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THE QUALITY OF EARLY CARE GIVER-CHILD INTERACTIONAL BEHAVIORS IN LIDETA SUB-CITY KEBELE 12, ADDIS ABABA.

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THE QUALITY OF EARLY CARE GIVER-CHILD INTERACTIONAL BEHAVIORS IN LIDETA SUB-CITY KEBELE 12, ADDIS ABABA.

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ACRONYMS

UNICEF – United Nation International Children's Emergency Fund
ICDP - International Child Development Program
MISC - Mediational Intervention for Sensitizing Caregivers
MLE - Mediational Learning Experience

Abstract

This is a descriptive study of the quality of early caregiver-child interaction in one low socio-economic community of Addis Ababa. An observation was made as a major technique using video recording for 10 minutes for each 30 caregiver-child pairs and the caregivers were interviewed using semi-structured questionnaire for background information. The observation scale depends on the ICDP 8 theme of interactional behaviors comprising 17 items measured on a 4-point scale rating as: 1 (minimal); 2 (moderate); 3 (good) and 4 (very good), which were grouped into two categories (emotional and cognitive behaviors).

The analysis has employed descriptive, one-sample t test (to indicate whether the sample mean is different or the same from the specified levels of quality) and the major maternal background characteristics such as maternal age, level of education, monthly income and family size were seen against the quality of emotional behavior and cognitive behavior using non-parametric procedure (spearman's rank correlation).

The study revealed that the nature of the quality of interactional behaviors among mother-child pairs was poor, the emotional behavior was predominantly observed than the cognitive aspect although; it was not expressed appropriately in most of the couples and out of mothers' characteristics only mothers' education has showed significant positive correlation with emotional and cognitive behaviors.

Finally, the situation in the study suggest that much effort have to be made to bring better positive quality of early caregiver-child interaction in the community therefore, all concerned bodies must work hard jointly in coordinated and integrated manner.

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Early development is embedded within social contexts in very young children. These contexts are defined largely by children's interactions with their primary caregivers. Social interactions with caregivers play a central role in the development of general competence and exert powerful influences on various developmental domains, including emotional systems, communication and cognition (Guralnick, 1997). Parents play a major role in affecting their child's cognitive and emotional development directly through processes of direct mediation, indirectly through the interplay between the direct and indirect effects. Especially mothers are key persons in the social, cognitive and emotional environment of children at the early ages (Klein, 1992). Similarly, Winnicot (1965) described, *"without the mother's contribution there is no such thing as an infant"*. Furthermore, Waters et al.,1991 described that

"In these early relationships, the infant forms mental representations of the world, including a self concept, and these concepts and representations determine the child's later movements and interpretations of experiences. For this reason, loving, mutually responsive early care is essential for the child to develop into an emotionally secure and confident individual".

Babies learn rapidly from the moment of birth. They grow and learn fastest when they receive affection, attention and stimulation in addition to good nutrition and proper health care.

Touching, hearing, smelling, seeing and tasting are learning tools a child uses to explore the surrounding world. Children's minds develop rapidly when they are talked to, touched and cuddled, and when they see familiar faces, hear familiar voices and handle different objects. They learn quickly when they feel loved and secured from birth and when they frequently play and interact with family members. Children who feel secure usually do better in school and cope more easily with the difficulties of life. The most important way children develop and learn is through interaction with others. The more often parents and caregivers talk and respond to a child, the quicker he or she learns. Parents or caregivers should talk, read or sing to infants and young children. Even if children are not yet able to understand words, these early conversations develop their language and learning capacities. Caregivers can help children learn and grow by giving them new and interesting things to look at, listen to, hold and play with. Babies and small children should not be left alone for long periods of time since this delays their physical and mental development (UNCEF 1988).

Medical and educational studies have both shown that mental growth-that is, the development of intelligence, personality, and social behaviour occurs most rapidly in humans during their earliest years. It is estimated that half of all intellectual development potential is established by age four (Bloom 1964). As Neuberger (1997) stated, new brain-imaging technologies have enabled scientists to investigate how the brain develops and works. The finding affirms that:

- good parental care,
- warm and loving attachments between young children and adults, and
- from the time of birth, positive age-appropriate stimulation really do make a difference in children's development for a lifetime.

In addition, during the early years the brain has the greatest capacity for change. Neural plasticity and the brain's ability to adapt with experience confirm that early stimulation sets the stage for how children will continue to learn and interact with others throughout life. Particularly during the first three years of life, brain connections develop quickly in response to outside stimulation. Positive interactions with caring adults stimulate a child's brain profoundly, causing synapses to grow and existing connections to be strengthened. Those synapses in a child's brain that are used tend to become permanent fixtures while those that are not used tend to be eliminated. If a child receives little stimulation early, synapses will not be able to develop, and the brain will make fewer connections. Therefore, a child's experiences during the first few days, months, and years may be more decisive than what scientists once believed. Particularly during the first three years of life, brain connections develop quickly in response to outside stimulation. A child's experiences, good or bad, influence the wiring of his/her brain and the connections in his nervous system (Newberge, 1997).

Generally studies with a precise focus on parent-child interactions have identified environmental qualities such as warmth and predictability as being positively related to attachment, cognition, and communication. They are also positively related to more optimal development including responsiveness, sensitivity and warmth. Thus early psychosocial intervention introduced to the environment where the child is growing up will be important as a short term and long term basis and it can be viewed as a good investment in terms of human and socio-economical benefits (Rye, H., 1997).

1.1. Statement of the problem

Most children in the third world countries are exposed to the threat of mental starvation. Mental starvation, according to mediated learning experience theory, is a type of starvation that results from a poor mediation. It is assumed to prevail in the families and institutions of disadvantaged children. The cognitive feature of these children is lack of mental flexibility. This includes the inability to discern things or ideas clearly, appreciate, and construct reality distinctly and coherently (Klein, P. S. 1991 cited in Zewdie, T. 1998).

As Tesserawork described, hunger, disease, illiteracy, poor child rearing practices, poverty etc, are some of the terms that are frequently used to describe the living conditions of children in Ethiopia (Tesserawork, 1989 cited in Fekadu, Z., 1994). These are environmental risk factors that impinge upon children's normal growth and development. Zewedie (1996) also stated that, Ethiopia is one of the poorest countries in the world with a per capita annual income of 120 US dollars and over 60% of its total population live below the poverty line. According to Ethiopia demographic and health survey (2000), the majority of Ethiopians have little or no education. Women are much less educated than men (62% of males and 77% of females have no education).

Mothers are key persons in the social, cognitive and emotional environment of children at the early ages (Rye, H, 1997). However, poor mothers are relatively less stimulating, less responsive, more restrictive and controlling in interactions with their children. This behavior of the poor is quite pervasive in developing economies such as Ethiopia, where child-caregivers

predominantly mothers, have limited education, heavy workloads, many closely spaced children; and also reside in a state of poverty (Kelly et al., 1996 cited in Teferra, 2003)). Moreover parents are less likely to provide stimulating and responsive care giving if they do not realize that their interactions are important for their child's development, or if they are not aware of the need to support their child's emerging capacities (Reis, 1988). Especially mother's level of schooling is a better predictor of a child's cognitive growth and health.

Studies in child rearing practice in Ethiopia indicated that parent-child relationship in Ethiopia tends to be formal, authoritative and restrictive. Children are expected to be reserved in their manners and speech as far the society dictates that a child should be shy and obedient (Wondimu et al, cited in Hussein, 1996). Such features of child rearing practices in Ethiopia appear to be quite contrary to the ones that have been suggested as facilitative of the psychosocial development of children (Fekadu, Z., 1994). There is no doubt that child-care practices vary widely, and cultural scripts influence caregiver-child contacts and communications through practices of carrying, co-sleeping, conditions and conversions for interaction (Hess et al., 1980 and Ogbu, 1981, 1994). However, all child-rearing environments for infants, so far identified about the good enough mothering (Abel et al., 2001; Werner, 1988). Engle & Ricciuti (1995) stated that the quality of psychosocial care provided to the young child is reflected in the caregiver's responsiveness, warmth and affection, involvement with the child, and encouragement of autonomy and exploration.

Moreover O. Connor, (2002) stated that, early caregiver-child interactions play a profound role in the development of self-regulation, cognition, language acquisition, and socio-emotional

adjustment. An enormous body of literature indicates that the quality of infant-caregiver relationship is a major determinant of psychological adjustment, and subsequent development of personality. Because of the importance of the early years, intervention even in kindergarten may be too late to help develop young children's capacities. Therefore, early intervention in the caregiver-child interaction should be given top priority as a preventive measure.

Considering these mentioned facts, the study has attempted to explore the magnitude and nature of the problems about the quality of early caregiver-child interactional behaviours. So, the study tries to answer the following questions.

1) What is the nature of the qualities of ICDP communicative behaviors (Emotional and cognitive) among mother-child pairs?
2) Which components of ICDP communicative behaviors (Emotional and cognitive) are predominantly observed among the mother-child pairs?
3) What is the relationship between caregiver's characteristics (age, education, income and family size) and the qualities of early caregiver-child interactional behaviors?

1.3. Objectives of the study

The study has the following general and specific objectives.

1.3.1. General Objective

The general objective of the study is to explore the quality of early caregiver-child interactional behaviors in 30 caregiver-child pairs from Lideta Şub City Kebele 12, Addis Ababa.

