5296
	Degree	.30909	.15793	.062	-.0162	.6344

*. The mean difference is significant at the 0.05 level.

The findings shows that the mean difference between the teachers with certificate training and those with a diploma was not statistically significant at p value ($p=0.538>0.05$). However, the mean difference between teachers with a certificate and those with a degree was statistically significant at p value ($p=0.005<0.05$). The difference between teachers with a post graduate training and those with a certificate was statistically significant at p value ($p=0.000<0.05$). Therefore, the findings show that teachers with post graduate training, followed by those with degree training, then those with a diploma and the least ones were those with a certificate.

Furthermore, a chi-square goodness of fit test was conducted to establish whether use of different types of fun activities in teaching was significantly related to teachers levels of education. To determine whether a relationship exists between teacher’s experience and use of play.

Table 11 Teachers’ Training and use of play

Use of play		Teachers’ training					
		Certificate f (%)	Diploma f (%)	Degree f (%)	Post-graduate f (%)	X2	p-value
Social dramatic	Often	1(3.45)	5(17.24)	9(31.05)	3(10.74)	7.442	0.049
	Sometimes	2(6.90)	5(17.24)	1(3.45)	1(3.45)		
	Rarely	1(3.45)	0(0)	1(3.45)	0(0)		
Creative	Often	0(0)	3(10.34)	8(27.58)	4(13.79)	9.790	0.037
	Sometimes	4(13.79)	3(10.34)	2(6.90)	0(0)		
	Rarely	0(0)	4(13.79)	1(3.45)	0(0)		
Playing with objects	Often	1(3.45)	4(13.79)	10(34.49)	4(13.49)	2.034	0.917
	Sometimes	3(10.34)	6(20.69)	1(3.45)	0(0)		
	Rarely	0(0)	0(0)	0(0)	0(0)		
Role play	Often	1(3.45)	3(10.34)	8(27.58)	2(6.90)	2.034	0.017
	Sometimes	2(6.90)	2(6.90)	2(6.90)	1(3.45)		
	Rarely	1(3.45)	1(3.45)	1(3.45)	1(3.45)		

The study sought to determine whether there is a relationship between a teacher’s level of training and their use of social play as a teaching strategy. The findings in the table 4.8 indicate that teachers with certificates often 3.45% often use social play respectively and 6.90% sometimes use social play. Among those with diploma training 17.24% sometimes and 17.24% often use social play as a teaching strategy. Those with degree training 31.05% often use social play as a teaching strategy. Regarding those with post graduate training, it was observed that 3(10.74%) often use social play as a teaching strategy. Generally, it can be observed that teachers with bachelor’s training and post-graduate training (41.15%) very often and often utilize social play as a teaching strategy.

The findings are echoed by the chi-square findings ($p=0.049<0.05$) which showed that a significant relationship exists between a teacher’s level of training and their use of social play as a teaching strategy. These findings are supported by Kinuthia (2009) who argues that a teacher’s level of education is important in their ability to use appropriate instructional resources. Mbise (2012) while carrying out a survey on early childhood stimulation in Mwanza, Mtwara Mara and Lindi region concluded that very low academic qualifications are likely to affect the ECE teachers. Particularly their ability and confidence to articulate child centered issues, which are relevant in teaching and learning in pre-primary schools. These findings, just similar to the ones in this study revealed the importance of teacher’s training on their competence and ability to use play-methods as a teaching strategy. It points towards a lack of proper training and expertise among ECDE teachers. Which has an overall negative effect on teacher’s ability to be innovative and utilize play to improve learner’s learning.

As per the table, teachers with certificate training sometimes (13.79%) creative play while those with diploma training sometimes 10.34% and 13.79% rarely used creative play as a teaching strategy. Teachers with degrees often 27.58% used creative play and while those with post-graduate training(13.79%) often used creative play as a teaching strategy. From the table it can be observed that there is a discernible pattern between a teacher’s training and their use of creative play .The higher a teacher was trained, the more he or she often used creative play.

The findings are echoed in the chi-square goodness of fit test which established that, a statistically significant ($p=0.037<0.05$) relationship exists between the teacher’s level of training and their use of creative play. Ngasike (2014) concurs with these findings and claims, teacher’s use of play as a medium of bridging pre-school children’s mathematics experiences in Kasarani division in Kenya, are positively correlated to the teacher’s training levels. He further posits that training is important, for teachers to have positive influence on teachers’ tendencies in using child centered teaching approaches.

As the table further shows, teachers with certificate training sometimes (10.34%) and 1 (3.45%) rarely use playing with objects as a teaching strategy. Those with diploma 20.69% sometimes and (13.79%) often use playing with objects. Among those with a degree, most (34.49%) use playing with objects often. Lastly, those with a post graduate training 4(13.79%) often use playing with objects as a teaching strategy. It can be observed that the higher the teacher is trained, the more he or she would often use play as a strategy. Despite the identified pattern between the two variables, the chi-square findings indicated that the existing relationship is not statistically significant ($p=0.917>0.05$).

