

Relative Contribution of Different Levels of Parental Involvement to Primary School Readiness in Preschool Pupils in Nairobi County

David N. Mungai

University of Nairobi, Department of Educational Communication and Technology

Abstract

Recent developments have led to a lot of emphasis being placed on early childhood education. Massive growth has also occurred in this segment of the education sector. Emphasis continues to be placed not just on growth but also on quality of the educational experiences that children are exposed to. In Kenya reports continue to emerge of pupils in primary school who lack numeracy and literacy competencies expected at their level. This inevitably shines the spotlight on the quality of educational experiences at the preschool level, which lays the foundation for all future learning and later success in school. One of the parameters of quality is parental involvement. In Kenya this parameter happens to be amongst the least understood. This paper sought to shed some light on the contribution of this aspect of quality to primary school readiness in preschool pupils in Nairobi. Parental involvement at six levels of involvement was measured for a sample of 150 parents of preschool pupils, while primary school readiness was assessed for a sample of 156 pupils. The results indicate that four of the six levels of parental involvement have a positive correlation to primary school readiness, while two are negatively correlated. The researcher recommends that schools and educators explore ways of creating and enhancing parental involvement so as to tap into the associated and recognized benefits of such cooperation.

Keywords: Parental involvement, primary school readiness

1. Introduction

In the year 2000, world leaders at the UN Millennium Summit approved the summarized goals agreed in international conferences and summits in the 1990s and came up with the Millennium Development Goals (MDGs). The goals had specific targets to be met by 2015. Of the eight goals agreed upon, five relate to young children's health, nutrition and education including ensuring that all children have a chance to complete primary school, and eliminating gender disparities in school. In the same year 2000 the Dakar Framework of Action was held to review progress made by countries in relation to provision of Education For All (EFA) since 1990. At this meeting the international community expressed commitment to ensuring the basic learning needs of children, youth and adults are met within a generation and maintained thereafter. The effect of these initiatives has been to push the agenda of early childhood education (ECE) to the fore front of public awareness at both the global and domestic levels. This has consequently led to massive growth in the area of ECE globally and locally. This growth and growing awareness has been informed by continual appreciation of the benefits and importance of early childhood education as demonstrated by research. For example, in a review of studies on benefits of ECE, Crosser (2005) found that studies have pointed out the personal and social gains associated with early educational experiences. Preschool and kindergarten seem to benefit all children. After a review of literature on benefits of ECE, Morrison (2007) concludes that the increased demand for early childhood education services is a partly due to the increased recognition of the crucial importance of experiences during the earliest years of life. Essa (1999) has also found evidence of the benefits of ECE. Studies have also shown that these effects are long term, evident years after the preschool experience (Crosser, 2005).

For ECE to have the desired positive effects, however, it needs to be of high quality. Making ECE accessible is not enough. The quality of the early childhood experiences is also key in determining outcomes. This has also been backed by research findings. In a review of studies on the effect of quality of programme on child outcomes, Morrison (2007) found that research indicates that children who attend good-quality childcare programmes, even at very young ages, demonstrate positive outcomes, and children who attend poor-quality programmes show negative effects (Vandell & Powers, 1983; Phillips, McCartney & Scarr, 1987; Fields et al., 1988; Vandell, Henderson & Wilson, 1988; Arnett, 1989; Vandell & Corasanti, 1990; Burchinal et al., 1996). Specifically, children who experience high quality-quality, stable childcare engage in more complex play, demonstrate more secure attachments to adults and other children and score higher on measures of thinking ability and language development. Morrison (2007), in a review of studies, also found that high-quality childcare can predict academic success, adjustment to school, and reduced behaviour problems for children in first grade (Howes, 1988). Crosser (2005) also reviewed studies that examined effect of quality of childcare on child outcomes. In one of these studies (Peisner-Feinberg et al., 2001), the researchers were looking particularly for any long term effects of childcare quality on child's cognitive and social skills. The results indicated that children who attended high-quality preschool benefitted in the long term. For example, children who were placed

in higher-quality centres compared to those placed in lower-quality centres were better at understanding spoken language, had better math skills, demonstrated fewer behaviour problems, were more sociable and had better cognitive and attention skills when they were in second grade. The quality imperative had also been acknowledged by the international summits on education as well as the MDGs. The 1990 Jomtien EFA Declaration, for instance, called for special attention to be given to the care of young children. This is clearly a call to enhance the quality of childcare. The recommendation to have programmes for young children necessarily involving parents, communities and institutions is also a call to improve quality. Involvement of parents in ECE is actually one of the recognized measures of quality.

