



Full Length Research Paper

The Urban Socio-spatial Planning Policy Impact on Early Learning Infrastructure Development: in the context of selected public and private preschools in Addis Ababa

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Abstract

Preschool is early learning environment built for infants to experience healthy childhood growth, education and development. Lack of quality learning environment deteriorates children's right to decent, safe and nurturing environment. This study assessed the urban socio-spatial planning policy impact on early learning infrastructure development: in the context of selected public and private preschools in Addis Ababa, Ethiopia. Two private and two public pre-schools were selected from two sub cities/woredas as case study. Employing qualitative case study design, both primary and secondary sources were consulted. 26 participants were selected for an in-depth interview, using purposive sampling technique from urban planning and children education sectors, based on selection criteria. After an in-depth assessment of the secondary data was organized to answer the research questions, the primary data was used to refine the secondary data. The secondary data was collected from policy documents. Discourse thematic data analysis approach was employed for data analysis. The study found that, gaps in the former and the current urban planning policies induced preschools facilities problems. Lack of institutional accountability made preschools environment quality deteriorate from time to time and widened the gap between private and public preschools. From 2014 -2016 E.C the number of students and schools in private increased compared to public. However, the school environment quality in both sectors is in a critical condition, except exclusive private preschools. These conditions compromised healthy early learning environment; sustaining lasting impact on children preschool life. Thus, urban planning has to address early learning environment problems and respond to children's preschool rights.

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1. Introduction

Sustainable early learning environment includes various interdisciplinary approaches. It addresses every dimension of children growth, learning and development environment. Creating sustainable early learning environment requires planning environment based on infants learning nature. Early learning environment is a critical part of support system. It is purposely altered for infants to experience healthy learning and development at infants' age. Preschool is one of children' learning environment, where children grow, learn and experience early childhood development (Jobb, 2023; Pratt, 2014; MoE, 2010; Rakesh et al., 2023; Ukamaka, 2024; Valentini et al., 2024). Early Childhood and Care (ECCE) is a guideline provides principles for sustainable early childhood education and development. It refers to the process of change a child experience at early years from prenatal up to seven years. It declares that, healthy childhood development is indicated in child physical, emotional, cognitive, and social development. These features enable healthy child growth and development (MOE, 2010). Thus, it urges supportive, nurturing and decent early growth and learning environment.

Healthy childhood development requires for a child to have safe, decent, and enabling environment; these are functional family, community, schools, society, and nation that put the right policies to protect children' rights. Early childhood development builds the basis for children lifelong learning capacity, social life, cognitive ability and emotional stability (Piaget, 1952, Pratt, 2014). The childhood growth and development that children experience in their early ages will shape their brain and their capacity to learn, to get along with others, and their capacity to respond to daily stresses and challenges (Loughlin and Joseph, 1982; Piaget, 1952; Pratt, 2014; John, 2013; Kuddus et al., 2020; Rakesh et al., 2023; Ukamaka, 2024). Thus, preschool infrastructural facilities are oriented based on the

early learning environment standards appropriate for children from age three up to seven years. Compared to the schooling set up of primary and high schools; preschool education system is dependent on the school environment setups (MOE, 2010). Preschool learning and teaching methodology mainly operates with physical instruments, visual aids, formed objects and designed classroom learning corners (MOE, 2010). These approaches require children mobility, interaction, participation and play based activities (Diale and Sewagegn, 2021; Duncan, 2022; Harvey, 1973; Losaria et al., 2024; Katsavounidou, 2024; MOE, 2010; Sen, 2025; Ukamaka, 2024).

However, when it comes to Addis Ababa context lack of planned environment, designed classrooms and decent school environment are the critical challenges of preschools in urban areas. Urbanization is one of the challenges that are inducing environmental problems to preschool. The crises primarily affect children learning environment causing poor social interaction, low educational facilities, and poor schooling environmental quality. All these bring impact on children cognitive development, behavioural and socio-emotional life (John, 2013; Loughlin and Joseph, 1982; Piaget, 1952; Pratt, 2014; Rakesh et al., 2023).

In addition, lack of response from urban planning and concerned bodies about the space and the surrounding preschool environment issues making the condition critical from time to time. Thus, preschools environment in Addis Ababa are characterized with disturbances of commercial and business activities, advertisement and traffic noises and other related crowded (Diale and Sewagegn, 2021; Sarwar, et al., 2024). Following that, the passive role of urban planning for children schooling environment problems take the key role contributing to preschool space and planning related issues. These issues made it difficult for

preschools to secure decent and safe learning places in urban areas.

With regards to this, studies like Mulugeta (2015), Tafere (2012), Zewdie et al (2016) findings also indicated, the quality of preschool education in urban areas of Addis Ababa is keep on decreasing due to lack of quality school compound, curriculum contents, and qualified teachers. Which directly and indirectly impacting the education quality and learning process (Mulugeta, 2015; Tafere, 2012; Zewdie, et al., 2016). Despite these challenges preschools are expected to provide ECCE standard child education. While majority of environmental related issues and challenges are beyond service giving agencies capacity to provide quality ECCE standard children education (Tassew, 2011; Zewdie, et al., 2016).

Apart from that, schools in urban setting suffer densely populated urban society's social needs, such as place of play, recreation, decent place to grow and socialize. In relation to such issues different studies have indicated how growing cities like Addis Ababa is facing to provide those needs for its citizens (Tafu, 2008; Tewodros and Semu, 2008; Tigabu and Semu, 2008; Woldeamanuel, 2020). Yet, when it comes to the contribution of urban planning on infant schooling in addressing preschool environment and planning issues, no many studies have been done. Most studies have focused on negative consequences of urban planning on natural environment, peace and security problems; and socioeconomic stresses in urban areas, where less attention has been given on how urbanization contributing to education system particularly to pre-schooling facilities. Literatures of urban planning and design mainly focused on urban planning role on natural built and non-built environment, urban-regional (Spatial) planning, urban greenery, public infrastructure services, urban peace and security problems of the residents (Bhatt et al., 2024; El-bouayady and Radoine, 2024; Guo, 2024; Kuddus et al., 2020; Mehmood

et al., 2021; Mohamed, et al., 2020; Pratt, 2014; Sarwar et al., 2024; Tigabu and Semu, 2008; Woldehanna and Mesele, 2017). However, there is study gap in addressing how urban planning and design contribute to pre-schooling environment and early learning experiences. Thus, the current study fills this gap by studying the urban socio-spatial planning policy impact on early learning infrastructure development: in the context of selected public and private preschools in Addis Ababa

Hence, the main objective of this study is to assess the contribution of urban socio-spatial planning policy in facilitating sustainable urban preschool environment; and its role in addressing preschools infrastructure challenges and assisting healthy early learning experiences. In doing so, the study analyzes the policy, practice, and institutional gaps in pre-schooling and urban planning sectors. By addressing two main research questions: what is the contribution of urban planning in addressing preschool space challenges? What are the policy, institutional and practice gaps of socio-spatial planning and children education sectors contributing to preschool environment problems?

