



HOME ENVIRONMENT AND DIMENSIONS OF DEVELOPMENT IN PRESCHOOL

CHILDREN IN DEBRE MARKOS TOWN

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**HOME ENVIRONMENT AND DIMENSIONS OF DEVELOPMENT IN
PRESCHOOL CHILDREN IN DEBRE MARKOS TOWN**

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A thesis submitted to Addis Ababa University College of Education and Behavioral Studies in partial fulfillment for the requirements of Master of Arts Degree in Early Childhood Care and Education

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This is to certify that this thesis presented by Habtam Giletew, entitled: “Home Environment and Dimensions of Development in Preschool Children in Debre Markos Town” and submitted in partial fulfillment for the requirements of Master of Arts Degree in Early Childhood Care and Education, complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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LIST OF ACRONYMS AND ABBREVIATION

AU	African Union
WHO	World Health Organization
HOME	Home Observation of Measurement Environment
CDI	Child Development Inventory
IQ	Intelligent quotient
MoE	Ministry of Education
UNESCO	United Nation Education Scientific and Cultural Organization
OECD	Organization for Economic Cooperation and Development
KG	Kinder Garten

Abstract

Home environment occupies the first and the most important place in laying the foundation for the child's personality. It is here that the basic developmental phases such as physical, cognitive, social-emotional and language domains of development which strongly influence well-being throughout life take place. The purpose of this study was to study home environment and dimensions of development in preschool children in Debre Markos town. To achieve this objective, the researcher used descriptive survey and correlation design, and both qualitative and quantitative approaches were employed. Purposive sampling and stratified simple random sampling were employed to select participants. The study was conducted on ten government preschools found in Debre Markos town. The participants of the study were 294 parents and 10 preschool teachers. Data was collected using questionnaire and interview. Structured questionnaire items for 274 parents and semi-structured interview questions for 20 parents and 10 teachers were also administered. Quantitative data obtained through questionnaire was analyzed using mean, standard deviation, one-way ANOVA and regression. Whereas, qualitative data obtained through interview and open-ended questions was analyzed using translation and narration. Findings showed that there was positive significant relationship between the independent variables (Physical, Social, Academic Support, and Psychological Environments) and all dimensions of development. It also revealed that independent variables predicted dependent variables. Based on the findings, there was direct relation between parents' educational levels and child development. The findings also indicated that no significant difference found between male and female respondents and job type of participants in all dimensions of development. Low economic income, lack of awareness on home environment and child development, and parents' mis treatment of children were the major home environment challenges. The government bodies, parents, policy makers and preschool teachers should take the responsibility and create awareness about the importance of home environment for the development of children.

Keywords: *Home Environment, Child Development, Preschool Children*

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Early childhood is the most important and determinant period in the life of human being. Particularly the first six years of life are extremely important since children learn and acquire knowledge, skills, attitudes and behaviors quickly and with minimal effort (MOE, 2010). It is at this period of time that important developmental phases such as physical, cognitive, social-emotional and language domains of development which strongly influence well-being throughout life take place (AU, 2014). Research continuously shows that the brain develops at an astonishing rate during a child's early years, and is at its highest levels of plasticity than at any other point in our lifetime. This is because at early stage, children are highly influenced by the environment and the people that surround them (UNESCO, 2008).

In the field of child development, environmental influences are considered critical factors for optimal growth and development (Shiro, 2013). Son and Morrison (2010), stated that the environment plays a critical role in the development of children and it represents the sum total of physical and psychological stimulation the child receives. According to Catholic Relief Services (2016), the growing child affects his/her environment and the environment affects the growing child (e.g., abilities, personalities, objects, families, social values, culture). Bronfenbrenner (1986) also proposed environmental factors have an impact on human development particularly children.

Elmira (2014), states that during the preschool period, a child's socio-emotional, cognitive and physical developments are affected by interactions with the environment and it is a basic factor in his/her personality and development. The quality of education and opportunities to be offered at this critical period enable the child to acquire fundamental concepts through active involvement with the environment (Gunseli and Akamca, 2017).

All these points indicated that the environment the child exposed shapes not only early personality but also later life. So, during this critical period, providing rich and stimulating environments can

benefit children most; otherwise, significant learning opportunities and development would be lost forever (Bruer, 1997).

According to ecological perspectives' view, it is necessary to understand the environment in which the child develops and the factors that influence child development (Jones, 2016). Based on this, although there are different environmental factors that can affect child development, home environment occupies the first as well as most important place for the development of children; (Rani, 2013).

The home environment is the combination of everything the families do and the spaces the child has access that affect child's development and learning. The first lesson of a child's life is learnt at home. According to Coleman (1990), the influence of home environment should be taken as a highly considerable issue for children's development. Previous research indicated that the home environment is a primary agent and a significant factor for learning and development in early child development (Mori et al., 2013). A good home environment encourages children to have positive attitudes to learning, to be curious, and to have confidence in themselves (Brotherson, 2006).

Home as a powerful learning environment for a child with their presentation of concept such as: the encouragement of incidental learning as a natural reaction to their environment, individualized attention from adults and the close relationship between parent and child as an important factor in learning experiences (Sharma, 2011). According to Lynch (2011), home is a universal phenomenon that relates to having a place for rest and safety, privacy and freedom, comfort and order, which serve as a context for meeting physical, social and emotional needs. Anene (2005) stated that the home is the single most significant environmental factor in enabling children to develop the trust, attitude and skills that will help them to learn and engage positively with the world. It is the foundation from which babies and young children and youths can grow to achieve their full potential.

A child's family and home environment have a strong impact on his/her language and literacy development and educational achievement. This impact is stronger during the child's early years and continues throughout their school year (Bonci, 2008). Family, as one element of home environment, is the most important contributor to a child's development. Children learn to investigate the world through the family context and as such it provides the blueprint for learning, behavior and attitudes. Parenting practices such as reading to children, using complex language, responsiveness, and warmth in interactions are associated with better developmental outcomes (Bradley, 2002). Hence, parents and other caregivers are the most important persons in the life of a child as they play a key role in children's development (MOE, 2010).

According to National Scientific Council on the Developing Child (2004), sensitive and responsive parent-child relationships and quality home environment (including toys, activities, and interactions within the family setting) are strongly related to early cognitive, language and social/emotional development, enhanced social competence, performance on IQ testing, and later achievement in school. Mondal (2015), also stated that the family nurtures the child and prepares him/her for his/her role and function in the society, that is, a healthy parental relation in the home is a medium for making children into wholesome and adjustable personalities.

Growing number of studies have provided empirical evidence that the home learning environment is an important predictor of differences in children's academic and social development (Rose, Lehl, Ebert & Weinert, 2018). As parents are a child's first teachers; and the home is a child's first classroom, most studies could identify that parents' level of educational attainment, occupational status and vocational choices are perhaps the most widely used indicator in the early childhood development and education (Ensminger & Fothergill, 2003; Kohn, 1963; 1986; Pearlin & Kohn, 1966).

United States Department of Education Office of Communications (2005) stated that the presence of academic support such as helping children to read & do homework, provide necessary materials such as toys and books, sharing information, encouraging, etc. by parents at home, enables children to be effective in their education and development. According to Khanam and Nghiem (2012),

family income, parents' education and children book at home are found to be highly significant on the child's cognitive development. An individual's social environment, including the social relationships an individual makes within it, can also have a profound impact on child's health development and future achievements.

According to Bergmann (2016), the psychosocial environment in early childhood influenced the health and well-being of the growing individual, and may also impact the later development of emotional and behavioral difficulties in adults' health. The importance of psychosocial environments to health outcomes physical health, mental health and wellbeing, and health behaviors has been increasingly recognized in recent years. This indicates that, as key resources for learning and development, the status of home and parents play a decisive role in shaping a child's social, emotional, cognitive and physical development.

Better-educated parents tend to create more positive home environments (Davis-Kean, 2005). Parents' educational attainment has an important influence on the environments they create for their children, and it is a predictor of cognitive and behavioral outcomes. Studies have linked higher levels of maternal education with more parental warmth and responsiveness (Davis-Kean, 2005), more learning materials in the home (Magnuson, Sexton, Davis-Kean, 2009), increased school readiness and improved educational and employment outcomes throughout life (Dubow, Boxer & Huesmann, 2009). Education influences parenting knowledge and beliefs, which, in turn, affect parenting practices and the quality of home environment. In general, the home environment molds the behavior, personality and attitude, level of aspiration, aptitude of the child in school and later on as an adult (OECD, 2018).

This study was conducted focusing on home environment and dimensions of child development. Under home environment different variables such as physical environment, social environment, academic support environment and psychological environments were included. On the other hand, dimensions of child development are the other focus point of the study. According to Engle (2007) child development refers to the ordered emergence of interdependent skills of sensory motor,

cognitive– language, and social–emotional functioning, which depend on the child’s physical well-being, the family context, and the larger social network. Under dimensions of child development, physical development, social development, cognitive development and psychological development were treated as different variables.

The researcher was initiated to conduct research on this title was; one, understanding home environment as a basic foundation for child development; second, by the time this research was conducted, preschools were closed and preschool children were at home and this condition brought an idea to the minds of the researcher about home environment and child development. Based up on these reasons, the researcher was initiated to conduct research on home environment and dimensions of child development in order to investigate to what extent home environment factors affect/related with dimensions of child development in preschool children in Debre Markos town.

Therefore, the purpose of this researcher was to assess the relationship between home environment and dimensions of child development in preschool children in Debre Markos town.

1.2. Statement of the Problem

A child’s early home environment has a great effect on his/her well-being, especially in the first years of life. A healthy and safe home environment is essential for promoting and protecting health and development during childhood. So, the home environment is a primary agent for learning and development in children (Mori et al., 2013).

According to Mondal (2015), home and parents play the most important part in laying the foundation of the child’s personality, because they are the most influential part of child’s environment. The family environment is the primary source of experience for a child, because it provides the largest share of human contact with children and mediates a child’s contact with the broader environment (Siddiqi, Irwin and Hertzman, 2007).

However, if there is absence of proper home environment (physical, academic support, social and psychological environment), child development (physical, cognitive, social and psychological developments) would be affected negatively. Different researchers stated that, absence of home environment factors such as physical factors (play materials, playground, home spaces for movement, etc.); and social-psychological factors (social interaction, family care and attention (Mori et al, 2013) profoundly influences developmental outcomes negatively (Kopko, 2007).

According to Conley (2001), low quality home physical environment affects individual child well-being and creates inequalities in socio-economic developmental disparities. For example, the physical space available to the child and the way in which this environment is arranged influences the quality of his/her participation (Rigby & Huggins, 1997). If there are poor physical home environments, it may be a potential source of stress for children through difficult daily experiences (Schmeer, Kammi & Yoon. 2016).

Absence of academic support/activities that promote learning, such as reading books, telling stories, singing songs, taking the child outside the home, playing with the child and naming, counting or drawing things with the child affect cognitive development (UNICEF,2021). According to UNICEF (2021), absence of proper supervision and care and leaving a child alone can expose the child to increased risk of not only injury but also abuse and neglect.

It is also stated as poor family environment (care and stimulation) and low socio-economic status of families (family income, material resources, education and occupation) reduce psychological well-being, emotional and cognitive development (Ronfani, Vecchi, Mariuz, Tognin, Bin, Ferluga, et al. ,2015). Low family income negatively affects children's socio-emotional, cognitive, and academic outcomes (Huerta, 2013). Low levels of education and literacy of parents also affect the knowledge and skill-base of children (Siddiqi, Irwin &Hertzman, 2007).

Children in low-income family are more likely to face poor quality home environments across multiple domains than their wealthier counterparts (Bradley et al., 2001). This is because families

with low economic income cannot provide the necessary materials for children that stimulate development at home. Similarly, low educational level does not allow parents to treat and provide academic support to their children properly. As a result, physical, cognitive and socio emotional development of children will be affected negatively.

Supporting this idea Belay & Hawaz (2015) stated that early psychosocial stimulation is mostly done in a way both parents and caregivers are not aware off. It means that the psychosocial component, which is critical for proper cognitive, linguistic and overall stimulation and instrumental for adapting to new environment situations, is largely ignored due to lack of child development awareness and low socio-economic status of parents.

When come to Ethiopia, the issue of early childhood care and education is a recent phenomenon. Because of this many researches were not yet conducted on the issue. Particularly, no research was conducted on home environment and child development. Due to this, it was difficult to show problems in relation to home environment and child development in the Ethiopian context. But from experience, the researcher tried to mention some home environment related problems. In Ethiopia, most of the parents have low awareness about child development and lived with low economic status. Particularly in Debre Markos town, most of the parents who send their children to government preschools were in low economic income, low educational background including parents who cannot read and write, have low awareness on home environment and child development, limited knowledge of child-appropriate materials, and games/play etc. which would be important for child development. Because of lack of awareness, parents could not properly treat and give attention to their children. The majority of parents encounter financial difficulties to meet their children's needs. As it is stated under the National policy of Ethiopia, children of 5-11 years old do at least one hour of economic activity or at least 28 hours of domestic work per week. (MoE,2010); i.e., they are part of the labor market as domestic workers and care takers of siblings.

This condition denies children their dignity, endangers their lives and limits their potential 6 (Selamawit, 2007). Since most children did not have their own room at home, they faced all talks

and activities (positive and negative) of parents and this has its own influence on the development of children.

As most peoples of Ethiopia have low educational background accompanied with low economic status, early child development is being affected negatively. This is clearly stated under the National Policy Framework of Ethiopia as:

Most Ethiopian children live under very difficult circumstances and are exposed to different forms of abuses such as corporal punishment. This impedes their good start in life. Traditional practices like female genital mutilation, child labour and certain feeding habits are harmful to the child's development. As the vast majority of the population is not educated, parents have no knowledge about research findings on the care and education of children (MOE, 2010, p.8).

This shows that because of lack of awareness about effects of early environmental experiences on child development, children are being exposed to many influences. Even those who are educated and have better income, lack awareness about child development so do not treat their children in a way that can bring proper development.

Let alone home environment, even preschools, which could play a great deal of role for child development, are not being run in a way that can promote proper child development. Though there is ECCE policy, operational plan and framework and preschool standard in Ethiopia, because of lack of attention & enough awareness, preschool programs are not well implemented. In both government and private preschools there is no uniform curriculum and implementation. This is indicated by research conducted by Jerusalem & Milatework (2020) as there are curriculum implementation differences between public and private preschools.

The majority of preschool status is described under the National Policy Framework of Ethiopia as:

High payment that is requested to attend the pre-school, lack of proper training of pre-school teachers; lack of standard curriculum and guidelines; lack of culturally relevant story books; lack of access to early childhood education for almost all children and especially children from low socio-economic backgrounds; lack of awareness about the value and type of care and education of young children; low salary for teachers, causing high staff turnover; lack of early childhood education professionals; misconception about teaching children “because they are children!”; and the use of foreign languages (mainly English) as a medium of instruction(MOE, 2010,P.13).

In relation to preschools, the researcher could observe that most of the parents did not participate in preschool meetings and could not able to fulfill the necessary materials including food because of low economic status. Because of lack of awareness about the importance of preschool education, they could not value the preschool; they simply conceived it as it is used for only pass time for children. The problems mentioned above under the National Policy Framework of Ethiopia are also the problems of Debre Markos Town preschools.

Though, both home environment and preschools are decisive components in determining the fate of the present and future development of children, they were found to be low quality. From this, it is possible to conclude that child development is being affected not only by poor quality home environment but also unorganized preschool environment, curriculum and low awareness.

Even though home environment is a basic foundation across developmental domains of a child, relatively little research has been carried out in children’s home settings (Lynch, 2011). At the local level, in Ethiopia, the researcher could not find any research conducted in relation to home environment and child development. Most of the researches conducted mainly focus on quality, policy implementation, practices and challenges of early childhood care and education which are not related with home environment/the issue under study.

Not only absence of research conducted on the issue but also there is lack of awareness on how to create child appropriate environment and development at home. Therefore, there is literature and knowledge gap in Ethiopia particularly Debre Markos town on home environment and child development. So, it necessitates undertaking research to assess relationships between home environment and dimensions of child development in order to fill the gap.

In line with this, the goal of this study was to examine and investigate the relationship between home environment and dimensions of child development, the status of home environment and dimensions of child development and challenges related to home environment on children's development. Therefore, for the purpose of this study, the following research questions were considered:

1. What is the relationship between home environment and dimensions of child development in preschool children in Debre Markos town?
2. To what extent can home environment (Physical, Social, Academic Support, and psychological environment) predict the dimensions of child development (physical, cognitive, social and emotional/Psychological development of children) in preschool children in Debre Markos town?
3. Are there any significant variations in dimensions of child development across demographic determinants (sex, educational background and type of job) among preschool children in Debre Markos town?
4. What are the major home environment challenges that influence the dimensions of child development in preschool children in Debre Markos town?

