

PRIMARY SCHOOL CHILDREN'S GENDER DIFFERENCES IN PLAYFUL ACTIVITIES

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Abstract

Boys and girls differ in the way they choose and participate in playful activities right from an early age. This is believed to be a result of the socialization process, in which boys and girls are socialized differently through play, and also are supported differently to manifest behaviors regarded as playful. The purpose of this study was determine whether there are differences between boys and girls on the factors that influence the choice and participation in playful activities among kindergarten children in selected primary schools in Dar es Salaam region, Tanzania. The sample included 304 children (152 girls and 152 boys) from 8 primary schools in Dar es salaam region. The mean age of children was 7.6 ± 0.4 years. Children were evaluated using Barnett's 1991. Children's Playful scale. The factors that were considered to influence children's choice and participation in playful activities were physical spontaneity, social spontaneity, cognitive spontaneity, manifest joy and sense of humor. Multivariate analysis of variance indicated that the multivariate effect of gender was statistically significant only for physical spontaneity (F5,304=19.06, p<.05), manifest joy (F5,304=9.02, p<.05) and sense of humor (F5,304=3.35, p<.05). Boys were rated higher than girls on all of the above measures. Based on the findings, it was recommended that there is a need to organize an effective learning environment that considers appropriate way to modify and implement play activities.

Keywords: playful behavior, kindergarten children, gender, observation

1. INTRODUCTION

The question concerning the influence of individual characteristics on the choice and participation in playful activities has been an issue of concern for many scholars (Zachopoulou, Trevlas & Tsikriki, 2004). Attempts to answer the question have been on age, race, socio-economic status and gender. While results have shown that age, race and socio-economic status have little effects, results on gender have been inconclusive. Some studies found no sex differences whereas others reported differences that were either congruent or not with gender stereotypes (Barbu, Cabanes & Le Maner-Idrissi, 2011). Discrepancies between studies undoubtedly feed the continuing debate, suggesting that considerable research has to be carried out on gender differences in various aspects of children's play. Indeed, Lippa (2005), Mehl, Vazire, Ramirez-Esparza, Slatcher, and Pennebaker (2007), and Wallentin (2009) opined that despite decades of concerted efforts, the very existence of sex differences remains debated.

However, a number of studies have generally revealed traditional stereotypes concerning male-female differences in the level of physical activity and reported that boys were more vigorous and physically active in their play than girls. There is evidence that boys engage in more physical play, their play is rougher and involves more body contact than girls' play (Nderego, 2014; Nieman, 2003; Zachopoulou, Trevlas & Tsikriki, 2004), while girls engage in more pretence play with peers than do boys (Lindsey & Mize, 2001; Nderego, 2014). Zachopoulou, Trevlas and Tsikriki (2004) noted that boys involve in more boisterous play, display more forms of mobility games and are aggressive and active, while girls tend to be quieter and more passive, they often play inside. In addition, girls are more likely to exhibit sedentary, constructive play (Nderego, 2014; Wall & Pickert, 2001) while boys prefer to engage in gross motor and functional play (Zachopoulou, Trevlas, and Tsikriki, 2004).

Gender differences have also been noted by the increase in age (Telama & Yang, 2000; Kemper, 2000; Knab & Lightfoot, 2010). For example, by age three to five, the sex differences increase. Girls' preferences include activities with refined, elegant manipulation in an artistic nature, while boys appear to spend more time in outdoor activities with active and aggressive play (Kemper, 2000). From the age five and six, sex differences emerge also in the formation and organization of play. Males' play is more constructive and complex, than females' play, occur for the most part in large groups with greater role differentiation, with interconnection and interdependence between players, and clarity of goals (Zachopoulou, Trevlas & Tsikriki, 2004). According to Piaget's analysis, traditional girls' games are, usually, simple in their rule structure and there are no teams with specialized roles, such as umpires or referees (Zachopoulou, Trevlas, and Tsikriki, 2004). Furthermore, boys' games are more competitive and longer lasting and seem to require a greater amount of skill than do girls' games (Goldstein, 2012). Cultural explanation of such gender differences emphasize the role of games in preparing children for competition in adult life and the greater need for the male to compete in modern societies.



