The Benefits of Play to Learning and Development for Lower Primary School Pupils

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Abstract

Many educators believe that children learn through play. As early as infancy, children immerse themselves in playful activities with the purpose of making sense of the world around them. However, their efforts to achieve this are most frequently halted by parents, care givers and teachers who work around them. There have been questions surrounding the importance of play for children in Tanzania. The major question has been what do children learn when they play? Lack of knowledge on the importance of play for children has led parents, care givers and pre-school teachers to deny children their right to play and focus more on reading and arithmetic than involving them in playful activities. The purpose of this paper is to explore the role and benefits of play for the learning and development of lower primary school pupils. This study is important as it may increase parents', teachers', the community's and other stakeholders' knowledge of the potential contribution of play to learning and development. This paper is based on a review of literature, and presents different play activities and their benefits for lower primary school pupil. It discusses the importance of play for the cognitive, social and psychomotor development of children. It concludes that play is important for children's holistic development. Therefore, parents, the community, primary schools and society as a whole should create a conducive and safe environment for children to play in, which will help to develop their full potential.

Key words: Role, benefits, play, development, lower primary school pupils

Introduction

It is generally believed that children learn through play. This is evidenced by the fact that as early as infancy, children immerse themselves in playful activities with the purpose of making sense of the world around them. Goldstein (2012:5) defines play as any activity freely chosen, intrinsically motivated, and personally directed. Wuest and Bucher (2008) define play as activities engaged in freely for amusement. It is a spontaneous activity and the act of playing is rewarding in itself. Ginsburg (2007) views play as a way in which children learn about the world around them, learn to talk and share and learn about themselves. Play has also been shown to be important in the development of language and literacy skills (Lockhart, 2009). Play then is seen as a way to foster cognitive and social development. Furthermore, play is described as the purposeless expenditure of buoyant strength while other scholars define it as the product of superfluous energy left over when people's primary needs are met (Tsao, 2011).

Although there are varying definitions of play, there are common elements in most of them. Play is regarded as: (a) being spontaneous (b) free from rules (c) involving active engagement (d) intrinsically motivated (e) a means rather than an end (f) having no time dimension and place (it can take place at anytime and anywhere) (Wuest & Bucher, 2008). Play includes a range of activities, chosen by children for their interest, enjoyment and satisfaction (Miller & Almon, 2009). However, the pattern of children's play reflects the society in which they live, including social changes over time (Miller & Almon, 2009).

Play is so important for the optimal development of children that it has been recognised in Article 31 of the UN Convention on the Rights of the Child. This article recognises "the right of a child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and art" (UNICEF, 1999; Gandhi, 2000). This right came after having realised that reduced time for physical activity may be contributing to the poor academic abilities of children. This is because a school that does not have an environment for physical activity makes it difficult for children to navigate their learning successfully (Gurian & Stevens, 2005; Pellegrini, Kato, Blatchford & Baines, 2002). It is believed that providing more time for play can lead to better concentration, reduced disruptive behaviour, and higher test scores in reading, writing and arithmetic (Satcher, 2005). It is also known that physical activity improves overall health. For example, play is important for the healthy development of the brain (Phillips, 2000). Play also improves blood circulation, increases blood flow to the brain, and raises endorphin levels (Ginsburg, 2007). Thus, play is an essential part of a child's life. Playing helps a child to develop emotionally, mentally and physically, as well as creating a bond between parents and a child. It is through play that a child's aptitude and personality can be fully explored (Cheong, 2011). Through play, social skills are also developed to help a child to be aware of other people who are around and learn how to respect them (Zins, 2004).

Although children's play is regarded as important for cognitive, psychomotor, emotional and physical development, particularly in the early years, not much effort has been made to inform parents, teachers and the general public of these benefits. There are still questions from parents, community members and even the general public on what actually do children learn as they play? Or what is the importance or benefits of play to children? Knowing about the benefits of play to children, particularly those at lower levels of schooling (standards one to three) may help educationists and parents to develop appropriate play programmes that could help children's psychological, social, physical and cognitive development.

The purpose of this paper is to explore the role and benefits of play for the learning and development of lower primary school pupils. This study is important as it may increase the knowledge of parents, teachers, the community and other stakeholders of the potential contribution of play to learning and development.