Bronfenbrenner Theory

Bronfenbrenner theory is one of ecosystem theory that explains childhood development and the impacts of surrounding environmental interaction on childhood growth, learning and development. It provides the holistic analytical lens to explain and assess how urban planning and design challenges pre-schooling system, and how socio-spatial planning induced problems weakness preschool' quality and efficiency in facilitating a healthy infants learning and development. It is a basic principle of this theory that child and youth development are influenced by many different contexts, settings, and ecologies, such as family, peers, schools, communities, sociocultural belief systems, policy regimes, and the economy (Bronfenbrenner, 1974).

The model accounts for multiple direct interactions of environments or settings, within the microsystem of a person such as family, school and peers (Velez, et al., 2017). It places five levels of interactions among systems and explains relations between systems that impact child development environment (mesosystem, exosystem, macrosystem, microsystem and chronosystem) (Bronfenbrenner, 1974). These are five levels of environment that directly and indirectly impact children's environment, the first one is, microsystem, it impacts a child directly. These are the people with whom the child interacts directly such as parents, peers, and teachers.

Secondly, mesosystem, these are interactions between those surrounding the child, such as relationship between children and school. This also will directly affect the child. The schooling quality, environment in which the school is established that purposely altered for infants' emotional, social, psychological and mental development. It is here that, preschool's role is critical in building a system that ushers healthy childhood care and education.

Thirdly, exosystem, these are larger institutions such as the mass media or the healthcare system, education institution and urban planning sector and others that are referred to as the exosystem. The above factors have influence on families and schools who operate under policies and regulations of these institutions; because they limit and make the schooling system weak and dysfunctional. The effectiveness of the policy and the provision of efficient and sufficient environment or space for children education system, directly affect what kind of early childhood care and education provided for preschoolers. Environment is the key learning factor for children under seven years to provide age-appropriate care and learning.

Fourthly, macrosystem, it encompasses cultural values, beliefs, ideals and expectations, that

inform institutions that ultimately affects the child. Fifth, all the things mentioned on the above systems happen in a historical context. This refers to chronosystem. Because things change overtime such as cultural values, policies of educational institutions and governments in certain political climates; and development happens at a point in time within these contexts (Velez et al., 2017).

When each system cannot serve according to its role, the dysfunctional system becomes burden on the other. Such replacement creates disorder and stress, for instance when microsystem is dysfunctional, the macrosystem bears the burden to fill in and play both roles. When the macrosystem is dysfunctional, microsystem must be strong enough to complement and provide a system that balance both microsystem and mesosystem (Bronfenbrenner, 1974). For instance, when family system becomes weak, preschool serves to complement and facilitate healthy childhood development and growth. It provides conducive and responsive environment for children to grow and experience healthy development. This is why urban planning needs to pay attention to the short and long-term value of children environment, and plan children learning environment as important as a second home. It is a place where infants' early growth and development happen.

2. Materials and Methods

The study used a qualitative research methodology in order to do an in-depth study on the challenges pre-schools are facing in the current context of urban planning; and its difficulties on pre-schooling infrastructural facilities and urban childhood development in Addis Ababa. The study is non-experimental study. It employs case study design. The justification is that case study research design enables the study to do a detail description by taking the case from private and public preschools and their schooling practice in Addis Ababa. Based on Creswell (2007) assertion, that

qualitative case study helps in selecting a specific population groups, cases and locations; it can include an inquiry of issues studied through one or more cases bounded within specific context or settings (Creswell, 2007).

The study used non-probability sampling technique, that was purposive sampling technique as to select preschools and participants that were specific to the study in order to analyse the study in a holistic and contextual approach. In that manner, this study took private and public pre-schooling cases in understanding both contexts to attain sufficient details to address the research questions (Creswell, 2007). Hence, *Megenagna* and *Jemo* areas located in *Bole* and *Lafto* sub cities were selected as study areas; private and public preschools of these areas were the cases selected for the study. The reason for selecting these areas located in *Bole* and *Lafto* sub cities is based on Creswell (2007) that, purposeful sampling in qualitative case study includes selecting individuals, groups and sites for the study because they can provide substantial information on the cases undertaken to be solved by the study. So, the sampling can be consistent with the information needed by the selected research design or case study (Creswell, 2007).

2.1. Description of the Study Area

There are 11 sub cities in Addis Ababa. *Megenagna* and *Jemo* areas are located in *Bole* and *Lafto* sub cities respectively. In *Megenagna* and *Jemo* areas, private pre-schools outnumber the public pre-schools. In *Megenagn* (Woreda 06) there are 6 private preschools and only one public preschool (Woreda 06, education office data, 2023). In *Jemo* (Woreda 02), there are 2 public preschools and 20 private preschools (Woreda 02, education office data, 2023). The locations of private preschools are concentrated in areas to be visible to the market and where affording families are concentrated (Woreda 02 and Woreda 06, *Jemo* and *Megenagna* education office data, 2023).

For this study 1 private and 1 public preschool were selected from each sub cities. The reason for selecting *Bole* and *Lafto* sub cities was because these areas demonstrate the cases and illustrate issues raised by the study in the context of Addis Ababa. The other reason is that, in order to make the study in a manageable scope. The study selected two sub cities and two Woredas out of 11 sub cities in Addis Ababa. This is a pattern in qualitative case study design, selecting individuals, groups, cases and sites for the study with manageable scope; because they can provide substantial information on the cases undertaken to be solved by the study within specific contexts or settings (Creswell, 2007).

Accordingly, participants were picked purposively for an in-depth interview, after making sure of the following categorical inclusive criteria. The categories and sectors were selected first and all officers in the selected categories and sectors were participated on the interview, they were 26 participants in total. They are from the selected Sub cities and Woredas, private and public preschools and administrative heads. The categories were selected based on the case identified and the issues the research aimed to address. Creswell (2007) also agrees that, the sampling can be consistent with the information needed by the selected research design or case study. Thus, in purposive sampling decision can be made on who or what must be sampled including the form of sampling and the categories used to sample (Creswell, 2007).

These are categories of inclusion criteria for participants,

1. Preschool Directors from the selected private and public preschools.
2. Pre-schooling Owners and Administrators from both private and public preschools.
3. Pre-schooling Education Inspection and Regulatory Officers, and Supervisors from the selected Sub cities/ Woredas, private and public preschools.