Gender differences have demonstrated not only in the motor play, but also in the social behavior. Zachopoulou, Trevlas, and Tsikriki (2004) found that girls displayed higher levels of social sensitivity than did boys. In addition, boy's social interaction tend to be focused on dominance and having a specific leader, whereas girls have a stronger convention for turn taking with peers in decision making (Edwards, 2000). Also boys make a greater number of attempts to influence peers, mostly by commanding and demanding, and girls tend to use indirect forms (speaking, politely, hinting rather than directly requesting) (Lindsey & Mize, 2001; Psaltis & Zapiti, 2014). Barbu, Cabanes, and Le Maner-Idrissi (2011) found that girls used polite requests and persuasion to get what they wanted in the play situation, whereas boys relied on commands and physical force. It is also reported that although girls remain relatively compliant, boys become increasingly resistant to influence attempts with age (Barbu, Cabanes, & Le Maner-Idrissi (2011). Boys and girls also differ in their reactions to conflict situations, in that girls are more likely than boys to engage in behaviors that defuse, or mitigate the conflict, whereas boys are more likely to engage in heavy-handed behavior (Zachopoulou, Trevlas, & Tsikriki, 2004). Zachopoulou, Trevlas and Tsikriki (2004), summarised the main differences in play between girls and boys as follows: a) boys played in larger groups than girls, b) boys engaged in loud public games whereas girls had a preference for quiet, private games and c) boys' play was hierarchical in nature whereas girls' games were collaborative.

Theoretical underpinnings

There are two major theoretical explanation concerning gender preferences for activities; cognitive development theory and social learning theory. The basic premise of the cognitive-developmental theory is that children gradually pass through developmental stages in their understanding of gender constancy (Zachopoulou, Trevlas, & Tsikriki, 2004). This is the recognition that gender always remains the same regardless of surface physical changes in appearance. Children can then make an effort - often a conscious and deliberate one - to imitate the characteristics of their prescribed role. They feel satisfied and receive reward because they engage in gender-appropriate activities. The learning theory posits that children learn by observation, imitation and modeling. In order to learn gender appropriate ways, children observe the activities done by people with the same gender to whom they associate and imitate such behaviours. The young child shapes his or her behaviors in response to environmental experiences (Bussey & Bandura, 1999).

Theoretical formulations of children's play have emphasized the consideration of an interrelationship between young children's play expression and cognitive growth (Piaget, 1962; Goldstein, 2012; Bergen, 2002; Barnett, 1991). There are a number of fairly well established differences in fantasy play that are related to sex of the player especially as regard the props used, the roles assumed and the themes played out. A study of Wall and Pickert (2001) showed that girls' conversation were scored as having significantly more verbal pretending than boys' and a higher proportion of it, refers to play roles. Girls seem to be slightly ahead of boys in their ability to initiate fantasy play without the benefit of realistic props and also to made significantly more reference to object substitution and animation than boys (Wall & Pickert, 2001). In addition, girls more often play out scenes pertaining to family relationships and social interactions, in which there is extensive conversation among the characters, while boys' make – believe play involves drama, adventure, and danger, and it relies more on physical activity and less on verbal interaction (Lillard, Lerner, Hopkins, Dore, Smith & Palmquist, 2013).

Several authors have proposed a relationship between child's playful attributes and his or her personality. They approached play as an internal predisposition and a personality's trait and as an individual characteristic and expression (relative stable, reproducible and recognizable), rather than focused on children play activities and interactions within physical or environmental contexts. Bergen (2002) was among the first who clearly postulated the existence of the playfulness trait in young children and defined its five factors: physical spontaneity, social spontaneity, cognitive spontaneity, manifest joy, and sense of humor. Barnett (1991) conducted research into the nature of the playfulness quality by exploring the interrelationships with characteristics of the individual, particularly the gender. Boys showed more physical play forms and were active in their play, while girls displayedmore cognitive play styles than boys. These trends appeared most markedly in the middle preschool years, after which girls developed their preference for the fine motor play activities. No sex differences were detected for social spontaneity or sense of humor. There were no differences between boys and girls at age two and three. By age four, boys were ahead of girls, and by age five, boys were sharply ahead of girls.