1.3. Objectives of the Study

1.3.1. General Objective

The general objective of this study was to examine the relationship between home environment and dimensions of child development in preschool children in Debre Markos town.

1.3.2. Specific Objectives

The study specifically seeks to achieve the following specific objectives:

1. To assess the relationship between home environment and dimensions of development in preschool children in Debre Markos town.
2. To determine to what extent the home environment (Physical, Social, Academic Support, and Psychological) predict the dimensions of child development (physical, cognitive, social and emotional development of children) in preschool children in Debre Markos town.
3. To test the variations in dimensions of development across demographic determinants (Sex, Family Educational background and type of job) among preschool children at Debre Markos town.
4. To explore the major home environment challenges those, influence the dimensions of development in preschool children at Debre Markos town.

1.4. Significance of the study

The findings of this study will give insight primarily for parents who participated in the study and to all preschool stakeholders. Thus, the beneficiary for this study will be parents, care givers, preschool teachers, principals, officials and policy makers. It will also be significant for those who have an interest to conduct a detailed and comprehensive study regarding the relationship of home environment and child development.

1.5. Delimitation of the study

The study was delimited in Debre Markos town government preschools. The participants of the study were parents of preschool children and preschool teachers at Debre Markos town. The study was conducted on the relationship between home environment and dimensions of development on preschool children at Debre Markos town. It also examined the factors that can influence dimensions of child development.

1.6. Limitation of the study

The limitation the researcher faced was that during data collection, some parents were not interested to fill questionnaires, unable to return and fail to properly complete. In addition, preschools are found faraway from each other and the time that the researcher could get parents was only at child entering and exit time. Because of this the researcher took more time to collect the data. This made the research to be late to be completed on time. Of course, to alleviate the problems, the researcher tried to convince those parents who were not interested to fill questionnaires by telling them about the objectives of the research and also elongated the time that was scheduled to collect data.

Above all the prevalence of covid-19 had an influence on the research. Because of covid -19, the researcher could not run observation. In addition, there was absence of local research conducted on the issue under study.

So, the researcher assumed that these conditions had an influence on the quality of the research. Still the other limitation was since parents filled the questionnaire on the development of their children, the researcher assumed they may not provide appropriate response and this could have influence on the findings of the research.

1.7. Operational Definitions of Terms

Home environment - refers to aspects of physical, social, academic support, and psychological factors that affect the dimensions of child development at home

Physical environment- refers to the spaces available for a child to move, play, make activities, rest, playing materials, etc.

Academic support environment- indicates provision of materials and support of parents on the learning of children at home.

Social environment- means parents/caregivers interaction, playing, talking, encouraging etc. with children

Psychological environment -is the treatment, understanding, feeling etc. of children by parents/care givers

Child development-is the sequence of physical, cognitive and socio-emotional changes that occur in a preschool child.

Physical development -is the ability to use muscles and body parts for particular skills. Both gross (large muscle movements) and fine (small movements) motor skills contribute to physical development, which involves developing control over the body, particularly muscles and physical coordination.

Cognitive Development – refers to the way how children think, explore and figure things out. It is the development of knowledge, skills, problem solving and dispositions, that help children to think about and understand the world around them.

Social and emotional development-means how children start to understand who they are, what they are feeling and what to expect when interacting with others. It includes the child's experience, expression, and management of emotions and the ability to establish positive and rewarding relationships with others.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Introduction

This chapter deals with the theoretical and empirical evidences concerning the relationship between home environment and dimensions of child development at the age of 5-6 years. It mainly focused on the understanding of different concepts related to home environment and different theories such as Piaget's cognitive development theory, Vygotsky's social development theory, Erikson's psychosocial theory and Bronfenbreneir's ecological theory on dimensions of child development. Lastly, conceptual framework, which is the bases of identifying relationship between the dependent and independent variables, was developed from the analysis of empirical evidence concerning dimensions of child development.

2.2. Overview of Home Environment

According to Ross (1978), Parents and children have answered the question "What is Home?" Mother said that "A home is where my children play and make much noise throughout the day". Timothy, 4.5 years old also said that "A home is a place where my toys and TV and I & all live". According to *Leventhal and Brooks-Gunn (2001)*, home environment is defined as "a place where emotional warmth displayed by parents while interacting with their children; provision of stimulating and learning experiences in the home; and physical surroundings, such as safety of play areas and cleanliness.

The home environment comprises physical (household possessions, play materials) and social (parent-child interactions, family size, and structure) components, which, if favorable, provide psychological stimulation and support necessary for optimal development of early cognitive skills and these in turn predict their education and employment success later in life (Nampijja M *et al.* 2018).

According to Nwachukwu and Agulaana (2002), the home is described as the primary and most important human institution in which the socialization of the child has been begun. The child's experience within the family definitely influences his/her behaviors; they provide the child the nature which he or she requires for normal physical cognitive and psycho-social development. The

home environment means the family background of the child, which includes all the human and material resources present in the home, that affect child's living such as the parent's level of education, occupation, social-economic status and the socializing facilities available in the house. Thus, home environment is the basic situation for providing the child's primary socialization and laying the educational foundation for the child upon which the other agents of socialization build.

According to (Bronfenbrenner, 1979), development and socialization are influenced by the different width rounds or circles of the environment with which a person is in active inter-relation of micro-, meso-, exo- and macro systems. Bronfenbrenner defined the micro system as the most proximal setting, with particular physical characteristics, in which a person is situated, such as the home, child care, play-ground, and place of work, and in which the developing person can interact in a face-to-face way with others (Tudge, 2013).

According to Bronfenbrenner's theory, the micro system is the system closest to the person and the one in which they have direct contact. This is the most influential level of the ecological systems theory. The first part of his micro system is his home environment (Tudge, 2013). The micro-system captures the arena where the child spends most of her/his time in intimate, face-to-face interactions with significant others such as the family or peer group. It is here that attachments or strong bonds are formed, a secure base realized and identity is molded. The micro system is also the place where socialization takes place and with it, moral development established (Houston, 2015).

2.3. The Role of Home Environment for Child Development

According to Rani (2015) home environment plays a very important role in early child development and the availability of stimulating material in the early years of a child's life is crucial for optimizing development. Home environment has consistently been found to be positively associated with a child's academic performance. Specifically, children whose parents are more involved in their education at home have higher levels of academic performance than children whose parents are involved to a lesser degree (Rani, 2015). As part of home environment, parental socio-economic status and involvement in their children's educational experiences at home have

been associated with children's higher achievement scores in reading and writing, as well as higher report card grades (Gottfried, 2019).

An optimistic home environment is the foundation for healthy brain development (Evans, Ricciuti & Hope, 2010). Children's surroundings have a huge impact on their well-being. A healthy, safe home is essential for a child to grow, learn and explore. A problematic home environment, by contrast, can have detrimental effects on a child's intellectual, social and emotional development. Research has shown that a negative home environment during the early years of life can lead to impaired development, including poor language skills, behavioral problems and deficits in school readiness (Trentacosta, 2008). This implies that a positive home environment is the foundation for healthy child development (Sanober, Ghazala, Liaquat & Anjum, 2014).

According to Aeronson (2000), a child's early home environment has also been linked to longer-term outcomes, including high school graduation, teen parenthood and adult employment and earnings. Brain imaging studies suggest that growing up in a depressed or stressful environment can cause the brain to develop differently. Studies of young children have identified distinct patterns of brain activity associated with family income and other socio-economic factors that relate to social and emotional development, cognitive ability, and learning and memory (Gianaros, 2011).

Belsky (2006) has argued that a child's home environment plays a key role in determining his or her chances for survival and development. For instance, a home environment which consists of optimal conditions such as a safe and well-organized physical environment; opportunities for children to play, explore and discover and the presence of developmentally appropriate objects, toys and books promote positive child development (Dobrova-Krol & Natasha, 2010)). Several research studies suggest that children who grow up in households where books are available receive, on average, three more years of schooling than children from homes with no books. This finding holds regardless of a caregiver's level of education, occupation or class and applies to rich and poor countries alike.

The parent investment model (Mayer, 1997), more closely identifies the types of parental contributions to their children. According to this model, children's success depends on the time, money, energy, and support their parents invest in their "human capital." From this perspective, parents foster children's development by providing them with a safe and stimulating home environment and engaging and supporting them in learning opportunities inside and outside of home. Family income influences children's development by way of parents' decisions about how to allocate their resources.

According to Wang (2016), the money families spend on their children, such as the purchasing of toys, books, and learning materials for the home or enrollment in higher quality child care and extracurricular activities, are investments that contribute to positive child outcomes. The time and energy spent on children are also important investments. Families with lower financial resources that cannot physically provide for their children may be able to compensate in other ways that do not require additional spending. Moreover, cultural endowments, such as the value parents place on education, work, and service, contribute to children's motivation to learn and to give back to society.

2.4. Dimensions of Child Development

Child development refers to the sequence of physical, language, thought and emotional changes that occur in a child from birth to the beginning of adulthood (Kid Sense, 2017). Early childhood is defined as a time that "spans the prenatal period to eight years of age and it is the most intensive period of brain development throughout the life span". This period is the most critical time for the growth and development of the child and needs the utmost attention and appropriate care.

According to Engle (2007) child development refers to the ordered emergence of interdependent skills of sensory motor, cognitive– language, and social–emotional functioning, which depend on the child's physical well-being, the family context, and the larger social network. The first year of life represent a critical window of opportunity in the healthy development of young children; what children learn and feel during this time will be foundational to the rest of their life.

Child Development Theories

Child development theories focus on explaining how children change and grow over the course of childhood. Such theories center on various aspects of development including social, emotional, and cognitive growth. Some developmental theorists view development as a discontinuous process and believe development as distinct and separate stages with different kinds of behavior occurring in each stage (Jean Piaget's stage theory; Maria Montessori's planes of development; Rudolf Steiner's seven-year phases; Kohlberg's stages of moral development; Erikson's stages of personal and social development). Others support a continuous view of development and suggest that development involves gradual and ongoing changes throughout the life span, with behavior in the earlier stages of development providing the basis of skills and abilities required for the next stages (Nolan & Raban, 2015). Some of the major theorists are:

Vygotsky - theory of Vygotsky breaks from traditional developmental psychology by focusing on the importance of social interaction. It emphasizes activity, rather than the individual, as the basic unit of analysis. In this view, children are actively involved in the timing and quality of their transition experiences. Vygotskian emphasized the importance of relationships and interactions between children and more knowledgeable peers and adults (Berk, 1996). He believed that the environment plays an important role in the social aspects of development.

Vygotsky believes that children learn through social interaction, not just on their own, and that "adults or more advanced peers must help direct and organize a child's learning before the child can master and internalize it" (Papalia, et. al., 2008). Vygotsky identified Zones of Proximal Developmental Theories (ZPD), which are defined as "the gap between what children is already able to do and what they are not quite ready to do by themselves". The ZPDs have been associated with the concept of scaffolding, which is "the temporary support that parents, teachers, or others give a child in doing a task until the child can do it alone" (Papalia, et. al., 2008). According to him the key point is that the support remains temporary, so that the child can stand on his or her own development once the task is mastered, just as a building stands on its own once its physical scaffolding has been removed.

Piaget (1963)- developed theories on cognitive development. He emphasized the importance of maturation and the provision of a stimulating environment for children to explore. Concerning to cognitive development, children are thinking and language skills develop significantly. They can remember more, reason better, and speak proficiently. Much of the theorizing on children's cognitive development comes from Piaget (1963) who proposed a theory about children's cognitions and how they change with age Cognitive theory helps explain the development of symbolic thought and language in preschoolers.

Piaget (1952) was the first to make a systematic study of cognitive development of child and explains how a child constructs a mental model of the world (McLeod, 2018). Piaget describes four theoretical periods, or stages, of child development: sensory motor, preoperational, concrete operational, and formal operational. The four stages are very different from one another; each reveals a different way in which an individual reacts to his environment.

A child in the preoperational stage (2-7 years.) is self-centered and lacks the ability to think of others first or consider someone else's perspective. They often do not understand rules and are not cooperative (Rodriguez, 2018). This stage is when a child starts to create mental representations of the world with words and images. The child uses the objects and symbols to represent something which exist in a concrete form for example: child play with a car as if it is a real car. At this stage the child is not yet able to conceptualize abstractly and needs concrete physical situations (Chapman and Routledge, 2005).

Piaget believes each stage in development occurs as a result of interaction between maturation and environment and all children progress through four stages and they do so in the same order (Bukatku & Daehler, 1995). Piaget believed all children pass through these phases to advance to the next level of cognitive development. In each stage, children demonstrate new intellectual abilities and increasingly complex understanding of the world. Stages cannot be skipped (Zhou & Brown, 2017).

Erikson- Erikson's theory of psychosocial development is one of the best-known theories of personality. Erikson believed that personality develops in a series of stages (Grazuleviciene, Andrusaityte, Petraviciene and Balseviciene, 2017).

Erikson asserts that "to achieve a healthy personality, an individual must successfully resolve a crisis at each of the eight stages of development" (Boyd & Bee, 2006). Erikson believes that psychosocial development continues throughout a person's life, and that the life span is divided into eight distinct developmental stages. Each of these stages is marked by a crisis between a positive trait and a negative trait, and by a virtue that is attained when the crisis has been resolved (Barry & Rodriguez, 2011).

The first crisis is between trust and mistrust, and its associated virtue is hope. The second crisis is between autonomy and shame and doubt, resulting in the virtue of will. Purpose is the virtue that results from the crisis between initiative and guilt. Successful resolution of the crisis of industry and inferiority results in the virtue of competence. The fifth crisis, between identity and role confusion, results in the virtue of fidelity. Resolving the sixth crisis, between intimacy and isolation, results in the virtue of love. The virtue of care is associated with the crisis of generativity and stagnation, while wisdom is associated with resolving the final crisis between integrity and despair (Barry & Rodriguez, 2011).

Erikson (1950) proposed a model of lifespan development that provides a useful guide line for thinking about the changes we experience throughout the life of children. He proposed that each period of life has a unique challenge or crisis that the person who reaches it must face, referred to as psychosocial crises. According to Erikson, successful development involves dealing with and resolving the goals and demands of each of these psychosocial crises in a positive way. If a person does not resolve a stage successfully, it may hinder their ability to deal with later stages. For example, the person who does not develop a sense of trust (Erikson's first stage) may find it challenging as an adult to form a positive intimate relationship (Erikson's sixth stage). Or an individual who does not develop a clear sense of purpose and identity (Erikson's fifth stage) may

become self-absorbed and stagnate rather than work toward the betterment of others (Martha and Suzanne, 2019).

Physical development

The physical development focuses on increasing the skill and performance of the body. Physical development can be divided into gross motor skills and fine manipulative skills. The sequence of physical development involves firstly gross motor skills that require control of large muscles in the body, arms and legs. This is followed by development of fine manipulative skills, which depend on small muscle coordination. As children progress and become more confident, improvement in coordination of gross and fine movements will continue to develop and new skills will be taught (Thomas, 2017).

Between the ages of 3 and 6, children make great advances in gross motor skills such as running and jumping. They become physically stronger, with increases in bone and muscle strength as well as lung capacity. Children make gains in coordination as the parts of the brain responsible for sensory and motor skills develop. Now they can play harder and engage in more complicated play activities that include running, jumping, and climbing (McPhillips & Jordan-Black, 2007).

As they grow and gain competence in their motor skills, young children become even more coordinated and begin to show interest in skipping, balancing, and playing games that involve feats of coordination, such as throwing and catching a ball. Fine motor skills like the ability to button a shirt, pour milk into a glass, put puzzles together, and draw pictures involve eye-hand and small muscle coordination (Hill, Hanks, Wagner & Portrie-Bethke, 2016). However, socio economic disadvantages such as inadequate nutrition and fewer environmental opportunities to practice motor skills are associated with poor motor skills (Anne, 2000).

Cognitive Development

Cognitive development takes place throughout the developmental stages of one's life. It is a process of constructing various thought processes that involved in remembering, problem-solving, and decision-making, from childhood through adolescence to adulthood (Gruber and Voneche, 1995). Cognitive development means how children think, explore and figure things out. It is the

development of knowledge, skills, problem solving and dispositions, which help children to think about and understand the world around them. Brain development is part of cognitive development.