4. Early Childhood Care and Education Officers and Child Right Officers, from the selected Sub cities/ Woredas.
5. From Ministry of Education: Children Education Sector Officers of the selected Sub cities/Woredas, private and public preschools.
6. Ministry of Urban Development and Construction Office, Addis Ababa: urban planning institute officers.

The study aim was not to generalize for the sample to the population, but it is to explain, describe, and interpret the issues of early learning space challenges and infrastructure difficulties of private and public preschools within the current urban socio-spatial planning. Also, to analyze how urban socio-spatial planning response to these issues is shaping and affecting children education facilities and childhood development in rapidly urbanizing city of Addis Ababa. Scholars also agree that, sampling is not a matter of representative opinions. The domain factor in qualitative sampling is an issue of information richness, appropriateness, and adequacy (Morse and Field, 1995).

2.2. Data Collection Tools

2.2.1. Primary Data

Primary data collection was collected from an in-depth interview (Creswell, 2007; Kaushik, 2019; Creswell and Clark 2011). The study used semi-structured questions for interview to guide respondents to the right question of the study, not to manipulate their response, but to keep the right direction of the question (Creswell, 2007). An in-depth interview questions were used to find perspectives of the involved different sectors participants' practical, institutional and thematic understanding of the problems and solution; after an in-depth assessment of the secondary data was organized to answer the research questions, the primary data is used to refine the secondary data as well as to analyze the practical, institutional and policies of the selected sectors have on the ground (Creswell, 2007).

The primary data served to inquire the socio-spatial urban planning policy contribution to the preschool facilities, and how it is shaping preschool education system in urban areas. It was also to assess the practical challenges of early learning physical environment in the current condition of preschool infrastructure facilities.

2.2.2. Secondary Data

Secondary data was obtained from document review from policies, regulations, proclamations and guidelines of ECCE policy, child rights and urban planning policies, pre-schooling education policies, curriculum documents and MoE (Ministry of Education) reports and theoretical perspectives.

The secondary data provided the policy details that are guiding preschool education practices and urban planning. This helped to assess policies that are guiding urban planning principles and social values attributed to preschool infrastructure. ECCE policies provided the policy standards on preschool education, early learning features and principles including standards of urban preschool infrastructural facilities. This allowed identifying the policy and practice gaps in assessing the urban planning and preschool education-built environment. Preschool regulatory policies also provided policy detailed on how the current preschools early learning are implemented and monitored (Creswell, 2007).

The following secondary data was selected based on the study objectives and the research questions. The study focused on urban planning and design, urban preschool infrastructure, urban childhood education and development. It aimed to analyse the policy documents of these factors specifically in the context of Addis Ababa. The analysis is based on ECCE policy criteria. These policy documents were determined based on the research themes, objectives and research questions.

The following table presents the selected policy documents and the specific policy contents and themes that were used as secondary data sources.

Table 1 : Policies and Contents

No.	Policy documents	Policy contents/themes
1	Addis Ababa City Structural Plan (2017-2027). Social Services, Education services, pp. 99-100. Legal Framework, pp. 14-16.	It is the current legal urban structural plan, design and strategic development framework that contained an overall framework for the spatial development of the city including urban infrastructural development.
2	FDRE Constitution Articles 89-92.	It guidelines structural plan to encompass the city needs to attain economic, social, cultural and environmental purposes.
3	FDRE Constitution Art 43(1) and (4)	It commands the structural plan to address citizens' right of basic needs, improved lifestyle and standard of life in urban places.
4	Article. 7 of the Urban Planning Proclamation no.574/2008)	It provides the basic regulation of physical development and the requirements to produce a comprehensible and coherent urban development of social, economic and spatial spheres.
5	Article 2(6) of the FDRE Constitution	It establishes a legal definitions and descriptions of the Federal Proclamation for the preparation, issuing and implementation of the Addis Ababa City Master Plan of the Proclamation No. 17/2004 and issues the operational meaning and general goals of a structural plan.
6	Article. 9(2) of the Federal Proclamation No. 574/2008.	It provides obligatory and optional regulations for permitted and prohibited land uses in the urban areas. These include the magnitude and direction of urban growth of urban areas, the principal land use classes, housing development, the layout and organization of major physical and social infrastructure.
7	National Policy Framework for Early Childhood Care and Education (NPFECCE), 2010.	ECCE is an international and national policy approved by Ministry of Education. The policy commands the provision of healthy growth and development environment, sufficient education space, safe and enabling environment playground.
8	Declaration of Human Right adopted by the United Nations on the Rights of the Child, the 1999 Convention on the Rights of the Child (CRC), Article 31, p. 9.	It instructs Children's right to play and their rights to basic needs; and to be recognized as an active member of the families, communities and societies. It commands children' needs for physical nurturance, emotional care and right to have space for social play, exploration, right to have safe and efficient learning environment. It also acknowledges and collaborates with the role the ECCE as criteria for children rights.
9	The African Charter on the Rights and Welfare of the Child (ACRWC) Article 12, p.13.	It affirms agreements to protect human rights of children, right to clean, provided and nurturing environments, to attain their basic needs and right to play.
10	The World Conference on Education for All (EFA), 1990	Articulated the significance of the early years of childhood development as foundation for the life of every child and individual.
11	Sustainable Development Goal #4 and # 11 (Quality Education)	Sustainable development goal # 4 aims to ensure quality and inclusive education for all children. Sustainable development goal # 11 aims to ensure cities to be inclusive, safe, resilient and sustainable.

12	Ministry of Education, 2010	It is a national education policy that bestowed Early Childhood Care and Education (ECCE) as a critical role in preparing children for holistic healthy childhood care and development, and promoted as a stage of preparing infants for primary education. The policy also acknowledged as an indication to attain Sustainable Development Goal 4 that is offering quality education for every child. It also serves as a national curriculum Framework for KG and ECCE Implementation guide.
13	Education and Training Policy, 1994: p. 4.	It guides the national KG Education Structure and Implementation Policy.

Source: (Tsiyon and Filmon, 2024)

2.3. Data Analysis

Thematic analysis employed for data analysis. Thematic analysis best fits for qualitative case study and purposive sampling. Because, the nature of thematic topics of childhood development in urban setting, the pre-schooling system in the problematic urban infrastructure and planning issues need a holistic analysis of the entire cases in public and private contexts. Thus, thematic data analysis strategy was significant to do detailed description of cases, secondary data, the context of the public and private preschool education system and early learning environment (Creswell, 2007; Braun and Clarke, 2006).