Play activities are without doubt of great importance for early young children's lives. It is the only way to externalize personality traits and characteristics, to express their feelings, to explore world and to develop social skills. Although there is evidence that gender differences in preschool play activities and behavior are existent, no studies have been conducted to investigate these differences among Tanzanian children. In the present study an attempt was made to identify if there were sex differences concerning the factors of playful behavior among Tanzanian lower primary school children. It was also checked to determine if these differences were similar with those recorded among early young children in previous studies.

2. METHODS SUBJECTS

A total of 304 children (152 girls and 152 boys) participated in this study, which was from 8 primary schools. Children's mean age was 7.6 ± 0.4 years. All of them were elementary primary school pupils from standard one to three.



Measures

Children's Playfulness Scale (CPS) developed by Barnett in 1990 was used by the teachers to evaluate children's behavior. The questionnaire consists 5-point Likert scale has 23 items and measured the following playfulness factors: physical spontaneity, social spontaneity, cognitive spontaneity, manifest joy and sense of fun. Playfulness was measured by posing statements and asked the rater to respond to each statement by choosing one of the five response alternatives. The rating for each playfulness factor was determined by summing the ratings given for each item in the factor. The CPS instrument has been shown to be reliable and valid (Barnett, 1990). The Swahili version of the CPS was used for this study. It was examined for its construct validity and showed adequate psychometric features (reliability and validity).

Experimental Procedure

The teachers of Children in respective schools performed the playfulness ratings. The teachers were familiar with the children more than 6 months period and the total number of teachers involved in the current procedure was 16. The teachers were trained on the use of the Children's Playfulness Scale. This study used playground sessions to help instruct the teachers on how to interpret and rate children's playfulness behaviors. Inter-rater reliability among the trained teachers was found to exceed 90%.

Results

Means and standard deviations for the five playfulness factors for girls and boys are depicted in Table 1.

Table 1. Means and standard deviations on the five playfulness factors for both genders

Boys Girls

	Boys		Girls	
Playful Factors	M	SD	M	SD
Physical Spontaneity	17.20	2.42	14.94	2.60
Social Spontaneity	18.62	3.07	18.03	3.13
Cognitive Spontaneity	12.87	2.91	12.25	2.75
Manifest of Joy	19.84	3.13	17.75	3.02
Sense of funny	16.72	3.86	14.52	3.58

In order to understand the differences between girls and boys, multivariate analysis of variance was used. The findings indicated that the multivariate effect of gender was significant (F5, 302=14.06, p<.05). It was found from the univariate tests that this effect was significant for scores on physical spontaneity (F5,304=19.06, p<.05), on manifest joy (F5,304=9.02, p<.05), and on sense of fun (F5,304=3.35, p<.05) (Figure 1).

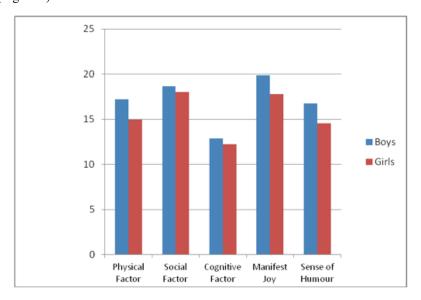


Figure1: Pupils' Playful Activities by Gender

3 DISCUSSION

This study was based on teacher's perceptions through observation in school environment and across a variety of school contexts and incidents, without focusing on specific behavioral elements within certain time frames and physical context. The study



attempted for an individualized approach of play, where the measurement of play was viewed as an internal personality construct and as a child's predisposition to engage in playful activities and interactions.

In this study the findings have indicated gender differences on playful factor of physical spontaneity. Boys demonstrated more physical play forms and were more active in their play than girls. The sex differences in physical spontaneity during play found by this study concur with the findings of other researchers (Rubin, 1977; Barnett, 1991; Blatchford, Baines, & Pellegrini, 2003; Zachopoulou, Trevlas & Tsikriki, 2004). Other findings have also indicated gender differences in the level of physical activity in children's play that boys are more vigorous, and physically active than girls (Nderego, 2014; Nieman, 2003; Zachopoulou, Trevlas & Tsikriki, 2004).

