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TEACHERS' INFLUENCE ON CHILDREN'S SELECTION AND USE OF PLAY MATERIALS IN KENYA

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Abstract

Gender socialization has an impact on children and any gender stereotyped verbal comments or activities assigned to children by those in charge are bound to influence the attitudes children have of themselves. This exploratory study therefore set out to investigate among 36 Kenyan preschool teachers if they hold gender-stereotyped views and if they communicate these views to children during selection and use of play materials. To collect data, an observation schedule was used. T-tests were then performed to find specific intergroup differences. Teachers were found to influence children in a gender stereotyped manner with more influence being exerted on boys than on girls. This influence on the children may encourage the children to adopt gender roles that are not always fair to both genders. This study therefore advocates for the encouragement and training of teachers to adopt an androgynous gender role attitude. In this way teachers may also encourage this same attitude in preschool children.

Keywords: teachers, preschools, play materials, gender stereotyping, Kenya

Introduction

Extensive research has been carried out in the area of gender stereotyping of children's toys in the western world yet surprisingly, the trend in developing countries is far less documented especially in Africa where research in this area seems to have been ignored. Existing studies on gender stereotyping of toys in the United States and Canada (Caldera, Huston & O'Brien, 1989; Campenni, 1999; Fein, Johnson, Kosson, Stork & Wasserman, 1985; Serbin, Poulin-Dubois, Colburne, Sen & Eichstedt, 2001; Weintraub et al., 1984), and in Europe and Asia (Kim, 2002; Roopnarine, Ahmeduzzaman, Hossain & Reigraf, 1992; Suito & Reifel, 1992; Wegener-Spohring, 1989) revealed the existence of stereotypes regarding children's play materials.

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. Research (Beauvoir, 1953; Hadley & Nenga, 2004; Michelle, 1971; Saadawi, 1980; Shorey, 1983; Steinke et al., 2007) shows that socialization processes have an impact on the child's perceptions, personality, role definition and role performance. Social learning theory (Bandura, 1977; Mischel, 1970) also emphasizes that early experiences determine later behavioural patterns. Children will develop behaviours based on principles of learning, reinforcement, extinction, and imitation of models. Early differences in the play materials provided and activities encouraged during free-play and during assigned activities will therefore determine how girls and boys come to perceive themselves as they do. Riria (1986) argues that no child would be able to perceive him or herself as gender differentiated if no one indicated to him or her that this difference existed. More often than not this difference is communicated to the child through the kind of activities that are assigned to the child by whoever is in charge of him or her. One implication of these childhood activities for girls' development is that girls grow up to internalise the expectation that their goal in life is to serve others mainly in the home.

Available literature from research carried out in the western world shows that play materials tend to be differentiated according to gender (Bertozzi, 2008). Play materials viewed as appropriate for girls are likely to be seen as attractive, creative, nurturing and manipulable while those for boys are seen as being more competitive, aggressive, constructive, conducive to handling and reality based (Miller, 1987). Those viewed as appropriate for girls include domestically oriented and stuffed toys while vehicles, balls, guns and construction toys are seen as appropriate for boys.

Teachers and classroom activities may also have a role to play in gender stereotyping of play materials. Lee & Gropper (1974) found that classrooms particularly at the preschool level are arranged into highly gender-stereotyped play areas such as a cooking corner for girls and a building-blocks corner for boys. Such a layout may reinforce the idea that such activities are incompatible and make crossing over to gender-inappropriate activities more difficult. Therefore, the way children are socialized may encourage them to sex-type play materials. There are also effects of gender stereotyped play. During and immediately following play with such toys, children are more accepted by their same sex peers who are also more likely to approach them (Berndt & Heller, 1986; Eisenberg, Tryon & Cameron, 1984; Moller, Hymel & Rubin, 1992).