Theoretical underpinnings

According to Charles worth (2014) there are two different views on the value of play. Physical education educators, early childhood educators, child development specialists and some parents believe that play is the best way for young children to learn the concepts, skills and tasks needed to provide a solid foundation for success in school and later on in life. On the other hand, some school administrators, many parents and most politicians believe that play is a waste of time, off-task behaviour, needless coddling of young children, messy and noisy, and an unstructured, uneducational and unaffordable luxury (Tombs, 2011). Despite these contestations, many educators and theorists have stressed the importance of play for the development of a child. Play incorporates all the language, social, cognitive and psycho-motor domains necessary for a child's development (Goldstein, 2012). Froebel (1894) felt that play was a way in which children gain an insight into their world and was a means of creative self-expression.

The classical theories discussed below are intended to provide some insights into the origin and function of play in human society, but it should be understood that they do not explore the true importance of play in children's daily lives, nor do they adequately explain how the quality of

play influences children's development. However, most classical theories are based on philosophical reflection and informal observation rather than research (Tsao, 2011).

Many modern psychological theorists provide different views on the role of play in children's development. Sigmund Freud (1856-1939) regarded play as cathartic or therapeutic. In 1920, he produced the psychoanalytic play theory that was defined in his book as "beyond the pleasure principle". He described play as a mechanism for children to release negative feelings caused by traumatic events and replace them with more positive ones (Tsao, 2011). Through play, children come to understand painful situations and find ways to substitute pleasurable feelings for unpleasant ones. Children master their covert thoughts and overt actions, and learn to interpret their experiences (Satcher, 2005).

The psychoanalytic theory also teaches that infants and young children realise their helplessness and come to know they must rely on other people's goodwill to meet their needs (Rushton, 2011). This realization of dependency often brings with it a fear of abandonment (Hughes, 1999). Play can help reduce this fear and sense of vulnerability in children. For instance, children can play with miniature toys, thereby reducing the overwhelmingly large world of adults to a manageable size.

According to Berk (2005), during the first year of a child's life, in the development of play children use their sensory and motor skills to explore their own bodies. In the second year, they progress to manipulating objects in the environment. These play activities can help children develop their self-esteem and sense of empowerment by allowing them to master objects. Gradually, as they play, children go beyond controlling objects to mastering social interactions with their peers (Hughes, 1999).

Piaget, a cognitive theorist, considered play a tool for facilitating children's mental or intellectual development (Berk, 2005). Jean Piaget is most noted for introducing the stages of child development. These stages directly relate to play, as he stated that intellectual growth occurs as children go through the stages of assimilating or manipulating the outside world to meet their needs, namely playacting, and then accommodating or readjusting their views to meet the needs of the outside environment, or work (Berk, 2005).

In Piaget's stage theory, the changes in play through each stage parallel different levels of cognitive and emotional development (Berk, 2005). Piaget believed that people change their way of thinking and behaving in order to adapt to their environments and that such adaptation is important for physical survival and psychological/intellectual growth (Tsao, 2011). For example, children who repeatedly play with the same object, such as pretending to drink from an empty cup several times, are actually practising hand-eye coordination and developing sensory-motor skills (Hughes, 1999). At the same time, children practise the behaviours that are acceptable to society so that they can act appropriately in different situations (Brown & Patte, 2013).

According to Piaget (1962), play involves both assimilation and accommodation. It is a way of taking in information from the world and organising it. Piaget further noted that play helps to reduce ego-centric thought. For example, in the game of hide and seek, when the one hiding is seen (caught), the game restarts and the one who was hiding has to seek. This means there is an equal opportunity for all participants to seek or hide. This reduces the tendency of being ego-centric because children learn to accept the results by changing their responsibility. Additionally, skills learned in structured lessons can be practised during play. Once skills are

learnt they need to be practised and generalized to other situations. Play allows for this to happen. There is a circular relationship with learning and play. As children play they practise what they have learnt and learn new skills which will lead to higher levels of learning, while at the same time learning new skills in structured sessions leads to a higher quality of behaviour when playing. Play is a child's way of learning.