Locally in Kenya, the government's National Early Childhood Development Policy Framework (2006) and the Early Childhood Development Service Standard Guidelines for Kenya (2006) have their objectives as including ensuring services for children are of good quality, ensuring maintenance of quality standards, and harmonizing quality services. Lots of development and growth has subsequently taken place locally in the area of ECE. In spite of this growth, the picture emerging on child outcomes is not very rosy. Kwena (2007), for example, in a study on selected factors on academic self-concept among primary school pupils in Bondo District, noted slow progression rates and pile-ups in certain classes that could be attributed to class retention in the five schools sampled. In one school at least 21.2% of the pupils had been retained in 2005, the highest rate among the five schools. An analysis of number of times repeated by class showed class one to have had the highest rate, 2.3% of all pupils having repeated twice. In a 2013 study titled "*Are our children learning?*" by Uwezo Kenya, a civil society group that monitors achievements in education, it was reported that 70% of class three pupils cannot read class two material. Other findings of this study were that 11% of class eight pupils cannot solve a class two level math question, and that more than 50% of class six to eight pupils cannot comprehend a class two level story, even when they can read it. This suggests that pupils are transiting from preschool to primary school without the expected requisite skills and competencies. This in turn sets them up for school failure in primary school. This paper attempts to examine the relative contribution of different levels of parental involvement to child outcomes as measured by primary school readiness score. Parental involvement refers to the participation of parents in all areas of their children's education and development, based on the premise that parents are the primary influence in their children's lives. Parental involvement is also a measure of quality, and has several levels. Epstein (1998) reviewed by Crosser (2005) identified six levels of parental involvement which include activity both in and out of the classroom. These are: One, parenting level – at this level the school helps parents and families to understand child development and appropriate parenting to promote the child's development. Schools learn from families as well, with the duty to understand the family culture, values and ways of interacting. Two, communicating level – at this level Epstein indicates that two-way communication is preferred to one-way communication in which the school simply tells or notifies parents. Two-way communication may include such methods as phone calls, conferences and email. Three, volunteering level – this brings parents into direct contact with schools and children in a variety of passive and active roles. Parents may volunteer to monitor or even direct an activity, or simply act as audience for an impromptu puppet skit or listen to a child read. Four, learning at home level – brings parents and children together to work on curriculum projects or supervise and assist with homework. Parents may be provided with literacy bags or suggested activities for learning at home. Parents may be encouraged to read to their children or complete activities such as math puzzles. Five, decision-making level – here we have leadership as a member of an advisory council, parent/teacher organization, or school committee. For example, parents may sit on textbook selection committees or take active roles in helping to develop a parent handbook. Six, collaborating with the community level – revolves around coordinating services for families within the community. For instance, a parent might arrange for the health department nurses to offer immunizations at school site, notify parents with children who are eligible and promote the programme. Parental involvement has been found to have positive outcomes in the child, and also to be beneficial to the parents. Creswell (2012) in a review of studies on parental involvement notes that in the past decades a wealth of studies showed that parental involvement is essential in children's educational process and outcomes (Henderson & Mapp, 2002). Another review by Crosser (2005) indicates that parental involvement has been correlated with higher achievement, improved attitudes, increased attendance, fewer discipline problems, fewer grade retentions, higher aspirations, and fewer dropouts (Caplan, Hall, Lubin & Fleming, 1997; Epstein, Clark, Salinas, & Sanders, 1997; Henderson & Mapp, 2002; Shaver & Walls, 1998; Fan & Chen, 2001; Hara & Burke, 1998; Miedel & Reynolds, 1999). In their meta-analysis, Fan & Chen (2001) reviewed quantitative studies examining parental involvement and achievement of children. They found a moderate relationship. Another review reported by Crosser (2005) is one by Carter (2003) who analyzed and summarized a decade of parental involvement research. The review confirmed the conclusion that parental involvement is related to numerous positive outcomes for pupils. When parents are involved, children tend to do better in school, regardless of age, economic status, gender or any other known factors. For example, findings from the Miedel and Reynolds (1999) study that investigated parental involvement in an inner-city Chicago setting indicated a relationship between parental involvement and reading achievement, lower numbers of grade retentions and fewer education referrals. Hara