The literature indicates that boys and girls receive different messages regarding expectations of the appropriate gender-related behaviours (Coakley, 2014). Thus, a physically active boy is always rewarded, while girl's appropriate behaviour includes more passive games roles. There is evidence that socialization process makes both boys and girls to have different messages about being physically active. While boys are socialized into masculine roles, girls are socialized into feminine roles (Cookley, 2014). Also, preschool-aged boys received criticisms from peers and teachers for cross-gender-typed play, while girls received less differentiated reactions to gender-typed and cross-gender-typed behaviors (Zachopoulou, Trevlas & Tsikriki, 2004). Positive and negative consequences occurring in response to children's gender-typed and cross-gender-typed behaviors may eventually be integrated into gender schemas so that children come to have an awareness of surrounding social expectations of familiar people regarding gender-related behaviours (Hanish & Fabes, 2014).

Manifest of joy was another playful factor which demonstrated differences between the two genders. Results in the present study indicate that boys exhibited higher scores in this factor than girls. This means that boys were more agile and vigorous during play than girls. This factor is related to the factor of physical spontaneity in terms of the idea that both of them are based on children's movements and expression of energy. The more physically active, the more vigorous a child is, and additionally, the more joyful the more active a child is. The same findings were observed by Barnett (1991) and Zachopoulou, Trevlas and Tsikriki (2004), who showed that boys had higher scores in manifest of joy than girls.

According to Barnett (1991), there is a diminishing trend in the expression of joy and physical spontaneity in girls from the age of four years. At the same time, a preference for movements and fine manipulation activities starts to evolve and a creative and mental profile starts to appear as well. Boys play games of an intense and energetic nature. Even the themes of their imaginary games involve adventure, movement, danger, superheroes and movement-integrated imaginary vehicles. On the other hand, girls' themes involve family and social relations and are based more on talking rather than on moving.

The findings also indicated differences in the sense of humor between the two genders. Similar findings for that age were also reported by Barnett (1991). However, the approach to humor requires a careful eye and a critical disposition, because humor is a combination of perceptions and behaviors of several factors (Zachopoulou, Trevlas & Tsikriki, 2004). The nature and expression of humor is a purely personal notion and perception, specific to each individual. The expansive nature of all activities of the boys and their boldness for teasing and joking may gain points over the low profile and the discretion exhibited by the girls. At the same time, however, there are serious problems with the attempts to distinguish the qualitative differences in the perception and expression of humor.

As regards to social spontaneity, the current study did not find any significant differences in the social game between the two sexes, These findings are in line with that of Zachopoulou, Trevlas and Tsikriki (2004), who did not find differences in the social game between the two sexes. However, the findings are in contrast with earlier findings which found significant differences (Lillard, Lerner, Hopkins, Dore, Smith & Palmquist, 2013; Bergen, 2002). Those studies noted some differences in social skills between boys and girls, where girls had higher scores than boys. However, the differences that were noted were based on social sensitivity in two genders, the social communication (Edwards, 2000; Psaltis & Zapiti, 2014), discipline and resistant (Wall & Pickert, 2001), and also conflict (Zachopoulou, Trevlas, & Tsikriki, 2004). The main explanation for those differences, given by investigators, is that boys participate mainly in competitive games which lead to win or beating, while girls' games require roles sharing (Zachopoulou, Trevlas & Tsikriki, 2004). Indeed, Blatchford, Baines, and Pellegrini (2003), opined that boys and girls have different styles of playing, with boys being more physical, active, competitive and involved in rough and tumble games, and girls participating more in sedentary games and in socialising activities, and being more cooperative.

It is important to understand that the preferences for sex-playmates, which are examined by the play/interaction theory, haven't taken into account in the present study. According to this theory, children show a preference for same-sex playmates, a preference that increase over time, at least through middle childhood (Poulishta Sen, Serbin, Poulin-Dubois, & Eichstein, 2001; Ruble & Martin, 1998). Children prefer to play with other children who have styles or interpersonal interaction that are similar to their own (Zachopoulou, Trevlas, & Tsikriki, 2004). Because there are socially, cognitively, and biologically based sex differences in children's typical play or interaction styles (Ruble & Martin, 1998; Poulishta, Sen, Serbin, Poulin-Dubois, & Eichstedt, 2001), children with similar styles are likely to be of the same sex.

