Play-Based Learning: Benefits and Challenges of its Implementation

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Abstract

This study explores how Eritrean pre-school educators viewed and conceptualized play-based learning (PBL), the benefits, and challenges of its implementation. A semi-structured interview was conducted with nine teachers, six principals, and two pre-primary education curriculum developers. Interviews were thematically analyzed. The study found discrepancies between participants' views and their implementation. Our findings indicate that most of the participants viewed PBL as incorporating both free-play and guided play. However, the result of this study revealed that free play cannot effectively be used as an instrument to teach lessons that have specific academic objectives such as numeracy and literacy skills. Besides, the researchers sought to investigate the actual practices of PBL and the study found that majority of educators were placed at the Child Adult Involvement Continuum extremes, free-play, and direct instruction. Furthermore, the result revealed that various challenges were teachers face as they try to implement PBL, but the most common barrier discussed by interviewees was the lack of awareness of parents and principals towards PBL. Finally, the study concluded that the reason teachers lie at the two extremes of the Child Adults Involvement Continuum could be due to their views towards PBL, and its benefits and the challenges they face in

implementing it.

Introduction

Literature in early childhood education indicates that children's engagement in a quality early childhood education (ECE) before starting compulsory education is beneficial. Whitbread and Coltman (2008) stated that high-quality ECE impacts children's academic development as well as their emotional and social well-being more powerfully than any other education phase. To ensure the quality of the early education children receive, the National Association for Education of Young Children in the United States (NAEYC) has provided a best practice frame-work since 1986. Developmentally Appropriate Practices (DAP) refers to the concept of providing an environment and offering content, materials, activities, and approaches that are coordinated with a child's level of development and readiness (NAEYC, 2009).

Although the term DAP was first used in the United States, the concept is not contained there. Many countries like Belgium, Netherlands, Italy, and New Zealand follow similar DAP ideas and principles (Walsh et al., 2010). The DAP mentioned in the position statement by NAEYC are grounded both in the research of child development, learning, and the knowledge base regarding education effectiveness. One of the twelve principles listed in the position statement for informing best practice is play. It is stated in the document that "play is an important vehicle for developing self-regulation as well as for promoting language, cognition, and social competence" (NAEYC, 2009, p. 14). Although research has repeatedly shown that play is a vital aspect of children's overall development and learning (Gleave & Cole-hamilton, 2012), integrating play in children's learning, especially in the classroom context, has been a controversial issue (Miller & Almon, 2009). The controversy arises because of the different benefits that come as a result of the types of Play-based learning (PBL) approaches that teachers use. The literature focuses on two types of PBL; free-play and guided-play. In free-play, children are provided with the autonomy to choose the play-based activity, which arises from their motives, and the direction of the activity is also determined by the child (Ashiabi, 2007; Lee et al., 2015). Guided-play, however, as the name indicates, occurs when an adult structures or guides the PBL activity to accomplish a particular academic objective (Weisberg et al., 2013; Fisher et al., 2010). If this guidance is extreme, and only the teacher determines what is done in the classroom, then PBL would lose its meaning, and the teaching methodology

will be a direct instruction method. The direct instruction method of teaching is the traditional, didactic teaching method where the teacher speaks, and the learners listen passively (Miller & Almon, 2009).

These two types of playful pedagogical approaches (free-play and guided-play) have their pros and cons, but which approach teachers use will depend on teachers' views towards PBL, the challenges they face as they try to implement PBL, and the developmental and learning benefits teachers expect from PBL. In different studies, teachers who endorse the developmental benefits of play primarily facilitate free-play in their classrooms, while teachers who endorse the academic benefits of play facilitate a broader range of play activities with active teacher involvement. Therefore, how teachers conceptualize and view PBL, their challenges, and the benefits they expect can indicate how they will implement it on the ground.

Context

Eritrea is a country located in the Horn of Africa, which officially declared its independence in 1993. Since its recognition as a sovereign nation, the country has been showing noticeable Early Childhood Education progress. The Early Childhood Care and Education Unit (ECCE) within the ministry of education understood the benefits of early childhood education and worked to institutionalize and improve the quality of the education provided in early childhood years (Habtom, 2001). As a result of the effort, the Early ECCE with the support of the United Nations Children's Fund (UNICEF) and other stakeholders, developed learning standards that include developmentally appropriate practices (ECCE, 2011). In congruence with the NAEYC position statement, one of the core ideas stated in the learning standards is that children should learn while playing and should play while learning (ECCE, 2011). This idea reflects on the two types of play that literature focuses, free-play and guided-play. Whether it be free or guided, play has a remarkable contribution to children's learning and development. Hence, Eritrea's ECCE has been working to incorporate developmentally appropriate practices, such as play, into pre-primary education curriculum.