Although interest groups working towards gender equity have emerged in recent years in developing countries especially in Africa, women are still striving to overcome deep-seated cultural barriers to equal participation in the social, economic and political arenas. In Kenya for instance, women were traditionally regarded as subordinate to men (Chesaina, 1994). While in

Malawi research (Davidson & Kanyuka, 1992) has shown that too often girls learnt at an early age that they are expected to limit themselves to activities at home and were tracked at school to courses which reinforce their roles as domestic producers and reproducers and that may exclude them from other productive careers. Schools therefore also bring social pressures to bear upon boys and girls to conform to masculine and feminine characteristics respectively. Boys are expected to be active, objective and interested in ideas while girls are expected to be passive, subjective and more interested in people than ideas (Eshiwani, 1986; Steinke et al., 2007). Schools therefore also play a significant role in the socialization of children.

African cultural and gender socialization processes could have an influence on children and classroom teachers. Literature (Kenyatta, 1965; Mbevi, 2010; Mwaniki, 1985) describes how children in the African traditional society were prepared for adult responsibilities from an early age. The children were gradually socialized into their adult roles by members of the extended family as they grew up (Kenyatta, 1965; Magesa, 1998). Due to this continuous education and training, they grew up well grounded to effectively take up various roles in adulthood. The concept of parenting was wider than the man and woman who were the biological parents. All adult members of the community to which the child belonged assumed parental responsibilities (Mbevi, 2010; Mwaniki, 1985).

There were specific roles expected of men and those expected of women and due to this, boys and girls received different kinds of training (Kenyatta, 1965). The same scenario was found among the Igbo of Nigeria for instance where the boys' fathers scolded and severely beat their sons to ensure they removed any traits that were viewed as being womanish (Uwalaka, 2003). Although indigenous knowledge systems varied from one society to another, these systems were essentially an education for living (Erny, 1981). The indigenous education placed a very strong emphasis on acquisition of knowledge which was useful to the individual and society as a whole (Erny, 1981). In the contemporary society however, there have been changes whereby children spend most of their time in school and while at home are busy doing their homework (Berns, 2009; Mburugu & Adams, 2001).

Presently in Africa, unlike in the past, a greater number of young children are being enrolled for preschool education and are therefore spending a great percent of their childhood years under the care of preschool teachers. This change has occurred as a result of the awareness of the benefits of preschool education and the break up of the extended family. This trend has also resulted in changes in the socialization process with preschool teachers playing a greater role in young children's lives. This is a significant change from the past when the young child's primary socialization agents were his or her extended family as the young child spent most of his or her time with these individuals.

Preschool teachers are therefore playing an increasing role in the socialization of young children comparable to that of the child's guardians. In the preschools, the teachers act as role models and tend to pass on the attitudes and views they hold to children. They therefore play a major role in the preschool children's lives and any prejudices they hold can, when communicated to young children, leave an indelible mark in young children's minds.

Another factor is the early childhood education syllabus developed by the Kenyan Ministry of Education and intended for use in Kenyan preschools. It places an emphasis on the use of play and play materials by teachers during learning in preschools (Kenya Institute of Education, 2008). It is due to these factors that this study was designed to investigate whether preschool teachers in Kenya hold gender stereotypes and if they transmit these stereotypes to young children under their care during free-play sessions.

Specifically, the objectives of this study were to:

- find out if preschool teachers influence children in specific selection patterns of play materials
- establish if preschool teachers influence children in specific use patterns of play materials
- determine if the gender of the child influences the extent to which the child's selection patterns are influenced by teachers
- find out if gender of the child influences the extent to which the child's use patterns are influenced by teachers

In this study, the term *gender appropriate play material* was used to refer to play materials that people generally think only children of one sex should play with while *cross-gender play material* was used to refer to play materials that are seen appropriate for the other sex and *gender-neutral play material* referred to play materials that are seen as appropriate for both sexes. The term *selection* was used to mean choosing or picking a play material and *use* to refer to handling or manipulating a play material.