1.3.2. Specific Objectives

The specific objectives of the study are:

- to examine the nature of the qualities of ICDP communicative behaviors (Emotional and cognitive) among mother-child pairs
- to examine the predominantly observed behaviors(Emotional or cognitive) among the mother-child pairs?
- to investigate the relationship between caregiver's characteristics (maternal age, mother's educational status, family size, and family monthly income) and the quality of early caregiver-child interactional behaviors?.

1.4. Significance of the Study

Ethiopia is one of the poorest countries in the world. Thus the interaction between caregiver and child is restrictive, directive, and less facilitative, in most families. This is due to poverty, mother workload, mother's conception of child development, mother's educational level, and lack of awareness and understanding of the need for appropriate care. Hence, this study may:

- Highlight the significance of early stimulation to ameliorate the quality of early caregiver-child interactional behaviors.
- Motivate concerned bodies give due attention to the healthy development of children.
- Motivate policy makers and relevant international agencies for designing and implementation of early stimulation in relation to psychosocial development of children.

1.5. The Scope and Limitation of the Study

1.5.1. The Scope of the Study

The study is delimited to the investigation of the quality of early caregiver-child interaction in 30 caregiver-child pairs from Lideta Sub City Kebele 12, Addis Ababa.

1.5.2. Limitations of the Study

The study has the following limitations:

- Due to time constraints the sample size was small and the duration of the study was short, and hence findings may not be representative. However it can highlight some relevant information which needs further large scale community based study.
- Considering the living standard of the caregivers, only playing time was chosen to observe the mother-child interaction; other relevant factors like feeding and washing time couldn't be included.
- Child characteristics (such as temperament, health and developmental status), culture and others which may be potential confounding factors were not considered
- There may be an intra observer bias

1.6. Operational definitions of key terms

1. **Caregiver** - the mother.

2. **Child** - infancy and toddler hood (from six months to 3years of age).

3. **Early Interaction** - early emotional communication and mediation.

   - **Early Emotional Communication** – refers to early affectionate dialogue of expressive gestures between caregiver and child.

   - **Mediation** - defined as a conscious attempt of a caregiver to adjust her behavior and modify the environment in a way that will ensure that the child can benefit from it, that is to focus on it, perceive, or understand and respond.

CHAPTER TWO

2. Review of Related Literature

2.1. Early Intervention

Early intervention, as defined under the Individuals with Disabilities Education Act (IDEA)' is a systematic process of planning and providing therapeutic and educational services to families that need help in meeting infants,' toddlers,' and preschool children's developmental needs (Papalia, D.E. et al 1999).

2.1.1. Early Intervention in the Perspective of Child Development

Early years are important for the overall development of children. Environmental factors in which children faces during the early years play a great role in their development. Particularly early caregiver-child relationships have a long-term significance on the child's health and development. Based on this aspect, intervention-oriented professionals have attracted to the field of early childhood and they became excited about the prospects of promoting development and family well being through early intervention.

According to the Carnegie Task Force on Meeting the Needs of Young Children (1994):

- Brain development before age one is more rapid and extensive than was previously realized. Although cell formation is virtually complete before birth, brain maturation continues after birth.
- Brain development is much more vulnerable to environmental influence than was suspected.
- The influence of early environment on brain development is long lasting.
- Environment affects not only the number of brain cells and the number of connections among them but also the way these connections are "wired."
- Early stress can affect brain function, learning, and memory adversely and permanently.

Siegel (2001) stated the importance of emotional communication for the development of the brain and the effect of an emotionally deficient caregiving environment on early development. Similarly Paciorek et al., 1999 mentioned that:

"Children who are emotionally neglected or abandoned early in life not only are more likely to have difficulty in learning but also may have more trouble experiencing empathy, attachment, and emotional expression in general. An excess of cortisol in the brain is linked to impaired cognitive ability and difficulty in responding appropriately or productively in stressful situations."

Generally since early development is embedded within social context, in very young children, social interactions with caregivers exert powerful influences on various developmental domains, including emotional systems, communication and cognition. Thus intervention interaction is very crucial for the over all development. Guralnick (1997) identified three essential family interaction patterns:

1. The quality of parent-child interaction.
2. The extent to which the family provides the child with diverse and appropriate experiences with the surrounding social and physical environment.
3. The way in which the family ensures the child's health and safety.

2.1.2. Nature of the Population for Early Intervention

In order to give effective early intervention services, it is important to distinguish clearly the target population of children who might be recipients of early intervention service. As Guralnick (1997) stated the three broad target populations of children for early intervention service might be:

1. infants and children at increased environmental risk (e.g., poverty, low socio economic status, single parent, adolescent mother),
2. infants and children at increased biological risk (e.g., premature/low birth weight, asphyxiated full term infants), and
3. infants and children with established developmental delays, deviations or disabilities.

2.2. The Significance of Mothers' Interaction with their Children

Mothers' early relationship with their children has significant role in their children's development. Studies indicated that, babies had an inborn sensitivity to the emotions of others, and to the ongoing interactions between themselves and their caregivers and these interactions were highly significant for the child's healthy psychological development (Fraiberg &Fraiberg, 1980). Studies also showed that the experience, which involves infant's interaction with another person, correlates more highly and consistently with measure of development, than experience that are created by the child individually (Carew 1980).

As Winnicott (1965) described, "there is no such thing as an infant without the mother's contribution." Thus children need loving, mutually responsive early care in order to develop into an emotionally secure and confident individual. Particularly in the first three years of life, children need appropriate care giving environments, which are important for the brain development because brain connections develop quickly in response to outside stimulation during these years (Newberger, 1997 as cited in Paciorek, 1999).

"The care that children receive has powerful effects on their survival, growth and development... Care refers to the behaviors and practices of caregivers (mothers, siblings, fathers and child care providers) to provide the food, health care, stimulation

and emotional support necessary for children's healthy survival, growth and development...Not only the practices themselves, but also the way they are performed- in terms of affection and responsiveness to the child- are critical to child's survival, growth and development" (Engle & Lhotska, 1999).

As Engle & Ricciudti (1995) explained the caregiver's responsiveness, warmth and affection, involvement with the child, and encouragement of autonomy and exploration reflected the quality of psychosocial care provided for the young child. Similarly Bowlby, 1951 (as cited in Rutter, 1995) also stated the infant and young children can find satisfaction and enjoyment when they experience a warm, intimate and continuous relationship with their mother (mother substitute) and the formation of ongoing, warm relationships was as crucial to the child's survival and healthy development as the provision of food, child care, stimulation and discipline.

Ruter, 1981 cited in Klein, 1992 indicated if warmth in the family is lacking, there is a higher risk of the child developing deviant behavior. A positive emotional climate is a prerequisite for a quality interaction with a young child, the quality of family relationship has been found to be strongly associated with the nature of the child's psychological development. From a cognitive developmental perspective, there is a special impact of early infant-parent interaction on later emotional development (Guidana & Liotti, 1983 cited in Klein, 1992).

2.2.1. Learning from Interactions with Caregivers

Parents have an important role for preparing their children for success or failure. If they are responsive and create stimulating home environment, they can prepare their children for school success. Interaction between caregivers and children that are sensitive to the child's cognitive functioning-complementing and extending the child's capacity are essential for the child's cognitive development and acquisition of cultural meaning (Rogoff & Wertsch 1994). Similarly, Vigotisky (1981) stated that, with respect to young children there exist a "zone of proximal development", a potential level of cognitive functioning, which the child can achieve with the guidance and collaboration of a more experienced , perceptive and responsive adult. According to Werner & Kaplan's theory of symbol formation:

"A child is able to acquire complex concepts on the basis of the primordial sharing situation. This sharing situation is a meeting between the child's developing capacities and the symbolic medium provided by a caregiver. The caregiver mediates the child's experience of the world by structuring it and giving it cultural meaning. The adult points out and explains objects and events. In this way, the adult simplifies and personalizes the child's experience so that it occurs in a form that the child, at her current level of development, is able to use" Werner & Kaplan (1963).

The cultural context, then, influences the way caregivers contribute to cognitive development. These researches suggest that direct adult involvement in children's play and learning may be less adaptive in a rural village or small town in a developing country, in which children more frequently observe and participate in adult activities, than in a middle-class urban community, in which home maker mothers have more time, greater verbal skills, and possibly more interest in children's play and learning (Papalia, D.E. et al 1999).

Social experience and learning, such as the quality of personal attachment and interaction, the quality of the social context of family and neighborhood – including peers, and the family's relationship to the sub-culture or culture where it is located determines children's development of social-emotional ability. Berit (2004) described the two central psychological conditions that determine the ongoing social-emotional relationship with our environment. These are:

- To what extent our basic needs for a positive human relationship and stable self-perception is met.

- To what extent we feel we are in a position that allows the development and use of the potentials of our human nature.

2.3. Features of Supportive and Facilitative Caregiver-Child Interactions

A number of component features of caregiver infant interactions as being associated with later social and cognitive development in the child have identified. These features include:

A. Sensitivity- According to Ainsworth (1992), sensitivity refers to regarding the child as a separate person and being capable of seeing things from the child's point of view. Similarly Meins et al., (2000) describe sensitivity as going beyond the basic ability to recognize and respond to the child's physical states such as hunger and distress, to a capacity to be able to read the babies' behavior call this "mind-mindedness" or the inclination to treat the baby as a person with feelings and wishes.