According to Edward (2010), Cognitive development refers to changes in reasoning, thinking, problem-solving, language acquisition and processes of acquiring, storing, remembering and using information about the environment. In early childhood, one of the main factors affecting child cognitive development is the home environment, which includes both care and stimulation provided to children by the caregivers and the socioeconomic status of the family. Substantial research evidence indicated that parenting and children's activities in the early years have a powerful influence on cognitive ability (Melhuish, 2010).

Psycho-social development

Early social and emotional development as the emerging ability of young children to form close and secure adult and peer relationships; experience, regulate and express emotions in socially and culturally appropriate ways; and explore the environment and learn all in the context of family, community and culture (Yates et al., 2008, as cited in K.E. Darling-Churchill, L. Lippman, 2016).

Psychosocial development in early childhood influences the health and well-being of the growing individual, and may also impact the later development of emotional and behavioral difficulties in adults' health. Social and emotional experiences with primary caregivers as well as interactions with other children and adults early in life set the stage for future academic and personal outcomes (K.E. Darling-Churchill, L. Lippman, (2016)

Children who have secure relationships with their parents develop greater social skills with adults and peers and greater social and emotional understanding of others, show more advanced moral development, and have a more positive self-concept. In addition, children with greater self-control are more likely to grow into adults with better health, have higher incomes and fewer financial struggles, and fewer criminal convictions than those with weaker self-regulatory skills (Moffitt et al., 2011).

However, children facing challenges with their social and emotional development may have other specific needs for support. Preschoolers with very stressful home lives (due to divorce, financial difficulties, or parental job loss) suffer more respiratory and intestinal illnesses and more unintentional injuries than others (Berk, 2008).

ECCE in the context of Ethiopia

Ethiopia is one of the countries that accepted several legislations and declarations such as the Dakar Framework for Action, adopted in 2000, which was the first EFA goal and the United Nations Convention on the Rights of the Child, signed in December 1991 to take measures to address the needs of children in the early year's education. In addition, the need for children's development has been duly recognized in the country's education, health, and social welfare policies.

In 2010, the national government of Ethiopia, represented by the ministries of Education, Health and Women's affairs, signed and endorsed a National Policy Framework for Early Childhood Care and Education (ECCE) to provide a holistic and comprehensive approach to the development of children from pre-natal to seven years of age (Rahel, 2014). Failing to provide children at this stage of development with better nutrition, health care and education deprives them of their right to develop as productive citizens, enjoy a better quality of life and eventually contribute to society's growth (MOE, 2010).

The policy boost in 2010 is built around four pillars: The first two pillars – parental education and a comprehensive program of early child health and stimulation – are focused on children from the pre-natal period up to age 3 and fall under the Ministry of Health. The third and fourth pillars have been more targeted for children aged 4 to 6, comprising non-formal school readiness (notably Child-to-Child) initiatives and the establishment of pre-schools of various kinds, including community-based pre-schools, private pre-schools and pre-schools attached to primary schools (Orkin et al. 2012, as sighted in YongLves, 2016)

In both cases, as it is put on the national policy of Ethiopia, Parents and other caregivers take the big share and are the most important persons in the life of a child. They play a key role such as socialization, inculcating life principles and spiritual, cultural and moral values for the child's character development. They also provide an enabling environment for the child's growth and development, and early stimulation for his/her future development (MOE, 2010). But most of the parents don't have enough awareness on child development to implement such issues.

Because of this, the government of Ethiopia, as it is put on the national policy and operational plan of Ethiopia, planned to prepare parental education and demonstration program which will have a home-based and a center-based component. The home-based part will be carried out in the houses of the families; the center-based approach will take place in community building, health post, school, church, etc., to empower and raise awareness focusing on bringing up children; improving the practical nurturing skills of parents and caretakers (MOE, 2010).

Though the documents and different researches stated that the role of parents/care givers in child care and development is very indispensable, as can be seen practically, what is put on the policy framework and strategic operation plan is not implemented. This implied that both at home and in preschools, a conducive environment for proper child development is not yet created.

2.5. The Empirical Evidence

In the field of child development, environmental influences are considered critical factors for optimal growth and development. The home environment, in particular, is a primary agent for learning and development in children (Son and Morrison, 2010). Most researchers have argued that home environment has a profound impact on children development (cognitive, physical, social and emotional) both positively and negatively.

Bayley (1990) conceived that environmental conditions that determine how the individual's intelligent quotient will develop include nutrition health, quality of stimulation, emotional climate of the home and the type of feedback elicited by behavior. He also said that given children with the

same age, the child with better parental and postnatal nutrition, the more, intellectually stimulating and emotionally secured home and the more appropriate reward for academic accomplishment will attain a high (IQ) score, when tested in grade. He posited that environmental condition accentuate whatever differences intelligence that are present at birth.

The physical Environment

Large number of researches around the globe details the significant effects of the physical environment (toxins, pollutants, noise, crowding, chaos, housing, school and neighborhood quality) on children and adolescents' cognitive and socio-emotional development (Wigle, 2003).

According to Evans (2006), the physical environment can influence child development directly and via adult caregivers. She concluded that both physical and social environmental factors within the home can influence a child's development. The physical environment may include such things as housing; facilities for education and health care, workplaces and open space for recreation. According to Evans, physical factors include the housing structure and home density, physical items in the home, the quality and characteristics of the home, the predictability of daily routines, residential mobility, and the availability of resources. The physical structure of a home can help children learn and acquire developmental skills if the environment is accessible.

Social Environment

The social environment refers to an individual's physical surroundings, community resources and social relationships. The social environment factors include the accessibility and anticipations of significant individuals, such as parents and caregivers, and the children's relationships with those individuals (American Occupational Therapy Association, 2008). The social environment for children involves the people with whom they build relationships in the home, school, and community. This may include family, peers, and neighbors. As children grow and develop, their social environments have changed.

Research has shown that social isolation or lack of socialization can lead to early childhood development issues, such as speech problems or inability to socialize with others in a civilized way (Bakeman, & Brown, 1980). A well-designed social environment helps foster positive peer relationships, creates positive interactions between adults and children, and provides opportunities for adults to support children to achieve their social goals.

According to WHO (2008), children's cognitive development is affected by several types of factors including biological, socio-economic (e.g., parental assets, income, and education), environmental (e.g., home environment, provision of appropriate play material, and access to healthcare), and psychosocial (e.g., parental mental health, parent-child interactions, cognitive stimulation, and learning opportunities). Home environments are the context within which a significant part of children's development occurs. Studies show that there is a positive association between a quality home and optimal learning environment and children's development (Bradley & Putnick, 2012).

Psycho-social Environment

Fabrizio (2020) conducted research on the area of psychosocial and environmental determinants of child cognitive development in rural South Africa and Tanzania. The researcher concluded that socioeconomic status was most strongly associated with child cognitive development. The finding also indicated that there were modest associations between the organization of the home environment and its opportunities for cognitive stimulation and child cognitive development. Psychosocial environment in early childhood influences the health and well-being of the growing individual, and may also impact the later development of emotional and behavioral difficulties in adults' health (Bergmann, Schlesier-Michel & Wendt, 2016).

Regina & Sandra (2017) investigated the joint effects of the socioeconomic status and parent-child relationships on emotional and behavioral difficulties in preschool children. Their finding revealed that lower socioeconomic status women more often than higher ones reported pathological mother-child relations. Low education level was associated with statistically significant increase adjusted odds ratios for emotional symptoms and total behavioral difficulties. With reference to the group of

better-educated mothers and normal mother-child relations, low education and pathological mother-child relations statistically significantly increased the risk of total difficulties in 4–6 years-old children.

Parent's Academic Support

Children's development takes place in a range of contexts at home with the family, in non-formal settings in the community, and in formal early childhood education and settings (ECEC). There is a notable consensus across education policy statements and practice guidelines in many countries that parents are children's first and most enduring educators (OECD, 2011). The home learning environment is formative in a child's social development and is an essential contributing factor to educational outcomes at all stages of the learning line (Bull, Brooking and Campbell 2008). Mainly home learning environment is performed by parents. According to Organization for Economic Cooperation and Development, parents can create a home environment suitable for learning by 23 designating an area to do homework, providing access to reading material and assisting with the organization of homework and studies (OECD, 2011). An interesting home learning environment which consists of a variety of educational materials and positive reinforcement of the value of education by parents is integral to intellectual and social development in children of all ages (Henderson and Berla, 1994).

Evidence indicated that parental involvement in the form of academic support at-home has a positive effect on children's achievement and development (Epstein and Sheldon, 2006). Importantly, Programme for International Student Assessment (PISA) data indicates that parents do not need to invest a significant amount of time or acquire specialized knowledge in order to assist their children in learning (PISA, 2018). Instead, improved educational outcomes result from a genuine interest and active engagement from parents (OECD, 2011).

Learning at home activities include information about how to help children with homework and improve skills in various subjects (Epstein, 2009). Students should be encouraged to discuss with their parents, the activities they are involved in and demonstrate what they are learning in class. When learning at home activities are effectively designed and implemented, students are more

likely to complete their homework assignments, improve their skills, and parents may be more aware and involved in school curriculum, (Epstein, 2009).

2.6. Conceptual Framework

As McGaghie & Bordageb (2001) mentioned, a conceptual framework represents the researcher’s synthesis of literature on how to explain a phenomenon. It is the way how the researcher understands the variables in the study connection with each other. As it is depicted in the following diagram, the dimensions of development (criterion variable) are influenced by Physical, Social, Academic Support, and psychological environment (predictor variables). Thus, it identifies the variables required in the research investigation. It is the researcher’s “map” in pursuing the investigation.

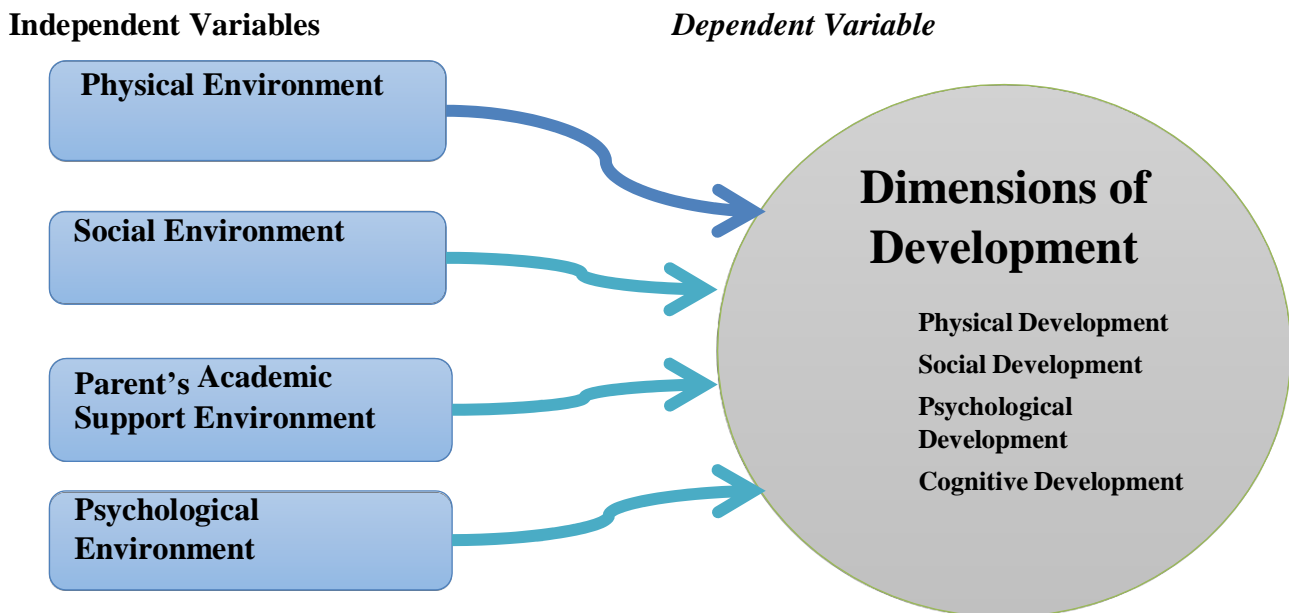


Fig. 3.1: The Conceptual Framework. (Self-developed)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter discussed the research methodology that was used to carry out this study. It explains how data was collected, analyzed, interpreted and presented. It also included the target population, sample size, sampling frame and sampling technique that were used in the study.

3.2. Research Design

According to Cooper and Schindler (2014), research design constitutes the blueprint for the collection, measurement and analysis of the data. They further add that research design is the plan and structure of investigation so imagined as to obtain answers to the research questions and aids the researcher in the allocation of the limited resources by posing crucial choices in methodology.

The main objective of this study is to examine the relationship between home environment and dimensions of development in preschool children in Debre Markos town. Therefore, to achieve this research objective and to answer the research questions raised, the researcher employed descriptive survey and correlation research design.

The reason for adopting descriptive research design was the need to observe and describe the relationship between home environment and development of children and home environment challenges. Since the researcher needs to observe two variables in order to establish a statistically corresponding relationship between them, correlation research design was adopted (Creswell, 2009).

3.3. Research Approaches

This study followed mixed research approach (quantitative and qualitative). The reason behind using mixed approach is that it is helpful for the purpose of triangulating and to collect useful and related data. Triangulation is a common feature of mixed method studies (Creswell, 2009). Besides this it is helpful for enhancing the reliability and validity of the research.

Mixed research approach focuses on collecting and analysing data by using both quantitative and qualitative approaches. From the different types of mixed research approaches, this study used the ***Concurrent Triangulation Mixed design***. This method was used since the quantitative and qualitative data was analysed side by side. That is, the quantitative data that was collected from close ended questions was analyzed first followed by qualitative data collected from open ended questions and interviews.

3.4. The Sampling Design

3.4.1. Population of the study

The population of this study was ten government preschools with total of 873 children in Debre Markos town. Therefore, 873 parents (since the participants were parents of preschool children) were the target population. In addition, 28 preschool teachers who were teaching in these ten preschools were also the target population.

3.4.2. Sampling size and Sampling Techniques

Sampling Size: There were ten government preschools in Debre Markos town and all of them were included in the study. Determining the sample size from the total population make the sample size more representative and thereby increase its validity and reliability of the research findings (Dattalo, 2008). The researcher used the following formula in order to determine the sample size which is developed by Yamane (1967).

$$\text{Sample Size } (n) = \frac{N}{1+N(e)^2}$$

Where: n = the sample size that the researcher used

N = the total population size

e = the total of precision of margin of error (0.05)

$$\text{Hence, Sample Size } (n) = \frac{N}{1+N(e)^2} = \frac{873}{1+873(0.05)^2} = 274$$

Thus, the representative sample size for this research was 274 parents of children. That means, from ten preschools, a total of 873 populations, 274 samples (parents of preschool children) were selected. In addition, 20 parents of children (two parents from each preschool) were selected. Similarly, 10 teachers (1 from each preschool) who were teaching KG 2 or 3 were selected for the purpose of interview. In short, 274+ 20 (for interview) = 294 parents and 10 preschool teachers were selected.

Sampling Technique

Purposive sampling was used to choose KG levels, parents and preschool teachers who participated in interview. Purposive sampling was used since it allows the researcher to choose the required respondent. For example, among the three GK levels, GK 2&3 (children with 5 & 6 years aged) were selected purposefully (KG1 was excluded). This is because one, for better manageability, second, because children in KG 2&3 relatively knows about letters and numbers and this allows respondent parents to evaluate their children while filling questionnaires. In similar manner, KG 2 & 3 teachers were selected using purposive sampling since they better know the parents and home environment of children (KG 2 & 3) than KG1 teachers.

In addition, since the research was conducted from different preschools and respondents were selected from all these preschools, stratified simple random sampling was used to select parents of children who participated in filling questionnaires as shown in the table below.

Table 3. 1: Name of preschools, population and sample size of the study

<i>Preschool Name</i>	<i>Population</i>	<i>Sample Size</i>
Nigus T/manot	111	29
Abima	201	59
Dibiza	89	25
DilBetigil	124	36

Endimata	91	25
Ede Tibeb	97	27
Biruh Tesfa	101	29
Yene	54	14
Tsehay Gibat	81	20
Addis Hiwot	38	10
Total	873	274

Source: Debre Markos city education office

3.5. Data Sources

Because of the global issue (COVID-19), it was impossible to employ various data sources. Therefore, the researcher used only primary data sources (Nayak and Singh, 2015). Primary data was collected through questionnaire and interview from parents and teachers of preschool children in Debre Markos town.