Piaget (1962) observed that different kinds of play require different levels of cognitive complexity, and that is why each type of play is found at a specific stage of cognitive development. Tsao (2011) summarizes it that Piaget's theory of play focuses on play as a means of facilitating learning by exposing "a child to new experiences and new possibilities of physical and mental activities for dealing with the world".

John Dewey, one of the prominent theorists in the early 1900s, viewed play as preparation for future life. According to him, play is a subconscious activity that helps an individual develop both mentally and socially. He contended that play should be separated from work as it helps a child to grow in the working world. As children become adults, they no longer "play" but seek amusement from their occupation. This childhood activity of play prepares them to become healthy working adults (Tsao, 2011).

Maria Montessori, an Italian educationist during the early 1900s, looked at play as sensory learning. She postulated that "play is the child's work." According to the Montessori Method, which is still employed today, children would best be served by spending their play time learning or imagining. Montessori play is sensory, using a hands-on approach to everyday tools like sand tables. The child sets her own pace, and the teacher is collaborative in helping the child to learn through play (Tsao, 2011).

Vygotsky, a socio-cultural theorist, believed that play serves as a tool of the mind to help children master their behaviour (as cited in Bodrova & Leong, 1996). That is, he viewed play as social development. The function of play, according to Vygotsky, is to help children develop self-regulation, expand the separation between thought and actions, and develop the skills needed to obtain higher cognitive functioning (Hughes, 1999). This separation of thought and action prepares children to develop abstract thinking. By exercising their minds through different play behaviours, children become capable of using high-level mental functions (i.e., abstract thinking) to manipulate and monitor thoughts and ideas without direct and immediate reference to the real world. Therefore, play can be an important educational strategy for facilitating children's development in cognitive, social, emotional, motor and language areas (Bodrova & Leong, 1996).

Children play make-believe to develop roles, learn adult expectations of behaviour and master social norms. Through socio-dramatic play, children come to understand the meaning of the particular role they play, act out that role, and learn to maintain the associated script. Children learn to distinguish between playing mummy and daddy by drawing on each one's different symbolic gestures and costumes. When children play, they behave according to the roles they assume. In order to play a particular role well, they need to unite their body, mind and spirit (Bodrova & Leong, 1996).

The surplus-energy theory of play hypothesizes that play allows people to release pent-up energy that has built up over time. The theory was developed by Friedreich Schiller (1759-1805), who believed that play was an aimless expenditure of exuberant energy (Saracho & Spodek, 2003). The theory suggests that play helps to eliminate any excess energy that is left

over after meeting basic survival needs (Saracho & Spodek, 2003, p.5). Teachers, parents and care givers must understand that after intense (and often inactive) academic classroom pursuits, children need to release their energy. Furthermore, educators believe that outdoor play enables children to "recharge their batteries" by engaging in a very different activity from their classroom experience (Brown & Patte, 2013). This recreation theory of play enables children to get ready to return to the important work of academic learning. These theories view outdoor play as an essential component of academic learning, not as an important activity in its own right.

Summing up the above theories, the theorists agree that play contributes to children's development. Play allows children to transform reality and develop symbolic representations of the world in order to meet their psychological and physical needs. In addition, the qualitative differences in children's play reflect different levels of ability (i.e., from sensori-motor activities to fantasy play). Play can also facilitate children's development from lower to higher functions and from understanding simple concepts to performing advanced mental activities. Play can help children master their behaviour and learn adult roles, beginning with the exploration of their sensory and motor skills and proceeding through to the gradual acquisition of social skills with peers. Moreover, play helps children prepare for the future. Not to be forgotten, play is enjoyable. Table 1 summarizes the types of play and their benefits for children.

