

CHAPTER 2

INFANCY: DEVELOPMENTAL TASKS AND STAGES, FORMS OF PLAY AND TECHNIQUES

2.1 INTRODUCTION

In this chapter reference will be made to several developmental theories in the development of an infant. Developmental theories strive to systematically describe and explain the development of an organism from a specific viewpoint. The purpose of this chapter is for the caregiver to develop a better concept and understanding of the influence which the working mother and caretaking at home has on the growth and development of the infant.

For optimal caretaking of the infant, the caregiver must have knowledge and insight in the developmental tasks and skills that the infant must achieve in order to grow and develop into a self-actualized organism and an integrated whole. There will be a distinction between the physical, cognitive, language, personality and social development of the infant. Techniques such as forms of play, massage techniques, and music as a technique are discussed, and examples are given.

2.2 THE INFANT

It is important to remember that all individuals are unique and therefore will grow and develop at different rates. The "right time" will be when the infant is ready. The following information can only offer a general guide to how infants grow and develop. The caregiver cannot speed up the development timetable, but if she gives the infant a lot of love and undivided attention, she gives him what he needs in order to grow and develop at his own pace. The infant's development does not happen in a vacuum or in isolation from the rest of the world. He can learn and progress only by being part of his surroundings. He learns by example. He needs acknowledgment, love, and encouragement from the people around him in order to reach his full potential. By doing what comes naturally, like cuddling him, talking to him, and going to him when he cries, the caregiver is giving him a sense of security and confidence that allows him to learn. As the infant grows, develops and learns, the caregiver will also learn from him as her skills develop.

Infancy involves dramatic and rapid growth and development. A primary characteristic of infancy is the amount of energy that is used to explore and

discover the world. Infancy can be seen as a critical, dangerous, and challenging stage (Louw, 1990:177):

- critical, because the basis for behaviour patterns are established,
- dangerous, because fatal accidents may occur because of the infant's inability to foresee accidents, and
- challenging, because of the infants increasing strive for independence.

According to Newman and Newman (1987:160) there is an element of vulnerability during the infancy period. Severe, prolonged deprivation of adequate sensory stimulation and responsible caretaking can cause disruption in development. The rate of success that the infant will achieve depends on the opportunities and the guidance that he will receive. The infant that does not have optimal stimulation in this developmental period will have difficulty to achieve the developmental tasks in future periods. Continued support, motivation and a positive caring environment can result in successful achievement of the developmental tasks in this period.

2.3 DEVELOPMENTAL TASKS

The first two years get specific meaning when the developmental tasks of this period are taken into consideration (Havighurst & Hurlock in Louw, 1990:158):

- The infant learns to walk, although the success rate varies.
- He learns to eat solid foods.
- The infant learns the basic language skills. He can use different words in sentences, and he understands simple phrases and commands. Although he learns to pronounce the words he often uses correctly, his ability to communicate and understand is still on a lower level.
- He learns to partly control his body functions.
- The infant develops emotional communication with his parents and siblings.

The rapid development of the nerve system, the improvement of the bone structure and the improvement of the muscles, makes it possible for the infant to achieve these developmental tasks. How successful he will be in achieving these developmental tasks depends on the opportunities he will get and the help and guidance he will receive. Infants that are not as developed as their peer group

will have a handicap when they reach early childhood, and it will be expected of them to achieve the developmental tasks of this stage. Successful achieving of developmental tasks has the advantage that his peers will accept him, which is one of the most important developmental tasks of the early childhood (Louw, 1990:158-159).

2.4 PHYSICAL DEVELOPMENT

Growth and development happen rapidly during the first two years of life. At birth, the infant's weight included excess body fluids, which he lost during his first few days. The average newborn gains weight at a rate of 2/3 of an ounce (20-30 grams) per day, and by one month weighs about nine pounds (4kg). He will grow about one inch (3cm) during this month. In the first two and a half years, the birth weight gain is 300 percent, and his height 80 percent. His big forehead, big eyes, small nose, high shoulders, short neck and prominent abdomen characterize the infant. At birth the weight of the brain is 25 percent of the total body mass, and by two years the brain is 75 percent of the total mature brain. No new brain cells develop after birth. The increase in weight gain is because of the increase of the blood supply and nerves. The paediatrician will pay particular attention to the infant's head growth, because it reflects the growth of his brain. The skull should grow faster during the first four months than at any other time in the infant's life (compare Du Toit & Kruger, 1991:71-72; Louw & Louw, 1992:177-180; and Shelov & Hannemann, 2004:143-144).