3.6. Data Types

For the purpose of this study, both quantitative and qualitative data types were employed. The quantitative data was collected from parents of preschool children using close ended questions. On the other hand, qualitative data was collected in two ways, one from open ended questions from parents; Second, from interview by involving parents and teachers of preschool children.

3.7. Data Gathering Instruments

The researcher collected primary data from parents of preschool children using self-report questionnaires which were developed in the form of Likert scale for home environment and child development. The questions were translated into Amharic language for the sake of clarity. In addition, two individuals (one language professional and one researcher) were invited to check the reliability and validity of the questions.

3.7.1. Questionnaire

In order to capture responses from respondents in a standardized manner, questionnaire was used (Nayak and Singh, 2015). Questionnaires should produce valid and reliable demographic variable measures and should yield valid and reliable individual differences that self-report scales generate (Marchall and Rossman, 1989). The questionnaires were distributed for parents of preschool children. Both closed and open-ended questions were included in the questionnaire. Close ended questions were prepared in the form of 5-point Likert scale (strongly disagree – strongly agree).

Demographic questionnaire

In data collecting instruments, the first section of the self-report questionnaire was demographic characteristics of the respondents such as gender, education and job statuses. From this, it was possible to get general information about participants.

Home Environment Questionnaire

To measure home environment variables, the researcher used Home Observation Measurement Environment (HOME) inventory scale (Caldwell & Bradley, 1984). The HOME Inventory was developed in the United States and is one of the earliest and most widely used instruments for measurement of significant aspects of the home environment (Bradley & Corwyn, 2005). The

HOME is the most widely recognized and commonly used instrument for evaluating the quality of the home environment and has been frequently revised and adapted (Paul, *et al*, 2017). HOME is made up of 55 items that are grouped in eight different subscales and used to measure children from 3-6 years old at home. It is a self-report measurement completed by the parents and/or caregivers of children. HOME has been used extensively in research to reveal relationships between several aspects of the home environment and children's developmental outcomes (Totsika & Sylva, 2004).

In a study conducted in 1979 by Bradley and Caldwell the psychometric properties of this version were explored. Based on this, internal consistency was ranged from .53 to .83 for the subscales while for the total scale it was .93. Agreement between raters reached 90%. In order to assess validity, correlation coefficients were computed between the HOME scores and were moderately correlated.

Child Development Inventory (CDI) – this was designed to provide systematic ways of obtaining in-depth developmental information from parents. The CDI is used for children who are judged to be functioning in one-to-six-year range. The CDI measures the child's present development in eight areas: social, self-help, gross motor, fine motor, expressive language, language comprehension, letters, and numbers (Ireton, 1992). CDI norms and validity were determined for a community sample of 568 children. Thus, the CDI provides a useful measure of children's development (Glascoe, 1995).

3.7.2. Interview

Besides questionnaire, the researcher conducted interview because of its flexibility and providing the opportunity on the part of the interviewer to probe and expand interviewee's responses and enabled the researcher to clarify points and raise fresh questions so as to gain a deeper understanding (Rahel, 2014). The researcher developed interview questions from related researches and some of them are developed by the researcher based up on the research questions. Interview was conducted with parents and teachers of preschool children since they are the nearest person to know about home environment and the status of children.

3.8. Measurement of Variables

Measurement in research consists of assigning numbers to empirical events, objects or properties or activities in compliance with a set of rules (Kumar, 2011).

Variables in this research are measured using standardized instruments. The predictor variables/ independent variables were measured using a Home Observation Measurement Environment (HOME) scale. According to Bradley (2009), the HOME is designed to measure the quantity and quality of stimulation, support, and structure available to a particular child in the child's home environment. The reliability of this instrument has been approved by more than 50 countries in the World (Bradley, 2015). According to Bradley, this instrument has been adapted for different cultural beliefs about children. Because of different social and physical affordances present in different geographic locales, researchers have adapted HOME in order to more accurately capture critical elements of home environments.

The HOME has been used extensively in research to reveal relationships between several aspects of the home environment and children's developmental outcomes. The primary goal of the instrument is to measure, within a naturalistic context, the quality and quantity of stimulation and support available to a child in the home environment. It is used to assess 3 to 6 years old children.

HOME instrument is made up of 55 items that are grouped in eight different subscales (Totsika & Sylva, 2004). For the purpose of this study, the researcher adopted some of the items which are appropriate for the study area. The researcher has modified this instrument and made it in the form of five-point Likert Scale.

Criterion variable or dependent variable (child development) was measured using Child Development Inventory (CDI). CDI inventory was designed to provide systematic ways of obtaining in-depth developmental information from parents. The Child Development Inventory (CDI), a standardized version of the Minnesota Child Development Inventory, is completed by parents to measure the developmental progress of their children ages 15 months to 6 years or children judged to be functioning in that age range. The CDI measures the child's present development in eight areas: social, self-help, gross motor, fine motor, expressive language, language comprehension, letters, and numbers (Harold, 1992). It includes items to measure various behavior and emotional problems of young children, and an index of overall development (Harold, 1990).

Both the dependent variable and independent variables were measured with those items developed by using the 5-point Likert Scale on the questionnaire ("1 = Strongly Disagree", "2 = Disagree", "3 = Average", "4 = Agree" and "5 = Strongly Agree").

Even though the measurement of Likert Scale is ordinal, there are two or more items or questions under each variable in the questionnaire which makes it continuous data (For example, if 5 individuals said agree or 4, 3 individuals said average or 3, then the data becomes 3.62 which is continuous). Therefore, the measurement scale became Interval scale. Interval scales are used when a researcher wants to measure something that is not easily quantified, like feelings or opinions (Devellie, 1991). All the independent and dependent variables were measured in a continuous data using the 5-point Likert Scale on the questionnaire. This measure is expected to bring a reliable result after the collection of the data and its analysis.

Table 3. 2: Summary of Definition and measurement of study variables

	Variables	Notation	Measurement	Indications
Dependent Variables	Physical Development	PD	5-Point Likert Scale	It reflects growth and the ability to use muscles and body parts for particular skills.
	Social Development	SD	>>	It indicates to the process by which a child learns to interact with others around them
	Cognitive Development	CD	>>	It refers to how a child perceives, thinks, and gains understanding of his or her world through the interaction of genetic and learned factors.
	Psychological Development	PSD	>>	It indicates the development of the personality, including the acquisition of social attitudes and skills, from infancy through maturity.
Independent Variables	Physical Environment	PE	>>	It indicates a place where children live, learn, and play.
	Social Environment	SE	>>	It refers to social setting in which people live.
	Academic Environment	AE	>>	It refers to the supply of materials and support of parents for children in

				home.
	Psychological Environment	PSE	>>	It indicates the interaction, feeling, understanding and treatment of parents towards children

3.9. Method of Data Analysis

Quantitative Data Analysis Techniques

The data that was collected through close ended questions was grouped, organized and analyzed by using quantitative data analysis techniques such as descriptive statistics and inferential statistics. From descriptive statistics: percentage, mean and standard deviation were employed. From inferential statistics: correlation, one-way ANOVA, and multiple linear regression analysis were used. Percentage, mean and standard deviation were used to answer research questions 1 and

4. Correlation, one-way ANOVA, and multiple linear regression analysis were used to answer research question 2 and 3 and to check various assumptions for the application of multiple linear regression. For the quantitative data analysis, SPSS new version was used.

Qualitative Data Analysis Technique

Data that was collected from the semi-structured interview and open-ended questions were analyzed qualitatively and was reported through narrative descriptions. Hence, the written notes of the interviewees were translated, categorized and compiled together in to themes, followed by narrations and interpretations.

3.10. Nature of variables

Variable is any attribute, event, situation, behaviour or individual characteristics that varies in terms of value across time, place and situation (Shaughnessy & Zechmeister, 2012). Moreover, these variables are measurable and quantified in terms of numbers. There are three major types of variables in this research: demographic variable, predictor and criterion variables.

Demographic variable-is categorical variables such as sex, educational background and job of respondents. It was used to know about the status of respondents and was treated as independent variable.

Predictor variables-these variables are independent variables that predict the dependent variables (Greene & Oliveira, 2005). In this research home environment (Physical, Social, Academic Support, and psychological environment) was considered as predictor variable that was used to predict the status of preschool child development.

Criterion variables-are variables that are dependent or outcome variables (Howitt &Cramer, 2011). Dimensions of child development (physical, cognitive, social and emotional development of children) are under this category.

3.11. Data Collecting Procedures

First, the researcher took a letter from Debre Markos College of Teachers Education; the researcher has been working, to convince preschools and respondents as the researcher is conducting research for academic purpose. Then the researcher went to preschools and first met the school principal and got permission. Then the researcher met preschool teachers and told them about the objective of the research and distributed the questionnaires to parents by informing them how to fill it. With appointment the researcher collected the data filled by respondents. Interview was also conducted with the selected parents and teachers. During this data collection process, teachers supported by selecting and convincing parents since they know each other better than the researcher. This condition made easy the data collecting process which otherwise could be difficult and time taking.

3.12. Pilot Study

The pilot study represents a fundamental phase of the research process. The researcher conducted a pilot study to examine the validity and reliability of the instruments that were used in the study. The pilot study was conducted on 20 parents of 2 preschools who did not participate on the real research data collection process.

The Validity of the Instruments

It is important to check what the data collecting instrument intends to measure. The researcher tried to check the content validity of the instruments by inviting professionals in research and

language instructor at Debre Markos College of Teacher Education and Debre Markos University. Both the content and construct validity were checked to make the instrument valid.

The Reliability of the Instruments

Based on the data collected from the pilot study, the researcher checked the reliability of the instruments. There are different ways to check or improve the reliability of the instrument, such as performing pilot study, increasing the number of items, calculating the Cronbach's Alpha, etc. Thus, the researcher tried to perform these techniques.

The reliability of the instrument measures the internal consistency for both HOME & CDI instruments (Pallant, 2013). This was done by using Cronbach's Alpha. After the data was collected from respondents, the collected data was entered in to Statistical Package for social Science (SPSS-20) to make it ready for reliability test. The reliability statistics was calculated by using Cronbach's Alpha and the result was shown in Table:

Table 3. 3: Cumulative test of Reliability

Cronbach's Alpha	No of Items
823	51

According to George and Mallery (2003), if the Cronbach's alpha greater than 0.90, then the instrument is excellent; if it is greater than 0.80, then it is good and if it is greater than 0.70, it is acceptable level. Thus, based on the result of the statistics, the data collecting instruments were good since it was 0.823 or 82.3% reliable.

The following table shows the internal consistence of items which helps to measure each variable.

This alpha value was also applicable to both instruments.

Table 3. 4: Reliability of the variables

<i>Variables</i>	<i>Cronbach's Alpha</i>	<i>No. of Items</i>
Physical Environment	.73	5
Social Environment	.70	5
Academic Support Environment	.74	6
Psychological Environment	.72	6
Social Development	.67	6
Physical Development	.72	8
Psychological Development	.84	7
Cognitive Environment	.76	8

3.13. Ethical Consideration

The researcher before engaged to collect data, took formal letter of cooperation containing the objective of the research from Debre Markos College, in order to get permission for collecting data from each preschool at Debre Markos town. According to Bordens and Abbot (1999), research participants have the right to refuse or to give their own agreement to participate in the research. Therefore, the researcher informed the objective of the research for school principals and requested the participants to participate in filling voluntarily the questionnaires and except few, they were voluntary to participate. The researcher did not include any identifying details in the questionnaires in order not to make public who the respondents were. The information obtained during the research was also kept securely. During the research process, all the necessary steps were taken to ensure that the participants were not harmed in participating in the research study.

CHAPTER FOUR

RESULT AND DISCUSSION

4.1. Results

This chapter deals with the data analysis part of the research. It presents, explains and discusses the results of findings based on the data analysis done on the data collected. The results of the study are discussed by triangulating the different sources resulting from questionnaire results and interview. The discussion began to present and describe the demographic characteristics of respondents followed by analysis of variables to accomplish the objectives of the study and to answer the research questions and the hypotheses tests.

A total of 274 questionnaires were distributed to parents of preschool children, from which 264 questionnaires were returned. From returned questionnaires 10 were discarded due to incompleteness and its response rate is 96%. Semi-structured interviews were also conducted to collect additional data in order to triangulate the response of the questionnaires. Data collected from the interviews were interpreted qualitatively. In analyzing the data from interviews and open-ended questions, narrative approaches including interpretations from respondents were used.

4.1.1. Respondents' Demographic Characteristics

The researcher used descriptive statistics to analyze the background information of participants such as sex, educational level & type of job.

Table 4. 1: Sex of the Respondents

Gender	Frequency	Percent	Cumulative Percent
F	154	60.6	60.6
M	100	39.4	100.0
Total	254	100.0	

Source: Primary data

The above table shows sex of the respondents who completed the questionnaire. Of the 254 respondents who completed the questionnaire, 154 (60.6%) were females and the remaining 100 (39.4%) of the respondents were male. This shows that females are active participant in child development and learning and are also responsive on the affairs of their child.

Table 4. 2: Educational Level of the Respondents (Children’s Parents)

<i>Educational Level</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Percent</i>
Uneducated	33	13.0	13.0
1-8 educated	47	18.5	31.5
9-12 educated	54	21.3	52.8
10+3	50	19.7	72.4
12+2	19	7.5	79.9
BSc	37	14.6	94.5
Msc	14	5.5	100.0
Total	254	100.0	

Source: Primary data

The above table (table 4.2) shows the educational level of the respondents. As can be seen from the table, 33 (13 %) of the respondents were uneducated, and 47 (18.5%) of the respondents have completed 1-8 grades, 54 (21.3%) of the respondents were 9-12 completed, 50(19.7%) were

10+3, 19(7.5%) were 12+2, 37(14.6%) were first degree holders and, 14(5.5%) were second degree holders. This shows that majority of the parents were below higher level of education and as education status increase, number of parents who send their children to government preschool decrease. This was due to low economic status.

Table 4. 3: Job of the Respondents

<i>Job</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Percent</i>
Government employee	95	37.4	37.4
Private employee	63	24.8	62.2
Merchant	24	9.4	71.7
Other	72	28.3	100.0
Total	254	100.0	

Source: Primary data

As shown from the above table (Table 4.3), 95(37.4%) of respondents were government employee, 63(24.8%) of respondents were Private employee, 24(9.4%) of the respondents were merchants and the remaining 72(28.3%) respondents were within the category of other (the respondents with in this category were housewives, beer sellers and day workers). From this, it is possible to conclude that since merchants are relatively financially better that they do not send their children to government preschool. On the other hand, government employees 95 (37.4%) send their children to government preschools. This might be due to low income.

4.1.2. The Relationships between Home Environment and Dimensions of Development

The purpose of this analysis is to investigate the overall relationship among the independent and dependent variables. The following table shows the relationship between home environment and child development variables.

Table 4. 4: Means, Standard Deviations and Inter-correlations among Variables

Variables	<i>Mean</i>	<i>SD</i>	<i>PE</i>	<i>SE</i>	<i>ASE</i>	<i>PSE</i>	<i>SD</i>	<i>PD</i>	<i>PSD</i>	<i>CD</i>
<i>PE</i>	3.0627	.78242	1							
<i>SE</i>	3.5861	.74935	.346**	1						
<i>ASE</i>	3.5850	.70220	.314**	.406**	1					
<i>PSE</i>	3.7439	.71269	.384**	.618**	.595**	1				
<i>SD</i>	3.1294	.67618	.334**	.361*	.390*	.430**	1			
<i>PD</i>	3.1490	.70511	.403**	.411**	.508**	.527**	.708**	1		
<i>PSD</i>	3.1601	.68234	.356**	.457*	.331**	.425**	.612**	.758**	1	
<i>CD</i>	3.1485	.71767	.345**	.339**	.408**	.379**	.738**	.618**	.507**	1

Source: Primary data

* $p < 0.05$, ** $p < 0.01$

In order to investigate the relationship among studying variables, Person's Correlation was employed. As it is depicted in the Table 4.4 above, all the independent variables/home environment (physical home environment, social environment, academic support environment and psychological environment) were significantly and positively correlated with the dimensions of development/dependent variables (physical development, social development, emotional development and cognitive development). Table 4.4 revealed that physical home environment

was significantly and positively related with physical development ($r = .403, p < .01$), social development ($r = .334, p < .01$), psychological development ($r = .356, p < .01$) and cognitive development ($r = .345, p < .01$). The result shows that physical home environment has slightly stronger impact on physical development of children ($r = .403, p < .01$).