In Eritrea pre-primary education prepares children for school and lays a firm foundation for later education. There are three categories of pre-primary schools in Eritrea: governmental, private, and missionary pre-primary schools. Although three of them follow the same curriculum designed by the Ministry of Education, schools possess different contextual background. Educators in those schools conceptualize and integrate play differently. Hence, PBL in these three types of pre-primary schools is expected to differ. Therefore, it would be essential to explore how educators conceptualize and integrate PBL in the Eritrean pre-primary school context

to explain a gap between theory and practice. The study will contribute to the existing literature on how PBL is conceived and integrated into the pre-primary school context through the Eritrean perspective. Besides, it will inform educators on the different developmental and academic benefits gained from the different types of playful approaches to learning. Hence, this study will try to address the following three research questions:

1. How do Eritrean pre-primary school teachers, principals, and curriculum designers conceptualize PBL?
2. What are the developmental and academic benefits of PBL approaches?
3. What challenges do Eritrean pre-primary school teachers face as they try to integrate PBL into their classes?

Literature Review

It has been difficult over the years to define and conducted a study on play, because it is an intrinsically spontaneous and unpredictable phenomenon (Whitbread & Coltman, 2008). An important aspect that complicates play's definition is that it is seen through different theoretical approaches or lenses (Fesseha & Pyle, 2016). When seen from a psychological perspective, for example, which is widely agreed upon (Pui-Wah & Stimpson, 2004), play is defined as a function of the individual's disposition. It is an activity that is intrinsically motivated, is freely chosen by the child, and has a personal direction (Goldstein, 2012). Hence, children's behavior during play is a natural one, and children do whatever they wish in their own time and their own ways (Gleave & Cole-hamilton, 2012). When seen from another view, such as the neurological perspective, play is seen as an activity that helps develop the sensory and neurotransmission stimulators and overall cognitive development (Rushton, Juolaa-Rushton, & Larkin, 2010). Hence, Fesseha & Pyle (2016) note that the lack of a clear and precise definition of play creates confusion for early childhood educators on integrating play with learning.

Play Based Learning (PBL)

An essential inquiry in the 21st century is educating children best and preparing them for an ever-changing technological and globalizing world. One important approach to learning is play-based. PBL is a pedagogical philosophy that tries to combine play and learning. PBL 'are the ways in which early childhood professionals make provisions for play and play-based approaches to learning and teaching, how they design the PBL environment, and all the pedagogical decisions, techniques, and strategies they use to support or enhance learning and teaching through play' (Wood, 2004, p. 27).

PBL includes two kinds of methods that have contesting ideas, which are guided-play and free-play (Weisberg et al., 2015). Free-play includes all the criteria in the general concept of play. It involves the child's active engagement; it is fun, directed by the child, and flexible (Burghardt, 2012). As the child directs free-play and the motive to play comes from the child, it can be a method that best promotes children's various domains of development (Gray, 2013). However, as Geary (2007) argues, free-play is challenging to apply in educational settings with a specific curricular goal. Geary (2007) proposes, to teach children 'biological secondary' skills, which according to him, are skills that have evolved only in some cultures and cannot be attained without formal schooling, teachers have to use direct instruction. However, when applying direct instruction, everything is defined by the teacher, and children are passive recipients of mere information. This methodology reduces children playing, exploring, and learning and thus hampers their development (Gray, 2013). On the other hand, it is definite that children's development in free-play is enhanced, its disadvantage is that it is difficult to predict what kind of learning has taken place during the process, as there is not a definite goal or direction from part of the teacher.

Some researchers have come with a concept termed "guided-play" to resolve the imbalances between these two methods (Weisberg, Hirsh-Pasek, & Golinkoff, 2013). Guided-play takes the child-directed nature of free-play and the learning goals associated with direct instruction. In guided-play, the teacher gives children the autonomy to explore their environment, but this exploration is guided and scaffolded by the teacher (Weisberg et al., 2013). Effective implementation of PBL nonetheless, whether it be free or guided-play would depend on how teachers conceptualize and view PBL, how they see their role and involvement in the approach: - the benefits they expect of it, and the challenges they face when teaching playfully.

Views and Conceptualizations of PBL

PBL is a relatively new concept and a pedagogical approach that has recently received much attention in Early Childhood Education. Because of its novelty, there have been divided views and understanding on how teachers view the concept of PBL (Bubikova-Moan et al., 2019). We can better understand teacher's views toward PBL as a continuum ranging from those who believe and advocate free-play without any intrusion up to those who say that children need to prepare for formal education and the amount of play in pre-primary school should be minimal. In between these extremes, we also find teachers who are placed in the middle within the continuum (Bubikova-Moan, Næss Hjetland, & Wollscheid, 2019). A study done by Pyle, Prioletta, & Poliszczuk (2018) reflects that there are discrepancies among teacher views in integrating play with learning. In their qualitative

study, half of the participants believed that play can be effectively integrated with learning and is beneficial for children's academic and overall development. The remaining teachers' attitude was that play can help children's overall development, but tailoring play as a pedagogy for specific academic areas would not be effective.