As Field (1981) stated sensitivity is not only a characteristic of a caregiver. It is a relationship construct and thus also a function of the infant's capacity and skill to signal behavior states in clear and consistent ways. This capacity is sometimes underdeveloped in vulnerable infants, such as those born at very low birth weight, or with neurological difficulties.

B. Responsiveness –refers to prompt and appropriate behavior of the caregiver to infant signals. *"The responsive caregiver behaves promptly and appropriately to the infant's signals. Responsiveness strengthens the affective bond between the adult and increases the child's sense of security" (Beckwith & Cohen, 1989).*

Ainsworth, et al. (1974) described four components of the ability of caregivers to perceive, accurately interpret and respond to their infant's behavior. These are:

1) Awareness of the infant's signals. That is, the caregiver must be reasonably accessible to the infant's signals and to the threshold, even if muted, of the Infant's cues.
2) An accurate interpretation of signals. That is, the caregiver must be free of distortions resulting from projection, interference of denial, as might occur when the caregiver is hurried during a feed and prematurely interprets the baby's restlessness as a sign of satisfaction. In addition, the caregiver needs to be empathic, not detached, so that her emotions are available to be engaged by the infant.
3) An appropriate response to the infant's communications.
4) A prompt response to the infant, so that the caregiver's reaction is perceived to be contingent on the child's communication and a satisfaction of his needs.

C. Emotional availability -describes the caregiver's supportiveness and encouragement of the infant (Bringen & Robinson, 1991).

"Emotions are apt to be a sensitive barometer of early development functioning in the child-parent system. If the relationship is going well, there should be some indication as sustained pleasure and mutual interest, as well as a well-modulated range of emotional expressiveness, both negative and positive. One expects to see evidence of this in the child, in the parents and in their interaction. If the system is not functioning well, one often sees that there is little

pleasure, and the range of emotional expression is restricted; instead of interest, there may be evidence of apathy. In more extreme circumstances, there may be sadness and depression" (Emde & Easterbrooks, 1985).

2.4. Models of Care giving

The universal needs of infants creates the common dimensions of care giving across all situations are. According to Bradley and Caldwell (1995) care giving functions as a mutual regulator of human behavior and development in a transactional system. They classify care giving in terms that cannot be separated from one another:

- Sustenance: to promote biological integrity through the provision of food and shelter.
- Stimulation: to engage attention and provide experience and information that is neither incomplete nor excessive or disorganized (Wohlwill & Helft, 1977). The deleterious effects of under stimulation on children were brought to light a long time ago in studies of institutionalized children (Skeels & Dye, 1939).
- Support: to meet social and emotional needs and to reinforce goal-directed behavior.
- Structure: to differentiate inputs to the child according to the child's needs and capabilities. Both support and structure have a great deal in common with regulation and scaffolding.

- Surveillance: to keep track and to monitor child activity.

2.4.1. A Model of Characteristics of the Care Relationship

Galler et al, (1984) describe the four levels of characteristics of the care relationships. These are:

Level 1 – Infant care

- Protection, nutrition, stimulation, affection.

Level 2 – General characteristics of relationships

- Continuum of acceptance from warm and affection to rejection, hostility.
- Continuum of involvement from being involved to detached and indifferent
- Continuum from sensitivity to insensitivity.
- Continuum from contingent (i.e. tuned, regular, predictable) responsiveness to unresponsiveness.
- Continuum from encouragement of exploration, independence and learning to restriction and interference.

Level 3 – Specific behavior of caregiver and infant

(This may contribute to the general characteristics on Level 2)

- Caregiver behavior towards the infant gaze, touch, postural adjustment, emotional expressiveness, vocalization, imitation, adaptations to the infant.
- Infant behaviors towards the caregiver gaze, touch, postural adjustment, emotional expressiveness, vocalization, imitation, adaptations to the caregiver.

Level 4 – Characteristics of the caregiver-infant pair as a dyad

- Reciprocity – dyadic gaze, mutual smiling, imitation, reciprocal play.
- Synchrony – adjustment in mutually adaptive ways.

2.5. A Mediational Intervention for Sensitizing Caregivers (MISC)

The Meditional Intervention for Sensitising Caregivers (MISC) is based on a model for understanding specific components or "criteria" within adult-child interaction effecting flexibility or plasticity of mind in young children. Through the suggested approach one can identify a series of factors which may turn an adult-child interaction into an enriching learning experience for a child and it is particularly suitable for cross-cultural adaptations these factors may be identified within existing child rearing practice, and parents or caregivers could be helped to identify and increase them within their interactions with their children (Klein 2001).

According to Klein (2001) MISC is primarily concerned with children's needs or dispositions that are essential for future learning i.e., the need to focus on things, to seek meaning, to inquire about and associate past, present and future experiences, to seek success of approval, the need to evaluate one's own action, and the need to plan before doing.

2.5.1. What Is a Mediated Learning Experience (MLE)

Klein (2001) defined mediated learning experience as:

"The process of learning which occurs when another person serves as a mediator between the child or learner and the environment; preparing and reinterpreting the stimuli from the environment so that they become meaningful and relevant for the child. Mediation is an active process. The mediator acts upon the stimulus by selecting, accentuating, focusing, framing, providing meaning and locating the stimulus in time and space. The mediation enables the individual to benefit from experience; it actually prepares him to learn, to become modified".

Klein (1992) also stated the universality of MLE, and its use of maximizing learning from experience. Similarly Feuerstern, 1980 defined mediation as:

"A conscious attempt of an adult to adjust his or her behavior and modify the environment in a way that will ensure that the child can benefit from it, that is to focus on it, perceive, or understand and respond."

2.5.2. Basic Elements of Mediation

Based on Feuerstein's (1979, 1980) theory of cognitive modifiability, the basic elements of what constitutes a teaching mediational interaction between a caregiver and a child at any age were identified. The empirical definitions of the factors are:

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1. ***Focusing- Intentionality and reciprocity***. Any adult's act or sequence of acts that appear to be directed toward achieving a change in the child's perception, or response

(e.g. selecting, exaggerating, accentuating, scheduling, grouping, sequencing, or pacing stimuli).

2. ***Affecting (Mediation of Meaning).*** An adult's behavior that expresses verbal or nonverbal appreciation or affect in relation to objects, animals, or concepts and values.

3. ***Expanding (Transcendence).*** An adult's behavior directed towards the broadening of a child's cognitive awareness, beyond what to necessary to satisfy the immediate need that triggered the interaction.

4. ***Rewarding (Mediated Feeling of Competence).*** Any verbal or nonverbal behavior of an adult that expresses satisfaction with a child's behavior or identifies specific components of the child's behavior that the adult considers successful.

5. ***Regulation.*** Adult behaviors which model, demonstrate, and/or verbally suggest to the child a regulation of his/her behavior in relation to the mature of the task, or to any other cognitive process prior to overt action. Mediated regulation of behavior may be expressed through a process of matching the task requirements to the child's capacities and interests, as well as through organizing and sequencing steps towards success

(Klein, 1992).

Klein, 1992 also stated the dual role of parental mediation in affect development. These are:

a. The direct role, which occurs in relation to emotion as a content area, pointing out to the child and focusing his or her awareness of their causes and consequences, helping the child reduce impulsive responses through experiences of mediated regulation of behavior and rewarding the child for the kinds of emotional behaviors that are considered appropriate in our society.
b. The indirect role which occurs through its effect on general cognitive development, helping the child for example improve his capacity and need to focus, differentiate, associate, classify, and reach operational thinking or the capacity to keep in mind and process several possible thoughts simultaneously.

Recent insights about interpersonal experiences are also formulated eight themes of recommendations in the international child development program (ICDP) (the Eight Guiding Principles for Positive Interaction in the International Child Development Program). The first fourconcern early emotional communication (expressive aspects), while the last four are especially concerned with the care givers facilitating of learning themes (mediational aspect) involved in introducing children to experiences and learning in the world (Rye, 1995). These eight themes are:

A. Early Emotional Communication

1. Demonstrate positive feelings – show that you love your child
2. Adjust yourself to the child, and follow its lead

3. Talk to your child about what it is interested in and try to get it to "talk" through emotional expressions, gestures and sounds
4. Give praise and verification to the child when he/she manages to do something.

B. Facilitated or Mediated Learning

5. Help the child focus their attention so that child and caregiver has a mutual experience of things in their environment.
6. Attribute Meaning to the child's personal experience of the world by describing and naming what it is the child and care giver are experiencing together and by showing feeling and enthusiasm.
7. Go into depth about and give explanation when you share together with your child.
8. Help your child exert restraint over him/herself by setting limits in a positive way, by distracting it, showing it positive alternatives and by planning together.

Rye (1995) also stated, some negative consequences to the child if mediated learning doesn't take place while the child is young. These are:

- Demonstrating little enthusiasm to explore the world around them and satisfying with an unclear or simplistic view of the world.
- Little interest in comparing anything they experience with anything else, lack of looking for similarities and differences, not trying to solve problems or overcome obstacles.

- Because of lack of interaction, the child becomes under stimulated and will show sign of apathy and lack of interest.
- "Flat" and "monotone" impression of reality, nothing will stand out, nothing will have any special value or meaning.
- The world will not be connected; it will appear as segments, divided up with few associations to other things, the child will not form opinions on matters.
- There will be little goal-oriented activities initiated by the child.
- The child will have poor abilities to plan his/her activities.
- The child will lack the ability to adjust their behavior and to solve problems.