This study followed five major systematic ways processing qualitative data using coding; and finally conjunct and refine the secondary data. The first one was data familiarization: this step involved transcribing the data, reading and re-reading the data, and noting down the initial ideas. At this stage the major ideas were highlighted and written down for each transcript (Braun and Clarke, 2006). The second stage was, generating initial code, coding, and create a set of initial codes that represent the meanings and patterns of the data. Create a codebook to keep track of the codes, read through data again, and identify remarkable excerpts and apply the appropriate codes to them. While translating and transcribing, features were coded as a small phrase or keyword representing a specific idea. Similar themes were merged together and themes

did not have enough data to back them were removed (Braun and Clarke, 2006).

The third stage involved searching for themes across the data, organizing codes into potential themes, gathering all data relevant to each potential theme (Braun and Clarke, 2006). The data was read and re-read, and the cycle was repeated several times to narrow down the number of codes and categorized them into identifiable themes. The codes were then analyzed and grouped into central themes sections (Braun and Clarke, 2006). Fourthly, reviewing themes, this involved checking whether the themes work in relation to the coded extracts in order to generate a thematic map of analysis in conjunction with the secondary data. The complete interview data was re-read to validate the codes (Braun and Clarke, 2006).

The final step was writing the findings of selected extracts, relating to the analysis to their research questions, literature and secondary data producing a scholarly report of the analysis. Important and vital statements and features representing the data were extracted to showcase the resulting outcomes both as statements in the form of ideas and remarks (Braun and Clarke, 2006).

2.4. Ethical Considerations

Creswell (2007) asserts that, in qualitative research data collection process, researchers encounter various ethical problems particularly in field, in analysis and report presentation of

findings. As a result, to avoid ethical issues researchers need to use consents procedures and protect confidentiality towards participants. It is also important to be sensitive to cultural and social norms of participants. Thus, in this study to gain full participants support and participation their consent was asked first by revealing the general purpose of the study. Their willingness for audio record of information was requested, and their confidentiality was fully covered (Creswell, 2007). As social science research scholars emphasize that “The assurance of anonymity and confidentiality is something that researchers should seek to maintain throughout the entire research process.” (Henn et al., 2006: 97). In the process of writing the report the confidentiality of the participants was completely protected (Creswell, 2007; Henn et al., 2006).

The study was also taken in consideration of protecting children rights in areas and issues that they are affected, so that their voices need to be heard. It is to advocate for their rights and protect them from negative consequences of environmental issues in their learning places (Bell, 2008).

3. Results and Discussion

3.1. The Consequences of Urban Planning Policy Gaps on Preschool Infrastructure

The current legal structural plan of Addis Ababa bestowed an overall structural framework for the spatial development of the city including every development plans (The Addis Ababa City Development Plan, 2017-2027). This plan functions to direct the urban needs to address economic, social, economic and environmental needs. This is also specified by Articles 89-92 of the FDRE Constitution, and stated as citizens right or urban residents right to have “improved living standards and to sustainable development “by stipulating main achievement of “development activities to improve the capacity of citizens for development and to meet their

basic needs” (FDRE constitution Art 43(1) and (4)).

These policy directions seek to address citizens’ standard of living that directly states to the availability of appropriate infrastructures, services and amenities; these policies also relate to sustainable development; that aspires for sustainable urban social development including children’ rights to have healthy childhood growth, development, and quality education facilities. Since urban structural plan deals with the spatial nature of cities development, it also carries along residences equal right to benefit, to promote and participate citizens in the issues that address their life during planning, designing, and implementing. This directly connects the rights of children to have safe, nurturing, clean and conducive environment. These rights are the national and international policy agreement that every nation and every development agenda, that need to carry out the rights of children as a primary goal.

However, when social services and infrastructures plans planned, designed and implemented special consideration for children and family is not included particularly infant preschool environment. The content of these urban policies also do not have specific preventions, precautions, and priorities for children in structural plans apart from giving a general statement that give attention for citizens social, economic, and environmental safety.

3.2. School Environment Challenges in Public and Private Preschools Context

Preschools lack of proper planning in the former and the current structural plan have different features in public and private preschools schooling environment.

The former structural plan of Addis Ababa (Addis Ababa City Development Plan, 2013-2023) did not include preschool infrastructure on the plan, because preschool was considered as

informal education. It was following the promotion of ECCE in 2010 and the need of preschool platform for ECCE that made the preschool to be included as a pre-primary in the formal education framework. Thus, the former structural plan could not formally allocate space for preschools. This issue contributed significantly for the current spatial problem of preschools even if the current structural plan (Addis Ababa City Structural Plan, 2017-2027) listed preschool as formal education system under each sub city administration (Addis Ababa City Structural Plan, 2017-2027), the issue of planning of preschool infrastructure remained the same.

After preschool was considered as a formal system, the burden was added to the primary system to accommodate public preschool. That stretched primary schools to accommodate public preschools in the formal system in the same primary school compounds. However, the private based preschools facilities remained as private business to find their own facility either in their private property or rental places to provide preschool services.

This was also private preschool system owners' struggle operating in rental compound. The compounds are not made for children learning and teaching purpose. Such facilities are built either for hotel, private homes or business purpose. In order to cope up with facilitates expenses and secure profit. Private preschools prefer locations where the areas are dominated with kids and families that afford to pay. Still, the house rent is another challenge that push privates to move from place to place, and struggle to find suitable space and facilities with required standard for children care and education. Following this problem, families also suffer the distant location of kindergartens. Children travel distant and suffer traffic jam issues in the city, safety problems, and transportation costs. These problems frustrate children and affect their learning habits.

However, private preschools with quality platform and facilities are expensive. These preschools have sufficient outdoor and indoor play areas, clean and neat classrooms, napping and dining areas. Such private preschool education seems favoring higher and affording class of the society; while the public suffer with lack of quality service, efficient teachers, and quality education environment. This is also similar for private preschools operate in lower quality rental facilities and poor environment. These facilities are not designed and planned for preschool and children schooling purposes, they are homes, high steers building, small compound size with small classrooms, located in noisy and crowded environment.

In public preschools lack of adequate preschool environment is shaping the learning and teaching approach in a wrong way. Children spent most of their preschool learning time in overcrowded classrooms with less mobility, and limited indoor play or activities. Outside of classrooms, there are limited outdoor play instruments like swings, slides and children play toys with interactive games. There is lack of adequate spaces for mobility in the class and enough spaces for napping rooms, which affects children' health and hygiene.

Studies like Tafere (2012), Mulugeta (2015), Zewdie et al (2016) findings also indicated, the condition of Addis Ababa that, preschools suffer with lack of quality, social and environmental induced issues which directly and indirectly impact the education quality, learning process and interactive or enabling approach of childhood growth and development (Zewdie, et al., 2016; Mulugeta, 2015). These studies also revealed, schools in urban setting suffer densely populated urban society's social needs that increase from time to time, such as place of play, recreation, sport and outdoor activities (Tafu, 2008; Woldeamanuel, 2020).