In another study of teacher's beliefs towards PBL, conducted in Northern England, a significant number of teachers in the research were undecided whether PBL can be enacted, and some of them opposed PBL (Walsh, Glenda & Gardner, 2006). The teachers' uncertainty and opposition towards PBL are similar to the teachers' study conducted by Pyle et al. (2018). In both studies, a significant number of teachers perceived play and learning as two different entities and that play could help in the overall development of children but not necessarily in academic achievements such as in literacy and numeracy skills. Moreover, ECE teachers in different Asian, Scandinavian, and English-speaking countries almost unanimously perceive play as an activity that enhances social competence and holistic development; when coming to enhancing academic learning, however, ECE teachers' beliefs are inconsistent (Bubikova-Moan et al., 2019).

Wherefore, just like Danniels & Pyle (2018) suggested, it would be helpful if we see teachers views towards PBL as a continuum ranging from those teachers who entirely oppose PBL towards those who are unsure about the effectiveness of PBL and those who definitely perceive that play can be integrated with learning.

Developmental and academic benefits of PBL

The evidence of the benefits of PBL in children's holistic development and academic achievement is not vivid. First, researchers have not yet agreed on the definition of PBL. Different researchers view PBL with different theoretical perspectives, which adds to the complication of understanding the benefits of PBL (Fesseha & Pyle, 2016). If we take the educational perspective of PBL, we can identify differences among educators in their perceived view towards the benefits of PBL (Fesseha & Pyle, 2016). Free-play, which is initiated and directed by the child with very little interference from adults, is believed to enhance children's overall development. Overall development implies developing personal and social skills, communication skills, physical development, and overall cognitive development (Burghardt, 2012; Fesseha & Pyle, 2016). On the other hand, research findings reveal that for academic learning such as literacy and numeracy to occur in a playful activity, teachers should participate in the process to some degree (Bodrova, 2008). Nevertheless, teachers' degree of engagement in such play remains undefined in the literature (Fesseha & Pyle, 2016).

Challenges of PBL Implementation

It is consistently indicated in PBL literature that the pedagogy comes with various application difficulties (Bubikova-Moan et al., 2019). One of the most frequently reported challenges for teachers is balancing policy and curricular mandates and play-based activities. A study done by Fesseha and Pyle (2016), suggests that the play-based curriculum lacks a clear and more consistent conceptualization of play, which leaves teachers confused about implementing PBL. In other studies, teachers are challenged in applying a play-based pedagogy because of the administration's pressure to apply a more traditional direct way of teaching (Wu, 2014; Baker, 2015). Another challenge that teachers face in enacting PBL is parental attitudes. For example, Fung & Cheng (2012) describe that the Chinese tradition considers effort and willpower as the essence of effective learning, but parents cannot see any efforts their children make while they play. Hence, they have ambivalent views towards PBL, which creates an obstacle for teachers to implement the approach effectively.

Teacher education and qualification is yet another challenge for implementing PBL in Early Childhood Education. Teachers in the studies done by Cheng (2001) and Gray & Ryan (2016) reported their limited understanding of PBL as a concept. Hence teachers either incline to a classroom environment where child-directed activities dominate learning or to a class where scripted teaching and didactic instruction dominates (Miller & Almon, 2009).

Theoretical framework

The Zone of Proximal Development (ZPD), according to Vygotsky, is 'the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers' (Vygotsky, 1978) as cited in (Nilsson & Ferholt, 2014). According to Vygotsky, what a child can achieve alone in learning and development significantly differs from what he or she can achieve when supported by an adult.

ZPD can be created through play. In play, children get to try out real-life situations and circumstances. Furthermore, children have roles and rules to attend to; this makes play a form of activity that can create a proximal development zone. Play creates a situation where the child can learn and develop. However, as Vygotsky suggests, the child's potential to learn and develop within such a context must be backed up by an adult. Therefore, the adult/teacher who tries to bridge the gap between the child's actual development level and learning with his/her potential level plays a role of mediation/instruction, which Bruner called scaffolding (Brock et al., 2013).

Scaffolding can be understood and conceived differently by different practitioners, and therefore, how they integrate learning and play in their classrooms can differ accordingly. According to Miller and Almon (2009) and Zosh et al. (2017), differences in the way practitioners integrate or scaffold play in the early childhood classroom creates a continuum of free-play, guided-play, and direct instruction. Free-play that gives children the freedom to freely explore, and discover at their initiative is placed at one end, and at the other end is found direct instruction where children are provided limited opportunity to learn through play. Guided-play, where a teacher structures or guides play is placed in the middle of the two extremes (Ashiabi, 2007; Miller & Almon, 2009; Zosh et al., 2017; Weisberg et al., 2013).

Method
Research design
This research study followed a qualitative design to collect data through a semi structured interviews. A theoretical thematic analysis was used to analyse the data. The reason for conducting the study through a qualitative approach was to see educators' practices in natural life settings. As stated in Yin (2016), if the study's purpose is to look for people's practices under real world conditions through their own way of perceiving reality, the qualitative approach is a preferred study design. Hence putting the research's questions into consideration, a qualitative design was applied. In Eritrea, although the early education curriculum is said to promote PBL, it is expected that there are some salient constraints to PBL that only practitioners express. Therefore, a qualitative approach that studies people's opinions and perspectives in an in-depth way was considered a better fit for the proposed study.