and Burke (1998) also studied inner-city elementary pupils and found significant pupil reading gains. Not only did the children make achievement gains, the parents also appeared to develop more positive attitude toward education, teachers and their own interest in learning for themselves. Similar findings relating involvement in school to more positive attitudes toward teachers were reported by Caplan, Hall, Lubin and Fleming (1997). Parents who were actively involved rated the teacher's teaching ability higher after they became involved. The effects may be long-term too, as indicated by a longitudinal study of 1205 urban kindergarten through third grade pupils (Izzo, Weissberg, Kasproff & Fendrich, 1999). The children and their parents' involvement levels were followed for three years. Teachers then rated the frequency of teacher-parent contact, quality of parent-teacher interactions, participation in educational activities at home, and level of participation in school activities. Although all variables were moderately correlated with children's achievement, the strongest relationship to academic success was parent participation in educational activities at home. Naughton (2003), after a review of related literature, concludes that the 1990s research consolidated the idea that parental involvement supports children's learning. These studies affirm that parental involvement positively influences children's cognitive and social development (Endsley et al., 1993; Studer, 1993/94; Laloumi-Vidali, 1997); improves children's educational outcome, especially literacy (Baker et al., 1996; Cooter et al., 1999; Bryant et al., 2000); increases parents' ability to support children's development by increasing their understanding of appropriate educational practices (Gelfer, 1991); improves parents' commitment to schooling (Izzo et al., 1999); and contributes to national development by improving children's educational outcomes, especially literacy (Cone, 1993; Hannon, 1995; Cairney, 1997).

2. Objectives

- (i) To determine the relative contribution of Parenting level of involvement on Primary school readiness.
- (ii) To determine the relative contribution of Communicating level of involvement on Primary school readiness.
- (iii) To determine the relative contribution of Volunteering level of involvement on Primary school readiness.
- (iv) To determine the relative contribution of Learning at home level of involvement on Primary school readiness.
- (v) To determine the relative contribution of Decision making level of involvement on Primary school readiness.
- (vi) To determine the relative contribution of Collaborating with the community level of involvement on Primary school readiness.

3. Methodology

The target population for this study was pupils enrolled in their final year of preschool in Nairobi and their parents. These pupils are typically aged 5 or 6, though there were some whose age was more than 6. The sample consisted of 156 pupils in 39 preschools and 150 parents.

Two researcher-developed instruments were used to collect data. One is the Primary School Readiness Test. This was administered on individual pupils to measure school readiness. It consists of six sub-scales, each measuring a different dimension of school readiness. The six sub-scales are cognitive dimension, language dimension, social-emotional dimension, physical dimension, adaptive dimension, and approaches to learning dimension. Each of the first five dimensions comprises various tasks that the pupil is required to perform. The pupils were then rated on their ability to perform the tasks as follows: Yes/Able=3; Some ability=2; No/Unable=1. The last sub-scale required the researcher, with assistance from the preschool teacher, to rate the pupil on various attributes that relate to approaches to learning. They were rated on how much they displayed the said attribute as follows: Never=1; Sometimes=2; Often=3.

The second instrument was a rating scale for assessing the extent of parental involvement in the education of their children. It consists of six sub-scales, each measuring a different level of involvement. The six levels correspond to those identified by Epstein (1998). Each subscale consists of statements regarding some relationship or interaction between the parents and their children or the parents and their children's teachers. The parents were required to select the option that best describes their situation as follows: Never=1; Sometimes=2; Frequently=3. The instrument was administered to one parent of each pupil sampled as an interview schedule. Six parents were, however, unavailable for the interview.

4. Findings and discussion

4.1. Demographic data on study participants

The study had two main categories of participants, namely the pupils and their parents. Some demographic characteristics about the participants are presented below.