4.1.3. The Extent to which home environment factors predicts the dimensions of child development

The purpose of the following analysis is to examine the influence of the independent variables on the dependent variables. This means that “to what extent the home environment (independent variable) predicts the dimensions of development (dependent variable)” was examined in detail using inferential statistics.

Inferential Statistics

In order to estimate the extent to which the home environment (Physical, Social, Academic Support, and psychological environment) predict the dimensions of child development (physical, cognitive, social and emotional development of children) in preschool children, multiple Linear Regression was employed. Multiple Linear Regression allows one to determine how well multiple independent variables predict the value of a dependent variable (Brooks, 2008).

Regression analysis models the relationship between a response variable and one or more predictor variables. It is useful for understanding how changes in the predictor values are associated with the changes in the response variable. Moreover, it is useful for making predictions based on the values of the predictors (Brooks, 2008). The rationality behind using multiple linear regressions for this study was to assess the contribution of the independent variables (physical environment, social environment, academic support environment, and psychological environment) for the dimensions of child development at Debre Markos town preschool children.

Checking Assumptions for applying Multiple Regression Analysis

When running a Multiple Linear Regression, there are several assumptions that the researcher needs to check whether the data is reliable and valid for the analysis result. According to classical liner regression theory, a model is said to give economically intuitive result if it is free of serial correlation, multicollinearity& normality problems (Brooks, 2008). Based on this, the

researcher conducted Linearity, Multicollinearity test, normality test, and others before applying the regression analysis. When assumptions are violated, accuracy and inferences from the analysis are affected (Antonakis & Dietz, 2011). Statistical software packages allow researchers to test for each assumption. Checking the assumptions carry significant benefits for the researcher, reduce error, and increase reliability and validity of inferences from the findings (Brooks, 2008).

The first assumption that should be checked to apply multiple linear regressions is to see the continuous level of the dependent variable. The dependent variable should be measured at a continuous level or scale – not a dichotomy or ordinal measurement. Even though the items were Likert scale type data, in each item there are more than one item. When we calculate the items in each Likert Scale type data, it became continuous.

For instance, 5 respondents responded 3 (average), 2 respondents responded 2 (disagree) and 4 respondents responded 4 (agree), the result will be 3.18 $[(3 \times 5) + (2 \times 2) + (4 \times 4)]$ divide by 11. Therefore, the dependent variable was measured at a continuous data.

Linearity Test

Linear regression needs the relationship between the independent and dependent variables to be linear (Brooks, 2008). The first assumption of Multiple Regression is that the relationship between the Independent Variables and the Dependent Variable can be characterized by a straight line. It aims to determine the relationship between the independent variables and the dependent variable is linear or not. A simple way to check this is by producing scatter plots of the relationship between each of the independent variables and the dependent variable (Tabachnick and Fidell, 1996).

The scatter plot produced by SPSS fig. 1 indicated that the relationship between each independent variable and the dependent variable could be modeled by a straight line. It suggested that the relationship between these variables is linear. The linearity assumption can best be tested with scatter plots. It is also important to check for outliers since linear regression is sensitive to outlier effects. The following plot (Fig. 1) indicated that there is best fit of linearity to use multiple linear regressions.

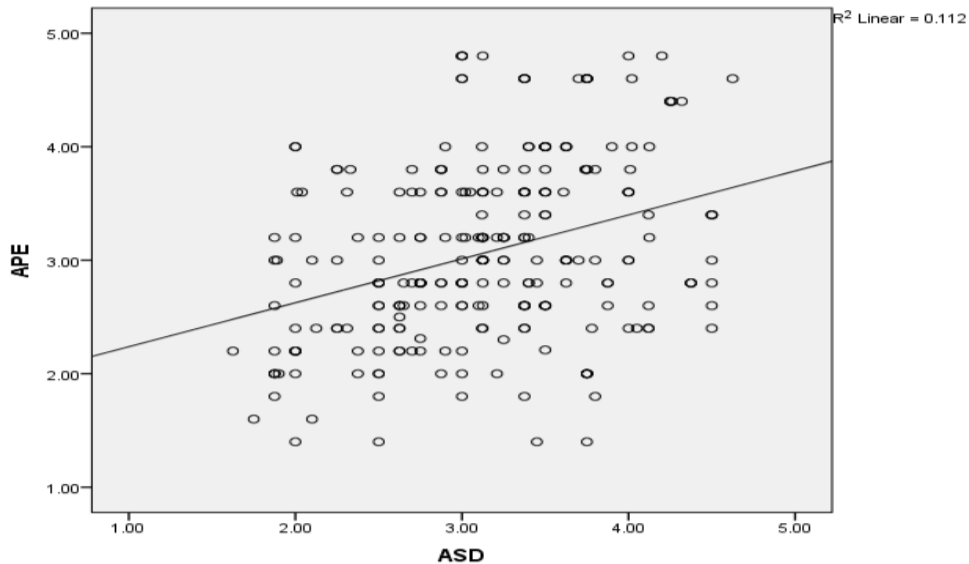


Fig.4. 1: The scatter plot which shows the Linearity of the data

Normality test

Multiple regressions assume that samples have normal distributions (Darlington, 1968; Osborne

& Waters, 2002). This assumption can be tested by looking at the distribution of residuals. This assumption can be tested by various techniques or approaches, such as by looking at the P-P plot for the model (Osborne & Waters, 2002), by the Histogram and by Skewness and kurtosis values. When the researcher looks at the P-P plot for the model, the closer the dots lie to the diagonal line, the closer to normal the residuals are distributed (Keith, 2006). The plot shows that the points generally follow the normal (diagonal) line with no strong deviations (Pallant, 2001). In this case, most of the data points touch the line, indicating that this assumption is acceptable.

When the researcher also inspected the model graphical by using histogram, our residuals seem normally distributed which means our model is free from normality problem. The SPSS output and the residual statistics revealed that distribution is normal or a bell-shaped curve.

Multicollinearity Test

After the normality of the data in the regression model has been met, the next step is to determine whether there is similarity among independent variables in a model. For this purpose, it is necessary to undertake multicollinearity test. Multicollinearity occurs when independent variables in a regression model are correlated. This correlation is a problem because independent variables should be independent from each other (Hinton, Brownlow, McMurray & Cozens, 2004). If the degree of correlation between variables is high enough, it can cause problems when you fit the model and interpret the results. Based on this assumption, predictor variables are not too highly correlated with one another. For this assumption to be met one could check the Variance Inflation Factor (VIF) scores to be well below 10, and tolerance scores to be above 0 (Keith, 2006 and Pallant, 2013). The researcher has undertaken multicollinearity test and has ascertained that all the VIF value is below 10 and the tolerance scores is above zero as shown below table 4.5. Therefore, there is no strong correlation between independent variables.

Table 4. 5: Collinearity Statistics table

<i>Model</i>	<i>Multicollinearity Statistics</i>	
	<i>Tolerance</i>	<i>VIF</i>
PE	.824	1.214
SE	.603	1.660
ASE	.637	1.571
PYE	.465	2.151

Source: Primary data

Regression Analysis

This study examined the effect of four major independent variables on four dependent variables. Thus, each dependent variable was investigated using the four independent variables and it is presented as follows:

Goodness of fit

The *goodness of fit* of a statistical model describes how well it fits a set of observations. It helps to see how well sample data fit a distribution from a population with a normal distribution. As the ANOVA table (table 4.6) below indicated that the model is fit to predict the social development from those variables as it is found statistically significant, which is $p < 0.05$.

Table 4. 6: The ANOVA table

<i>Model</i>		<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	51.452	4	12.863	47.860	.000
	Residual	66.921	249	.269		
	Total	118.373	253			

As one can see from the above table (Table 4.6), the p-value of the overall model is 0.000 (below 0.05) at the degree of freedom ($df= 4, 249$) and ($F=47.860$). The amount of variance explained by the model (independent variables) is statistically highly significant ($p\text{-value}>0.05$). Which means the model explained the deviations in the dependent variable. The lower the “Sig” number, the better the fit. Typically, if “Sig” is greater than 0.05, we might conclude that our model could not fit the data (Brooks, 2008 & Gupta, 2000).

The following model summary was used by the researcher to determine how well a regression model fits the data. R is a Pearson correlation between predicted values and actual values of dependent variable. R^2 is multiple correlation coefficients that represent the amount of variance of dependent variable explained by the combination of predictors. Adjusted R square is an estimate for the population R square if we'd use our sample regression model on our population (Stevens, 2002). As one can see from table 4.7 below the value of R is 0.659, which indicates a good level of prediction.

Table 4. 7. Model Summary table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659 ^a	.435	.426	.51842

Source: Primary data

As it is possible to see from the above model summary table 4.7 results, the coefficient determination value of R^2 was 0.426. This tells us that the independent variables (Physical, social, academic support, and psychological environments) or the model explained 42.6% of the variation of the dependent. The significant level also explained this; the p-value 0.000 is less than 0.05, which indicated that the overall mode.

Table 4. 8. Multiple Linear Regression Results of home environments on social development

	<i>Variables</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>T</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	.317	.209		1.514	.131
	PE	.216	.046	.247	4.733**	.000
	SE	.176	.057	.193	3.100*	.002
	ASE	.137	.060	.137	2.300*	.022
	PYE	.264	.064	.280	4.140**	.000

Source: Primary data

$R^2 = .435$; * $p < 0.05$, ** $p < 0.01$

As it is indicated on the above table (table 4.8), the total four independent variables are tested in this study. The regression analysis revealed that physical home environment ($\beta = .247$, $t = 4.733$ and $p < 0.001$) has a positive statistically significant relationship on the dependent variable (Social development). This implies that if the physical home environment is increased by one unit, the social development is increased by 0.216. Social environment is found to be significant and positive with social development ($\beta = .193$, $t = 3.100$ and $p < 0.01$). Similarly, Academic support and psychological environment is found to be significant and positive with social development (β

= .137, $t = 2.300$ and $p < 0.05$ & $\beta = .280$, $t = 4.140$ and $p < 0.001$, respectively). From the above coefficient table, one can see that among the four independent variables, psychological home environment has greater impact on the preschool children’s social development (Beta = .280). The higher the beta value the greater the impact of the predictor variable on the criterion variable (Brooks, 2008).

The ANOVA tables for both models indicated that the models are fit to predict all dimensions of development from those variables as it is found statistically significant, which is $p < 0.05$. Together with this, the model summary for both models indicated that the fitness of the data in the regression model was well satisfied.

Table 4. 9. Multiple Linear Regression Results of home environment on physical development

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>T</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	.329	.211		1.561	.120
	PE	.282	.047	.297	4.304**	.000
	SE	.157	.057	.170	2.749*	.006
	ASE	.199	.059	.203	3.359*	.001
	PYE	.242	.067	.253	3.590**	.000

Source: Primary data $R^2 = .425$; * $p < 0.05$, ** $p < 0.01$

The above coefficient table (table 4.9) revealed the prediction of independent variables on the dependent variable (physical development). The regression analysis revealed that physical home environment ($\beta = .297$, $t = 4.304$ and $p < 0.001$) has a positive significant relationship on the dependent variable (physical development). This implies that if the physical home environment is increased by one unit, the physical development is increased by 0.297. Social environment is found to be significant and positive with physical development ($\beta = .170$, $t = 2.749$ and $p < 0.01$). Similarly, Academic support and psychological environment is found to be significant and positive with physical development ($\beta = .203$, $t = 3.359$ and $p < 0.01$ & $\beta = .253$, $t = 3.590$ and $p < 0.001$, respectively). From the above coefficient table, one can see that among the four independent variables, physical home environment has greater impact on the preschool children's physical development (Beta = .297). The higher the beta value the greater the impact of the predictor variable on the criterion variable (Brooks, 2008).

Table 4. 10: Multiple Linear Regression Results of home environment on Psychological Development

<i>Model</i>		<i>Unstandardized</i>		<i>Standardized</i>	<i>T</i>	<i>Sig.</i>
		<i>Coefficients</i>		<i>Coefficients</i>		
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	.257	.210		1.225	.222
	PE	.223	.047	.249	4.769**	.000
	SE	.306	.057	.321	3.623**	.000
	ASE	.195	.059	.197	3.305*	.001
	PYE	.201	.067	.207	2.987*	.003

Source: Primary data $R^2 = .439$; * $p < 0.05$, ** $p < 0.01$

The above coefficient table (table 4.10) indicated the prediction of independent variables (Physical, Social, Academic Support, and Psychological Environments) on the dependent variable (Psychological development). The regression analysis revealed that social home environment ($\beta = .321$, $t = 3.623$ and $p < 0.001$) has a positive significant relationship on the dependent variable (Psychological development). This implies that if the social home environment is increased by one unit, the psychological development is increased by 0.321. The Physical environment is found to be significant and positive with social development ($\beta = .249$, $t = 4.769$ and $p < 0.001$). Similarly, Academic support and psychological environment is found to be significant and positive with psychological development ($\beta = .197$, $t = 3.305$ and $p < 0.01$ & $\beta = .207$, $t = 2.987$ and $p < 0.01$, respectively). From the above coefficient table, one can see that among the four independent variables, social home environment has greater impact on the preschool children’s psychological development (Beta = .321). The higher the beta value the greater the impact of the predictor variable on the criterion variable (Brooks, 2008).

Table 4. 11: Multiple Linear Regression Results of home environment on Cognitive Development

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>T</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	(Constant)	.185	.205		.904	.367
	PE	.212	.045	.239	4.656**	.000
	SE	.185	.055	.200	3.341*	.001
	ASE	.408	.057	.411	3.612**	.000
	PYE	.229	.065	.239	3.500*	.001

Source: Primary data $R^2 = .459$; * $p < 0.05$, ** $p < 0.01$

The above coefficient table (table 4.11) revealed the prediction of independent variables on the dependent variable (Cognitive development). The regression analysis revealed that physical home environment ($\beta = .239$, $t = 4.656$ and $p < 0.001$) has a positive significant relationship on the dependent variable (Cognitive development). This implies that if the physical home environment is increased by one unit, the cognitive development is increased by .239. Social environment is found to be significant and positive with cognitive development ($\beta = .200$, $t = 3.341$ and $p < 0.01$). Similarly, Academic support and psychological environment is found to be significant and positive with cognitive development ($\beta = .411$, $t = 3.612$ and $p < 0.001$ & $\beta = .239$, $t = 3.500$ and $p < 0.01$, respectively). From the above coefficient table, one can see that among the four independent variables, Academic Support home environment has greater impact on the preschool children's Cognitive development (Beta = .411). The higher the beta value the greater the impact of the predictor variable on the criterion variable (Brooks, 2008).

4.1.4. Demographic determinants (Sex, Family Educational Levels and type of job) variation in dimensions of child development

To check whether there was statistically mean difference among preschool children's dimensions of developments across educational levels; One Way Analysis of Variance (ANOVA) was employed.

Table 4. 12: ANOVA result for educational levels& Social development

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.108	6	.518	1.137	.341
Within Groups	112.570	247	.456		
Total	115.678	253			

Source: Primary data

As shown on the above table (table 4.12), there was no a statistically significant mean difference between educational levels and social development since the p-value $> .05$ ($f = 1.137$, $df = 247$, $p > 0.341$).

Table 4. 13: ANOVA result for educational levels& Physical development

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.724	6	.454	.911	.487
Within Groups	123.064	247	.498		
Total	125.787	253			

As shown on the above table (table 4.13), there was no a statistically significant mean difference between educational levels and Physical development since the p-value $> .05$ ($f = 0.911$, $df = 247$, $p > 0.487$).

Table 4. 14: ANOVA result for educational levels& Emotional/Psychological development

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	8.263	6	1.180	2.651	.012
Within Groups	109.529	247	.445		
Total	117.792	253			

Source: Primary data

As shown on the above table (table 4.14), there was a statistically significant mean difference between educational levels and Emotional/Psychological development since the p-value $< .05$ ($f = 2.651$, $df = 247$, $p < 0.012$). The ANOVA output only told us that there was statistically significant

mean difference among the educational levels but it didn't tell us between which educational levels the difference was existed or it didn't tell us exactly which Means differ. Therefore, to know this a Post Hoc (meaning *after*) analysis was conducted. If the ANOVA is not significant, no need to perform Post Hoc test. The following table (table 4.15) shows the Post Hoc analysis.