Participants
The study participants included pre-primary school teachers, principals, and curriculum designers of ECCE unit Ministry of Education (MoE). Nine teachers and six principals from three different types of pre-primary schools were purposively selected. Two informants from the ECCE unit that had an active role in designing the ECCE curriculum participated in the study. To make the sample in this study heterogeneous, principals and teachers with varying degrees of experience, training, age, and working in different types of schools were included. The study viewed pre-primary education in the context of three types of schools: missionary, public and private schools. Therefore, the sample included participants from these types of schools. As Table 1 indicates the age of the participants ranges from 26 years up to 73 years. The participants' experience in pre-primary schools

ranged from 3 years of experience in the area up to those who had 50 years of experience. Participants' education level stretched from those who had no training in ECCE up to those who have a master's degree in the field. Table 1 summarizes the demographic information of principals and teachers who participated in the study.

Data Collection and Analysis

As mentioned above, the data for this research study was collected through a semi structured interviews in the 2021. After the ECCE office in Eritrea granted data collection permission, the researchers interviewed nine teachers, six principals, and two ECCE officials who had input in pre-primary curriculum development (See Table 1). There are three working languages in Eritrea namely Tigrigna, Arabic, and English. Hence, the interviews were done in Tigrigna language which is the widely spoken language in the country and particularly in the region where this study was done.

Name	Age	Gender	Training in ECCE	Current Position	Experience in ECCE Years)	Type of School
GT1	34	F	Diploma	Teacher	14	Public
GT2	48	F	Diploma	Teacher	6	Public
GT3	40	F	Diploma	Teacher	20	Public
MT1	45	F	Diploma	Teacher	13	Missionary
MT2	48	F	Certificate	Teacher	17	Missionary
MT3	26	F	No training	Teacher	4	Missionary
PT1	27	F	No training	Teacher	3	Private
PT2	32	F	No training	Teacher	4	Private
PT3	30	F	Diploma	Teacher	8	Private
GP1	58	F	Diploma	Principal	38	Public
GP2	47	F	No training	Principal	4	Public
MP1	73	F	B.A	Principal	50	Missionary
MP2	32	F	Diploma	Principal	7	Missionary
PP1	39	M	Diploma	Principal	17	Private
PP2	42	F	No training	Principal	7	Private
Informant 1	65	F	M.A	ECCE official	25	ECCE office
Informant 2	50	F	M.A	Supervisor	20	ECCE office

Table 1. Demographic characteristics of Participants

Two interviews were first transcribed, translated and analyzed to ensure that the semi-structured interview questions elicited a valid information from interviewees. After the researchers were convinced that interview questions were producing the targeted responses, then the rest of

the participants were interviewed. The research followed thematic analysis, specifically theoretical or 'top down' thematic analysis method, to analyze the interview data. A theoretical thematic analysis is one form of thematic analysis which begins with a specific theoretical frame-work and research questions and analyzes recurring themes or patterns in the data based on those questions (Braun & Clarke, 2006). Hence, interview data was first transcribed and translated. Then, participants' responses were coded based on the study's three research questions and organized into categories. Finally, the categories formed the themes in the study.

To maintain ethical rules, the researchers requested the ECCE and SN unit to grant permission to collect data from different pre-primary school teachers, principals, and ECCE officials. After that, the researchers received written informed consent from teachers, school principals, and ECCE officials for interviewing. The purpose of the research and procedure of data collection was clearly communicated with participants. All information provided by respondents was confidential. Teachers and principals were given codes based on the types of the school they worked so that their identity would be concealed. The first letter of the code represents whether the participants is a principal or a teacher the second letter represents whether he/she works in a private school, governmental schools, or missionary school. Curriculum designers were referred to as informant one and informant two.

Results
Participants View Towards PBL
A.   View towards integrating play in lessons

All seventeen participants said that play can be used as a teaching method and can be embedded in the teaching and learning process. Two principals (GP2 & MP2), and teacher PT1, said that PBL is the approach that the MOE and their schools support. They said there is a slogan that they follow which says, *'Children should learn while playing and play while learning.'* Principal PP1 also said, *'in pre-primary school, a child has to learn playfully, because it enhances their concentration and makes them active.'* The two informants from the ECCE unit similarly asserted that children should learn through play. One of the informants from ECCE said, *'the principle in pre-primary education is that children should learn through play.'* The informant elaborated on this that PBL is not just an alternative approach in Eritrean pre-primary education but a method of learning that should strictly be followed. Participants, therefore, unanimously believed that play should be integrated into the teaching and learning process in pre-primary education.