According to ESAA (Education Statistics Annual Abstract) 2022/2033 (2015 E.C) report, the enrolment of pre-primary is increasing every year in Ethiopia in each region, especially in Addis Ababa region. This is also true in the selected public and private preschools in *Bole* (Chart 1) and *Lafto* (Chart 2) sub cities. The following charts present the annual increase of students' number from year 2014 up to 2016 E.C, particularly; the numbers of students are increasing in private preschool compared to public preschools.

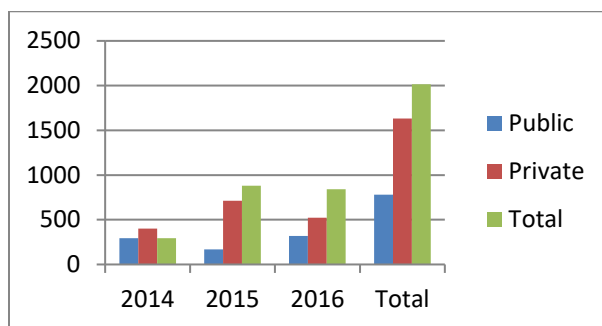


Figure 1: Bole Sub city, Woreda 06, Preschools data 2014 - 2016 E.C

Source: Bole Sub city Woreda 06, education office, 2016 E.C

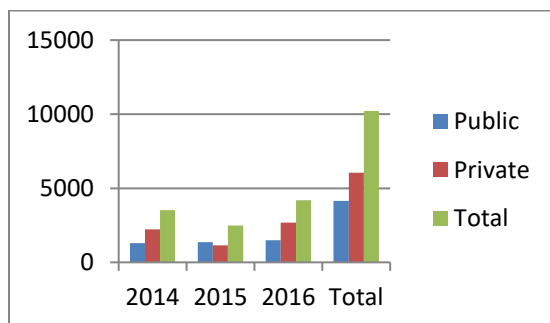


Figure 2: Lafto Sub City, Woreda 02, Preschools data 2014 - 2016 E.C

In accordance to this reality there is lack of planning response from preschool education or urban planning sector to expand preschools facilities. As the number of students increases the access to have quality early learning system will

be limited. The available preschools will get more crowded and cannot be comfortable for early learners. These issues are not in the agenda of urban planning programs and designs. This makes the issue deeply rooted and children education cannot bring solution alone. Based on ECCE the collaboration of institutions like urban planning and children education sector needs to work hand in hand like other countries manage to bring about institutional and social norms and values of prioritizing the quality of early learning of every child in response to any changes. As the city become more urbanized the pressure on preschool is becoming more challenging to provide decent, safe and comfortable environment for children.

Kerman and Gable (2007) study on the practice of early learning of preschool across countries, both in developing and developed countries contexts describe that, even if the contexts are different, early learning is tied with children rights protection policies. It is also integrated with the country's national social welfare and child protection institutions policies. The policy integration on child education and child protection policies connect other sectors to give priority for family and childhood growth and development (Kerman and Gabel, 2007).

Thus, providing a kindergarten is not the responsibility of the federal government alone rather it is the responsibility of state governments' mandate. However, depending on each state needs, all government level can be involved in providing ECCE quality service to children and families. The federal government policy give priority to children at risk providing services available: considering the social, economic, and psychological situations of children. As an incentive for childcare and protection quality, kindergartens are provided as well as mothers receive social assistance to involve in labor force (Kerman and Gabel, 2007). State level policies are approved based on the

availability of services, the extent of supply, allocation, services, quality, quantity, and eligibility of services. These include health and safety standard for children and families. State legislations take the leading roles in the development and provision of quality ECCE in childcare, education, and development. This involves institutions to deliver integrated and effective programs for healthy childhood and development related services: labor market policy, public (social) assistance policy, education policy and child welfare policy work collaboratively (Kerman and Gabel, 2007).

However, when it comes to Ethiopian context, pre-school is merely considered as an education and garden place for children from 4-6 years. In early days it was considered as a gardening place for children. The practical demonstration and implementation of ECCE for-kindergarten education in Addis Ababa is almost practiced in the contrary to ECCE (Mulugeta, 2015; Zewdie et al., 2016; UNICEF, 2020). One part of the issues is that ECCE policies are mandated conditions only for preschool service provider agencies to fulfil all the criteria to formulate curriculum and to get the license. There is no government or other institutions like urban planning involvements in facilitating and building of children early learning centers, platforms or infrastructures, because it is viewed as merely preschool' responsibility. Yet, ECCE policy demands sectors to collaborate in making early children learning. For instances, private preschools are concentrated in certain parts of urban areas looking for wide and cheaper compounds to rent looking for higher concentration of infant kids and young families areas and locations nearby to the main roads for transportation needs. So, creating enabling, decent, safe, clean, and nurturing environment are indirectly replaced by the above desperate needs. On the other hand, the policy requirements of quality preschool service criteria have been

pushed towards preschools to deal by themselves (Chawla, 2016; Kassahun and Tiwari, 2012; Loughling and Suina, 1982).

According to report of Economist Intelligence Unit (2012), despite the countries highly developed the practice of preschool might suffer certain difficulties. For instance, European countries sustain a good practice of preschool compared to the US. The main reason is the societal values, local policies of prioritization of early childhood development, long term investment on children education system, children care and childhood norms. The other issues are the affordability of high quality preschool education make families to prefer minimum quality of preschools. This is the main challenge in US. However, in European countries like Finland, Sweden, Norway and Ireland government subsidize preschool to provide high quality preschools for underprivileged (Economist Intelligence Unit, 2012).

However, according to World Conference on Early Childhood Care and Education (2010) report, preschool practice in African countries is commonly challenged with lack of accessibility, quality, national and local policy effectiveness to carry out ECCE, poverty and lack of institutional cooperation (World Conference on Early Childhood Care and Education, 2010). The socioeconomic condition of how children were born and raise depend on their access and affordability of early childhood education (Guetterman, 2015; Kuddus et al., 2019). It is also translated into children' over all wellbeing (Sandstrom and Huerta, 2013; Kim et al., 2022; UNICEF, 2019). The practice of preschool suffers with multidimensional challenges. The main issues are lack of proper facility, environment and infrastructural planning.

3.3. The Role of Early Learning Policy in Response to Urban Planning Problems and Preschools Environmental Challenges

According to the policy documents of the official Syllabus of Kindergarten, early learning features are established under the major themes of: language development, social and emotional, behavioural development, environmental science, motor and mathematical skills (MOE, 2010). It commands the quality of the curriculum to be guided by ECCE standard in terms of including active learning, outdoor and indoor activities and play based learning and teaching method. The core rule of this syllabus declared that teaching method must be by play and learning through play. Nevertheless, this could have been made possible only with the sufficient learning corners, outdoor engaging activities, available playground and physical environment purposely altered in preschool facilities.