Table 4. 15: Post Hoc Analysis to check the statistical mean difference among educational levels

<i>No.</i>	<i>Educ Level</i>	<i>Mean</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
1	Uneducated	2.8980	-			*		*	*
2	1-8 educated	3.0956		-					
3	9-12 educated	3.1582			-				
4	10+3	3.3048	*			-			
5	12+2	3.1061					-		
6	BSc	3.2342	*					-	
7	Msc	3.3128	*						-

*Source: Primary data * The mean difference is significant at $P < 0.05$*

There is a significant mean difference between uneducated and 10 + 3, BSc and Msc respondents in Emotional/Physiological development of preschool children. The single asterisk means that the two groups being compared are significantly differ from one another at the $p < 0.05$ (Pallant, 2013). Thus, the statistical difference is found between uneducated respondents (Mean = 2.8980) and

10+3 respondents (Mean = 3.1833) (*, $p < 0.05$). The other statistically significant mean difference is found between respondents who don't read and write (Mean = 2.8980) with respondents with first degree (Mean = 3.2342) and respondents with second degree (Mean = 3.3128 and $*p < 0.05$).

Table 4. 16: ANOVA result for educational levels& Cognitive development

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.441	6	.407	.786	.582
Within Groups	127.865	247	.518		
Total	130.306	253			

Source: Primary data

As shown on the above table (table 4.16), there was no a statistically significant mean difference between educational levels and cognitive development ($f = 0.78, df = 247, p > 0.582$). To check whether there was statistically mean difference among preschool children's dimensions of development across gender, independent sample t-test was used.

Table 4. 17: Independent sample t-test result for dimensions of development across gender

Variables	Sex	N	Mean	Std. Deviation	Df	T	Sig
<i>Social</i>	F	154	3.1246	.72133	252	-.138	.890
<i>Development</i>							
	M	100	3.1367	.60354			
<i>Physical</i>	F	154	3.1290	.73627	252	-.561	.575
<i>Development</i>							
	M	100	3.1798	.65667			
<i>Emotional</i>	F	154	3.1363	.71892	252	-.687	.493
<i>Development</i>							
	M	100	3.1966	.62357			
<i>Cognitive</i>	F	154	3.1703	.74624	252	.599	.550
<i>Development</i>							
	M	100	3.1150	.67359			

Source: Primary data

As it is revealed from table 4.17, significant difference was not found between male and female respondents in *all* dimensions of development. For example, significant difference was not found between male and female respondents in social development ($t = -0.138$, $df = 252$, $p > 0.05$). This implies that there was no significant mean difference between male ($M = 3.1367$, $SD = .60354$) and female ($M = 3.1246$, $SD = .72133$) respondents in the development of preschool children at Debre Markos town.

To check whether there was statistically mean difference among preschool children's dimensions of developments across job type; One Way Analysis of Variance (ANOVA) was employed.

Table 4.18: ANOVA result for Job type & dimensions of development

		Sum of Squares	df	Mean Square	F	Sig.
ASD	Between Groups	.478	3	.159	.346	.792
	Within Groups	115.200	250	.461		
	Total	115.678	253			
APD	Between Groups	2.656	3	.885	1.798	.148
	Within Groups	123.131	250	.493		
	Total	125.787	253			
AED	Between Groups	2.197	3	.732	1.584	.194
	Within Groups	115.595	250	.462		
	Total	117.792	253			
ACD	Between Groups	.143	3	.048	.092	.965
	Within Groups	130.163	250	.521		
	Total	130.306	253			

Source: Primary data

As it is revealed from table 4.18, significant difference was not found among job types in *all* dimensions of development since the p-value is greater than 0.05.

4.1.5. Major home environment challenges that influence the dimensions of child development

The purpose of this analysis was to describe the major home environment challenges that influence the dimensions of child development by using the data obtained from parents and preschool teachers. First the quantitative data collected from parents through questionnaire was analysed followed by the qualitative data obtained through interview from parents and preschool teachers to answer research question four.

The researcher developed ten (10) questions to identify the major home environment challenges that influence the dimensions of child development in preschool children.

These items used to assess the home environment challenges are part of the questionnaire and they are measured on a 5-Point Likert scale. The researcher has identified these items based on the experience and from different researches. When we visualize the overall challenges (table 4.18 below), the total questions mean response was than 3.00 and Standard deviations were less than 1.00.

Table 4. 19: Home environment challenges that influence the dimensions of child development

Items	N	Mean	Std. Deviation
Lack of awareness about child development	254	3.32	1.095
Lack of materials that can promote child development	254	4.01	.917
Lack of adequate family income	254	4.32	.732
Unable to support the child because of low family education background	254	2.69	1.068
Shortage of time to support children at home	254	2.74	1.233
Family instability (e.g., divorce, death etc.)	254	2.05	1.301
Unsafe physical home Environment	254	2.59	.976
Lack of encouragement	254	2.11	1.044
Child maltreatment (child abuse or neglect)	254	1.71	.983
Job instability of family	254	2.12	1.298
Valid N (list wise)	254		

Source: Primary data

Based on the table 4.19 above, respondents were asked to give their level of agreement about the home environment challenges that influence the dimensions of child development in preschool children. Thus, lack of adequate family income was a major home environment challenge on child development since the majority of the respondents with mean & standard deviation of 4.32 & .917 respectively provided an agreement. Moreover, the findings also indicated that lack of materials that can promote child development (mean response of 4.01 & standard deviation of 1.095) was

also the other major home environment challenge that has an impact on the development of children. Since the mean (3.32) of lack of awareness about child development is greater than the average mean (3.00), still it can be considered as the major home environment challenge for child development. But the rest of items' mean value is less than average (3.00) and the least likely home environment challenge for child development for preschool children at Debre Markos town.

To triangulate how the home environment factors, influence child development in preschool children, the researcher tried to collect qualitative data using interview and open-ended questions. So, the responses given by respondents are analyzed as follow:

The researcher asked parents whether there were materials that can promote child development at home and most of them replied as there were only letters which were posted on the wall. Some parents, who have relatively better income, replied as there were child books, toys, balls, games, and letters in their home for children. Still some parents replied that there was no any supportive material in their house for their children because of lack of enough income (their life is hand to mouth).

Parents were also asked if they support their children at home or not and some of them replied as they were supporting their children by encouraging to reading and writing, do homework, asking questions, advising, giving feedback, etc. particularly educated and government employed parents supported their child better. While others, particularly day workers and merchants did not support their children due to lack of time as they said. As they are relatively better in income, merchants provided better materials but did not give time and support their children due to shortage of time. Three parents replied that because of low education status/not educated that they could not support their children particularly in academic issues.

For the question raised whether parents allow their children to play with other children, those parents who have their own house replied that they allowed their children to play if the home environment is free from risk otherwise not. While other parents who did not have their own

house/live in rent house/ replied as they did not allow their children to play with other children because of absence of free space and fear of risky conditions. Few parents said that if the rented house has space and the environment is free from risk, they would allow their children to play. As parents told, children's absence of play with other children and limiting their involvement in different activities put influence on the development of children and become less active in social activities.

Still the researcher asked parents what measures they take when children make mistakes. Some parents, particularly educated, said that when children made mistakes, they advised rather than punished and they did it, when necessary, only. But few parents replied that they punish their children up on making mistakes even without telling why they punished them. All parents replied that there was no written rule in their house to guide children. They said that they know what children should do and not do so they did not have written rules.

On the other hand, the researcher also asked preschool teachers what were the major challenges children faced at home that could disturb them at preschool. All of the respondent teachers said that parent's quarrel front of children was the major challenge for children. Children, whose parents fight in front of them, frustrated at school, not follow properly, not play, not eat their food; in short, they become inactive and unhappy and rehearse what they saw at home throughout the day.

In addition, teachers were also asked whether there were differences among children in their development as a result of parents' difference in economic status and educational back ground. They replied that in both cases there were differences, for example parents with better economic status can provide better facilities including better feeding. To the reverse parents with low economic status could not provide /though they need/the necessary materials for their children including food. As teachers said, to some extent housewife mothers could treat and support their children better since they do have time.

Teachers also said, relatively educated parents support their children in doing homework and follow up their children. But parents who cannot write and read and most merchant parents could not support and follow their children due to shortage of time and lack of awareness about child

Development. In addition, teachers said that children who live either of the parents/due to quarrel or divorce were strongly affected and could not follow attentively and feel unhappy.

4.2. Discussion

This part of the study discusses the outcomes of the study presented in the result. It mainly discussed focusing on the relationship between home environment and dimensions of child development, the extent to which home environment factors predict the dimensions of child development, demographic determinants (Sex, Family Educational Levels and type of job) variation in dimensions of child development and the major home environment challenges that influence the dimensions of child development.

The Relationships between Home Environment and Dimensions of Child Development

Home environment predicts child development

Research finding revealed that family and home environment have a significant influence on the development of children (Biedinger, 2011). The quality and quantity of stimulation and support available in the early home environment is a key predictor of healthy cognitive and socio-emotional development. For example, home environment factors such as maternal warmth, sensitivity, responsiveness toward the child, family organization and the availability of resources and learning materials are important predictors of child development and may account for differences in children's outcomes (Orri et al., 2019). Research results showed that home environment, socioeconomic status and maternal intelligence, are connected with each other in affecting the different domains of early child development. Children who grow up in families with lower socioeconomic status are at increased risk of reduced psychological well-being and emotional and cognitive development (Ronfani et al., 2015). The finding of similar studies indicated that the physical environments experienced by children have important impacts on their cognitive and socio-emotional development (Ferguson, Cassells, MacAllister & Evans, 2013).

In line with this, the regression result of this research revealed that the home environment variables of physical environment, social environment, academic support and psychological environment had positive and significant relationship with social development. Among the four independent

variables, psychological environment has greater impact on social development. This means if 56 psychological environment is found to be of good quality, there would be better social development in preschool children. Otherwise, the reverse would happen.

The regression result demonstrated that physical home environment, social environment, academic support and psychological environment were found to be significant and positively correlated with physical development. Among the four independent variables, relatively physical environment has greater impact on physical development. This is supported by research conducted by Kim T. ital. (2013) as the physical environment experienced by children impacts their physical, cognitive and socio emotional development across the life span, from the prenatal period through adulthood. This indicates that the presence of good quality physical environment resulted in encouraging development in preschool children.

The regression result demonstrated that social environment, physical environment, academic support and psychological environment were found to be significant and positive with psychological development. Among the four independent variables, social environment has greater impact on the preschool children's psychological development.

According to National Scientific Council on the Developing Child (2004), it is stated that cooperative interactions with others, Sensitive and responsive parent/caregiver-child relationships (which are part of social environment) are associated with stronger cognitive skills, enhanced social competence and has connection with social/emotional development and intellectual growth. To the contrary, young children who grow up in seriously troubled families, poor quality of care especially those who are vulnerable temperamentally, are prone to the development of behavioral disorders and conduct problems. This implies that the better the social environment, will be the greater the psychological development in preschool children.

The research result also revealed that Physical environment, social environment, academic support and psychological environment had significant and positive relationship with cognitive development. From this result, we can see that among the four independent variables, academic support has greater impact on the preschool children's cognitive development.

Demographic determinants (Sex, Family Educational Levels and type of job) variation in dimensions of child development

The research also discussed educational level, sex and type of job of respondents across dimensions of child development. So, the result revealed that there was no statistically significant mean difference between educational levels and social development, physical development and cognitive development whereas there was a statistically significant mean difference between educational levels and psychological development. Here the difference mean on illiterate respondents is low while the mean difference on respondents with diploma and second-degree holders were found to be high. This implies that education has positive effect on the psychological development of children. According to Dubow, Boxer and Huesmann (2009), parental educational level was highly related to children's education and their development. Better educated parents tend to provide more positive home environments and psychological treatment.

On the other hand, there was no significant difference between male and female respondents in all dimensions of child development. This means gender difference has no any effect on child development. That means both male and female parents can play similar role for the development of children.

In relation to type of job, the findings (quantitative) of this research revealed no significance difference across respondents' type of job (merchant, government employee, private employee, day workers) in all dimensions of development. But the qualitative result obtained from preschool teachers indicated that government employees relatively better treated and supported their children which has positive role for child development.

Major home environment challenges that influence the dimensions of child development

This part of the result discusses the major home environment challenges that influence child development which were taken from both quantitative and qualitative findings.

The quantitative result demonstrated that lack of adequate family income was a major home environment challenge on child development. Family income and economic well-being are important predictors of children's well-being (Berger, Paxson and Waldfogel, 2009 & Mayer,

1997). Low-income children are more likely to face poor quality home environments, across multiple domains. The findings also indicated that lack of materials and lack of awareness were the second and third major home environment challenge that has an impact on the development of children respectively for preschool children at Debre Markos town. From this it is possible to understand that most of the time parents with low economic income and education level send their children to government preschools. Second the improvement of family's income and better awareness on child development would minimize the home environment challenges on child development.

To develop their full potential, children need safe and stable housing, nurturing and responsive parenting, high-quality learning opportunities, supportive social environments and access to resources within the home to enhance cognitive, socio-emotional, and physical development (Bronfenbrenner, 2001 as cited in, Yoon, Aimee & Merry, Joseph (2017). However, the result from qualitative data from parents showed that in most of the respondent's home there were no enough/even no supportive materials for preschool children that could facilitate learning and development.

The qualitative result from parents also showed that because of lack of awareness about child development most of the respondents did not support their children either by providing the necessary materials or by encouraging and supporting in academic issues. Relatively educated parents supported in academic issues while parents with better income can provide supportive materials. In general, economic problems and lack of awareness about child development prohibit respondents not to provide the necessary material, no to properly support, not to treat well and not to invest their parenthood responsibility as required. This is stated under the national policy of Ethiopia that low socio-economic backgrounds and lack of awareness about the value and type of care and education of young children by parents affects their development (MOE, 2010).

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In similar manner, the result from preschool teachers also indicated that the major home environment challenges were low economic income of parents, parents' quarrel in front of children, lack of materials that can promote child development, lack of awareness about home environment and child development, some parents considering the preschools as stay place only, and lack of time were major home environment challenges that have an impact on the development of children who were at preschool age

From all the respondents' responses, the researcher generally understood that the responses obtained from parents and preschool teachers were almost similar and ensured that there was positive relation between home environment and child development. Except few, majority of the respondents did not understand what home environment and child development mean, they were

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also in serious economic problems. Because of this, they could not full fill the interest of their children including food and clothing. Among other things, Parents' quarrel in front of their children strongly affected the emotions of children. These in turn affected child development.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter presents summary of the findings, conclusions, recommendations and implications of the results. Based on this, the first part presents the summary of the findings; the second part presents the conclusions of the study; the third part presents recommendations; the fourth part presents the implications and finally, the last part presents possible future research areas.

5.2. Summary

This study was guided by four research questions:

1. What is the relationship between home environment and dimensions of child development in preschool children at Debre Markos town?
2. To what extent can home environment (Physical, Social, Academic Support, and psychological environment) predict the dimensions of child development (physical, cognitive, social and emotional/Psychological development of children) in preschool children in Debre Markos town?
3. Are there any significant variations in dimensions of child development across demographic determinants (Sex, Family Educational Levels and type of job) among preschool children in Debre Markos town?
4. What are the major home environment challenges that influence the dimensions of child development in preschool children in Debre Markos town?

The main purpose of this study was to examine relations of home environment and child development, home environment challenges and home environment factors that predict the dimensions of child development in preschool children at Debre Markos town.

The data collection instruments were questionnaire and interview. Before the data has been collected, the pilot study was done and checked the reliability of the instruments using the Cronbach's Alpha. Then after, the data was collected from the respondents. A total of 273 questionnaires were distributed to parents of preschool children and 264 questionnaires were

returned and ten were discarded due to incompleteness. Semi-structured interviews were also conducted to collect additional data in order to triangulate the response of the questionnaires. Data collected from the interviews were interpreted qualitatively accordingly. In analyzing the data from interviews and open-ended questions, narrative approaches including interpretations from respondents were used.

The collected data was analyzed using different methods depending on the type of research questions. The methods that were employed were mean, standard deviation, correlation and multiple linear regressions.

The Relationship between Home Environment and Dimensions of Child Development

The analysis result showed that all the independent variables (physical home environment, social environment, academic support environment and psychological environment) were significantly and positively correlated with the dimensions of development. They have direct relationship.

The predictability of Home Environment on Dimensions of Child Development

The regression analysis revealed that all home environment factors have a positive statistically significant relationship on all dependent variables. They all predict the dimensions of development. All home environmental factors (Social, physical, academic support and psychological) were found to be significant and positive with social development. The home environment has affected or predicted the development of the preschool children. This result supported by Karyn (2012). According to Karyn (2012) a child's physical environment can directly affect all areas of their development, regardless of where they live. According to Evans (2013), the physical environments experienced by children have important impacts on their cognitive and socio-emotional development. An individual's social environment, including the social relationships an individual makes within it, can also have a profound impact on the quality of parenting, which in turn affects a child's health development and future achievements.