Sample and Sampling Method

The participants in this study were 36 preschool teachers in selected Nairobi City Council preschools in Kenya. Of the 36 teachers, 35 were female and one was male. All the teachers had training in early childhood education at the certificate or diploma level with 19 of the teachers having certificate level training while the remaining 17 had diplomas. The number of years of teaching experience varied with 11 teachers having less than 5 years teaching experience, 18 teachers had 5 to 10 years teaching experience, 3 teachers had 11 to 15 years experience and 4 teachers had over 16 years teaching experience.

City Council preschools were the focus of this study and were selected as the study sites because the Kenyan Ministry of Education trains most of the teachers in these preschools. To determine which City Council preschools were to be used in this study, the researcher consulted the Education Officer One in charge of Early Childhood Education with the City Education Department. This Education Officer is an educationist with long standing experience of educational practice in Nairobi City Council preschools. The City Education Department classifies these schools into three groups. These are groups E, F and G. During the colonial days, the preschools in group E were termed as low class, those in group F as middle class and those in group G as high class. From this list, the City Education Officer provided the researcher with the names of two schools from each group. The City Education Officer felt these schools were representative of the other schools in those groups.

Therefore, the researcher was provided with names of six schools. Within the six schools that were selected, nine classes were selected. Each class was homogeneous in terms of the age of the children. Therefore, in each school, three classes were selected, one of three-year-old children, one of four-year-old children and one of five-year-old children. Each class had two teachers who were in charge of the children, therefore a total of 36 teachers were observed interacting with the children.

Tools of Measurement

An observation schedule was used to record frequency counts of how the teachers interacted with the children to influence them during their selection and use of the play materials. In general, the

play materials used were homemade. These included play materials perceived as appropriate for boys, play materials deemed as appropriate for girls and play materials which were considered to be gender-neutral.

The play materials used in the current study were developed after an extensive review of literature (Caldera, Huston & O'Brien, 1989; Campenni, 1999; Fein, Johnson, Kosson, Stork & Wasserman, 1985; Kim, 2002; Roopnarine, Ahmeduzzaman, Hossain & Reigraf, 1992; Serbin, Poulin-Dubois, Colburne, Sen & Eichstedt, 2001; Suito & Reifel, 1992; Wegener-Spohring, 1989; Weintraub et al., 1984). These play materials had been mentioned in the previous research as being appropriate either for boys or girls or as being gender neutral. Play materials mentioned as appropriate for boys were toy-cars, catapults, lorries and footballs. Those appropriate for girls included dolls, skipping ropes, brooms and cooking utensils while the play materials that were perceived as gender-neutral were televisions, beanbags, wire-shakers and cameras.

The opinions of experts in the area of early childhood education regarding the extent to which these play materials were representative was also obtained. The specialists consulted were five university lecturers who had extensive knowledge in the area of early childhood education and five preschool teachers who had hands on experience working in various preschools in Kenya. Therefore the following 12 play materials were used in this study: toy-cars, catapults, lorries, footballs, dolls, skipping ropes, brooms, cooking utensils, televisions, beanbags, wire-shakers and cameras. A minimum of 12 pieces of each play material was constructed so that each classroom had a minimum of three pieces of each kind of play material. Approximately 36 toys were provided per class. The rationale for using the author's supplies instead of the classroom regular play materials was to ensure there would be uniformity in the type of play materials in all the sampled schools. The play materials provided were enough as each of the classrooms from which data was collected had less than 20 children. Thus, providing 36 play materials in each classroom ensured the play materials were enough.

The hypotheses statements guiding this study were:

- Preschool teachers influence children in specific selection patterns.
- Preschool teachers influence children in specific use patterns.
- Gender of the child influences the extent to which the child's selection patterns are influenced by teachers.
- Gender of the child influences the extent to which the child's use patterns are influenced by teachers.