However, according to urban planning sector officers' view, ECCE policy or preschool learning requirements have nothing to do with urban planning, that it is education sector policies. On the other hand, data from children education regulatory participants argue that, it is the responsibility of urban planning office to evaluate the situation of the city and address preschools space challenges. Thus, implementation of ECCE standard preschool service has become impossible without adequate space and location for school. The current locations and the environmental quality problems of preschool are some of the examples to this argument as planning failure to recognize the need of children infrastructure. In addition, according to data from this category, the above problem is not limited to preschool, but also the primary and secondary school sites and locations are not appropriate to the schooling nature. The sites and locations planned of the schools are illegally taken by other investors, given to lease, hotels and commercial molls. This is also key struggle for primary school to secure sufficient space that was already planned for schools.

Such lack of accountability from both institutions exposed preschools system to be abandoned. The role of providing and facilitating children education is not merely preschools or urban planning responsibility. ECCE enforces the collaboration and partnership of institutions under their key roles to provide child-based services and build environment. This requires institutional and policy integration among urban planning and urban child education ministries. Thus, preschool facilities alone cannot answer or fulfil the quality of education, and childhood development policy placed by ECCE.

Considering the above policy, institutional and practice gap, reconsidering the vulnerability of children in urban planning is critical. While urban planning aspires towards sustainable urban social development; thriving to attaining sustainable urban development (Sustainable Development Goal #4 and # 11) of ensuring cities to be inclusive, safe, resilient and sustainable. Preschools are struggling to secure safe and decent environment. This is lack of critically asking the question of inclusiveness, and neglect of children rights in the process of conceptualization of urban designing, planning and implementation.

While there is global policy like ECCE and policy goals in achieving quality child care and education, the need for local actions and approach play viral role in providing standard preschool education system. The divers methods and practices around the world indicates that norms, cultures, government policies, socioeconomic factors shape the way children are cares, educated and nurtured. In some countries such as in Denmark, Israel, Korea and Norway, early child care starts from providing length of parental leave until a child gets to the enrolment of ECE (Early Childhood Education) or preschool (Education at a Glance, 2022). The availability and provision of high-quality early child care services starts at early age. Institutional cooperation of health and

education facility work hand in hand. As a result, the enrolment of early child education and development program are high in these countries (Education at a Glance, 2022).

Moreover, like children education officers argue, inclusion of children education experts in urban planning is significant in advocating the rights of children and protecting children learning environment. Children education professionals should be consulted or included in the planning office, both professionals from each sector need to plan and design the school areas, and locations. It must be carefully examining ways to protect the environment from long-term and short-term multidirectional challenges that affect the decency and quality of children schooling places.

Thus, urban preschool education and urban planning policy strategies need to be synchronized and integrated with children rights and ECCE policy requirements in order to provide appropriate learning environment for infants. The structural plan of social service for education sector and facilities planning needs to place policy enforcement and aligned functional separate plan for preschool that can be translated and implemented at local urban development plans. So that, proper consideration and due attention need to be given to the sensitivity nature of infants and toddlers in structural plan (Addis Ababa City Structural Plan, 2017-2027). This is also a national and international policy agreement that placed on ECCE, it places requirements for children education facilities and commands suitable environment that capacitate school to provide quality child education services that promotes healthy childhood growth, education and development (MoE, 2010). Also, Ethiopia is one of the countries that are committed for these rights of children in the United Nations Convention on the Rights of the Child (UNCRC), the African Charter for Children's Rights (ACCR), and the Early Childhood Care and Development (ECCD).

4. Conclusion

Preschool is not only an education facility, it is an environment where infants experience early years growth, learning and development, that need to be altered purposely to assist this stage or process of childhood to be productive and healthy. Public and private preschools service need the right location and environment in urban areas. Urban planning has to integrate ECCE and children rights policies. This provides the required policy standards to plan and secure the right space and location for children early learning environment. Creating healthy early learning requires collaboration and partnership of institutions among urban planning and preschool education sector. This requires inclusion of early childhood education and care experts in urban planning in order to establish institutional values and form children rights policy in planning. This cooperation also put in practice the core value and principles of children rights to have clean, nurturing and enabling environment that address the current struggle of public and private preschools environment challenges.

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Ethical Clearance

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Declaration of Competing Interest

The Authors confirm that there is no conflict of interest.

Consent for Publication

This study is awarded a certificate from Institutional Review Board (IRB), College of Development Studies, Addis Ababa University, in permission to gather data, analyse and publish the manuscript as a requirement for PhD in Development Studies (Urban, Regional and Local Development Studies).

References

- Addis Ababa City Structural Plan (2017-2027). Draft Summary Report of Addis Ababa City Structural Plan (2017-2027). Addis Ababa, Ethiopia. [2036 Addis Ababa Structural Plan 2017 to 2027.original.pdf \(c40.org\)](#)
- Bandura, Albert (1977). Social Learning Theory. University of the Michigan, published by Prentice Hall.
- Bell, Nancy (2008). Ethics in child research: rights, reason, and responsibilities. *Children's Geographies* (6) 1:7–20. <https://www.tandfonline.com/doi/epdf/10.1080/14733280701791827?needAccess=true>
- Bhatt, Hritik, Shivani Devkota, and Swati Shah (2024). Sustainable Urban Planning and Green Infrastructure: A Symbiotic Relationship. *International Journal for Multidisciplinary Research (IJFMR)* 6 (6): 1-16. <https://www.ijfmr.com/papers/2024/6/33921.pdf>
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2): 77–101. [file:///C:/Users/tsiyo/Downloads/Using thematic analysis in psychology.pdf](file:///C:/Users/tsiyo/Downloads/Using%20thematic%20analysis%20in%20psychology.pdf)
- Bronfenbrenner, Urie (1974). Developmental Research, Public Policy and the Ecology of Childhood. *Child Development* 45 (1):1-5.
- Chawla, Louise (2020). Childhood nature connection and constructive hope: A review of research on connecting with nature and coping with environmental loss. *People and Nature. Journal of British Ecological Society* 1: 619-642. <https://besjournals.onlinelibrary.wiley.com/doi/10.1002/pan3.10128>
- Creswell, JW. (2007). Qualitative inquiry and research design: Choosing among five approaches, 2nd edition. Thousand Oaks, CA: Sage. [Qualitative inquiry and research design: Choosing among five approaches, 2nd ed. \(apa.org\) cuali2.](#)
- Diale, BM. and Sewagegn, A. (2021). Early childhood care and education in Ethiopia: A quest for quality. *Journal of Early Childhood Research* 29:1-14. [\(PDF\) Early childhood care and education in Ethiopia: A quest for quality](#)
- Duncan, Greg, Ariel Kalil, Magne Mogstad and Mari Rege (2022). Investing in Early Childhood Development in Preschool and at Home. *Becker Friedman Institute for Economics Working Paper* 58: 107. <http://dx.doi.org/10.2139/ssrn.4101452>
- Education at a Glance (2022). B2. How Do Early Childhood Education System Differ Around the World. OECD (2022). [63190ffa-en.pdf \(oecd-ilibrary.org\)](#)
- Facilitating Play: A Medium for Promoting Cognitive, Socio-Emotional and Academic Development in Young Children: Smilansky, Sara, Shefatya, Leah: 9780962596308: Amazon.com: Books
- El-bouayady, Rachida and Hassan, Radoine (2024). Urbanization and Sustainable Urban Infrastructure Development in Africa. *Environment and Ecology*