2.5.3. Effects of Cultural Variability on Parental Mediation

Studies indicate that, in considering the quality and style of maternal interaction with a child the role of cultural psychosocial variables is especially central. (Hundeide, 1988 cited in Klein 1992).

"Cultural differences in the philosophy of child development dictate various approaches to child rearing and greatly effect mediation provided to the infant and young child. All the above aspects, including a focus on mothers' perceptions of themselves as effective agents in child development, their styles of coping with their life stresses, their support systems, and so on, must be taken into serious consideration in attempting to understand parental mediation and its effects on the child" (Klein, 1992).

Cultural factors significantly influence mothers' ideas about the timetable of development in infancy and childhood more than by information gained in the course of parenting. It appears that more westernized cultures believe in an earlier timetable of infant development than the more traditional cultures (Hess, Kaskigawi, Azuma, Price, & Dickson, 1980; Goodnow, Cashmore, Cotton, & Knight, 1984, Rosenthal, 1985 cited in Klein, 1992). Mother's style of interaction with her baby is strongly affected by her basic perception or model of the interaction she holds in her mind of what "good mothering" should be. Parents view and respond to child characteristics and behaviors depend on parents' childhood experiences and memories of their own relationship with their parents (e.g., Belsky, 1984; Ricks, 1985; Crowel & Feldman, 1988 cited in Klein, 1992). Based on their experience with their parents children create an internal mental representation or working model of self and other (Bowlby, 1980 cited in Klein, 1992).

2.6. Social and Personal Determinants of the Quality of Caregiver-Child Interaction

Different researchers indicated that a number of factors influence the establishment, maintenance and quality of caregiver-child interactions. These are:

1) Socio-economic conditions

Halpern (1990), indicated that, the consistency of the positive correlation between socio-economic status and children's psychological development and adjustment in all societies

"While many causes underlie the development problems of the young, the most profound and pervasive exacerbating factor is poverty. Poverty does not harm all children, but it does put them at greater developmental risk, through the direct physical consequences of deprivation, the indirect consequences of severe stress on the parent-child relationship, and the overhanging pall of having a depreciated status in the social environment" (David Hamburg cited in Halpern, 1990).

Similarly Robert Halpern (1990) also stated that, "*poverty increases the likelihood that numerous risk factors, will present simultaneously in the child, the parents, the family's informal support system, and the neighborhood; as a corollary, poverty reduces the likelihood that protective factors will be present".*

2) **Child and Caregiver Characteristics**

Prematurely, congenital malformations, infant temperament, particularly infant difficultness, have been found to negatively affect caregiver-child interaction, (Campbell, et al., 1979). Age, knowledge and mental state, situational factors in the home, marital relations and autonomy, and circumstances beyond the home, such as community resources and supports are characteristics of caregivers that are associated with caregiver-child relationships (Engle & Ricciuti, 1995).

Depression amongst mothers and other primary caregivers is currently of great concern in studies of the early development of the child and the quality of the caregiver-child relationship.

Depression frequently manifests as self-preoccupation, irritability, diminished emotional involvement, increased hostility and resentment, fatigue and helplessness (Weissman, Paykel & Klerman, 1972).

It is also well known that caregiver knowledge about child development, and parental beliefs about children and their expected milestones of development, affect how caregivers behave with young children. If parents do not realize that their interactions with their children are important for their child's development, they are not aware of the need to support their child's emerging capacities; they are less likely to provide appropriately stimulating and responsive care giving (Reis, 1988).

CHAPTER THREE

3. Research Methodology

3.1. Research Design

The major objective of the study is to investigate the quality of early caregiver-child interactional behaviors in 30 caregiver child pairs (30 caregivers & 30 children). Hence, in order to explore the magnitude of the quality of interaction among the pairs in a natural setting, quantitative research method is considered to be appropriate. In addition qualitative analysis of four selected caregiver-child pairs is also used for more illustration.

3.2 Population Sampling

The sampling procedure was based on the following:

- low level of education,
- low socio-economic status,
- having children between six months and three years of age.

Having considered the above-mentioned factors, 30 caregiver-child pairs were selected from Lideta Sub City Kebele 12 Addis Ababa. In addition, the project site was preferred to have communities with low socio-economic status, over-crowded households and bad sanitation.

3.3. Data Collection Instruments

Two data collection techniques were employed in the study. These were semi-structured questionnaire for parental interview, focusing on background information of the caregiver-child pairs and video observation. Since the study is concerned with interactional behavior video observation was chosen as a major technique of the study. Observation checklist was prepared based on the ICDP'S 8 themes of positive interaction. The observation scale has 17 items with a 4-point scale rating as 1 (minimal), 2 (moderate), 3 (good) and 4 (very good).

3.4. Data collection Procedures

The data collection was made in two stages pilot and main study stages.

3.4.1. The pilot study

The academic supervisor examined the quality of the questionnaire and the observation checklist and then it was tried out in a pilot study. The pilot study was far from the study area (Kirkos sub city), interview and observation was done on randomly selected 6 caregiver-child pairs and rapport was secured.

The pilot study was conducted having the following purposes:

- to ensure whether or not relevant lines of questions were held,
- to ensure the appropriateness of data collection plan,
- to ensure the inter observer confidentiality and inter code reliability.

Lessons Learned

- Minor amendments regarding the questionnaire were considered in preparing the final version,
- In order to minimize the observation bias, inter observer reliability was done by the researcher who has prior knowledge and training on the ICDP and two outside observers who have BA degree in psychology. First the researcher has oriented them about ICDP, then and they have read about it, and they have watched the video film at the same time, finally they rated (scored) the scales individually and the obtained result shows 95.5% confidence.
- The inter code reliability was ensured (alpha=0.96)

3.4.2. Main Study

In the main study the following procedures were followed:

- First, area of interest was visited and then rapport was secured from the kebele and parents. The concerned members of the kebele were contacted to ask the willingness of the respondents to participate in the study.
- The participants were asked about their willingness to carry the video recording.
- The observation session (video recording) was carried out by the video man in the presence of the researcher. The video man was oriented on which activities he should focus.
- The video recording of caregiver and child was held for 10 minutes during playing time in their home environment. The observer has tried to make the caregiver and child

comfortable and to be unobtrusive in order to make the couple's behavior as natural as possible.

- Each mother was interviewed for 20 minutes.
- A total of 6 days has been required to collect the data (5 mother-child pairs per day).

3.5 Data Organization and Analysis

The major technique of the study was an observation of the video recorded data. The information obtained through the video observation was transcribed and then scored after watching the videotapes several times. Then the data was categorized in a way it could give a meaningful link with the research questions. The background information obtained through the interview was also organized. Accordingly, quantitative method has mainly been used for the analysis of the data and qualitative analysis was also used for more illustration. Rating was made from observation of 10 complete minutes (for each pairs) of video tapes of 30 care giver-child pairs during playing time The data analysis procedure was done by the researcher by consulting professional statisticians. The procedure of data analysis mainly used the ICDP criteria:

- The quality of emotional behavior among mother-child pairs was measured based on the three ICDP communicative behaviors (showing positive feeling, developing empathy and understanding of emotions and emotional talk).
- The quality of cognitive behavior was measured based on the five ICDP communicative behaviors (encouraging, focusing, expanding, giving meaning and regulating).

For statistical analysis, SPSS software package version 10 has been used. During the analysis of the data, descriptive statistics, nonparametric method (spearman's rank correlation) to measure the association between the variables, and one sample t-test to measure whether the mean score of the observed quality of interactional behaviors is different or the same from the specified levels of the quality (minimal, moderate, good and very good) have been used.

CHAPTER FOUR

4. Results/Findings

The purpose of the study was to identify and describe the quality of caregiver-child interactional behaviors. Data were collected from 30 caregiver-child pairs. All of them were selected from Lideta Sub City kebele 12, Addis Ababa.

As Mentioned in chapter three, quantitative research design and analysis were mainly applied to respond to the major research questions of the study. In addition qualitative analysis was used for detail illustration.

The major research questions of the study were:

1. What is the nature of the qualities of ICDP communicative behaviors (Emotional and cognitive behaviors) among mother-child pairs?
2. Which components of ICDP communicative behaviors (Emotional or cognitive aspects) are predominantly observed among the mother-child pairs?
3. What is the relationship between caregiver's characteristics (age, education, income and family size) and the quality of early caregiver-child interactional behaviors?

4.1. Presentation of the Findings/Results

The results are presented in four parts. First, the selected background information from the questionnaire was presented. Second, the observed qualities of ICDP interactional behaviors (Emotional and cognitive behaviors) among mother-child pairs and the predominantly observed behavior among mother child pairs were presented. Thirdly, a qualitative analysis demonstrating the quality of early caregiver-child interactional behaviors in four selected care giver-child pairs was displayed to illustrate how caregivers communicate emotionally with the children and how they facilitate learning to the children. Finally, the relationships between caregivers' characteristics (mothers' age, mothers' education, monthly family income and family size) and the quality of early caregiver-child interactional behaviors were presented.