Table 1: Types of Play and their Benefits for Children

Types of Play used by Children	Benefits for Children
Hide and seek	❖ Develops reasoning capacity
	❖ Develops problem solving
	♦ Motor skills
	❖ Develops flexibility and speed
	 Develops cooperation among participants
Family play (Daddy and Mummy)	❖ Social responsibility/roles/commitments
	❖ Critical thinking
	❖ Problem solving
	❖ Helps children understand their cultural aspects such as language, beliefs,
	norms and values.
Wooden Blocks	❖ Develops hand-eye coordination
	 Controls and coordinates large and small muscles
	Recreates the world around them
	❖ Gives understanding of concepts such as size, shape, weight, number,
	length, balance, sorting and classification
	 Enables them to make decisions, cooperate, plan and negotiate
Modelling Clay	❖ Develops fine motor skills
	 Helps release anger harmlessly
	 Helps learn the transformation of materials and change of texture
	Helps them learn about measuring and blending
	❖ Fosters creativity
Puzzles	Helps them learn about the relationship of the part to the whole
	Improves concentration skills
	Helps them learn about similarities and differences
	 Helps them match objects to abstract shapes
	Helps them solve problems
Story Books	❖ Improves language and listening skills
	Facilitates learning to read and write
	 Stimulates imagination and creativity
	• Widens their experience and introduces them to new ideas
Art materials (pencils, markers,	Provides a creative experience
construction paper, scissors)	Releases tension
	Enables them to make choices, design and express thoughts
	Enables them to organise thoughts and actions into patterns and symbols

	Improves fine motor skills and hand-eye coordination
Memory game	❖ Helps them pay attention to detail
	❖ Improves concentration
	 Helps them learn to follow instructions
	❖ Builds confidence
Stringing Beads and toys	Helps learn to categorise and sort objects based on size, shape and colour
	 Develops hand-eye and mouth coordination and fine motor skills
Skipping Rope and balls	Helps children exercise and develop their motor skills
	 Develops confidence
	 Develops flexibility and agility
	 Develops hand-eye coordination
	 Children learn to observe rules and regulations
Filling the bottle with sand and water	❖ Cooperation
	 Physical development
	 Language development such as mathematical concept of volume
	 Concentration and hand-eye coordination
	 Children learn to observe rules and regulations
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Modified from Brown (2002). The Power of Play: A strategy to meet the developmental and learning needs of young children.

The Benefits of play for children

Play is essential for development because it contributes to the social, emotional, cognitive and physical well-being of children and youth. Play also offers an ideal opportunity for parents to engage fully with their children.

1 Social development

Play gives children the opportunity to learn how to cooperate with others. It's all about taking turns, sharing and developing interactive skills with others (Zins, 2004). When bouncing or dribbling a ball or assuming a parental role (being mum or dad) in imaginative play, it encourages conversation and develops peer relationships. It is through play that children develop essential life skills, they learn how to interact with their peers and with adults, they learn how to choose friends and enemies, and they learn how to run around, play team games and sports (Tombs, 2011).

Play also provides bonding opportunities. When children play among themselves or with their parents or teacher, this creates a close relationship, a bond, between them and their parents/teachers. This bond in turn can instill love, respect and trust. In addition, play helps children gain an understanding of cultural aspects, such as their language, cultural beliefs, norms and values. Goldstein (2012) summarizes the following social benefits of play:

- Enhances cooperation and sharing
- Imparts conflict resolution skills
- Imparts leadership skills (such as emotional control)
- Increases empathy, compassion and sharing
- Creates options and choices
- Models relationships based on inclusion rather than exclusion
- Improves non-verbal skills
- Increases attention and attachment
- Helps children learn the language, norms, values and beliefs of their culture

2 Emotional-Behavioural development

Children who are given the opportunity to engage in a lot of free play display more confidence. They are able to cooperate with peers and adults. They learn how to express their emotions in an appropriate manner and how to deal with negative feelings productively. When given the opportunity, children will acquire cognitive skills more quickly when they have a good sense of self. Greater self-esteem and increased confidence in oneself is a result of free expression, and for children this is easily acquired through play (Tombs, 2011).

Play helps children to deal with emotions. Many times children in groups are exposed to situations that cause new emotions, such as anger with a peer, frustration with an adult or extreme sadness over sharing. Play gives the children an opportunity to learn how to appropriately express their feelings. Play also brings a feeling of joy. Many scholars agree that play brings joy, excitement or amusement to children (West & Bucher, 2008; Tao, 2011). A toddler who jumps and sings shows the sheer happiness that play brings him or her.

Goldstein (2012, p.6) outlines the emotional and behavioural benefits of play, as follows:

- It reduces fear, anxiety, stress and irritability
- Creates joy, pleasure, intimacy and self-esteem
- Improves emotional flexibility and openness
- Increases calmness, resilience and adaptability to situations
- Increases attention and attachment capacity
- It can heal emotional pain.