- Research 11*(2):385- 391.
<http://dx.doi.org/10.13189/eer.2023.110212>
- Eyasu, M. Woldesemayat and Paolo, V. Genovese (2021). Urban Green Space Composition and Configuration in Functional Land Use Areas in Addis Ababa, Ethiopia, and Their Relationship with Urban Form. *Land*, 10(1), 85.
<https://doi.org/10.3390/land10010085>
- Guetterman, Timothy C. (2015). Descriptions of Sampling Practices Within Five Approaches to Qualitative Research in Education and the Health Sciences. *Forum: Qualitative Social Research* 16 (22): 5-17.
- Guo, Xiaorui (2024). Exploration of Urban Development Models and Sustainable Development of Urban Economy in the Digital Process. *International Conference on Sustainable. Economy and Social Sciences* 200: 1-5.
<https://doi.org/10.1051/shsconf/202420001021>
- Harvey, D. (1973). In Social Justice and the City (REV-Revised). Basil Blackwell, Oxford.
<https://erikafontanez.com/wp-content/uploads/2017/09/david-harvey-social-justice-and-the-city.pdf>
- Henn, M, Weinstein, M. and Foard, N. (2006). A Critical Introduction to Social Research. 2nd Edition. Los Angeles: SAGE Publication Ltd.
- Jobb, Cory (2019). Power, Space, and Place in Early Childhood Education. *Canadian Journal of Sociology / Cahiers canadiens de sociologie* 44(3):211-232.
<http://dx.doi.org/10.29173/cjs29596>
- John, AP. (2013). Education Psychology. Theories of Learning and Human Development. El Cajon, CA: National Social Science Press.
- ["Educational Psychology: Theories of Learning and Human Development" by Andrew P. Johnson \(mnsu.edu\)](#)
- Katsavounidou, Garyfallia and Sílvia Sousa (2024). Reimagining Urban Spaces for Children: Insights and Future Directions. *Urban Planning* 9.
<https://doi.org/10.17645/up.9434>
- Kerman, Sheila B. and Shirley Gatenio-Gable (2007). Early Childhood Education and Care in the United States: An Overview of the Current Policy Picture. *International Journal of Child Care and Education Policy, Korea Institute of Child Care and Education* 1(1):23-
- Kim J, Araya M, Ejigu C, Hagos B, Hoddinott J, Rose P, Teferra T, Woldehanna T (2022). Early Learning in Ethiopia: Effects of pre-primary education on school readiness. *Early Learning Partnership Ethiopia Phase 2 report*. REAL Centre University of Cambridge UK.
- Kuddus, M Abdul, Elizabeth T. and Emma, M. (2020). Urbanization: a problem for the rich and the poor? Public Health Reviews Australia. [\(PDF\) Urbanization: A problem for the rich and the poor?](#)
- Losaria, Nerissal L., Carolina T. River, Rodel C. Apostol, Rodrigo C. Morales, Emerson O. Sabadlab and Leah E. Sudsakorn (2024). Helping young learners to learn through future learning spaces: Perspectives from stakeholders. *Research Journal of Multidisciplinary Studies*, 08(02), 056–064.
<https://doi.org/10.53022/oarjms.2024.8.2.0063>
- Loughlin, CE. and Suina, JH. (1982). The learning environment: An instructional strategy. New York: Teachers College Press Columbia University. [ERIC - ED220470 - The Learning Environment: An Instructional Strategy.. 1982](#)

- Mehmood, Rashid , Zia Ullah and Irfan Lal (2021). Human Capital, Urbanization and Dynamics of Economic Growth and Development. *Journal of Human Earth and Future* 2(4):382- 394. <http://dx.doi.org/10.28991/HEF-2021-02-04-06>
- Ministry of Education (MoE) (1994). Education and Training Policy. The Federal Democratic Republic of Ethiopia. [Education and Training Policy of Ethiopia.pdf \(moe.gov.et\)](#)
- Ministry of Education (MoE) (2009). Curriculum Framework for Ethiopian Education (KG-Grade 12). The Federal Democratic Republic of Ethiopia. [Curriculum Framework for Ethiopian Education \(moe.gov.et\)](#)
- Ministry of Education (MoE) (2010). Education Sector Development Program IV (ESDP IV) 2010/2011-2014/2015 2003 EC-2007 EC. The Federal Democratic Republic of Ethiopia. [ethiopia_esdp_iv.pdf \(unesco.org\)](#)
- Ministry of Education (MoE) (2015). Education Sector Development Program V (ESDP V) 2008-2012. E.C. 2015/16 - 2019/20 G.C. The Federal Democratic Republic of Ethiopia. [ESDP V.indd \(moe.gov.et\)](#)
- Ministry of Education (MoE) (2021). Education Sector Development Program VI (ESDP VI) 2013-2017. E.C. 2020/21-2024/25 G.C. The Federal Democratic Republic of Ethiopia. [moe.gov.et/storage/Books/Ethiopian Education Sector Development Program 6 \(ESDP VI\).pdf](#)
- Ministry of Education (MoE) (2022/23). National Early Childhood Development and Education Policy Framework (2022/23). The Federal Democratic Republic of Ethiopia. [Final ECDE Policy Framework.pdf \(unicef.org\)](#)
- Ministry of Education (2010). National Policy Framework for Early Childhood Care and Education (ECCE) in Ethiopia. Government of Ethiopia, Addis Ababa. [MoE 17 English National Policy framework for ECCE in Ethiopia.pdf \(aau.edu.et\)](#)
- Ministry of Finance and Economic Development (MOFED) (2010). The Federal Democratic Republic of Ethiopia: Poverty Reduction Strategy Paper Growth and Transformation Plan 2010/11–2014/15. Volume II Main Text. [eth144893.pdf \(fao.org\)](#)
- Mohamed A, Hailu W. and Tebarek L. (2020). Urban and regional planning approaches for sustainable governance: The case of Addis Ababa and the surrounding area changing landscape. *City and Environmental Interactions*, Published by ELSEVIER Ltd; pp. 5-8. <https://doi.org/10.1016/j.cacint.2020.100050>.
- Morse, J M. and Field, P A. (1995). Qualitative research methods for health professionals (2nd ed.). Thousand Oaks, CA: Sage. [Qualitative research methods for health professionals / Janice M. Morse, Peggy Anne Field. - University of Massachusetts at Boston \(umb.edu\)](#)
- Mulugeta, T. (2015). Early child care and education attainment in Ethiopia: Current status and challenges. *African Educational Research Journal* 3(2):136-142. [\(PDF\) Early child care and education attainment in Ethiopia: Current status and challenges \(researchgate.net\)](#)
- Piaget, J. (1952). The Origins of Intelligence in Children. New York, NY: W.W. Norton and Co.
- Pratt, M. (2014). Environments that Speak to Children. *Child Care Exchange* 219:25-32. [219- Pratt-cw.indd \(accap.org\)](#)