2.4.1 Development of motor functions

Motor development depends on the total physical development of the infant. In order to crawl, walk, climb and hold, the skeleton, nerve system and muscles must be developed. Infant reflexes include sucking, grasping, rooting, coughing, and stepping. With time, each of these behaviours will make a transition from an involuntary to a voluntary behaviour. According to Newman and Newman (1987:162) the transition from involuntary to voluntary reaching and grasping take place as a result of a process of repeated discovery, exploration, and practice of controlled, coordinated muscle movements. Other motor skills are achieved as a result of physical growth, maturation of bones and muscles, and maturation of the nervous system. **Cephalocaudal development** is the development and control of muscles from the infant's head to his feet (or "tail"). The infant first gets control over his eyes, then his head, neck, arms, upper body, and then downwards to his legs and feet. **Proximodistal development** implies development of the body outwards. The infant will firstly gain control over his body and shoulders, before he can control his arm movements, hand movements, and finger movements (Du Toit & Kruger, 1991:73-74).

During the first twelve months the infant develops rapidly. During the infant's first weeks, his body will gradually straighten from the tightly curled position he held inside the uterus. His legs and feet may continue to rotate inward, giving him a bowlegged look. This condition usually will correct itself gradually over the next six months. By the third week, the stump from the infant's umbilical cord should have dried and fallen off. Leaving behind a clean, well-healed area (Shelov & Hannemann, 2004:144-145).

Between one and four months the infant will undergo a dramatic transformation from a totally dependent newborn to an active and responsive infant. He will lose many of his newborn reflexes while acquiring more voluntary control of his body. The caregiver will find him spending hours inspecting his hands and watching their movement. An important development during the early months is the infant's increasing neck strength. If placed on his stomach before two months, he will struggle to raise his head to look around. If he succeeds for only a second or two, this success will allow him to turn for a slightly different view of the world and to move his nose and mouth away from the blanket in his way. These momentary "exercises" also will strengthen the muscles in the back of his neck. By the fourth month, he will be able to hold his head and chest up to look all around at will, instead of just staring at the mobile directly overhead. The caregiver no longer has to support the infant's head quite as much when carrying him. When the caregiver uses a front or back carrier, the infant will be able to hold his own head up and look around as the caregiver walks.

By two to three months, the soft spots at the back of the infant's head should be closed, but the spot on the top of his head will still be open. He will look round and chubby, but as he starts using his arms and legs more actively, muscles will develop and fat will begin to disappear. By the end of the third month, it is possible for the infant to turn over from stomach to back while in a lying position. The caregiver needs to be vigilant whenever the infant is lying on the changing table or on any other surface above floor level (Shelov & Hannemann, 2004:177-180).

By four months, the most important changes are taking place within the infant. It is a period wherein the infant's personality and unique character traits will be recognized. He will smile and play with everyone he meets. This is a good time for the mother to take advantage of the infant's sociability to acquaint him with his new caregiver. Instead of reacting primarily by reflex, as he did during his earlier months, he will now choose what he will and will not do. He will be able to communicate his emotions and desires. (For example, he will not only cry when he is hungry or uncomfortable, but also when he wants a different toy.) He will learn to coordinate his emerging perceptive abilities and his increasing motor abilities to develop skills like grasping, rolling over, sitting up, and crawling. The infant's physical coordination improves, and he will discover his different body

parts as he is lying on his back. The infant will grab his feet and toes and bring them to his mouth. He will also start to understand the function of his body parts. The infant will then take on a greater challenge: sitting up. He will accomplish this as his back and neck muscles gradually strengthen and he develops better balance in his head, neck and trunk. First he will learn to raise his head and hold it up while lying on his stomach. The caregiver can encourage this by placing him on his stomach and extending his arms forward. The caregiver can then hold a rattle toy in front of him and shake it to get his attention. Once he has mastered the action of holding up his head, he will start pushing up on his arms and arching his back to lift his chest. This will strengthen his upper body so that he can remain steady and upright when he will be sitting. Once the infant is strong enough to hold up his head, the caregiver can help him practice sitting up. She can hold him up in a sitting position or support his back with pillows as he learns to balance himself. Placing his favourite toy in front of him will help the infant to focus as he gains his balance. By the end of this period, he will be able to roll over in both directions. When the caregiver places him on his feet on the floor he will practice bouncing (Shelov & Hannemann, 2004:2001-2005). By maturing his motor skills, the infant increases his process of making and maintaining contact with his caregiver, which will enhance his sense of security and well-being.