Demographic determinants (Sex, Family Educational Levels and type of job) variation in dimensions of child development

The research also discussed educational level, sex and type of job of respondents across dimensions of child development. So, the result revealed that there was no statistically significant mean

difference between educational levels and social development, physical development and cognitive development whereas there was a statistically significant mean difference between educational levels and psychological development. The difference means on parents who cannot write and read respondents was low while the mean difference on respondents with diploma and second-degree holders were found to be high. This implies that education has positive effect on the psychological development of children.

On the other hand, there was no significant difference between male and female respondents in all dimensions of child development. This means gender difference has no any effect on child development.

In relation to type of job, the findings (quantitative) of this research revealed no significance difference across respondents type of job in all dimensions of development. But the qualitative result obtained from preschool teachers indicated that government employees relatively better treated and supported their children which has positive role for child development.

Home environment challenges that influence the dimensions of child development

Respondents were asked to give their level of agreement about the home environment challenges that influence the dimensions of child development in preschool children. Lack of adequate family income was found to be the major home environment challenge for the dimensions of child development. Moreover, the findings also indicated that parents' quarrel in front of children, lack of materials that can promote child development, lack of awareness about home environment and child development, some parents considering the preschools as stay place only, lack of time to support children, and un comfortable home physical environment are other major home environment challenges that have an impact on the development of children who were at preschool age.

5.3. Conclusion

The study was conducted on home environment and child development on preschool children in Debre Markos town. Under home environment different variables such as physical, social academic support and psychological environment were included. On the other hand, with in child development, physical, cognitive, social and psychological development were variables

included. To answer the research questions, data was collected and analyzed using quantitative and qualitative techniques. So, based on the analysis result, the following conclusions were made.

It is clear that home environment is a basic foundation across dimensions of child development. The findings of this research indicated that there was significant and positive relationship between home environment and child development. Home environment factors also predicted/ affected child development. Therefore, the improvement of home environment quality could promote the development of preschool children.

Different researches (as mentioned under chapter one) and the findings of this research showed that child development has direct relation with level of parental education. Based on this, the improvement of educational level of parents improves children development.

The findings of this research also revealed that parents lacked awareness about home environment, child learning and development and lived with low family income. As a result, they could not treat and support their children as required. From this it is possible to conclude that home environment challenges have their own impact on the development of children.

5.4. Recommendations

The study was aimed to examine the relationship between home environment and dimensions of child development in preschool children in Debre Markos town. Thus, data was collected through different appropriate data collection instruments and analyzed by using different data analysis techniques and major conclusions were drawn based on the analysis. Based on this, the researcher forwarded the following recommendations for different stakeholders.

5.4.1. Recommendations for Parents

It is already known that parents are the primary agents for the development of children. So, the role that is expected from parents takes the lion share. However, as the findings of the research indicated, because of lack of awareness about child development, parents quarrel in front of children, do not give time and other necessary materials for children, give less value for child education, etc. These and other conditions negatively affected child development. Therefore,

- Parents should understand that childhood is a basic foundation for the child's current and future development. So, they should understand this fact and should give attention and the necessary treatment for their children and as much as possible.
- Parents are expected to participate and involve themselves in programs prepared to create awareness on child related affairs; follow media (particularly Ethiopia Lijoch TV parents' program) in order to develop better awareness about child development.

5.4.2. Recommendations for preschool Teachers

As the findings from preschool teachers showed, parents lacked awareness about child development. Because of this they could not treat them properly. So, by discussing with the principal, preschool teachers should make continuous discussion with parents in order to create awareness for parents on how to take care of their children and improve the home environment. Preschool teachers should also try to give special treatment for children who might face different influences from the family/at home.

5.4.3. Recommendations for government (Regional and Woreda educational bureaus)

As the findings of the research indicated, most of the parents did not have awareness about what home environment and child development mean. Because of this they could not properly treat their children even those parents with relatively better income and educated. So, regional, woreda education bureaus and preschools should create awareness for parents since parents are the first and nearest agents of children. Without parental involvement, preschools cannot achieve their objectives. Therefore, responsible government bodies should take the responsibility and create awareness through different means such as meeting, media, home to home visit, etc.

5.5. Implications for Future Research/Directions for Future Research

- ✓ As far as the researcher's knowledge was concerned, there was no research conducted on home environment and child development in Ethiopia. Because of this there was no/little awareness about the issue. This limitation on the issue in turn limited the role that could be played by parents, government bodies and other stakeholders. Therefore, as childhood is the

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foundation for future development in every aspect, the researcher highly recommended researchers to conduct further researches on early childhood care and education in general and home environment and child development in particular in wide scope both in urban and rural areas, on the basis of gender, etc.

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11	you tell story to the child					
12	There are Child toys which teach colors, size and shape.					
13	There is/are child books for your child					
14	Child is encouraged to read on his own					
15	Child is encouraged to learn numbers					
16	you respond to child's questions					
	Psychological Environment					
21	Child is taken or outing by a family member at least every week					
22	Parent shows some positive emotional response to praise child.					
24	parent punish the child for every rule broken or not followed					
25	Parent does not use physical restraint during visit					
26	you respect your child's privacy					
27	Child can express negative feelings without harsh reprisal					

Child Development Questionnaire

The following statements describe the status of your child development. So, you are kindly required to give response that can describe your real and current child development and put a tick mark (√) based on your level of agreement

Key: [1] Strongly Disagree [2] Disagree [3] Average
 [4] Agree [5] Strongly Agree

No	Items	1	2	3	4	5
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Social Development						
	5 years age					
1	Child tells ideas and listens to other children's ideas.					
2	Child makes excuses for mistakes					
3	Child easily gets into conflicts with children of the same age.					
4	Child has shown difficulty in playing with other children					
5	Child gets very worried/upset by small changes to his/her daily routine					
6	You and other people can understand most of what your child say					
9	Plays different simple playing such as 'kukulu'					
10	Difficulty understanding the feelings of other people					
11	Often quarrels with peers					
12	Difficulty to participate in group activities					
13	Gets very upset by tiny changes in daily routines					
14	Eye contact in face to face situations is abnormal or missing					
Physical development						
	5 years Age					
15	Hops around on one foot without support.					
16	Has difficulty throwing and catching a big ball.					

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17	Has difficulty using a spoon.						
18	Cuts across paper with scissors from one side to the other.						
19	Has difficulty using, assembling and handling small objects.						
20	Draws pictures of people that have at least three parts, such as head, eyes, nose, mouth, hair, body, arms, or legs.						
21	Has difficulty buttoning buttons when getting dressed.						
22	Your child can walk, run and climb like other children of similar age						

	6 years age						
23	Difficulty throwing and catching a ball						
24	Difficulty running fast						
25	Balance problems; for instance, has difficulty standing on one leg						
26	Difficulty handling, assembling and manipulating small objects						
27	Difficulty pouring water into a glass without spilling						
28	Often spills food onto clothes or table when eating						
30	Difficulty buttoning or tying shoe-laces						
31	Immature pencil-grip, holds the pen in an unusual manner						
	Emotional development						
	5 years age						
32	Feel anxious.						

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33	Shows fears in many situations					
34	Gets very worried/upset by small changes to his/her daily routine					
35	Often refuses to follow the orders of adults.					
36	Doesn't forget when he/she has been wronged					
37	More shy than children of the same age.					
	6 years age					

38	Difficulty expressing emotions and reactions with body language					
39	easily distracted or disturbed					
40	Bowel and bladder problems, toilet training.					
41	Does not talk well for age.					
42	Does not pay attention; poor listener.					
43	Seldom plays with other children.					
44	Lacks self-confidence;					

For the following questions use

[1]. Highly inapplicable [3] Moderately applicable

[2] Inapplicable [4] applicable [5] Highly Applicable

Cognitive development						
	5 years age					
45	Read familiar books.					

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46	Difficulty in remembering names of friends or familiar toys.					
47	Names at least five letters of the alphabet.					
48	Recites the alphabet, in order, without help.					
49	Differentiates different size (e.g. big/small, long/short)					
50	Recites numbers in order from 1 to 10.					
51	Knows how many fingers there are on each hand.					
52	Knows what "half" means.					
	6 years age					
53	Count 1-15 without making mistakes					
54	Difficulties shaping letters and to write neatly					
55	Child know the names of letter when you show it					
56	Writes a few simple words from paper.					
57	Recognizes and names all the letters in the alphabet					
58	Reads four or more words.					
59	Recites numbers in order from 1 to 30					
60	Answers arithmetic questions such as "How much is 2+2? 1+4? 3+6?" -1? 4-2? 6-3?"					

Part IV: Challenges

The following statements describe challenges of child development at your home environment.

So, you are kindly required to give response that can describe the challenges on child

development in your home and put a tick mark (√) based on your level of agreement.

Key: [1] very low [2] low [3] Average [4] high
[5] very high

No	Items	1	2	3	4	5
1	Lack of awareness about child development					
2	Lack of materials that can promote child development					
3	Lack of adequate family income					
4	Unable to support the child because of low family education background					
5	Lack of time to support children at home					
6	Family Instability (e.g. divorce, death, etc.)					
7	Un safe Physical home Environment					
8	Lack of Encouragement					
9	Child maltreatment (child abuse or neglect)					
10	Job instability of family					

Part IV: Open-Ended Questions

1. In relation to physical environment, what facilities are available to promote your child development at your home?

2. To What extent is the social interaction of your child with in the family at home or with other children?

3. In what way do you support your child in relation to academic issues at home?

4. How do you keep your child's psychology at home?

5. What are the major challenges that influence child development in your home?

Appendix B

Addis Ababa University College of Education and Behavioral Studies Center for Early Childhood Care and Education

Interview questions for parents

Dear respondents, kindly I would like to inform you that the purpose of this interview is to collect data for the research which is conducted on “**The Relationship between home environment and dimensions of child development in preschool children in Debre Markos town**”. I would like to assure that this data are collected for academic purpose only and would not affect any of your life. Any information given by you will be kept strictly confidential. Hence, I believe that you will provide genuine and timely response for the success of this research.

1. What do you understand about home environment?
2. What do you understand about child development?
3. Do you think your home environment is comfortable and safe for child development?
Describe your answer
4. Are there materials in your home that can support child development? E.g. books, toys, letters, games etc.
5. Do you support your child at home by advising, supporting in doing home work giving comment, listening questions etc. How?
6. Do you allow your child to play with other children? Why or why not?
7. Do you punish your child in case of making mistakes? Why or why not?
8. Is there any rule for children in your home? If yes, what and why?
9. What other challenges you observe from your home that influence child development

Thank you for your cooperation!

Interview questions for preschool teachers

1. Do you think that parents do have awareness about home environment and child development?
2. What major challenges/problems you observe on children which they face at home and could disturb them at preschool.
3. Do you think parents' difference in income; profession and educational status bring difference on the education and development of children?

Thank you for your cooperation!

Appendix C

አዲስ አበባ ዩኒቨርሲቲ

የትምህርትና ባህሪ ጥናት ኮሌጅ

የቅድመ መደበኛ እንክብካቤና ትምህርት ማእከል

ለወላጆች የተዘጋጀ መጠይቅ

የተከበሩ የመጠይቁ ተሳታፊ የዚህ መጠይቅ አላማ በመኖሪያ ቤት አካባቢያዊ ሁኔታ እና በልጆች እድገት መካከል ያለውን ግንኙነት ለማጥናት ግብአት የሚሆን መረጃ ለመስብስብ ነው። ስለሆነም ለሚጠየቁት ጥያቄ ተገቢ ምላሽ ይሰጡ ዘንድ በአክብሮት እጠይቃለሁ። የሚሰጠው መረጃ ሚስጥራዊነት የተጠበቀ ነው፤ እርስዎ ለሚሰጡት ግልጽና ቅንነት የተሞላበት ምላሽ በጣም አመሰግናለሁ።

ክፍል አንድ- አጠቃላይ መረጃ

መመሪያ - አማራጭ መልስ ላላቸው ከስሩ ያስምሩበት፤ ለሌላቸው መጠይቆች ደግሞ በተሰጡት መስመሮች ላይ መልስዎን አጭር እና ግልጽ በማድረግ ይጻፉ። በመጠይቁ ላይ ስም መጻፍ አያስፈልግም

- 4. ጾታ:- [1] ሴት [2] ወንድ
- 5. የትምህርት ደረጃ - [1] ምንም ያልተማሩ [2] ከ1- 8 ባለው የተማሩ
- [3] 9-12 የተማሩ [4] 10+3
- [5] 12+2 ሰርተፍኬት [6] ቢኤ/ቢኤስሲ ድግሪ
- [7] ሁለተኛ ድግሪ [8] ሌላ ካለ ይጠቀስ

- 3. ወርሃዊ ገቢ [1] 1000 ብር በታች [2] 1000-2000 ብር [3] 3000-4000 ብር.
- [4] 5000-6000 ብር [5] ከ6000 ብር በላይ

- 4. ስራ [1] የመንግስት ሰራተኛ [2] የግል ተቋም ተቀጣሪ/ሰራተኛ [3] ነጋዴ
- [4] ሌላ ካለ ይጠቀስ _____

- 5. የልጅዎ እድሜ [1] 5 አመት [2] 6 አመት

- 6. KG ደረጃ _____

ክፍል -ሁለት የመኖሪያ ቤት ውስጥ/ከባቢያዊ ሁኔታ መጠይቅ/ Home Environment

Questionnaire

የሚከተሉት አረፍተ ነገሮች የቤትዎን ውስጥ/ከባቢያዊ ሁኔታ የሚገልጹ ናቸው። ስለሆነም በመጠይቆች ላይ በመመስረት ትክክለኛ ምላሽ ይስጡ። ለመመለስ ከመረጡት አማራጭ ፊትለፊት (✓) ምልክት ይጠቀሙ።

መፍቻ: [1] በጣም አልስማማም [2] አልስማማም [3] ለመወሰን እቸገራለሁ
[4] እስማማለሁ [5] በጣም እስማማለሁ

ዝርዝር						
አካባቢያዊ ገጽታ /Physical Environment /		1	2	3	4	5
1	የመኖሪያ ቤት /ህንጻና ግቢ/መጫወቻ ቦታ ከአደጋ ነጻና ምቹ ናቸው።					
2	በህጻናት ክፍል ውስጥ ስእሎች /የግድግዳ ጌጦች አሉ።					
3	የህጻናት ክፍሎች በተለያዩ ቁሳቁሶች/ወንበር፣ ጠረጴዛ፣ወ.ዘ.ተ./የተጨናነቁ አይደሉም።					
4	የህጻናት የፈጠራ ውጤቶች/ስእሎች በሚመች/በሚታይ ቦታ ላይ ተቀምጠዋል።					
5	ህጻናትን ከሚረብሹ ነገሮች ነጻ የሆነ የጥናት ቦታ አለ።					
ማህበራዊ አካባቢ/Social Environment /						
6	ልጅዎን ከእኩዮቹ/ቿ ጋር መልካም ግኙነት እንዲመሰርት/እንድትመሰርት ያግዛሉ።					
7	በሳምንት ውስጥ ከልጅዎ ጋር የተወሰነ ጊዜ ያሳልፋሉ።					
8	ቤት ውስጥ በሚነሱ የተለያዩ ጉዳዮች በልጅዎ ፊት ይጋጫሉ/ ይጣላሉ።					
9	በተለያዩ ጉዳዮች ልጅዎን ጥያቄ ይጠይቃሉ። አስተያየት/ ሃሳብ ይሰጣሉ።					
10	ከልጅዎ ጋር ወደ ውጭ ይወጣሉ/ይዝናናሉ።					
ትምህርታዊ ድጋፍ/Academic support						