Table 1. Parents' ages

Age	Frequency	Percent
18 – 23	5	3.4
24 – 29	50	33.8
30 – 35	33	22.3
36 – 41	38	25.7
42 – 47	17	11.5
48 – 53	1	0.7
54 and older	4	2.7
Total	148	100

Source: Field data

Of the expected maximum 156 parents, six were unavailable for the interview. Of the 150 who were interviewed, two did not disclose their age. The age bracket with the largest proportion of parents was 24-29, where 33.8% of the parents fell.

Table 2. Distribution of parents by gender

Gender	Frequency	Percent
Male	33	22
Female	117	78
Total	150	100

Source: Field data

The majority of the parents interviewed (78%) were female. This is to be expected as the parents were interviewed as they dropped their children to school in the morning. In a majority of Kenyan households, mothers are responsible for dropping kids to school and picking them up at the end of the school day, as well as attending school functions and activities.

Table 3. Highest academic qualification of parents

Highest academic qualification	Frequency	Percent
University education	13	8.7
Mid-level college	20	13.4
Secondary education	69	46.3
Primary education	42	28.2
None	5	3.4
Total	149	100

Source: Field data

One parent did not disclose their highest academic qualification. The highest academic qualification held by the largest number of parents is secondary education, which was the highest for 69 parents accounting for 46.3%.

Table 4. Ages of the pupils

Age	Frequency	Percent
4 years	11	7.3
5 years	84	55.6
6 years	38	25.2
7 years	12	7.9
Older than 7 years	6	4.0
Total	151	100

Source: Field data

All the 156 pupils sampled had the Primary school readiness test administered to them. However, the ages of five of them could not be ascertained and so was not indicated. Of the 151 whose ages were recorded, more than half were aged 5. Eighty-four pupils, representing 55.6%, fell in this age.

Table 5. Gender of the pupils

Gender	Frequency	Percent
Male	79	50.6
Female	77	49.4
Total	156	100

Source: Field data

Information on the pupil's gender was obtained from all the 156 pupils. The number of male pupils was 79 (50.6%) while that of female pupils was 77 (49.4%).

4.2. Research findings

A multiple regression analysis was carried out to achieve the six stated objective. These were to determine the relative contribution of each of the six levels of parental involvement on primary school readiness. The results of the analysis are presented below.

Table 6 – Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sign. F Change
1	.330 ^a	.109	.072	.22222	.109	2.954	6	145	.009

- a. Predictors: (Constant), Collaborating with the community level, Volunteering level, Parenting level, Decision making level, Learning at home level, Communicating level
- b. Dependent Variable: Primary school readiness

Table 7 – Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.500	.129		19.448	.000
1 Parenting level	.049	.048	.094	1.019	.310
Communicating level	.046	.059	.088	.780	.437
Volunteering level	.093	.052	.150	1.796	.075
Learning at home level	-.028	.054	-.053	-.530	.597
Decision making level	-.145	.041	-.342	-3.546	.001
Collaborating with the community level	.045	.049	.087	.934	.352

- a. Dependent Variable: Primary school readiness

The analysis gives a statistic known as the coefficient of multiple correlation, R . It indicates the strength of the correlation between the combination of the predictor variables and the criterion variable. It is also a measure of the quality of the prediction of the dependent variable. When R is squared it provides the percentage of variance in the criterion variable explained by the predictor variables. This analysis yielded an R value of 0.33 and R^2 value of 0.109 (see table 6). A value of $R = 0.33$ indicates a moderate correlation between the combination of the predictor variables and the criterion variable. It also implies a moderate level of the prediction of the dependent variable by the independent variables. A value of $R^2 = 0.109$ means that the six variables of levels of parental involvement explain or contribute 10.9% of the variance in primary school readiness. The analysis also gives information about the individual contribution each variable is making to the variance in the criterion variable (see table 7). The t value calculation and its level of significance give the individual effect of each variable in the model. Information on individual weights or coefficients to explain the contribution each variable has on the criterion is also obtained as standardized beta coefficient, β . The analysis shows that volunteering level of parental involvement ($t = 1.796$, $\beta = 0.15$, sig. = 0.075) had the greatest contribution to primary school readiness. It was followed by the parenting level of parental involvement ($t = 1.019$, $\beta = 0.094$, sig. = 0.31). The third greatest contributor to primary school readiness for this sample of pupils was communicating level ($\beta = 0.088$) followed by collaborating with the community level of parental involvement ($\beta = 0.087$) in fourth place. The other two levels of parental involvement, decision making level and learning at home level, had an inverse contribution to the primary school readiness in the pupils. Decision making level of parental involvement had the higher inverse contribution ($t = -3.546$, $\beta = -0.342$) than learning at home level ($t = -0.53$, $\beta = -0.053$). While the F -ratio for the overall regression model ($F = 2.954$, $p = 0.009$) reveals that the independent variables do not statistically significantly predict the dependent variable, decision making level ($p = 0.001$) does statistically significantly predict primary school readiness at the $p < 0.005$ level of significance.