3 Play enhances physical and motor development

Wuest and Bucher (2008) argue that learning proceeds most rapidly when instructional experiences are geared to individuals' physical and intellectual abilities. Motor development is concerned with the origins of and changes in movement behaviour throughout the lifespan. It encompasses the study of biological and environmental influences on motor behaviour from infancy to old age. Motor learning involves the acquisition of movement skills as a consequence of practice (Wuest & Bucher, 2008).

Climbing, running, jumping and navigating play equipment are all ways in which play can enhance the development of large muscles. Children improve balance, agility and coordination through these types of play. The best thing about play that develops large muscle skills is that it requires little or no equipment. For example, running, jumping, a game of tag or hopscotch, a game of football, making pretend food with play dough using soil, or constructing a house using mud all enhance a child's physical development (Rushton, 2011). Fine motor skills are also readily developed through play. Colouring, cutting with child-sized scissors and playing with toys such as peg boards or dressing dolls are just a few ways in which children develop small muscle coordination and dexterity. As skills increase, children naturally increase the difficulty of their play, constantly stretching their limits (Rushton, 2011).

Play often involves the use of the senses, the body and the extremities (Tombs, 2011). When children play, they exercise their bodies for physical strength, fluidity of movement, balance and coordination (Hughes, 1999). Perceptual-motor ability or the capacity to coordinate what they perceive with how they move is an essential skill that preschoolers need to develop. A three-year-old who is engrossed in digging, scooping and pouring sand into a container must match his or her perception of the space in front of him or her with actual hand movements, so that he or she can successfully fulfill the motor activity (Miller & Almon, 2009).

During toddlerhood, children experience a motor-growth spurt that equips them to solitarily fiddle with anything they can get their hands on – be it a construction toy or the box from

whence it came. Preschoolers begin extending their play to involve others, whether they bring others in at any stage of their game or they plan their game and its players way ahead. Their physical and motor skills allow them to widen their play arena, from dramatic play to table games to outdoor pursuits (Rushton, 2011).

Play also enhances health. This is critical as obesity is becoming an ever greater urban concern. and as we learn to care for and protect the environment. Children who engage in lots of physical activities at school tend to engage in more energetic activities at home, while children's experience of childcare and school that lack active physical activity engage in more sedentary behaviour at home, such as watching TV and using the computer (Zimmerman & Christakis, 2005). Children who enjoy playing are much more likely to become adults who enjoy gardening, jogging, bicycling, mountain climbing, or other physical activities. Physical benefits include a positive effect on blood pressure and on preventing obesity.

Goldstein (2012) summarises the physical and motor benefits of play in that it:

- Increases the range of motion, agility, coordination, balance, flexibility, and fine and gross motor exploration
- Imparts self-help skills
- Integrates sensory-motor, kinesthetic and emotional responses.
- Increases the efficiency of the immune, endocrine and cardio-vascular systems.
- Reduces stress, fatigue, injury and depression

4 Play facilitates cognitive learning

Play is vital for the intellectual development of a child. According to Goldstein (2012), active play has the paradoxical effect of increasing attention span and improving the efficiency of thinking and problem solving. The role of play is giving the child a better understanding of cognitive concepts in ways that are enjoyable, real, concrete and meaningful to them. For instance, through play, a child is able to understand that the equation 1 + 2 = 3 means 'putting together' his stones by lining them up on sand. When the child combines 2 triangles to make a square during block play, or writes down his score in a bowling game, the child is displaying what he knows about shapes and numbers. This means that play aids the development of academic skills. In a longitudinal study, Bergen and Mauer (2000) found that children who played a lot with literacy materials in preschool were likely to be spontaneous readers of place signs and have greater pretend verbalizations in a "town-building" activity at age 5.

In addition, play helps the development of problem solving and other cognitive strategies. A number of researchers have focused on how play is related to specific cognitive strategies, such as self-regulation, narrative recall, divergent problem solving and understanding rules. Vygotsky (1978) theorized that young children use private speech in play to regulate their behaviour and eventually transform this private speech into self-regulation through internal thought. McWayne, Fantuzzo & McDermott (2004) compared the private speech of preschool children in Montessori and traditional play-oriented programmes and found that more private speech occurred in the play-oriented setting, especially during pretend play with fantasy characters. They conclude that, at the preschool level, "make-believe play serves as a vital context for the development of self-regulation".