Validity and Reliability

Validity and reliability was obtained through pre-testing of the instruments in a school that was not included in the final study. The piloting was necessary to appraise the instruments and check whether they tested what they were supposed to test. During the piloting, the researcher and a research assistant visited three classrooms in the selected school and in each classroom they both observed one teacher and recorded this teacher's interactions with the children. After collecting data from the three classrooms, the two researchers then compared the data they had collected and a calculation of the inter-observer agreement was carried out. The inter-observer agreement assessed by percentage agreement was 84%.

Procedure

The researcher and a research assistant visited the selected preschools and introduced the play

materials to the preschool teachers and instructed them to introduce these play materials to the children. The researcher informed the teachers that the study being undertaken was on children's play behaviour but she did not provide specific details regarding the nature of the study. Therefore, the teachers were not aware of the focus of the study and did not, as a result consciously encourage or discourage the children to stereotype the play materials.

The researchers visited each classroom over a period of two weeks during the free-play period. The free-play period was selected as the most suitable for data collection due to the availability of play materials during this session and the fact that the preschool teachers would be engaged in watching over the children. Therefore, they would not pay close attention to the researchers. In the first week, the children were given a chance to explore and get used to the play materials and during the second week, the research was carried out.

The classroom teachers were asked to introduce the researchers as new teachers to reduce the children's curiosity. The play materials were initially placed at the front of the classroom on the teachers' table or on another table, and the children were asked to select what they wanted to play with from the play materials on the table. They were also told that they could exchange that play material for another by returning the play materials they finished playing with to the table and exchanging them for other play materials.

The purpose of the researchers visit to the classrooms during the first week was to verify that the preschool teachers had actually introduced the play materials to the children and to familiarize the children with the researchers as the researchers were participant observers during the study. The researchers also carried observation sheets with them during the first week and acted as if they were observing the children's play and recording the children's interactions. This was completed to ensure the preschool teachers would not deduce they were the main focus of the study when the actual data collection began during the second week.

The research was therefore carried out during the second week. As there were two teachers and two researchers in each classroom, one researcher recorded one teacher's interactions with the children and the other researcher recorded the other teachers' interactions. The researchers noted down how the teachers influenced the children in selection and use of the play materials that is, frequency counts were made of the teachers encouraging or discouraging children to sex-type the play materials. Data was therefore collected as the teachers made comments or behaved in any manner that positively or negatively influenced the children in selection of play materials. These behaviours included teachers giving the children play materials to play with, teachers taking play materials from the children and teachers telling children to play or not to play with certain play materials. Examples of such comments include statements such as,

"Mary, pick the big doll.....then you can dress it like a baby"

This statement made to a girl, Mary, was viewed as encouraging the girl to play with a doll. While a statement directed to a boy such as,

"Are you sure you know how to cook?"

was viewed as discouraging the boy from playing with the cooking utensils.

Results

To determine the teachers' influence in the children's selection and use of the play materials, t-tests were performed to find specific inter-group differences. There was a significant difference between the extent to which the children were influenced in selection of gender appropriate play materials ($M = 1.077$) and extent they were influenced in selection of cross-gender play materials ($M = 0.108$), $t(156) = -19.75, p < .05$. There was also a significant difference between the extent to which they were influenced in selection of gender appropriate play materials ($M = 1.077$) and extent they were influenced in selection of gender-neutral play materials ($M = 0.255$), $t(156) = 16.23, p < .05$.

T-test further revealed a significant difference between extent they were influenced in gender appropriate use ($M = 1.204$) and extent they were influenced in cross gender use of play materials ($M = 0.056$), $t(156) = -20.90, p < .05$. There was also a significant difference between extent of influence they received in gender-neutral use ($M = 0.121$) and extent they were influenced in gender appropriate use ($M = 1.204$), $t(156) = 19.98, p < .05$.

The results therefore revealed that the extent to which the children were influenced in selection and use of gender-appropriate play materials was much higher than the extent to which they were influenced in selection and use of cross-gender and gender-neutral play materials. It is also apparent that teachers least frequently redirected or influenced children from cross-gender selection and use.