Table 1. Background Information of the Respondents

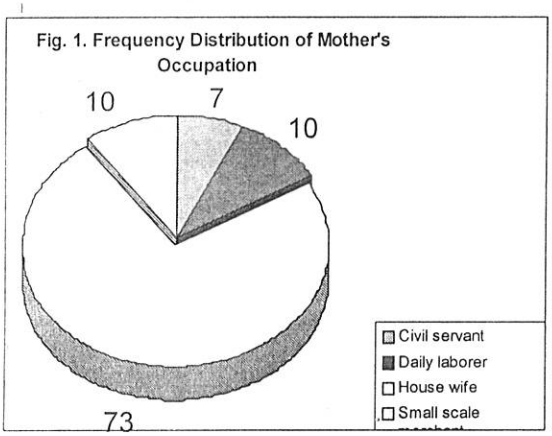
S.N.	Characteristics	N	%
1	**Child Age in Month**		
	6-11Month	6	20
	12-23Month	8	26.7
	24-36Month	16	53.3
	Total	30	100
2	**Maternal Age in Years**		
	15-19Yrs	1	3.3
	20-24Yrs	8	26.7
	24-29Yrs	10	33.3
	30-34Yrs	8	26.7
	Above35	3	10
	Total	30	100
3	**Mothers' Educational Status**		
	None	13	43.3
	Primary	11	36.7
	Secondary	6	20
	Total	30	100
4	**Family Monthly Income**		
	Less than 250	19	63.3
	250-500Birr	6	20
	Greater than 500Birr	5	16.7
	Total	30	100
5	**Family Size**		
	Below 5	6	20
	5 & Above	24	80
	Total	30	100

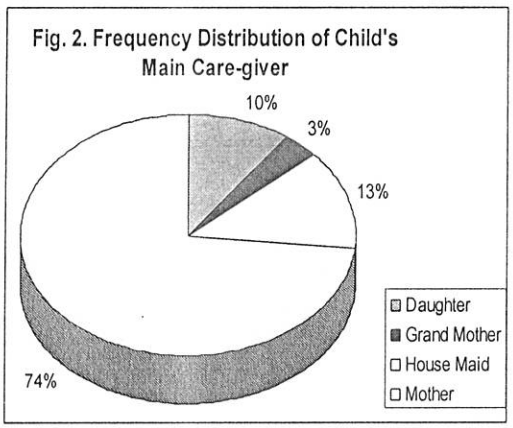
4.1.1 Background Information of the Respondents

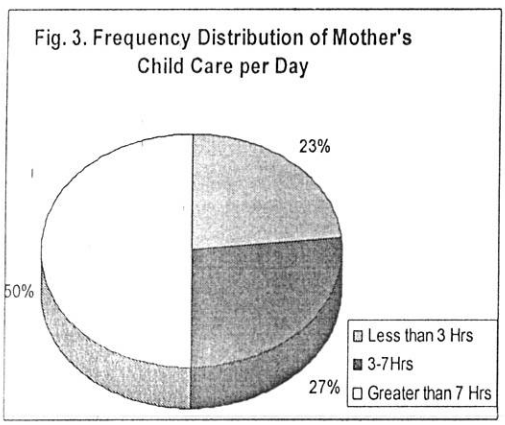
Table 1 shows the summary of background information of the respondents. The age of the children was described in months and large population of the children lie between 12-36 months (80%) and 20% of the children lie between 6 and 11 months. The average child age was 21.03 months, maximum 36 minimum 6 months (SD=9.28). With regard to maternal age, the

average age was 27.23, with maximum 48 and minimum 19 years of age, (SD=6.30) and a large population of mother's age lie between 20-29 years (60%).

Mother's education was presented in three categories of scores. These are 0= illiterate, 1= primary and 2= secondary. Majority of the mothers were illiterate (43.3) and primary (33.7%), only 6% of them were secondary. With regard to Family income, it has shown predominantly low income; less than 250 Birr (63.3%). Concerning family size, the size categorized into two >5 and <5, and majority of the respondent's family size was above 5 per household (80%) indicating over crowdedness. The average family size was 6 (minimum 3 and maximum 11).







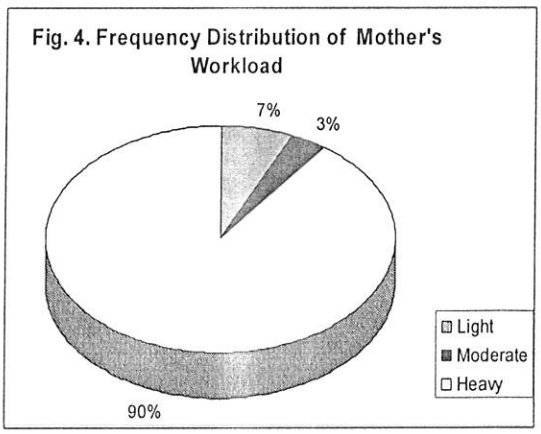


Fig. 1, Fig. 2, Fig. 3 and Fig. 4 depicts the caregiver's occupation, the main caregiver of the child, the heaviness of work load at home and the time they spent in giving care for the child. As indicated in the figures, workload was described as light, moderate and heavy scored as 1,2 and 3 respectively and the time mothers spent per day for giving care was presented in three groups of hours (above 7 hours, from 3-7 hours and less than 3 hours). Most of the caregivers (73.3%) were housewives, in most of the family the main caregiver of the child were mothers (73.3%), others were; house made (13.3%), daughters (10%), and grand mothers (3.3%). According to their response 50% of them spent more than7 hours per day to take care of their children while 23.3% of them spent less than 3 hours and 26.7% from 3 to 7 hours. And most of them (90%) responded that the workload at home was heavy.

4.1.2. The observed Qualities of ICDP Communicativ Behaviors among Mother-Child Pairs

In this study, the quality of interactional behaviors has been observed using videotape based on the scale of the ICDP 8 themes of interactional behaviors. Rating was made from observation of 10 complete minutes (for each pairs) of videotapes of 30 care giver-child pairs during playing time. According to the ICDP 8 themes of interactional behaviors, the first 3 (showing positive feeling, developing empathy and understanding of emotions, emotional talk) concerned about emotional communication, while the last 5 (encouraging, focusing, meaning, expanding and regulation of behavior) are especially concerned with the care givers facilitating of learning

themes (cognitive behaviors) involved in introducing children to experiences and learning in the world (Rye, 1995). Thus, this research study has used the same way of explanation.

Table 2. Distribution of the observed qualities of emotional behavior among mother-child Pairs

Components of Emotional behavior	N	%
Showing love		
Minimal	7	23.3
Moderate	16	53.3
Good	7	23.3
Giving and receiving attention and interaction		
Minimal	11	36.7
Moderate	13	43.3
Good	6	20
Showing pleasure and enthusiasm with the child		
Minimal	11	36.7
Moderate	11	36.7
Good	8	26.7
Understanding towards child's condition of wishing, aims, body language		
Minimal	15	50
Moderate	10	33.3
Good	5	16.7
Adjusting herself to the child and following it's lead		
Minimal	18	60
Moderate	11	36.7
Good	1	3.3
Putting emphasis on the child's own initiative		
Minimal	8	26.7
Moderate	13	43.3
Good	9	30
Talking to the child about what it is interested through emotional expression		
Minimal	22	73.3
Moderate	6	20
Good	2	6.7
Total	30	100

4.1.2. A/ The observed Quality of ICDP Emotional Behavior among Mother-Child Pairs

The quality of emotional behavior among mother-child pairs was measured based on the three ICDP communicative behaviors (showing positive feeling, developing empathy and understanding of emotions and emotional talk). The measure of the 3 elements of emotional communication was composed of 7 items and each item was scored on a 4-point scale (1=minimal, 2=moderate, 3=good and 4=very good) with possible range of 7-28, where higher scores indicated very good quality and lower scores minimal quality. The intra coding reliability result is satisfactory (alpha=0.93). One-sample t test has been used to indicate whether the sample mean is different or the same from the specified levels of quality (minimal, moderate, good and very good). (See appendix C)

Table 2 shows the distribution of the observed qualities of emotional communicative behaviors among mother-child pairs. More than half of the mother-child pairs (53.3%) rated moderate quality of showing love similarly, most of the pairs (43.3%) rated average in giving and receiving attention. With regard to the quality of showing pleasure and enthusiasm, the majority of mother-child pairs indicated minimal (36.7%) and moderate (36.7%) qualities. Additionally, most of the mothers (50%) rated minimal quality of understanding towards child's condition of wishing, aims and body language.

Furthermore, more than half of the mother's (60%) have rated minimal quality in adjusting to the child and following its lead and similarly, 73.3% of the mother's rated minimal quality of

talking to the child through emotional expression. Concerning the quality of putting emphasis on the child's own initiatives 43.3% of mothers rated moderate quality.

Generally, the quality of emotional behavior of ICDP was rated by adding the observed scores of the 7 items and the mean score was 13.6 and standard deviation 4.06, with maximum value 21 and minimum value 7.