The table shows that teachers with certificate training 6.9% sometimes and 3.45% often and rarely use role play. Those with diplomas 13.79% sometimes and 10.34% rarely use role play. Most of those with degrees 37.58%) use role play as a teaching strategy. Among those with post graduate training 6.90% often and 3.45% sometimes and rarely use role play as a teaching strategy respectively. It can be deduced that, the teacher’s level of training generally influences their use of role play. The findings are supported by the chi-square findings which show that the relationship between level of training and use of play is statistically significant ($p=0.017<0.05$).

Regression Analysis

A multiple regression model was conducted to establish the extent to which the independent variables influenced teachers’ use of play. The model was conducted at 95% confidence interval with the use of SPSS computer program.

Table 12 Model Fitness

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.369	4	.123	.244	.045 ^b
	Residual	12.604	25	.504		
	Total	12.973	29			

Table 12 shows a regression output of teachers’ factor as valid ($F(4, 25) = .244, P<0.045$). This means that decentralization factors can be used as predictors explaining the variation in the economic growth in county governments in Kenya. The $P<0.0045$ which is less than the critical value of 0.05, hence it is not by chance alone that teachers’ attitude, teachers’ experience and teachers’ level of training influenced their use of play in teaching.

Table 13 Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.759	.458		6.020	.000
	Teachers attitude	.143	.284	-.195	.505	.038
	Teachers Experience	.060	.271	-.073	.222	.026
	Teachers’ level of Training	.124	.184	.204	.676	.006

Table 13 shows a regression results that indicates that teachers factors (teachers attitude teachers experience, teachers’ level of training) ($X_1: \beta_1 = .143, P<.038$), ($X_1: \beta_1 = .060, P<.026$) and ($X_1: \beta_1 = .124, P<.006$) would have a significant influence on the use of play as a teaching strategy in pre-primary schools. This indicates that teachers factors (teachers attitude (.143), teachers experience (.060), teachers’ level of training (.124), would bring a unit changes in the use of play as a teaching strategy in pre-primary schools.

Where one a constant of an average of 2.759 indicates that teacher factors (teachers attitude teachers experience, teachers’ level of training) is rated at zero, the use of play as a teaching strategy in pre-primary schools in Ruiru Sub-County, Kiambu County would stay at 2.759. It can further be deduced that while all the factors under study had significant effect on teachers use of play as a teaching strategy, teachers’ level of training was most influential factor owing to its strength in the regression model.

IV. Conclusion

The findings of the study established that the use of play was used as method of teaching to some extent. Basically, use of play as a teaching strategy was not well embraced by most of the preprimary teachers as observed by the researcher. Despite this fact, most of the teachers believed that, play contributes to effective delivery of lessons and have interest in using play activities as a strategy to teach in pre-primary school. Hence leading to a disconnect between intention of using play and use of play in teaching.

While the use of play is a common teaching method in pre-school, only slightly above average had a positive attitude in the use of play as a teaching method. This seemed to significantly affect use of play as a teaching strategy. The hypothesis that ‘there is no significant relationship between teachers’ attitude and use of play’ was therefore, hereby rejected.

On the other hand, teachers experience has a high influence on the use of play as a strategy of teaching. Therefore given that most teachers had not served for so long, they find the method messy and lack knowledge about it. Number of years taught significantly influenced the teachers ability to use play in teaching. The

hypothesis that ‘there is no significant relationship between teachers’ experience and use of play’ was therefore, hereby rejected.

For play to be effectively used as a teaching strategy in pre-primary teaching, the teachers need to be properly trained. The findings of the study indicated that the teacher’s level of education enhanced their ability to use play in teaching. The more teachers had higher professional training, the more they were likely to use play in teaching. The hypothesis that ‘there is no significant relationship between teachers’ level of education and use of play’ is hereby rejected.

V. Recommendation

Use of play as teaching strategy should be made compulsory when instructing preprimary learners. Since it fosters holistic education and learners’ innovativeness and creativity. The study therefore recommends the Ministry of Education to develop a policy that makes use of play in classroom a mandatory practice rather than a choice. There is need for the education administration and the school heads to cultivate a positive attitude among teachers in pre-school. This is to ensure that, teachers develop positive attitude towards the use of play as teaching method in their classes. There is also need for training in emotions management and attitude development. To ensure that the teachers have the right attitude towards the use of play as a teaching method. On the other hand there is need for the teachers to try and gain the required knowledge and experience in the use of play as a teaching strategy among young learners. As the findings indicated, the more experienced teachers used play as a teaching strategy much better than the less experienced teachers. There is also need to ensure that the teachers in the pre-primary schools should be trained and equipped with the right skills. To ensure that they are able to teach the learners through play as an effective strategy of teaching. There is need for a study on the school factors influencing use of play as a teaching strategy in pre-schools. There is also a need to establish factors contributing to low number of males in pre-primary schools.

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