- Rakesh, D., McLaughlin, K. A., PhD, Sheridan, M., Humphreys, K. L., and Rosen, M. L. (2023). Environmental contributions to cognitive development: The role of cognitive stimulation. *ELSEVIER Developmental Review* 73. <https://doi.org/10.1016/j.dr.2024.101135>
- Kuddus, M Abdul, Elizabeth T. and Emma, M. (2020). Urbanization: a problem for the rich and the poor? Public Health Reviews Australia. (PDF) [Urbanization: A problem for the rich and the poor?](#)
- Sandstrom, Heather and Sandra, Huerta (2013). The Negative Effects of Instability on Child Development: A Research Synthesis. The Urban Institute.
- Sarwar, Naima , Fazal un Nisa Bibi, Ahmed Junaid, Shahzad Alvi (2024). Impact of urbanization and human development on ecological footprints in OECD and non-OECD countries. *Heliyon* 10 (15). <https://doi.org/10.1016/j.heliyon.2024.e38058>
- Sen, Umay and Gustaf, Gredeback (2024). Urbanization and Child Development. *Human Development* (2025) 69 (1): 20–47. <https://doi.org/10.1159/000541773>
- Tafu, D. (2008). Historical Development of Addis Ababa: plans and realities. Special Thematic Issue on Contemporary Urban Dynamics. *Journal of Ethiopian Studies* 41 (1/2): 27-59. [Historical Development of Addis Ababa: plans and realities on JSTOR](#)
- Tassew, W. (2011). 'The Effects of Early Childhood Education Attendance on Cognitive Development: Evidence from Urban Ethiopia'. The CSAE conference on Economic Development in Africa St Catherine's College Oxford.
- Tigabu, T. and Semu, G. (2008). Addis Ababa Profile: Ethiopia UN Habitat Regional and Technical Division. United Nations Settlements Program (UN Habitat), Nairobi, Kenya. [Ethiopia Addis Ababa Urban Profile.pdf \(unhabitat.org\)](#)
- The World Bank (2024). Inclusive Early Childhood Education and Care (P157117). Implementation Status & Results Report. https://documents1.worldbank.org/curated/en/099061824130016073/pdf/P157117180b49_f07a1813f1de3995a59364.pdf
- Tripathi, Sabyasachi (2021). How does urbanization affect the human development index? A cross-country analysis. *Asia-Pacific Journal of Regional Science* 5(7).
- Tsiyon, Ermyas and Filmon, Hadaro (2024). Integrated approach for sustainable urban early childhood education and development: The case of urban planning and preschool infrastructure in rapid urbanization context. *Educational Research and Reviews* 19(1), 1- 12.
- Ukamaka, E. Jacinta (2024). Early Childhood Education and Development: Innovations and Best Practices. *Research Output Journal of Arts and Management* 3(3):48-5 <http://dx.doi.org/10.1177/1757743818771986>
- Unicef (2024). The Future of Childhood in a Changing World. The State of the World's Children 2024. <https://www.unicef.org/media/165156/file/SOWC-2024-full-report-EN.pdf>
- UNICEF every child (2019). Situation Analysis of Women and Children, Addis Ababa. Addis Ababa Region. [Addis Ababa.pdf \(unicef.org\)](#)
- UNICEF (2020). Informing Early Childhood Education in Ethiopia: Insights from Young Lives Research on the O-Class Programme. *Young Lives, Ethiopia Research Brief* 3, January (2020).

- Valentini, Manuela, Denise Diamantini, Chiara Toni, Ario Federici (2024). Educational space, play, motor activities in the kindergarten: systematic review and graphic design of the exterior. *Journal of Physical Education and Sport*, 24 (4): 957 – 967. <https://efsupit.ro/images/stories/april2024/Art%20109.pdf>
- Velez-Agosto, Nicole M., Jose G. Soto-Crespo, Monica Vizcarrondo-Oppeneheimer, Stephanie Vega-Molina, and Cynthia García Coll, (2017). Bronfenbrenner's Bioecological Theory Revision: Moving Culture from the Macro into the Micro. Association Psychology Science. *Perspectives on Psychological Science* 12 (5) : 900–910. <http://dx.doi.org/10.1177/1745691617704397>
- Woldeamanuel, M. (2020). Urban Issues in Rapidly Growing Cities: Planning for Development in Addis Ababa. Published by Routledge Taylor and Francis Group, London, UK.
- Woldehanna, T. and Mesele, WA. (2017). Early Investment in Preschool and Completion of Secondary Education in Ethiopia. Published by Young Lives, London, UK. [YL-WP168-Woldehanna 1.pdf](https://www.younglives-ethiopia.org/YL-WP168-Woldehanna_1.pdf) ([younglives-ethiopia.org](https://www.younglives-ethiopia.org))
- World Conference on Early Childhood Care and Education (2010). Early childhood care and education, regional report: Africa. UNESCO Office Dakar and Regional Bureau for Education in Africa, programme and meeting document, p. 91. [Early childhood care and education, regional report: Africa - UNESCO Digital Library](https://unesco.org/en/rep/rep_en/Early-childhood-care-and-education-regional-report-Africa-UNESCO-Digital-Library)
- Zewdie T, Daniel D, Daniel T, Girma L, and Yekoyealem D. (2016). Quality of Early Childhood Care and Education in Ethiopia. Institute of Educational Research Addis Ababa University. [QualityofEarlyChildhoodCareandEducationinEthiopia \(2\).pdf](https://www.iere.academia.edu/ZewdieT/QualityofEarlyChildhoodCareandEducationinEthiopia(2).pdf)