Through play, the child constructs his or her worldview by constantly working and reworking his understanding of concepts. Incorporating the learning themes in the area of interest creates opportunities for learning formal concepts, such as the alphabet, colours and shapes. The arts area is a great place to incorporate these concepts. The same goes for the block and science areas (Lockhart, 2009).

Studies have also indicated that play encourages creativity. Play opens up an avenue for children to express themselves, show what they know and how they feel, and to create their own masterpiece (Howard-Jones & Sutton, 2002). It provides children with the opportunity for original thinking and expression (Howard-Jones & Sutton, 2002). There are no rules with playing. It develops as quickly as time passes. One action builds on the next. No-one can predict the outcome. Play helps children to understand the world around them. For example, children learn how far they should jump or slide, and how to slide on sand or grass. Play can also help children explore nature, such as learning about various animals, rivers and mountains.

Play enhances language development. Toddlers who are still grappling with words need to be immersed in oral language so they can imitate what they hear (Bergen & Mauer, 2000). They benefit from songs and rhymes that provide the basis for understanding how language works. When these tots are playing with toys, adults model to them how language is used to label objects or describe an event. At play, preschoolers use language to interact, communicate ideas and likewise learn from dialoguing with more mature members of society. Goldstein (2012) summarises that play helps with:

- Abstract thinking
- Creativity
- Problem solving
- Concept development
- Social cognition
- Language development (e.g. communication skills, vocabulary, etc.)

Conclusion and Recommendations

Children's play has many potential benefits for their learning and development. However, the culture of children playing outside and being in contact with nature is vanishing as they are spending a lot more time indoors. Children today have few opportunities to play outdoors in regular contact with the natural world. In Tanzania, this is due to a number of factors such as parents being afraid for their children's safety, the lack of facilities, equipment and supplies in schools and the changing policies regarding physical education, sports and games in schools. Furthermore, children's lives have become structured and scheduled by adults, who have the mistaken belief that sports and games may divert pupils' attention from academics. Moreover, many schools in Tanzania have limited space for children to play in during their free time. Using open space to fulfill children's basic needs—jumping, running, climbing, swinging, racing, yelling, rolling, hiding and making a big mess—is what childhood is all about. It is unfortunate that many schools in Tanzania deny pupils this opportunity. The outdoor environment is supposed to meet children's basic needs for freedom, adventure, experimentation, risk-taking and just being children.

Children need the opportunity to explore the unknown and the unpredictable, and to be adventurous. They also need to be able to wonder at nature. Parents at home should not only strive to allow their children to play, but they should also take responsibility for creating a safe environment for them to play. Parents must also be engaged in playing with their children as this can create a bond between them. Parents and other caregivers should encourage and appreciate their children's play, sometimes joining in and guiding it, but most of it should be initiated by the child. In this way, children learn to further develop their own ideas, solve problems, and use corresponding and appropriate language. Parents should note that by providing play opportunities for young children, they are promoting their development, learning and future success. Play activities often do not require extensive funding, but rather require the

wise use of local resources in the context of caring relationships. All in all interaction with adults is an important part of play.

Schools must find some ways to encourage children to play. This could be achieved by constructing sports equipment that children around are able to play on, which would ensure their social, emotional and cognitive development. Moreover, it would help children to adjust to the school setting and even make them ready to learn, improve their behaviour, and impart problem-solving skills. Therefore, play and unscheduled time that allow for children's interactions are important components of social and emotional learning.

As regards the community and Government, it is clear that many elementary schools, especially in urban areas in Tanzania, lack space for children to play in. In some places, areas which were designated for play (popularly known as open spaces) have been built on, so hotels, business areas or car parks now occupy these areas. There is a need, therefore, for the community to plan areas where children can meet and play. In addition, the government must make sure that open spaces reserved for recreational activities are preserved and maintained. Moreover, there is a need for the government to ensure that care centres and pre-schools have all the necessary facilities for children's play activities.

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