The mean score has no statistically significant difference from what may be considered moderate quality ($t=-0.539$, $df=29$, $p>0.01$). Thus it is possible to say the quality of emotional behavior was generally moderate. It is also indicated that the mean score was far better than what can be considered minimal, ($t=8.89$, $df=29$, $p<0.001$) and it was far worse than what may be considered a good emotional communication ($t=-9.97$, $df=29$, $p<0.001$). (See appendix C)

Table 3. Distribution of the observed qualities of Cognitive behavior among mother-child interaction

Components of Cognitive behavior	N	%
Give praise and verification to the child when it manages to do something		
Minimal	9	30
Moderate	14	46.7
Good	7	23.3
Making the environment stimuli compatible to the child's need		
Minimal	13	43.3
Moderate	15	50
Good	2	6.7
Expressing excitement verbally or nonverbally over experiences, objects, peoples		
Minimal	19	63.3
Moderate	11	36.7
Naming identifying, describing for whatever it is she shows together with a child		
Minimal	8	26.7
Moderate	14	46.7
Good	8	26.7
Expanding, associating and raising awareness to metacognitive aspects of thinking		
Minimal	28	93.3
Moderate	2	6.7
Relating past, present and future experiences		
Minimal	30	100
Relating to physical, logical or social rules and framework		
Minimal	21	70
Moderate	8	26.7
Good	1	3.3
Positive way of guiding the child		
Minimal	8	26.7
Moderate	14	46.7
Good	8	26.7
Creating a situation where it is possible for the child to succeed		
Minimal	27	90
Moderate	3	10
Helping the child to plan step by step		
Minimal	29	96.7
Moderate	1	3.3
Total	30	100

4.1.2. B/ The observed Quality of ICDP Cognitive Behavior among Mother-Child Pairs

The quality of cognitive behavior among mother-child pairs was measured based on the five ICDP cognitive behaviors (encouraging, focusing, expanding, giving meaning and regulating). The measure of the 5 elements of cognitive behavior was composed of 10 items and each item was scored on a 4-point scale (1=minimal, 2=moderate, 3=good and 4=very good) with possible range of 10-40, where higher scores indicated very good quality and lower scores minimal quality. The intra coding reliability result is acceptable (alpha=0.78). One-sample t test has been used to indicate whether the sample mean is different or the same from the specified levels of quality (minimal, moderate, good and very good). (See appendix C)

Table 3 shows the frequency distribution of the observed quality of cognitive behavior among mother-child pairs. It was indicated that 46.7% of the mothers rated moderate and 30% minimal quality in giving praise and verification to the child when it manages to do something. With regard to the quality of making the environment stimuli compatible to the child's need, half of the mothers rated moderate quality and only 6% of them rated good quality. More than half of the mothers (63.3%) rated minimal quality of expressing excitement verbally or non-verbally over experiences, objects and peoples. Concerning the quality of naming, identifying, describing for what the mother shows with the child, 46.6% of mothers rated moderate. Similarly, 46.6% of them rated moderate quality in positive way of guiding the child. Additionally, more than half of the mothers (70%) rated minimal quality in relating physical, logical or social rules and framework.

Further more, almost all of the mothers (more than 90%) rated minimal quality in expanding, associating and raising awareness to metacognitive aspects of thinking; relating past, present and future experiences; creating a situation where it is possible for the child to succeed and helping the child to plan step by step

Generally, the quality of cognitive behavior of ICDP was rated by adding the observed scores of the 10 items and the mean score was 13.73, standard deviation 2.88, with maximum value 20 and minimum value 10.

The quality of cognitive behavior of ICDP was significantly better than what might be considered minimal ($t=7.11$ $df=29$, $p<0.001$) and it was significantly worse than what one may consider as moderate ($t=-11.95$, $df=29$, $p<0.001$). Thus it is possible to say it was nearly minimal (below moderate).

4.1.2. C/ The Total Quality of Early Caregiver-Child Interactional Behaviors.

The total quality of early caregiver-child interactional behavior was measured based on the ICDP 8 themes interactional behaviors (showing positive feeling, developing empathy and understanding of emotions and emotional talk, encouraging, focusing, expanding, giving meaning and regulating). The measure was composed of 17 items and each item was scored on a 4-point scale ((1=minimal, 2=moderate, 3=good and 4=very good)) with possible range of 17-68, where higher scores indicated very good and lower scores minimal quality. The intra coding reliability result is satisfactory (alpha=0.96). One-sample t test has been used to indicate

whether the sample mean is different or the same from the specified levels of quality (minimal, moderate, good and very good). (See appendix C)

The total quality of caregiver-child interactional behavior ranged from 17 to 39 but the possible score was from 17 to 68, and the mean and the standard deviation were 27.00 and 7.01, respectively. Generally, the total quality of caregiver-child interactional behavior is significantly better than what might be considered minimal ($t=7.8$, $df=29$, $p<0.001$) and it is significantly worse than what one may be consider as moderate ($t=-5.47$, $df=29$, $p<0.001$). Thus the total quality was nearly minimal (below moderate). (See appendix C)

4.1.3. The predominantly Observed ICDP Interactional Behaviors

The mother-child pairs have shown moderate quality in emotional behavior while they have shown nearly minimal quality in cognitive behavior. Hence, the observed quality of emotional behavior was better than that of cognitive behavior. Although the emotional behavior was not expressed appropriately in most of the couples, it was predominantly observed than the cognitive aspect. For example some of the caregivers rated as good quality in emotional behavior in all of the components but they were rated as good in a very few components of cognitive behavior. (See table 2 and 3).

Since the quality of emotional behavior between the mother and child was not appropriate, the quality of cognitive behavior was badly affected. Most of the mothers express their love or feeling through badily contact (hugging, touching and kissing) in which the psychological

involvement was very poor. Generally from the findings it is possible to say that the physical care was predominantly observed behavior than the psychological care.

4.1.4. Qualitative Analysis of the Early Care giver-child Interactional Behaviors

Caregiver-Child Pairs (Code number 2)

The child and mother's age was 22 months and 27 years respectively; the mother was illiterate and a housewife living with her husband. The occupation of her husband was daily laborer with monthly income of 150 Birr. The total number of people living in a single room was 3. According to her response she spent nearly 8 hours per day to take care for her child and she responded that the workload in home was very heavy for her for the fact that she has no any supporter. The father did not have any contribution toward child rearing and other activities in the home.

During the playtime, the mother was indifferent, she didn't try to give and receive attention and her expression of affect was not positive. There was no pleasure and enthusiasm in both the mother and her child. The mother was not in a position to respond accurately to his behavior when the child was crying. Additionally the mother was talking in a threatening way weather he is interested to play with toys or not. Following this situation, the mother brought the toys to her child but he was not interested to play with it and consequently he threw the toys, continuing crying. This indicates that the mother did not understand the child interest. The mother said "drink the milk and I will buy you bread" but the bottle was empty. When he tried

to move away, she forced him to sit besides her. It appears as she prematurely interprets the child's restlessness as sign of satisfaction because she didn't adjust herself with what the child was interested and her emotions were not available to be engaged by the child and she has totally ignored the child's own initiatives. When the child tried to open the bottle of milk she didn't help him and give him praise or approved his action by touching or smiling. The mother didn't try to give explanation because their verbal interaction and emotional expression were very limited, they didn't share any thing in common.

Generally, the caregiver didn't accept her child as a communicative partner. Hence, there was no emotional expressive and meditional communication between the mother and child.

Caregiver-Child Pairs (Code No 14)

The age of the child and his mother was 9 months and 19 years respectively, the mother's level of education was primary and she was a housewife living with her husband. She had only one child but the total family size was 5, living in one room. The father's occupation was daily laborer with monthly income of Birr 300. According to the mother's response she was the only caregiver spending more than seven hours per day for giving care. The workload in the home was heavy; having no other supporter. The father's role in child rearing as she said, "*he goes out early in the morning and gets back in the evening and then if the baby is not sleep he plays with him*". Additionally she said "*my husband doesn't help me in other activities in the home*".

The mother was showing love to her child by kissing and hugging. And she was trying to give and receive attention towards and from her, which of course the child was responding with his sounds. Both the mother and the child were showing pleasure and enthusiasm. The child was lying in a carpet and the mother kneeled down in front of him and the child was alert receptive to the mothers face, voice and facial expression, they had good eye contact in which their emotional engagement was maintained by mutual gaze. The caregiver was playful using her face, voice, touch to elicit the infant 's attention and the infant was surprised by her routines, which makes him to laugh and stimulating the caregiver to become more playful and to laugh more. This shows the pleasure of being together and getting to know one another.

The mother was adjusting herself to the child's interest and she has followed his lead but she has put little emphasis on his initiative because she didn't give him more time. Although she was playing with her own initiatives, there was pleasure between them. The mother was helping the child to walk and while he was managing in doing it, she was not praising or approving his action. The mother was naming and identifying and describing about sport activities that she had played with the child, although they were accompanied with poor expressions of excitement. When the child protrudes his tongue out she said "*don't protrude your tongue, get it in*" by hitting his mouth and shouting; this shows that, her way of leading the child was not positive. The mother was trying little, to give explanations and create a situation where it is possible for the child to succeed and help him to plan step by step because she simply wanted him to be happy through her own initiatives.

murmuring and the mother put the child on her thighs and gave her breast to calm and immediately the child stopped breast feeding and started to look at the camera again then the mother started to describe about the objects and people around with good expression of excitement, mean while the child also tried to repeat what her mother said but the mother didn't give praise to the child actions. When the child has urinated in her pants the mother said *"a good baby doesn't urinate in her pants ok...you will not do this again ok.... then you will be a good girl"* it was a positive way of limit setting. With regard to facilitated learning, since the mother didn't put emphasis to the child's own initiative, there was no mediation to enrich the child's experience of the world.

Generally, although there was no eye contact, the mother has expressed her love through hugging, holding and kissing. Their emotional communication has taken place mostly through physical-body contact. When it comes to the total emotional communication, it was average and the facilitated learning behavior of the caregiver was inadequate.