Although all participants said that play should be integrated with learning, the extent and how it should be integrated were perceived differently by participants. five teachers, three principals, and both the informants from ECCE, had the belief that all kinds of learning and contents in pre-primary education can be done through playful ways. On the other hand, two teachers and three principals, said that everything could not be taught through play. The latter held that there is a time that children should learn through play, and there is also a separate time that they should listen attentively to the teacher. Principal MP1 expressed it in such a way,

> *'I am against the concept that everything should be done through play. Play, play, play, we have to also think about the discipline of the child. Children also have to know when they should write, read, draw and do other activities. They (people from MOE) sometimes say, 'do not make them write; they just have to play.' But I tell them, 'I am sorry, I will do it, but writing and reading I will not stop it.'*

As principal MP1 expressed, these participants believe that there is a kind of disconnection between play and learning. They viewed play as an activity that would disrupt learning. When it comes to academic learning, such as reading and writing, they had the view that play cannot be considered an effective instrument of learning. Teacher PT2 similarly said that play should be given a limited time and that children should be taught lessons directly throughout most of the day. Explaining her point, she said,

> *'In our school, we try to stretch children to a certain level that they can reach. Making children play the whole day is easy, but we stretch children to do more than that'*

Some of the participants that had the belief that all lessons cannot be taught through play, such as PT2, also held the view that children can achieve and learn more if they learn with the traditional direct teaching approach. They believed that direct teaching approach would enhance and stretch children's academic capacities more than PBL by these participants.

B.   View towards PLB in terms of holistic development and academic learning

Participants also shared their views on how PBL can enhance the holistic development and academic learning of children. The participants were divided into two groups in this category. Some of the participants said they did not view academic learning separately, but believed that it is included in children's holistic development. Holistic development included; physical, cognitive, socio-emotional, language, and moral development.

Other participants perceived academic learning, which included reading, writing, arithmetic, separately from holistic development, and they also said that playful activities that enhance this type of learning are also different.

Two third of the seventeen participants believed that PBL included different play types that enhance children's holistic development and academic learning separately. Principal GP2 clarified this by saying,

> *'The plays which promote academic learning are associated with letters and numbers. On the other hand, the ones which promote socio-emotional development, cognitive development and language are different types of play.'*

Hence this group of participants believed that there is a difference in the types of plays tailored for holistic development and academic learning.

Contrarily, another group which consist one-third of the participants said that there is no specific type of play or playful activity particularly intended for academic learning. They said that while children are playing, they develop in all aspects, and academic learning is included there. Teacher GT1 described it in this way, *'The one that we are saying academy is included in the five domains of development. There are no specific play types that are designed for numeracy or literacy learning.'* These participants believed that as children engage in different playful activities, they are also learning academic concepts. Therefore, for them, academic concepts are included in the holistic development of children. Moreover, the types of plays that they mentioned were mostly free plays. One principal and one teacher had an entirely different view when it came to academic learning. They suggested that children cannot learn letters or numbers through play; they can only be taught such lessons through direct teaching. Principal MP1 said, *'...and in academic learning when the teacher is teaching, students have to listen attentively because the teacher is transferring knowledge.'* Teacher PT2 also had a similar view. The teacher said,

> *'If a teacher concentrates more on play, then children would just want to play and forget learning.'*

C.   Extent of teacher involvement

Participants had differing views about to what extent a teacher should be involved in children's play. Half of participants said that the teacher should be involved in guided-play, but the teacher's involvement in free-play should be minimal. Principal GP2 explained the view in this way,

> *'Well, there are two types. One is free-play. They just play as they like. Even if the teacher does not know whether they are learning or developing, it is just free. The second one is; the teacher has to be involved in the play. Here there is*

supporting play, facilitating play, guiding play, and others. So, when she does supporting play, the teacher has to get involved. It means, for example a puzzle can be difficult for the children, so she says, 'do it like this, and this is done like this'.

These participants classified play types into two, guided-play and free-play. They also described that the involvement of the teacher should be more in guided-play and less in free-play. However, half of the participants said that there should be minimum involvement from the teacher in all play types. Explaining this teacher, GT1 said,

'The children have to create plays themselves. For example, when they play blocks, the teacher does not tell them to do this or that. They should not be dependent on the teacher. The teacher should instruct them what to do once, but at the time they are playing she should not intrude.'

Participants view on Benefits of PBL
A.   Developmental benefits of PBL

All participants described that PBL would enhance children's holistic development, which included physical, cognitive, and socio-emotional development. Teacher GT3 mentioned that even one kind of play could have enormous benefits for the child in his/her development. She explained this by sand play, saying,

'When a child is playing with sand his fingers are active, therefore his fine motor skills are developing, he/she is trying to design something in his/her mind and therefore the child is also developing cognitively, and while he/she is playing he/she is also enjoying the success of what he/she has done and is interacting with other, and hence is also developing socio-emotionally.'