4.3. Discussion

Four of the six variables of levels of parental involvement had a positive correlation to primary school readiness while two had a negative correlation to primary school readiness. Volunteering level of parental involvement had the highest positive contribution to primary school readiness. This was followed by parenting level, communicating level, and collaborating with the community level in that order. Decision making level and learning at home level had negative contributions to primary school readiness. While many studies have been conducted on benefits of parental involvement, and also on effective strategies for forming and maintaining parental involvement, not many studies have specifically sought to determine the relative contribution of different levels of parental involvement on child outcomes. For instance, a National Center for Education Statistics survey of a nationally representative sample of 900 public schools indicated that schools are making

the effort to involve parents by offering a wide variety of options for involvement (NCES, 1998, in Crosser, 2005). Crosser (2005) also points out that there is little definitive research indicating that one particular model of involvement is better than another, but we do have bits and pieces of information about different levels of involvement and results from specific studies. For instance, Crosser (2005) cites a project reported by Shaver and Walls (1998) that offered parent-training workshops to parents of elementary school children. Compared to the control group, standardized achievement test scores were better for children when parents had completed the workshop training. The results were similar regardless of income level or education level of parents. The training obviously enhanced parental involvement, and the better test scores implies a positive contribution of parental involvement to achievement test scores. This is consistent with the findings of this study which indicate a positive contribution by four levels of parental involvement to primary school readiness, a child outcome very comparable to achievement test. One of the levels of parental involvement with a positive contribution to primary school readiness is communicating level. This finding is consistent with that by Gelfer (1991, in Naughton, 2003) who noted that parent-teacher communication can assist teachers by providing information helpful in addressing students' individual needs, interests, capabilities, backgrounds and learning styles. This would in turn improve achievement and outcomes in the child. Crosser (2005) cites another study by Jordan, Snow and Porche (2000) in which low and middle class parents came to school to be trained in helping their kindergarten children develop literacy skills. Scores increased as amount of work done at home increased. This finding of a positive contribution of parental involvement at the learning at home level, however, is in contrast to the findings of this study which indicate a negative correlation between learning at home level of parental involvement to primary school readiness. This might be due to the fact that majority of the parents in this study had moderate to low levels of academic attainment. As seen from table 3, the number of parents who indicated as their highest academic qualification secondary education and below was 116 (77.9%). Ritter, Mont-Reynaud and Dornbusch (1993) is cited by Crosser (2005) in a study that sought to identify reasons for parents were uninvolved. Some parents reported that when teachers questioned them about their children, the questions were interpreted as being disrespectful. Other parents reported that they were not involved because they felt they lacked the necessary language skills. This could conceivably occur with parents of low educational attainment. As reported by Koech (2010) involvement in education of their children by parents increases as their level of education increases. In addition, in the course of involving parents tension arises because there is always the danger that parents will behave in educationally and developmentally inappropriate ways (Naughton, 2003). Naughton (2003) adds that under the guise of creating collaboration between parents and educators, educators can invoke a right to know what happens to a child at home. To investigate how parents raise their children at home, educators scrutinize those homes and subject them to their expert judgment. This is hardly an incentive for parents to become involved, or may lead to inappropriate forms of involvement in the learning at home level. Volunteering level of parental involvement was found to have the biggest positive contribution to primary school readiness. This finding is similar to that by Gestwicki (1992, cited by Essa, 1999) who found that children can benefit from having their parents in the classroom, feeling pride and a sense of security as they see their parents and teachers working together. Decision making level of involvement was found to be negatively correlated to primary school readiness. This finding contradicts the conclusion by Dunst and Trivette (1988, in Essa, 1999) who posit that effective decision making by an advisory or policy board in which parents serve, can promote a true partnership between families and the school programme, providing support for the school, empowerment of parents, and increased mutual understanding. This would in turn be expected to positively impact on child outcomes. Moore (1998, in Crosser, 2005) also reported a correlation between high reading scores and schools with strong local school councils, and went on to recommend more research in this area of parental involvement. This discrepancy can be explained by the observation made by Naughton (2003). Naughton (2003) noted that educators invite parents to become involved on the assumption that parents' knowledge of children is supplementary to their own expert knowledge, rather than being a necessary component of it. When parents' knowledge is seen as merely supplementary, educators can – and do ignore it without compromising their professional standards. For instance, Naughton (2003) cites a Greek study which found that only 25% of educators wished to work collaboratively with parents (Laloumi-Vidali, 1997), and a Japanese study which reports reluctance among staff to even talk with parents (Huiru, 1996). In addition, educators tend to resolve tension by inviting and encouraging parents to become involved in their children's care and education through activities such as raising money, helping with snack times, or serving on management committees. As observed by Sexton (1996, in Naughton, 2003), though beneficial, none of these activities involves parents as partners, advocates and decision makers in an early childhood curriculum, and none of them feature educators as co-learners with parents. Instead each form of parent involvement restricts them to non-educational areas and can subordinate parents' to educators' expertise in curriculum decisions. Under these circumstances, if and when parental involvement at decision making level occurs, it might have a negative contribution to child outcomes.