The results also showed that the mean score for the extent to which boys were influenced by teachers in selection ($M = 1.770$) and use ($M = 1.626$) of all the play materials was higher than the mean score for the extent of the influence on the girls' selection ($M = 1.068$) and use ($M = 1.106$) of all the play materials. The teachers therefore directed their influence to boys more than girls. In addition, t-tests were performed to find the specific differences between the extent to which the boys and the girls were influenced in selection and use of all the categories of play materials. These findings are illustrated in Table 1.

Table 1
Extent to Which the Children Were Influenced in Selection and Use of the Different Categories of Play Materials

	Boys M	Girls M	t	df	p
Selection					
Gender-appropriate	1.459	0.648	13.96	155	.000*
Cross-gender	0.047	0.175	-5.11	155	.000*
Gender-neutral	0.264	0.244	0.57	155	.569**
All play materials	1.770	1.067	10.66	155	.000*
Use					
Gender-appropriate	1.495	0.878	6.43	155	.000*
Cross-gender	0.059	0.054	0.45	155	.650**
Gender-neutral	0.073	0.175	-3.17	155	.002*
All play materials	1.627	1.107	4.83	155	.000*

* significant at $p = 0.05$ ** not significant

The data in Table 1 also shows the extent to which the children were influenced in selection and use of the specific categories of play materials. It is evident that the teachers directed girls significantly more than boys in selection of cross-gender play materials with the reverse occurring as regards the gender-neutral play materials where boys were influenced more than girls although there was no significant difference between the mean scores. However, as regards influence in gender-appropriate selection and use of the play materials, the results in Table 1 show that the teachers exerted more influence over the boys with the mean score for the extent to which the boys were influenced being almost double that of the extent of the influence on the girls. The same applied to cross-gender use of play materials with a higher mean score being obtained of teachers directing the boys more than the girls although there was no significant difference in this type of influence. However, there was a significant difference as regards gender-neutral use of play materials with girls receiving significantly more influence.

Discussion

The results obtained showed that preschool teachers influenced the children to select gender-appropriate play materials and use play materials in a gender-appropriate manner significantly more than selecting cross-gender or gender-neutral play materials and using the same in a cross-gender or gender-neutral manner respectively.

These findings on teachers' influence on children were similar to those of Fagot & Oregon (1984) who also found that teachers seemed to have preferences as to which play materials children of different genders should play with and tended to encourage children to sex-type these play materials. In the present study, the teachers also exerted most influence on the children in gender-appropriate selection and use of play materials but exerted very little influence on the children during cross-gender selection and use of play materials. It is possible that the teachers were positively reinforcing gender-appropriate behaviours by paying attention to the children who displayed these kinds of behaviours while they used little punishment or other forms of negative reinforcement on children displaying cross-gender behaviour because they did not want to encourage cross-gender behaviour.

It is also possible that due to the presence of the researchers, the teachers did not redirect the children during cross-gender selection and use of play materials. The teachers may have felt uncomfortable about reprimanding the children for cross-gender behaviour when the researchers were present. Therefore, this could be another reason why the teachers paid little attention to cross-gender behaviour.

In most Kenyan societies, greater social value is placed on men displaying "male" behaviour. Females who adopt male behaviour receive little reproach but males who adopt female behaviour are readily stigmatised. It can be assumed, therefore, that the teachers were exerting more pressure on the boys because the society they live in is very particular and demands that boys display male behaviour.

It is, therefore, not surprising that the teachers in this study exerted more pressure on the boys because they may have noticed that the boys were not selecting and using gender-appropriate play materials as frequently as they expected them to. Therefore, it is possible that the extra pressure on the boys was meant to ensure the boys selected and used more gender-appropriate play materials, but this needs further research for confirmation.