All seventeen participants, therefore, indicated that there is a definite relationship between playful learning and holistic development. Two third of participants also said that PBL creates a foundation for success in children's later lives. These participants viewed the effect of PBL as long-lasting and that it not only prepares children for grade school but also makes them ready for their journey in life. One of the informants from ECCE clarified this aspect, saying,

'Pre-primary school in Eritrea is not only preparing children for primary school; that is just a small part of the mission. We

> *focus on holistic development so that children would better prepare for all the challenges they will face later in life.'*

Therefore, several participants, including the two informants from the ECCE unit, viewed PBL as an approach to learning that would equip children in all dimensions to tackle challenges in later life successfully. Another developmental benefit mentioned by half of participants was that PBL enhances children's critical and creative thinking abilities. The participants believed that play provides a chance for children to explore. They also said that it creates problems to be solved by children. They said that as children try to solve these problems, their inventive, creative, and critical thinking abilities develop. Teacher MP1 said, '*Leave children to play. As children play, they will have the opportunity to engage in problem-solving, which will enhance their critical thinking'*. Teacher GT3 also mentioned that PBL enhances children's creative abilities. She said, '*When children play with blocks, mad, puzzles, and other materials, they try to create things such as cars and houses. These activities help them develop their inventive and creative abilities.'*

Few of the interviewees also mentioned that PBL enhances the confidence of children. They said that because PBL provides the ground for children to talk and interact with their peers, it can help them express their ideas and opinions later in life confidently. Principal GP1 described it in this way,

> *'In play children interact, and co-operate. They talk and ask things that they do not know. These interactions enhance their social development. Also, later in life, they would not say 'what would they say if I do this or that,' so it enhances their confidence'.*

Teacher PT2 also said that students who have learned through PBL would not be afraid to stand, teach and speak in front of other people or a crowd. These participants believed that PBL creates opportunities for children to express their ideas openly, hence becoming confident in expressing themselves.

At last, few participants such as two teachers related PBL with assessing children's level of development. They noted that when a child engages in playful activities, the teacher can easily assess or determine what developmental aspects the child is lacking. Teacher PT1 said, *'If we engage children in different kinds of play, we can easily identify their physical, cognitive and social abilities, and how they understand their environment.* These two teachers suggested that PBL is the best approach for the child's development and learning and is also a helpful instrument in assessing

children's abilities. In summary, participants mentioned numerous developmental benefits of PBL. However, the most frequently mentioned benefits were that it enhances holistic development of all domains, prepares children in all aspects for future life, enhances creative and critical thinking of children, and helps the teacher assess children's development.

B.   Academic benefits

Participants mentioned three crucial aspects concerning the academic benefits of PBL. One is that children would not forget what they learned, second children would learn without being bored, and thirdly children's motivation and concentration in learning would be enhanced. Half of the participants, said that children would not forget any concept they learned playfully. Teacher PT2 said,

> *'Something they learn through a song, story, or other playful method remains in their mind for the rest of their life. I, for instance, remember all the things I learned in school in the form of play. Because children associate it with pleasurable activity, they cannot forget it.'*

Therefore, these participants believed that because children are active and engaged in playful learning, the chances of remembering what they learned would be high. Another academic benefit of PBL that half of the participants noted was that children learn without being bored. They said that children learn through enjoyment in PBL, do not get bored in class, and their attention is not divided. Teacher PT1 expounded this point, saying,

> *'when a teacher teaches children directly, children are bored, and they wonder about other things, but when they are thought through play, it is fun for them. They do not even think that they are learning.'*

Challenges of PBL Implementation
A.   Lack of awareness in PBL

One of the frequently mentioned challenges in implementing PBL was a challenge that came from parent's lack of awareness in PBL. Almost two third of participants said that lack of awareness from the parents' side is a real challenge for implementing PBL. Most parents think that their children are just playing and are not learning anything when they learn through play. Lack of awareness particularly becomes a challenge for private schools where parents have to pay for education. Principals PP1 elaborated on this challenge, saying,

> '*Parents want their kids to write and read very quickly, and we want to go according to the syllabus in a play-based way because we believe that it is a better approach and fits with the developmental level of children. However, other private schools focus on writing and reading only, and parents want to move their kids there. Hence, to satisfy parents' needs, we try to focus on direct teaching sometimes, but the MOE does not allow that. Therefore, we face a sort of triangular challenge.*'

This challenge that comes from parents is also present in governmental schools, but principals try to resolve it by meeting with parents and informing them about PBL. Besides, because the payments in governmental schools are subsidized, parents do not have the financial ground to make demands on the learning approach teachers or schools follow. A similar challenge for teachers in implementing PBL came from principals. Two teachers said that PBL and especially free-play is not allowed in their school, and it is frowned upon by principals. Teacher PT1 for instance expressed that her efforts in trying to make children play outside were perceived negatively. The teacher said,

> '*One time when I was a novice teacher, I let the children in my class play outside with a ball, and the principal saw me and was not happy with me and told me not to do such an activity often.*'

Therefore, some principals think that play disrupts learning and this view of principals becomes a challenge for teachers to apply PBL.