Caregiver-Child Pairs (Code No 19)

The child and mother's age was 24 month's and 30 years respectively. The mother's level of education was primary, and she was a housewife, living with her husband who was daily laborer. The family monthly income was Birr 90 with family size 5, living in 1 room. According to her response, she spent the whole day to take care of the child, she was the only person who was taking care of her child and the workload at the home was heavy, having no other supporter. The father didn't help her in child rearing and other activities in the home.

She was not showing any love to her child, she was detached, she was thinking about something else, she didn't give and receive attention, she was avoiding looking at her child and there was no any pleasure and enthusiasm between them, the mother did not have any devotion because she was not concerned about her child's happiness, and she didn't seem that she knows how to play with her child. Before video recording, the researcher tried to make both to be more comfortable and told the caregiver to play as usual; during video recording she was told to play with her child but she was only talking with the child as if she is talking with an adult by saying *"you...say something don't be calm"* and the child was not interested with her mother's action. The mother was not emotionally available, with no expression of excitement, and no eye contact in between them. Their adjustments were not in mutually adaptive way, the mother didn't follow the child's lead, and the child's initiative was totally ignored. The mother didn't make the environmental stimuli compatible to the child's need; the verbal and vocal communication was very limited there was no any encouragement. This showed that the mother didn't consider the child as a communicative partner.

Generally, the mother was less sensitive, not emotionally involved, less verbally communicated and uninterested in her child's performance. Since the emotional communication was very poor, the facilitated learning behavior cannot be conveyed. Thus the care giver-child interactional behavior was inadequate.

4.2 Discussion

This part of the analysis is presenting the quality of early caregiver-child interactional behaviors and the relationship among caregivers' characteristics and the qualities of interaction.

4.2.1 Quality of early caregiver-child Interactional Behaviors

The quality of interaction was observed based on the two major elements of ICDP themes of interactional behaviors:

- Emotional Behavior
- Cognitive Behavior

4 .2.1 A/ Observed Quality of ICDP Emotional Behavior among Mother-Child Pairs

The quality of emotional behavior was observed based on the 3 quality indicators from the ICDP themes of interactional behaviors:

- Showing positive love
- Develop empathy and understanding of emotions
- Emotional talk

The results of the study indicated that, most of the caregivers have expressed their positive feeling through bodily contact (hugging, touching and kissing), although the eye contact was missing. They did not give and receive attention appropriately, they were less emotionally involved as well as they were less sensitive to their children's needs. Therefore, the children

lacked interest and became less active. Thus the mother and the child have showen little pleasure and enthusiasm. Similarly Cohn et al., 1986 mentioned that, caregivers' unresponsiveness to infant distress and attempts to illicit interaction, and a detachment and lack of pleasure during interactions with the child describes emotional unavailability.

Most of the caregivers also were not aware how to show their love appropriately, they thought that love could be expressed through physical care only indicating that they didn't understand about the importance of psychological involvement and implication of this seems that, the caregivers didn't have appropriate awareness about their role in the early relationship with the child. Practically or scientifically caregivers should express their love physically and psychologically in order to help the children develop healthy mental state. This idea has confirmed by Donald Winnicot (1995) who described the importance of adoration of the mother's gaze for the infant to find himself reflected hence care giving creates a holding environment which comprises both physical protection and psychological containment or the environment and the early relationships mirror for the infant a sense of being recognized, understood and validated through experience of warm and empathic care.

In addition most of the caregivers were not following and responding in a sensitive manner to the initiatives and body language of the child, they couldn't appropriately read the babies behavior (they couldn't appropriately understand their children's condition of wishes, aims and body language); they were not focusing attentively to the children's activities. They have only recognized and responded to the children's physical state (hunger and distress).This implies that the caregivers have the thought that, during interaction mothers should only follow their

caregivers were not aware of the importance of praising the child. Rye (1995) indicated, children could learn to behave in an acceptable manner when they get their parent's reaction, and it is used as a reference for their own behavior and sense of security. In addition parents need to respond positively toward their children and reinforce whatever the children do well and explain what was good about the accomplishment whatever it was. Most of the caregivers have tried to attract the children's attention through their own initiatives; there was no sharing of a common focus of attention. This seems that they have the thought that, the child activities should be controlled and dominated in order to make the child loyal and obedient. This idea might be raised from the caregivers' cultural background and personal experiences. Similarly, Klein (1986) stated caregiver's cultural background and conception of the child influences her intentionality.

Moreover, the verbal interaction between most of the caregivers and children was limited hence the caregivers didn't even give appropriate information about the immediate episode. However, as Rye (1995) stated, children need to learn that there is more to life than the immediate present surroundings because the mediation of transcendence is one of the most important factors in the child's cognitive and cultural development. Thus the children's cognitive and cultural development may be affected and as Feuerstein & Hoffman 1982 stated, these children were deprived from the ability to relate what they experience at the moment with past or future experiences. The verbal and non-verbal appreciation or affect in relation to objects, animals, people and value was also limited. This shows most of the caregivers didn't consider the child as a communicative partner. However, a child should communicate verbally and emotionally with her/his mother because as Klein (2001) stated, affective value oriented connotations can

not be transmitted to the child through direct exposure to stimuli; they can be transmitted through caregiver's mediation.

The findings also indicate that most of the caregivers didn't follow the children's lead during playing. Instead they prevent them from doing what they want to do by controlling their activities. From this information it is possible to say that, these children have been deprived from mediation of regulation hence the children's mental development might be delayed. This finding was consistent with Feuerstein (1985) findings that, "children who were deprived of mediated regulation of behavior lack the capacity to regulate and mach their behavior to the requirements of the task in a systematic way, instead they jump to conclusions in an erratic, unsystematic way".

Generally, the quality of caregiver's facilitated (mediated) learning behavior was minimal (below average). However, Hundeide (1991) stated that *"in every culture there needs to be interaction between caregivers and children if a process of socialization and enculturation is going to take place, and the interaction must mediate intentionality and reciprocity, transcendence, meaning, feeling of competence and regulation of behavior"*.

4.2.1.C/ The Observed total Quality of Early Caregiver-Child ICDP Interactional Behaviors

The total quality of early caregiver-child interactional behavior was observed on the ICDP's 8 themes interactional behaviors which was grouped in to two major categories:

was very poor. Generally from the findings it is possible to say that the physical care was predominantly observed behavior than the psychological care. This might be due to caregivers' low level of education and poverty. Similarly, Klein (1989) indicated little verbal interaction, but a lot of holding and body contact is typical type of interaction under conditions of high stress socio-economic deprivation.

Since there was no good emotional communication between caregivers and children, the quality of mediated learning experience was negatively affected. Thus, the children were deprived from MLE, which is important for cognitive and cultural development. Similarly, studies indicated that early expressive dialogue serves as a basis for establishing a mediated and guiding relationship necessary for the child's further socialization and cognitive development (klein and Feuerstein 1985).

4.2.3. The Relationship between Caregiver's Characteristics and the Quality of Caregiver-Child ICDP Interactional Behaviors

The relationship among caregiver's characteristics (maternal age, mothers education, family size and family monthly income) and the quality of early caregiver-child interactional behaviors has been observed based on:

- The relationship between caregiver's characteristics and the quality of emotional behavior among mother-child pairs
- The relationship between caregiver's characteristics and the quality of cognitive behavior among mother-child pairs

From the four caregiver's characteristics mother's educational status has shown positive and nearly statistically significant correlation with the quality of emotional behavior. This implies that those caregivers with a better educational status have shown better quality of interaction than those with lower educational status. With regard to other background characteristics, monthly income and family size have shown positive correlations and mother's age showed negative correlation, but the correlations for three of them were statistically insignificant.

Additionally, only maternal education has shown statistically significant positive correlation with the quality of caregiver's cognitive behavior; whereas the other characteristics maternal age, family size, family monthly income have shown statistically non-significant positive correlations

Almost all of the mothers were illiterate, which implies that, the caregivers couldn't have appropriate knowledge about child development hence the quality of interaction with their children was not good. This finding was supported by Hart (1989) cited in Teka Zewdie (2002), which indicate maternal level of education and socio economic status directly related to maternal knowledge. MacPhee (1983) cited in Teka Zewdie (2002) also confirmed the finding by indicating, *"the higher the positive rating of the more knowledgeable mothers about their infants, the higher their tendency to structure interactions between the children and the social and the physical environment"*. Similarly Teka Zewdie (2002) also stated, *"Knowledgeable mothers better positioned for exposure to socio-cultural sources of information, and for direct observation of infants and children than the less Knowledgeable parents who are usually characterized by lower education and socio economic status"*.

Maternal age had very weak positive correlation with the quality of cognitive behavior and very weak negative correlation with the quality of emotional behavior; this might be due to some confounding factors because studies indicated adult mothers give better care for their children than adolescent mothers. For example Guralnick (1997) grouped adolescent mothers as part of target populations for early intervention service because they are identified as family at risk. Family size shows weak positive correlation, with the two quality indicators. Evidently the observation shows weak correlations due to some confounding variables because most of the care giver didn't have any helper in their workload and have over-crowded living situations hence this might have negative effect on the mothers' mental health. On the contrary, limited family size may be a problem in terms of interaction (playing with children, helping mothers with workload) especially if the interval of children's age is high. In addition, families like grand parents and other relatives can be powerful sources of support for a mother looking after a young child.

Moreover family income has shown statistically non-significant positive correlation with the quality of interactional behaviors. This weak correlation might also be due to confounding variables because different studies confirmed the negative impact of poverty on children's development. For example, David Habmburg (cited in Halpern, 1990) stated poverty is the most profound and pervasive exacerbating factor, which causes the developmental problems of the young child. Similarly Robert Halpern (1990) also mentioned "poverty increases numerous risk factors which can present simultaneously in the child, the parents and the family's informal support system.