Findings also indicated that boys preferred mobility games and manipulation of objects. On the other hand girls preferred cognitive games. The findings are consistent with previous studies which show that boys were encouraged to explore their environment, to manipulate objects, to be more active and to formulate codes and strategies (Goldstein, 2012). On the other hand,



girls were encouraged to stay close to adults and to obtain information from them. They liked to emulate social roles by means of long dialogues and adult behavior (Coakley, 2014).

As regards to cognitive spontaneity, the current study indicates that there were no statistical significant differences in the mental factors between the two genders. The findings are in contrast with previous studies, which found that girls had higher scores than boys in the mental factor of playfulness (Barnett, 1991). This factor refers mainly to children's pretence play, child's ability to produce new ideas and to solve problems.

The findings in the current study have shown no significant differences on social spontaneity and cognitive spontaneity in children's playful behavior while previous studies demonstrated differences between the two genders in these two factors. The findings imply that the differences between play stereotypes for the two genders start to disappear. This may have been partly contributed by nature of socialization process in Tanzanian schools where the two genders participate in games with similar nature and framework. The developmental process of social structure and the creation of new values require a more substantial approach of the two genders and the assumption of equal duties and responsibilities. It is interesting to note that boys and girls participated equally in some aspects of playful activities,

4 CONCLUSIONS AND RECOMMENDATIONS

Based on the findings, it is evident that children's involvement in play is done along gender lines. Whereby boys are more involved in playful activities. This socialization process into play is basically a result of the socialization process that takes place in a larger community where boys and girls are socialized into masculine and feminine roles respectively. Basically, children develop skills for interacting with members of their own gender, but the opportunities to develop skills for interacting comfortably and effectively with the other gender are more limited. Gender socialisation, whether cultural or adult-motivated, may become problematic because children grow up in a gender-integrated society. Families, schools, neighborhood settings, and worksites include members of both genders. To be successful across the range of settings that children will find themselves in, they must be able to interact and relate effectively with both males and females.

Therefore, it is recommended that parents, teachers, community members, and policy makers should help young children structure and organize their peer interactions to maximize the benefits of peer socialization. This is particularly important for interactions with other-gender peers because children need support in understanding gender differences and in gaining comfort with other-gender peers. One way that this can be done is to provide opportunities for children to play positively with both boys and girls in mixed-gender groups in order to provide a safe place for learning about similarities and differences across genders and for the development of skills that allow children to interact effectively with both boys and girls.

Furthermore, it is important to recognize that peer influences associated with gender segregation contribute to gender differences in children's behaviours and attitudes. Separating boys and girls exaggerates these differences. It is therefore, important to reduce gender biases based on cultural, religious, ethnic and other differences in order to give equal opportunity for both boys and girls in participation in play, games and sport. In this respects, parents, school and community settings should provide equal opportunity for both genders to participate in playful activities

In Africa and Tanzania in particular, there is lacuna of research in children's play. For example, the role of toys and other objects in playing, cross-age play and intergenerational play, as well as street play are still least researched. Therefore, further researches are needed to investigate any changes in the dimensions of the children's playful behavior which may be generated by different approaches to instruction as well as by different ways of organizing games (e.g. sports for everybody), with the goal of achieving the mutual convergence and interaction of the two genders. For a better understanding of children's playful behavior, a contextualised approach is needed, counting in many factors (cognitive, situational, biological) and contexts (family environment, peer group, school environment and cultural norms and expectations) (Zachopoulou, Trevlas & Tsikriki, 2004). Since the present study centred on urban primary schools, more studies are needed to cover rural and semi urban primary schools. Moreover, there is paucity of knowledge on the influence of socio-cultural factors on young people's gender development.

5. References

Barbu, S., Cabanes, G., & Le Maner-Idrissi, G. (2011). Boys and girls on the playground: Sex differences in social development are not stable across early childhood. *PLoS ONE 6*(1), e16407. doi:10.1371/journal.pone.0016407

Barnett, L. A. (1990). Playfulness: Definition, design, and measurement. Play & Culture 3(4), 319-336

Barnett, L.A. (1991). The Playful Child: Measurement of Disposition to Play. Play & Culture, 4, 51-74.