The infant will be able to stand at six months, and walk from nine months. Each of these accomplishments requires practice, refinement, struggle, and mastery. The achievement of competence in each of the motor tasks depends on the infant's maturation level, environment conditions, and the strength of the infant's desire for mastery. As he achieves a motor task, it brings him in contact with the environment, in order to experience more varied stimulation, explore objects more deliberately, and voluntarily pursue his goals (Newman & Newman, 1987:163-165).

At seven to ten months the infant will master the skill of crawling. For a while he may rock on his hands and knees. Since his arm muscles are better developed than his legs, he may even push himself backward instead of forward. With practice he will discover that, by digging with his knees and pushing off, he can propel himself forward across the room toward the target of his choice (Shelov & Hannemann, 2004:230-231).

During the age of eight through twelve months, the infant will be standing without support. His posture will look unusual, because his belly will protrude, his behind will stick out, and his back will have a forward sway to it. When he takes his first steps, his feet may turn outward. This occurs because the ligaments of his hips are still so loose that his legs naturally rotate outward. During the first six months of his second year, the ligaments will tighten and then his feet should point nearly straight. The infant will become increasingly mobile. Being able to

move around gives the infant a sense of power and control and will promote his self-esteem. His newfound physical independence is also frightening to him, since he will be upset about being separated from his mother or caregiver. At this stage the infant has no concept of danger, and only a limited memory of the caregiver's warnings. Childproofing the house, will allow the infant a greater sense of freedom. Fewer areas will be off limits, and he will be able to make discoveries on his own, without the caregiver's intervention or assistance.

The more opportunities the infant finds to discover, test, and strengthen his new capabilities, the more confident and adventurous he will become (Shelov & Hannemann, 2004:231-234). The infant's physical development enables him to be independent and to explore his environment. Through his exploring, the infant is exposed to situations that can be dangerous (stairs, a hot oven or a swimming pool). The infant's mobility requires a lot of time, energy and patience from the caregiver. The caregiver must guide the infant in his process of self-realization.

2.4.2 Development of sensory functions

The human being is born with an internal set of sensory mechanisms. Human sensory mechanisms have been created so skilfully that a multitude of physiological transactions takes place before an individual can really experience an impulse. The human sensory system is a highly complex system, which enables beings to experience the world and make contact through their involvement in the world. It is essential for the infant's sensory skills to develop in order for him to make sense of his surroundings (compare Schoeman & Van der Merwe, 1996:41-42 and Thompson & Rudolph, 1992:121). Oaklander (1988:109) agrees: "It is through these modalities that we experience ourselves and make contact with the world". The researcher is of the opinion that the infant experiences, discovers, develops and internalizes his surroundings, and the world, as well as the self, through his senses. The mother and the caregiver must be aware of stimulating the infant's senses through caregiving and play. Sensory contact with his environment and his world is made through sight, hearing, touch, smell, taste and talking.

Sight

A newborn baby is born with peripheral vision, which means he has the ability to see to the sides. He can see everything at a fixed focus of eight to ten inches (twenty to twenty five centimetres). He will learn to follow, or track, moving objects. Normal development of the infant's eyesight depends on visual stimulation (compare Shelov and Hannemann, 2004:155-156 & Stoppard, 2001:176). Since a newborn baby's vision is more limited than an older child's, the caregiver will have to arrange activities in accordance with the infant's developmental level.

At birth, the infant is sensitive to bright light, and his pupils are constricted to limit the amount of light that enters his eyes. At two weeks old, his pupils will begin to enlarge, allowing him to experience a broader range of shades of light and dark. As his retina (the light-sensitive tissue inside the eyeball) develops, his ability to see and recognize patterns also will improve. The more contrast there is in a pattern, the more it will attract his attention, which is why he is most attentive to black-and-white pictures or high-contrast patterns, such as sharply contrasting stripes, bull's-eyes, checks, and very simple faces (Shelov & Hannemann, 2004:155-156).