B.   Lack of qualified teachers and material resources
The most mentioned challenge in the interview data was the level of creative abilities teachers have to display when teaching through play. More than two third of the interviewees said that teachers have to be highly creative and skillful in creating stories and playful activities that go along with lessons. Teacher GT2 expressed her concern in this way:

> '*Creating play and stories is a tough task to do; it needs skill. And though the guide book is written in detail, often teachers have to also create stories and plays as they teach*'.

Both the informants from the ECCE unit also said that because teachers lack the skill to teach playfully, they just go into directly teaching students. The ECCE informants also mentioned that teachers only receive training of one year, and teachers in most private sectors do not have training

in ECCE at all, and hence abandon the playful learning approach, which requires a high skill level, and go into direct instruction. One of the ECCE informants said,

> *'Currently, almost all private pre-school teachers are untrained and emphasize reading, writing, and arithmetic; and the approach they use is drilling and reciting letters and numbers.'*

Therefore, one of the challenges that educators face is the high level of skill and creativity that they have to display as they teach in a play-based way.

C.   Children's characteristics

Participants mentioned children themselves also add to the challenges of PBL. One third of the participants said that children with special needs who have learning difficulties are very hard to teach in a play-based way. The participants said that these children need special attention and that the playful activities which are used with normal children are usually hard to implement with these special children. Teacher GT2 said,

> *'When children who have normal development are playing with puzzles, they try to fit the puzzles in a meaningful way. However, children with special needs do not even try to put the puzzles in the correct order; they only look at them and sometimes throw them around.'*

Hence, children with learning difficulties such as mental retardation challenged teachers to implement PBL because the playful activities teachers use are not specially designed for such children. One fourth of the participants also mentioned that children in a school come from different neighborhoods and upbringing. These children had different exposures to play, and this exposure influences how they would participate in playful learning. Teacher GT3 said,

> *'There are different kinds of children; some are very active because they were raised in a neighborhood that has a collective culture. However, other children had never gone out of their homes to play with other kids before they started school. So aligning the play activities with these two different kinds of children is a hard task to do.'*

Thus, children had learning problems associated with mental retardation, and children who were raised in an environment that did not allow children to play presented challenges to teachers because teachers had to align playful activities to fit these types of children.

Discussion and Conclusion

Although all the study participants viewed play positively, the study results depict differences among educators on how they viewed the integration of play in learning. Participants were divided into two groups based on their view of what can be accomplished through PBL in the pre-primary education. The participants said that all lessons can be taught in a playful manner in pre-primary education, almost half of the participants said that everything cannot be done in a play-based way especially in mathematics and language skills. Similarly, one third of the participants said that the pre-primary education curriculum lacks some direct instructional methods. Studies also indicate that early childhood educators often have uncertainties in teaching academic lessons in playful ways (Walsh & Gardner, 2006; Pyle et al., 2018). Correspondingly, some participants in the current study also had doubts whether all lessons especially those that had academic objectives could really be achieved in playful pedagogical approaches.

More than half of participants conceptualized PBL as encompassing free play and guided play. Moreover, the participants who viewed PBL as encompassing two approaches, viewed free-play as enhancing general holistic development and guided play as a method that can enhance children's academic learning. We also find in the literature that there are two kinds of playful learning approaches. One is free-play which is directed and initiated by the child with almost no involvement or guidance from the teacher, and the other is guided-play where children are allowed to explore their environment and to learn through various plays, but the activities are initiated and constrained by the teacher to meet specific objectives (Pyle et al., 2018; Weisberg et al., 2015). One third of the participants, however, did not differentiate PBL as free play and guided play. They believed that any type of play can enhance both holistic development and academic learning. Moreover, the types of plays that these participants mentioned were mostly free-play types. Fesseha and Pyle (2016) and Geary (2007) argue that free-play can enhance children's overall physical, socio-emotional, and cognitive abilities; however, it is difficult to specifically trace the learning that occurred in a free-play scenario. Moreover, few participants said that the academic objectives of pre-primary education such as math and language skills can only be achieved through direct instruction, and did not believe that playful approaches can help children in learning academic lessons.

Participants were also divided into two when asked how a teacher should be involved in PBL. Half of the participants said that the involvement of a teacher is different in different types of PBL. They said that a teacher should be involved in a minimal way in free-play and should guide and

scaffold activities in guided play. The rest half of the participants, however, said that there should be minimal involvement of teacher in any type of play.

Vygotsky argues that there is a zone in which children have the potential of reaching particular development and learning level, but cannot reach unless they are helped or guided by more knowledgeable adults, such as a teacher (Vygotsky, 1978). He called this zone the zone of proximal development. Nilsson and Ferholt (2014) discuss that play can create this zone as it creates a challenging environment with roles to play and rules to attend. Vygotsky also proposed that the teacher's input is vital for the child to reach the desired development and learning level. At this point, scaffolding is crucial in which, according to Bruner et al. (1976), is shaping but not dominating the learning process. In the current study, as mentioned earlier, some participants believed that the teacher should scaffold children activities during guided play and agreed with the concept of Vygotsky and Bruner et al. Other participants, however, believed that the input of the teacher should be very minimal and children should explore things on their own.