As Tesserawork described, hunger, disease, illiteracy, poor child rearing practices, poverty etc, are some of the terms that are frequently used to describe living conditions of children in Ethiopia (Tesserawork, 1989 cited in Fekadu, Z., 1994). These are environmental risk factors that have an effect upon children's normal growth and development. Similarly, the study implies the caregiver-child pairs can be included in the family at risk because the quality of interaction was not appropriate. Thus there is a need of early intervention programs as Zewdie (2002) mentioned, mother-child interaction is the sum effect of multiple factors requiring multiple and interrelated actions so that an integrated developmental program is needed as a preventive measure.

CHAPTER FIVE

5.1. Conclusion

The study analyzed the quality of early caregiver-child interactional behaviors, the predominantly observed quality of interactional behaviors, and the relationship between caregiver's characteristics and quality of early caregiver-child emotional behavior and cognitive behavior. Finally the following conclusions were made from the study:

- The quality of emotional behavior among caregiver and child was generally moderate. Most of the caregivers have shown positive love to their children, through physical care only. The psychological involvement (eye contact,Emotional expressions, emotional talk etc) was very poor and they didn't consider the children as communicative partners. By realizing this, it is possible to conclude that, the caregivers didn't have appropriate awareness about the importance of psychological involvement and emotional dialogue to a child's development of mental abilities; hence there couldn't be appropriate emotional communication.

- The quality of cognitive behavior was generally minimal (below average). Most of the caregivers had limited verbal communication, they have ignored the children's initiatives as mentioned above, their interaction was through bodily contact. Therefore the caregivers' mediated learning behavior was not conveyed appropriately. From this it is possible to conclude that the caregivers didn't

understand the appropriate ways of interactional behaviors, which are important for the child's emotional, cognitive and cultural development.

- The emotional behavior was predominantly observed than the cognitive aspect although it was not expressed appropriately in most of the couples. Most of the mothers express their love or feeling through bodily contact (hugging, touching and kissing). The psychological involvement was very poor.

- When it comes to the relationship between caregiver's characteristics and quality of early caregiver-child interactional behaviors, mother's education showed positive statistically significant correlation with the quality of emotional behavior and cognitive behavior. From this it is possible to suggest that mother with better education shows better quality of interaction. The other characteristics show statistically non-significant positive correlations except mother's age and quality of emotional behavior showing weak negative correlation. The correlations were weak due to some confounding variables. However, they imply something in which they have some associations with caregiver-child relationships.

- Most of the caregivers were illiterate, with low family income and large family size and heavy workload in the home. These characteristics have negatively affected the total quality of interaction hence these are environmental risk factors that impinge upon children's normal growth and development. Thus it is possible to conclude

that the caregiver-child pairs could be included in the target population of early psychosocial intervention.

5.2. Recommendation

The research study focused on the quality of early caregiver-child interactional behaviors. Because of risk factors like low level of education, poverty, overcrowded living situations and workload the quality was minimal. Hence the caregiver-child pairs have been found to be target populations for early psychosocial intervention. Thus, the following recommendations have been made.

1. There is a need of a large scale study before implementing early intervention program to investigate the typical forms of child rearing, the styles of communicating with children, and the typical problems in the household that prevent a sensitive, mediational relationship with the child.

2. Implementing early intervention program to improve caregiver-child interactions targeted at integrated approaches which include:
    - knowledge about children's health and development,
    - Literacy education
    - Improving parental perception of their role as parents, their view of their child and their educational objectives for him or her

- socio-economic conditions, social support,
- Improved status of women
- Lowering unemployment
- Health services
- Training of multi-purpose social workers

3. Reactivation and facilitation of indigenous child rearing practices and child culture which are appropriate for child development, by the members of local community themselves.

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Appendix A. Questionnaire

Code No.: _____
Date: _____
Name of Interviewer: _____

DATA COLLECTION SHEET FOR RESEARCH IN MOTHER-CHILD INTERACTION

I. BASIC INFORMATION

1. Name of child_____Father_____Mother_____

2. Age of child _____

3. Mother's age_____ Father's age _____ Religion_____

4. Level of education: Mother_____ Father _____

5. Occupation: Father _____ Mother _____

6. Are Parents living together? Yes_____ No _____

7. Who cares mostly for the child? Mother____ Father ____ Grandparent___

8. Number of children in family _____

9. Their age and sex:

1) Age _____ Sex _____ 2) Age _____ Sex _____
3) Age _____ Sex _____ 4) Age _____ Sex _____
5) Age _____ Sex _____ 6) Age _____ Sex _____

10. How many people in average live together in the home _____ How many rooms_____

11. Socio-economic level of the family: Below ____ Average____ Above ___

12. Who are supporting the family economically? _____

12. Monthly income _____

13. According to your opinion how heavy is the mother's workload through out the day? Heavy: ___ Moderate: _____ Light: _____.

14. How much time does the mother spend for individual care and play with the child? _____Hours.

15. Who is helping the mother with her workload? _____

16. To whom can she turn in case of distress or need? _____

17. What is the father's task in relation to care of the child? _____

18. The father's task in the home? _____

Appendix B. Observational Checklist

Early Emotional communication

1. **Showing positive feeling**

1.1 Showing love

Minimal ☐ Moderate ☐ good ☐ very good ☐

1.2 Giving and receiving attention and interaction (Eye contact)

Minimal ☐ Moderate ☐ good ☐ very good ☐ 1.3

1.3 Showing pleasure and enthusiasm with the child

Minimal ☐ Moderate ☐ good ☐ very good ☐

2. **Developing empathy and understanding of emotion**

2.1 Understanding of caregiver to wards the child's condition of wishes, aims and body language

Minimal ☐ Moderate ☐ good ☐ very good ☐

2.2 Adjusting herself to the child and flow it's lead

Minimal ☐ Moderate ☐ good ☐ very good ☐

2.3 Putting emphasis on the child's own initiative

Minimal ☐ Moderate ☐ good ☐ very good ☐

3. **Emotional "talk" (Dialogue)**

3.1 Talking to the child about what it is interested in and to get it to "talk"

through emotional expressive (eye contact, smiles, sounds and turn taking with gestures and happy expressions)

Minimal ☐ Moderate ☐ good ☐ very good ☐

Facilitating or Mediating Learning

4. Encouraging (Feeling of competence)

4.1 Giving praise and verification to the child when he/she manages to do something

Minimal ☐ Moderate ☐ good ☐ very good ☐

5. Focusing (Intentionally and Reciprocity)

5.1 Selecting, exaggerating accentuating, scheduling grouping sequencing, or pacing stimuli.

Minimal ☐ Moderate ☐ good ☐ very good ☐

6. Meaning (Exciting)

6.1 Expressing excitement vocally, verbally or non verbally over experiences, objects, people etc

Minimal ☐ Moderate ☐ good ☐ very good ☐

6.2 Naming identifying, describing for whatever it is she shows together with a child

Minimal ☐ Moderate ☐ good ☐ very good ☐

7. **Expanding (Transcendence)**

7.1 Expanding, elaborating, associating and raising awareness to Meta cognitive aspects of thinking.

Minimal ☐ Moderate ☐ good ☐ very good ☐

7.2 Relating past present and future experiences

Minimal ☐ Moderate ☐ good ☐ very good ☐

7.3 Relating to physical, logical or social rules and frame work

Minimal ☐ Moderate ☐ good ☐ very good ☐

8. **Regulation Behavior (Organizing and Planning)**

8.1 A positive way of guiding the child

Minimal ☐ Moderate ☐ good ☐ very good ☐

8,2 Creating a situation where it is possible for the child to succeed

Minimal ☐ Moderate ☐ good ☐ very good ☐

8.3 Helping the child to plan step by step

Minimal ☐ Moderate ☐ good ☐ very good ☐

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Cognitive behavior	30	13.73	2.88	0.53

One-Sample Test

	Test Value = 10					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
Cognitive behavior	7.11	29	0	3.73	2.66	4.81

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Cognitive behavior	30	13.73	2.88	0.53

One-Sample Test

	Test Value = 20					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
Cognitive behavior	-11.935	29	0	-6.27	-7.34	-5.19

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Cognitive behavior	30	13.73	2.88	0.53

One-Sample Test

	Test Value = 30					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
Cognitive behavior	-30.979	29	0	-16.27	-17.34	-15.19

Appendix C. T test of the observed quality of interactional behavior among the mother-child pairs

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Emotional behavior	30	13.6	4.06	0.74

One-Sample Test

	Test Value = 7					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
Emotional behavior	8.893	29	0	6.6	5.08	8.12

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Emotional behavior	30	13.6	4.06	0.74

One-Sample Test

	Test Value = 14					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
Emotional behavior	-0.539	29	0.594	-0.4	-1.92	1.12

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Emotional behavior	30	13.6	4.06	0.74

One-Sample Test

	Test Value = 21					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
Emotional behavior	-9.971	29	0	-7.4	-8.92	-5.88

Declaration

"I herby declare that this thesis is my original work. It has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged."

Name: Rahel Gebresillassie Gebregeregs

Signature: .....

Place: Addis Ababa University

School of Graduate Studies

This thesis has been submitted for examination with my approval as University advisor.

Name: _____

Signature: _____