11	ለልጅዎ ተረት/ታሪክ ይነግራሉ።					
12	በቤትዎ ስለ ቀለም አይነቶች፣የተለያዩ መጠንና ቅርጽ ለልጅዎ የሚያስተምሩ አሻንጉሊት/ቶች አሉ።					
13	ለልጅዎ የህጻናት/የተረት መጻሕፍት አለ/ሉ።					
14	ልጅዎ ራሱን/ዋን ችሎ/ላ እንዲያነብ/ታነብ ይበረታታል/ትበረታታለች።					
15	ልጅዎ ቁጥሮችን ኢንዱያዊ/ታወቅ ይበረታታል/ች ።					
16	ለልጅዎ ጥያቄ ምላሽ ይሰጣሉ ።					
	የሰነልና አካባቢ/Psychological Environment					
21	ልጅዎ ቢያንስ በሳምንት አንድ ጊዜ ከቤተሰብ ጋር ወደ ወጭ/ለመዝናናት ይወጣል/ትወጣለች።					
22	ልጅዎን ለማድነቅ አዎንታዊ እይታ/አመለካከት ያሳያሉ።					
24	ለሚፈጸሙ እያንዳንዱ ጥፋት/ትእዛዝን አለማክበር ለልጅዎን ይቀጣሉ።					
25	በጉብኝት/በጨዋታ ወቅት ለልጅዎ በነጻነት እንዲንቀሳቀስ ይፈቅዳሉ።					
26	የልጅዎን ግላዊ መብት/ነጻነት ያከብራሉ።					
27	ልጅዎ አሉታዊ ስሜቶችን/ጥፋቶችን ያለ መሳቀቅ መግለጽ ይችላል/ትችላለች።					

ክፍል ሶስት: የህጻናት እድገት መጠይቅ/Child Development Questionnaire

የሚከተሉት አረፍተ ነገሮች የልጅዎን የእድገት ደረጃ የሚገልጹ ናቸው። ስለሆነም በመጠይቆች ላይ በመመስረት ትክክለኛ ምላሽ ይስጡ። ለመመለስ ከመረጡት አማራጭ ፊትለፊት (✓)ምልክት ይጠቀሙ። ጥያቄውን ሲሞሉ የልጅዎን እድሜ የሚመለከተውን ብቻ መርጠው ይሙሉ። ለምሳሌ ለልጅዎ ከ4-5 አመት ወስጥ ከሆነ በዚህ ስር ያሉትን ብቻ ይሙሉ ማለትም ከ5-6 አመት ስር ያለውን አይሙሉ፤ ለልጅዎ ከ5-6 አመት ከሆነ ደግሞ በዚህ ስር ያለውን ብቻ ይሙሉ፤ ከ4-5 ያለውን አይሙሉ

መ ፍቻ : [1] በጣም አልስማማም [2] አልስማማም [3] ለመወሰን እቸገራለሁ
 [4] እስማማለሁ [5] በጣም እስማማለሁ

No	ዝርዝር/Items	1	2	3	4	5
ማህበራዊ እድገት /Social Development						
5 ዓመት						
1	ልጅዎ ሃሳቡን ይገልጻል/ትገልጻለች፤ የሌሎችን ሃሳብ ያዳምጣል/ታዳምጣለች።					
2	ልጅዎ ስህተት ሲፈጥር/ስትፈጥር ይቅርታ ይጠይቃል/ትጠይቃለች።					
3	ልጅዎ ከእድሜ አቸዎች ጋር በቀላሉ ወደ ግጭት ይገባል/ትገባለች።					
4	ልጅዎ ከሌሎች ልጆች ጋር ለመጫወት ይቸገራል/ታቸገራለች።					
5	ልጅዎ በአለት ከአለት እንቅስቃሴ በሚያጋጥሙ ቀላል ችግሮች ይጨነቃል/ትጨነቃለች።					
6	ልጅዎ የሚናገረውን/የምትናገረውን አብዛኛውን ሃሳብ እርስዎና ሌሎች ሰዎች ይረዳሉ።					
6 ዓመት						
9	ልጅዎ ቀለል ያሉ እንደ ኩኩሉ ያሉ የተለያዩ ጨዋታዎችን መጫወት ይችላል/ትችላለች።					
10	ልጅዎ የሌሎችን ሃሳብ ለመገንዘብ ይቸገራል/ትቸገራለች።					
11	ልጅዎ ከእኩዮች/ጓደኞች ጋር አዘውትሮ/ራ ይጣላል/ትጣላለች።					
12	ልጅዎ በጋራ ተግባራት ለመሳተፍ ይቸገራል/ትቸገራለች -ለምሳሌ በቡድን ጨዋታ።					
13	ልጅዎ በአለት ተአለት በሚፈጠሩ ትንንሽ ለዉጦች ይረበሻል/ትረበሻለች።					
14	ልጅዎ ፊት ለፊት ላማየት ይቸገራል/ትቸገራለች።					

	አካላዊ እድገት/Physical development					
	5 ዓመት					
15	ልጅዎ ያለ ድጋፍ በአንድ አግሩ/ሯ መዝለል ይችላል/ትችላለች።					
16	ልጅዎ ትልቅ ኳስ ለመወርወርና ለመያዝ ይቸገራል/ትቸገራለች።					
17	ልጅዎ ማንኪያ ለመያዝ/ለመጠቀም ትቸገራለች/ይቸገራል።					
18	ልጅዎ ወረቀት ከአንድ ጫፍ ወደ ሌላ ጫፍ በመቀስ ይቆርጣል /ትቆርጣለች ።					
19	ልጅዎ ትናንሽ ነገሮችን/መጨወቻ ጌሞችን መጠቀም፣ መገጣጠምና መፈታታት ትቸገራለች/ይቸገራል።					
20	ልጅዎ ቢያንስ ሶስት የሰውነት ክፍሎችን ሊያሳይ የሚችል ስእል መሳል ትችላል/ይችላል/ምሳሌ አይን፣ ጀሮ ፣አጅ ፣አፍንጫ...።					
21	ልጅዎ የለበሰችውን/የለበሰውን ልብስ ቁልፍ ለመቆለፍ ትቸገራለች/ይቸገራል።					
22	ልጅዎ እንደ እኩዮቹ/ቿ መራመድ፣ መሮጥና መወጣት/መወረድ ይችላል/ትችላለች።					
	6 ዓመት					
23	ልጅዎ ኳስ ለመወርወርና ለመያዝ ትቸገራለች/ይቸገራል።					
24	ልጅዎ በፍጥነት ለመሮጥ ትቸገራለች/ይቸገራል።					
25	ልጅዎ ሚዛኗን/ኑን ጠብቃ /ጠብቆ በአንድ አግሯ/ሩ ለመቆም ትቸገራለች/ይቸገራል።					
26	ልጅዎ ትናንሽ ነገሮችን መያዝ፣ መገጣጠምና መፈታታት ይቸገራለች/ትችላለች ።					
27	ልጅዎ ወሃ ሳያንጠብጥብ /ሳታንጠባጥብ ወደ ብርጭቆ ለመጨመር ትቸገራለች/ይቸገራል።					

Home Environment and Dimensions of Development at Preschool Children

28	ልጅዎ ምግብ ሲመጥን/ ስትመጥን ልብስ/ጠረጴዛ ላይ ያንጠባጥባል/ታንጠብጥባለች						
30	ልጅዎ የጫም ማሰሪያ ለማሰር ይቸገራል/ትቸገራለች						
31	ልጅዎ እርሳስ /እስክርቢቶ በአግባቡ አይዝም/አትይዝም						
	ስሜታዊ እድገት/Emotional development						
	5 ዓመት						
32	ልጅዎ ይጨነቃል/ትጨነቃለች						
33	ልጅዎ በብዙ ሁኔታዎች ይፈራል/ትፈራለች						
34	ልጅዎ በትናንሽ ለውጦች ይሸበራል/ይጨነቃል/ትጨነቃለች/ትሸበራለች						
35	ልጅዎ የትላልቆችን ትእዛዝ አያከብርም/አታከብርም						
36	ልጅዎ ስህተት ከፈጸመ/ች በቀላሉ አይረሳም/አትረሳም						
37	ልጅዎ ከእኩዮቹ/ቿ የበለጠ አይናፋር ነው/ናት						
	6 ዓመት						
38	ልጅዎ ስሜቱን/ቷን በአካላዊ ምልክት ለመግለጽ ይቸገራል /ትቸገራለች ምሳሌ በእጅ						
39	ልጅዎ በቀላሉ ይረበሻል/ትረበሻለች						
40	ልጅዎ ሽንትን ለመቆጣጠር/ በአግባቡ ለመጸዳዳት ይቸገራል/ትቸገራለች						
41	ልጅዎ እንደ እድሜው ማወራት ይቸገራል/ትቸገራለች						
42	ልጅዎ ለነገሮች ትኩረት ያለመስጠትና በአግባቡ ያለ ማዳመጥ ችግር አለበት/አለባት						

43	ልጅዎ ከሌሎች ልጆች ጋር ሁሉ አይጫወትም/አትጫወትም					
44	ልጅዎ በራስ የመተማመን ችግር ይታይበታል/ይታይባታል					

የሚከተሉት አረፍተ ነገሮች የልጅዎን አእምሮአዊ እድገት የሚገልጹ ናቸው። ስለሆነም በመጠይቆች ላይ በመመስረት ትክክለኛ ምላሽ ይስጡ። ለመመለስ ከመረጡት አማራጭ ፊትለፊት (✓) ምልክት ይጠቀሙ።

መ ፍቻ : [1] በጣም አይተገበርም [2] አይተገበር [3] በመጠኑ ይተገበራል

[4] ይገተበራል [5] በጣም ይተገበራል

አእምሮአዊ እድገት/ Cognitive development						
	5 years age					
45	ልጅዎ የሚታወቁ መጽሐፍትን ማንበብ ትችላለች/ይችላል።					
46	ልጅዎ የጓደኞችን/የተለመዱ አሻንጉሊትን ስም ለማስታወስ ትችላለች/ይችላል።					
47	ልጅዎ ቢያንስ አምስት የእንግሊዝኛ ፊደሎችን መጥራት ትችላለች/ይችላል።					
48	ልጅዎ የእንግሊዝኛ ፊደሎችን በቅደም ተከተል ያል እገዛ መዘርዘር ትችላለች/ይችላል።					
49	ልጅዎ የተለያዩ መጠን መለየት ትችላለች/ይችላል።					
50	ልጅዎ ከ1-10 ያሉ ቁጥሮችን በቅደም ተከተል መዘርዘር ትችላለች/ይችላል።					
51	ልጅዎ በእያንዳንዱ እጅ ስንት ጣቶች እንዳሉ ማወቅ ትችላለች/ይችላል።					
52	ልጅዎ ግማሽ ማለት ምን ማለት እንደሆነ ያወቃል/ታወቃለች።					
	6 ዓመት					
53	ልጅዎ ከ1-15 ያለ ስህተት መቁጠር ትችላለች/ይችላል።					

54	ልጅዎ የፊደሎችን ቅርጽ ሳይበላሽ ለመጻፍ ይቸገራል/ትቸገራለች።					
55	ልጅዎ ፊደሎችን ሲያይ/ስታይ መለየትና መጥራት ትችላለች/ይችላል።					
56	ልጅዎ የተወሰኑ ቀላል ቃላትን ከወረቀት መጻፍ ትችላለች/ይችላል።					
57	ልጅዎ ሁሉንም የእንግሊዝኛ ፊደሎች ማወቅና መጥራት ትችላለች/ይችላል።					
58	ልጅዎ አራትና ከዚያ በላይ ቃላትን ማንበብ ትችላለች/ይችላል።					
59	ልጅዎ ከ1-30 ያሉ ቁጥሮችን በቅደም ተከተል መጻፍ ትችላለች/ይችላል።					
60	60. ልጅዎ 2+2፣ 1+4 የመሳሰሉ ሂሳባዊ ጥያቄዎችን መስራት ትችላለች/ይችላል።					

ክፍል አራት፡ ተጽኖዎች/ Challenges/

የሚከተሉት ጥያቄዎች የሚያተኩሩት በቤት ውስጥ/አካባቢ በልጅዎ እድገት ላይ ተጽኖ ሊፈጥሩ በሚችሉ ሁኔታዎች ላይ ነው። ስለሆነም ለሚጠየቁት ጥያቄ ተገቢ ምላሽ ይሰጡ ዘንድ በአክብሮት እጠይቃለሁ። ለመመለስ ከመረጡት አማራጭ ፊትለፊት (✓) ምልክት ይጠቀሙ።

Key: [1] በጣም ዝቅተኛ [2] ዝቅተኛ [3] መካከለኛ
[4] ከፍተኛ [5] በጣም ከፍተኛ

No	Items	1	2	3	4	5
1	ስለ ህጻናት እድገት የግንዛቤ ጥረት መኖር					
2	የህጻናትን እድገት ሊያሳለብቱ የሚችሉ ቁሳቁሶች(መጽሐፍት፣ አሻንጉሊት) እጥረት መኖር					
3	በቂ የቤተሰብ ገቢ አለመኖር					
4	የትምህርት ደረጃ ዝቅ በማለቱ / ባለመማር ምክንያት ጅምን በትምህርት ለማገዝ አለመቻል					
5	በቤት ውስጥ ልጅዎን ለማገዝ በቂ ጊዜ አለመኖር					
6	የቤተሰብ አለመረጋጋት ምሳሌ በሞት፣ በፍቅር ወዘተ ምክንያት					

7	ለአደጋ/ለስጋት የሚያጋልጥ የቤት አካባቢ መኖር					
8	ልጅዎን ማበረታታት አለመቻል					
9	ለልጅዎ ተኩረት አለመስጠት/ የማግለል ሁኔታ መኖር					
10	የስራ አለመረጋጋት መኖር/በስራ ቦታ/አይነት መቀያየር ምክንያት					

ክፍል አምስት: ለወላጆች የቀረበ ክፍት ጥያቄዎች/Open-Ended Questions

1. በቤትዎ ውስጥ/ አካባቢ የልጅዎን እድገት ሊያሳሉብቱ የሚችሉ ምንምን ነገሮች አሉ?

2. ልጅዎ ከቤተሰብ ወይም ከሌሎች ልጆች ጋር ምን ያህል ማህበራዊ ግንኙነት አለው/አላት?

3. ከትምህርት ጋር በተያያዘ ልጅዎን በቤት ውስጥ ያግዙታል/ያግዟታል? እንዴት?

4. በቤት ውስጥ የልጅዎን ስነልቦና ወይም ስሜት እንዴት/ምን በማድረግ ይጠብቃሉ?

5. በቤትዎ ውስጥ/አካባቢ በልጅዎ እድገት ላይ ተጽኖ የሚፈጥሩ አብይ ነገሮች ምን ምን ናቸው?

ከፍል ስድስት: ለወላጆች የቀረበ ቃለ-መጠይቅ

1. ስለ የቤት ከባቢ እና ልጅ እድገት/አስተዳደግ ያለዎት ግንዛቤ ምን ያህል ነው?
2. የቤት ከባቢ ሁኔታ ለልጅ እድገት/ አስተዳደግ ምቹ ነው ብለው ያምናሉ? እንዴት?
3. ለህጻናት እድገት አስተዋጽኦ የሚያደርጉ እንደ መጽሐፍት፣ መጫዎቻ፣ የፊደል ገበታ የመሳሰሉት በቤትዎ አሉ?
4. ልጅዎን በማዳመጥ፣ በመምከር፣ የቤት ስራ እንዲሰራ/ትሰራና እንዲያነብ/እንድታነብ በማድረግና በመሳሰሉት ያግዙታል/ዟታል?
5. ልጅዎ ከሌላ ልጅ ጋር እንዲጫወት/እንድትጫወት ይፈቅዳሉ/አይፈቅዱም? ለምን?
6. ልጅዎ ስህተት ስትፈጽም/ሲፈጽም ይቀጣሉ/አይቀጡም? ለምንና እንዴት?
7. በቤትዎ ውስጥ ለልጅዎ መመሪያ አዘጋጅተዋል/አላዘጋጁም? ካለ ምን አይነት? ለምን?
8. በቤትዎ ውስጥ በልጆች እድገት/አስተዳደግ ላይ ተጽኖ የሚያሳድሩ ምንምን ሁኔታዎች አሉ?

ከፍል ሰባት: ለቅድመ መደበኛ መምህራን የቀረበ ቃለ-መጠይቅ

1. ወላጆች ስለ ልጅ እድገት/አስተዳደግ ግንዛቤ አላቸው ብላችሁ ታስባላችሁ? በአግባቡ ይንከባከቡዎቻቸዋል?
2. በቤት ውስጥ የሚፈጠሩና ልጆችን ትምህርት ቤት ድረስ ተከትለው ተጽኖ የሚፈጥሩባቸው/የሚረብሻቸው ሁኔታዎች አሉ? ካሉ ምን ምን ናቸው? ምን ተጽኖ ይፈጥራሉ?
3. የወላጆች የትምህርት፣ የገቢና የስራ ልዩነት በልጆች ትምህርትና እድገት ላይ ልዩነት ይፈጥራል? ከፈጠረ ምን ምን?