Blatchford, P., Baines, E. & Pellegrini, A. (2003). The social context of school playground games: Sex and ethnic differences, and changes over time after entry to junior school. *British Journal of Developmental Psychology 21*, 481-505.

Martin, C. L., Ruble, D. N., & Szkrybalo, J. (2002). Cognitive theories of early gender development. *Psychological Bulletin*, 128(6), 903-933.



Lillard, A. S., Lerner, M., D., Hopkins, E. J., Dore, R. A., Smith E. D., & Palmquist, C. M. (2013). The impact of pretend play on children's development: A review of literature. *Psychological Bulletin*. 129(1), 1-34.

Bergen, D. (2002). The role of pretend play in children's cognitive development. Early Childhood Research and Practice, 4 (1), 1-5.

Coakley, J. J. (2014). Sport in society: Issues and controversies (10th ed.). New York, NY: McGraw Hill.

Edwards, C.P. (2000). Children's play in cross-cultural perspective: A new look at the six cultures study. *Cross-Cultural Research*, 34, 318-338.

Goldstein, J. (2012). Play in children's development, health and well-being. Brussels, Belgium: TIE

Goencue, A.; Mistry, J.; and Mosier, C. (2000). Cultural variations in the play of toddlers. *International Journal of Behavioral Development*, 24, 321–329.

Hanish, L. D. & Fabes, R.A. (2014). Peer socialization of gender in young boys and girls. Retrieved on 28th December 2015 from http://www.child-encyclopedia.com/sites/default/files/textes-experts/en/2492/peer-socialization-of-gender-in-young-boys-and-girls.pdf

Kemper, H. C. (2000). Physical activity of young people: The Amsterdam Longitudinal Growth and Health Study. *Medicine and Science in Sports Exercise*, 32, 1610-16.

Knab, A. M., & Lightfoot, J. T. (2010). Does the difference between physically active and couch potato lie in the dopamine system? *International Journal Biological Sciences* 6(2), 133-150.

Psaltis, C. & Zapiti, A. (2014). *Interaction, communication and development: Psychological Development as a social process.* London: Routledge.

Lindsey, E. W., & Mize, J. (2001). Condextual Differences in Parent-child Play: Implications for Children's Gender, Sex Roles, 44, 155-176.

Lippa, R. A. (2005). Gender, nature, and nurture. New York, NY: Taylor & Francis Group.

Mehl M. R., Vazire, S., Ramirez-Esparza, N., Slatcher, R. B, & Pennebaker, J. W. (2007). Are

Nderego, E. F. (2014). Biological correlates of physical activity behavior among primary school children in Nyamagana municipality. Unpublished dissertation in Master of Education in Science with education, University of Dar es Salaam, Tanzania.

Nieman, D. C. (2003). Exercise Testing and prescription: A Health-Related Approach (5th ed.). New York. McGrawHill.

Paulishta, K. K., Sen, M. G., Serbin, L. A., Poulin-Dubois, D., & Eichstedt, J. A. (2001). From Infancy through Middle Childhood: The Role of Cognitive and social Factors in Becoming Gendered. In R. Unger (Ed.), *Handbook of the psychology of women and gender* (pp. 166-132). New York: Wiley.

Piaget. J. (1962). Play, Dreams, and imitation in childhood. New York: W.W.Norton.

Saracho, O. N. & Spodek, B. (2007). *Contemporary perspectives on social learning in early childhood education*. Charlotte, NC: Information Age Publishing.

Sayeed, Z. & Guerin, E. (2000). Early years play: A happy medium for assessment and intervention. London: David Fulton Publishers.

Telama, R., & Yang, X. (2000). Decline of physical activity from youth to young adulthood in Finland. *Medicine and Science in Sports Exercise*, 32, 1617-22.

Wall, M. S., & Pickert, M. S. (2001). Fantasy Play in 5- and 6- Year-Old Children, The Journal of Psychology, 123(3), 245-256.

Wallentin, M. (2009). Putative sex differences in verbal abilities and language cortex: A critical review. *Brain Lang, 108,* 175–183.

Zachopoulou, E., Trevlas, E, Tsikriki, G. (2004). Perceptions of gender differences in playful behavior among kindergarten children. *European Early Childhood Education Research Journal*, 12, 1-26.