The findings on teachers' influence on boys and girls in selection and use of play materials are similar to other studies (Durkin, 1985; Maccoby & Jacklin, 1974; Martin, 2005) that also found that guardians exerted more influence on boys than on girls to conform to gender-appropriate behaviour. This shows that it is not only in Kenya where more pressure is put on boys to conform to gender-appropriate behaviour.

There was only one male teacher in the sample therefore it was difficult to carry out a comparison of the teachers' actions based on their gender. Previous studies in Kenya (Kinuthia, 2009; Makoti, 2005; Waithaka, 2005) have established that teaching in preschools is dominated by female teachers. The poor remuneration, belief that looking after young children is women's work and the preschool children's parents influence were found to be some of the factors contributing to this gender disparity (Karanja, 2009). Perhaps future studies that include larger samples of male teachers could provide in-depth information as to whether teachers display sex-typed behaviour due to their gender.

All the teachers in this study had training in the area of early childhood education which was either at the certificate or diploma level. Training of professionals working in the area of early childhood education in Kenya has reached the degree level and it is now possible to obtain an undergraduate and post graduate degree in early childhood education. This therefore implies that the sample of teachers included in this study generally had low levels of training in the area of early childhood education. It is probable that their level of training influenced their behaviour. Previous studies (Dunn, 1993; Ndegwa, 2005; Wawire, 2006) have established that teachers with more advanced education tend to be the most effective. It is probable that the teachers in this sample were not well trained on the importance of adopting an androgynous gender role attitude and this led them to either encouraging or discouraging the children in their play with certain play materials.

The teachers experience in the teaching field varied with most of the teachers in the sample having less than ten years of teaching experience. These results are similar to those of other recent studies carried out in Kenya (Kinuthia, 2009; Makoti, 2005; Ndegwa, 2005) which also established most preschool teachers had comparatively few years of experience. This may be attributed to teachers leaving classroom teaching either to start their own schools or to get better paying jobs elsewhere (Kinuthia, 2009). The implication of this is that most preschool children are frequently introduced to new teachers within a term. These teachers may not have enough experience in handling preschool children. Different scholars (Branyon, 2002; Ng'asike, 2004) argue that with the number of teaching years, teachers acquire positive attitudes and a higher self-efficacy. Therefore, teachers' lack of experience in the teaching field could consequently limit their knowledge of the importance of adopting androgynous gender role attitudes and lead them to influence the children in their classrooms to adopt gender stereotyped views.

Conclusion

Teachers act as role models and therefore have a great influence on children. Teachers may tend to pass on the views and attitudes they hold to children. This implies that if they hold gender-stereotyped views, they pass these views on to children. Children learn, therefore, to adopt gender roles that are not always fair to both genders.

Teachers in this study also seemed to spend more time influencing boys than girls. This implies that teachers were directing more attention to the boys than to the girls. This is bound to affect the relationship between the teachers and children if the teachers pay attention to children

based on gender preferences.

Teachers should understand that they act as role models for children thus they greatly influence the children's perceptions of what is or is not acceptable. They should be encouraged and guided to adopt an androgynous gender role attitude and encourage the same in the preschool children. Teachers should also re-examine the frequency with which they direct influence to the children under their care. They should strive to spend the same amount of time with each child regardless of the child's gender. This will ensure that all the children get an opportunity to interact with the teachers. This study also showed that material developers need to strive to create more gender-neutral play materials while curriculum developers should encourage all play activities incorporated in the curriculum for learning purposes to be regarded as gender-neutral.

The presence of the researchers may have influenced the teachers' decision to direct very little influence during cross-gender selection and use of play materials. One recommendation is for future researchers to spend more time in the classrooms to find out if teachers will still behave in this manner. Longitudinal studies also need to be carried out to establish if the teachers continue throughout their careers to use reinforcement for gender-appropriate behaviour while ignoring cross-gender behaviour. Future studies could also involve the use of video recorders. The data collected through these recordings would prove invaluable as a qualitative analysis of the discourse variables could provide very useful information.

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