The study revealed that educators mostly associated PBL with holistic development. All participants mentioned that play would generally enhance the development of children. Many of the participants also believed that PBL helps children to be prepared for life in general. The same views are found in studies done by Hunter and Walsh (2014) and Pui-Wah and Stimpson (2004). Participants in these studies believed that as children learn in playful ways, all the domains of development would be enhanced. Participants of the study also believed that PBL is a practical learning approach to raise children's creative and innovative abilities. As children learn through play, they engage in practical activities such as forming blocks, creating models, and assembling materials. As Bergen (2009) highlights, these activities are the daily routines of an engineer or a scientist. Hence when children engage in such activities at an early age, it can pave the way for them to pursue such creative jobs in the future.

It appears that most of the educators in pre-primary education mostly focus in the holistic development of children rather than specific academic areas. This can be partly because of the vision of the pre-primary school in Eritrea, which primarily focuses on the holistic development of children rather than mastery of specific academic skills. It is discussed above that majority of participants mostly implemented free-play which is only one aspect of PBL. The reason for this could be because educators are focusing on holistic development which is assumed to be enhanced through free-play.

The study results indicate that parents' and administrators' lack of awareness was one of the frequently reported barriers teachers face as they try to implement playful approaches to learning in pre-primary education.

Teachers reported that some parents perceive PBL as a learning approach that lets children play the whole time without any learning purpose, and hence they are usually against the approach. More than half of the participants believed that parents expect their children to excel in reading and writing skills during their pre-primary schools and demand that teachers use drilling and recitation methods to achieve these academic goals. Studies done by Baker (2015) and Fung and Cheng (2012) reported the same results. The studies indicate that it is challenging to implement PBL in countries where academic achievement has a very high value. Similarly, in the Eritrean context, rather than seeing what children will achieve later in life through education, parents and the community focus on the short-term academic achievements such as grades and children's ranks in the class. Thus, parents usually associate the term play with leisure and think that their children are not truly learning when they learn through playful ways.

Another similar challenge in implementing PBL came from teachers that worked in privately funded pre-primary schools. All principals in the study had a positive attitude towards PBL; however, these teachers reported that it is challenging to implement PBL in their school because the administration does not have a positive attitude towards the approach. In agreement with these reports, Wu (2014) and Baker (2015) indicate that sometimes the administration puts pressure on teachers to follow a more teacher-directed teaching method. This pressure could be due to the lack of awareness from the administration and other factors such as achieving academic objectives and satisfying parents' demands. Moreover, the result of the study indicated that lack of material resources, such as lack of teachers' skill and adequate qualification to teach, lack of play materials, lack of enough space for playing, and deteriorated infrastructure, make it hard to implement PBL in Eritrean pre-primary schools. Similar to the current study, Fesseha and Pyle (2016) reports that class size, lack of materials resources, and space of schools make PBL implementation a challenging task.

At last, the study revealed that some teachers and principals had a challenge of teaching special needs children in a play-based way. Teachers reported that special needs children add an extra challenge to implementing PBL in the class. The types of special needs children reported were children with learning disabilities who had some form of mental retardation. Movahedazarhouligh (2018) indicates that various physical and cognitive disabilities can limit what children can experience and gain from play. Another challenge that participants stated concerning children's characteristics is that children come from different backgrounds and differ in how they play and learn through play.

Integrating play and learning requires skill, creativity, and sound theoretical knowledge of play-based teaching approaches. According to the

study results, however, these qualities are lacking in the Eritrean pre-primary school teachers. Therefore, providing training for teachers that focus on implementing PBL should be the responsible body's initial move. PBL requires creativity and flexibility in using different methods. Moreover, without the proper training, it would be impossible for teachers to exhibit these qualifications. One of the challenges that educators face in implement PBL is the lack of awareness on the part of parents and sometimes principals that children can learn through play. Therefore, schools, the ECCE unit, and the ministry of education should communicate the importance of PBL and raise society's awareness.

Limitation and Future Directions

The main limitation of the study is that it only viewed PBL through the lens of educators. Parent's and children's views were not included. Hence the findings are limited to the perspectives of only teachers, principals, and ECCE officers. Besides, the study was done only in the capital city of Asmara, as the focus of the study was in urban centers. However, pre-primary schools in urban areas have different backgrounds and make-up compared to pre-primary schools located in the country's rural area. Hence the findings discussed in this study cannot apply to those in rural areas.

Based on the limitations of the study, the researchers suggest the following directions for future study. Prior research concerning playful approaches to learning lacks in the Eritrean context. Hence this qualitative study tried to explore educators' views towards PBL and the challenges they face in implementing it from scratch. Through the qualitative methods, the study explored teachers, principals, and ECCE officers' views towards PBL and the challenges of its implementation. Future research, therefore, should explore the research questions using quantitative designs. Furthermore, research that includes observational studies that confirm the current study's findings should also be done. The current research did not include the view of parents as well as children. Therefore, future research should aim to include these vital source of information.

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