5. Conclusion

Since the benefits of parental involvement in the education and development of their children is well documented, the researcher recommends that deliberate measures be put in place to enhance and improve parental involvement at the six levels. As noted by Jordan, Orozco, and Averett (2001, in Crosser, 2005), no one mode of involvement seems to meet the needs of all parties. Any level of involvement is, however, better than no involvement. In addition, ethnic and cultural values impact on how parents think about education and what they believe their role should be in promoting the education of their children. Ethnic and cultural contexts should therefore be considered in formulating parental involvement policies and practices by schools and educators. As recommended by Lopez (2001, in Crosser, 2005), schools should also identify and recognize nontraditional ways in which parents may be involved.

References

- Cresswell, J.W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson Education, Inc.
- Crosser, S. (2005). *What do we know about early childhood education? Research based practice*. New York: Thomson Delmar Learning.
- Daily Nation correspondent (2013, August 2). *Are our children learning?* Nairobi: Nation Media Group, p.13, col. 1-3.
- Essa, E.L. (1999). *Introduction to early childhood education* (3rd ed.). New York: Delmar Publishers.
- Huizingh, E. (2007). *Applied statistics with SPSS*. London: SAGE Publications.
- Janus, M. (2007). *The Early Development Instrument: A tool for monitoring children's development and readiness for school*. In M.E. Young and L.M. Richardson (Eds.), *Early child development: From measurement to action* (pp.183-201). Washington: The International Bank for Reconstruction and Development.
- Koech, P.K. (2010). *Parent-teacher partnerships for enhancing pre-school children's education in Uasin Gishu District, Kenya*. Unpublished PhD thesis, Kenyatta University.
- Kwena, J.S.A. (2007). *An investigation into selected factors on academic self-concept among Primary school pupils in Bondo District*. Unpublished PhD thesis, Kenyatta University.
- Morrison, G.S. (2007). *Early childhood education today*. New Jersey: Merrill/Prentice Hall.
- Naughton, G.M. (2003). *Shaping early childhood: Learners, curriculum and contexts*. Berkshire: Open University Press.
- Republic of Kenya (2006). *Early childhood development service standard guidelines for Kenya*. Nairobi: MoE.
- Republic of Kenya (2006). *National early childhood development policy framework*. Nairobi: MoE.