Although his eyesight is limited, the infant's eyes are sensitive to the human face and to anything that moves. At first he will not be able to focus on anything farther than ten inches away, but if the caregiver brings her face close to his, he will see her. She will notice that his eyes move in recognition and his expression changes. By eight weeks, the infant will be able to fully focus, and he should recognize the caregiver's face and respond to it with smiles and waving arms. By three months, the infant can take in details, and is able to build up a three-dimensional picture of the world. This is an essential step before he becomes mobile, since he needs to understand depth as well as height and width before he starts crawling. Colour vision does not fully mature before four months. The infant's good vision is essential in his early motor and cognitive development. At four months he can distinguish subtle shades of reds, blues, and yellows. From six months, he can identify objects and he can adjust his position to see people and things that interest him. Visual development from this stage on is the way his brain interprets the information his eyes see (Stoppard, 2001:176).

According to Sears and Sears (2002:56-57) it is more educational for the infant to be on the mother's or caregiver's shoulder or hip while she walks around the house, (sorting the mail, talking on the telephone or unpacking a variety of groceries), than to lie in a crib, watching a developmentally appropriate mobile turn in the air or in a playpen well stocked with the latest in educational toys. When the caregiver goes to the mall (with the mother's consent) the environment will be more stimulating in the caregiver's arms, than in a stroller eighteen inches off the ground. By carrying the infant as the caregiver goes about her daily tasks and errands, he will get the stimulation he needs to develop his sight, his hearing, and his understanding. He will also get the added input as the caregiver talks to him and shares her observations and feeling with him. The infant that is carried more will cry less, thereby giving him more time for productive interaction with his environment. The closeness to the caregiver and the gentle motion of her walking will keep the infant calm. The infant who is carried spends more time in the state of quiet alertness, which helps him to adapt more quickly to the outside world.

To stimulate the sensory awareness of sight and keep his visual interest, the infant can be motivated to become aware of different aspects within his surroundings. The caregiver can take him for sightseeing in his stroller, so that he will be able to look all around him. The following guidelines are proposals:

- hang a photo of his mother's face (or any significant person in the infant's life) at the side of the crib (Stoppard, 2001:176);
- hang a mobile over the crib or string brightly coloured objects across it to catch his eyes once colour vision is more developed (Stoppard, 2001:176);
- give the infant an unbreakable mirror so that he can look at his own reflection. The reflected image is constantly changing, which fascinates him (compare Shelov and Hannemann, 2004:207 & Stoppard, 2001:176);
- look at the sun through different colours of cellophane or sunglasses;
- look at footprints on the sand;
- look at the forms, shapes and colours of different stones, shells or flowers;

The caregiver must use her initiative and creativity to stimulate the infant's sight through interaction and play.

Hearing

The newborn baby needs to be able to hear the full range of sounds that are essential for speech if he is to be able to talk correctly. Even though the newborn baby does not understand sound, he reacts to noises. If he is startled by a sudden loud noise, such as a door slamming, he may throw out his arms and legs in a "startle" reflex action. As he grows and develops he will blink or open his eyes when he hears a loud noise. By four weeks, he will begin to notice noises of longer duration, such as the vacuum cleaner (Stoppard, 2001:178). The infant will pay close attention to human voices during the first month, especially high-pitched ones speaking "baby talk". When the caregiver talks to him, he will turn his head to search for the caregiver and will listen closely as she sounds out different syllables and words (Shelov & Hannemann, 2004:155-156).

By the time the baby is four months old, he should be able to discriminate between certain sounds. He might react to the caregiver's voice with a smile and by turning his head into the direction he hears the caregiver's voice coming from. A nine-month-old baby should be babbling to hear his own voice, and will listen attentively to familiar sounds (Stoppard, 2001:178).

The researcher is of the opinion that, depending on their surrounding, activities will take on different dimensions. The caregiver and the infant can listen to the sounds in their surroundings and name or imitate them, for example, the chirping of a bird, a car blowing its horn or the leaves of a tree waving in the wind. Stoppard (2001:178) suggests being theatrical about explaining sounds. For example, to put your finger to your lips and say, "Sssh, let's be quiet as mice," to explain the idea of quietness. The caregiver can describe sounds and music with appropriate adjectives such as "loud" and "soft". She can name new sounds, such as the cat purring, and imitate it. "Allowing sounds to enter our awareness is our first step toward contacting the world, the beginning of communication" (Oaklander, 1988:113). The infant can be in contact with himself and make contact outside himself through sound.

Touch

The infant is equally sensitive to touch and the way the caregiver handles him. He will nestle into a soft piece of material (satin or flannel), but will pull away from scratchy material (burlap or sandpaper). When the caregiver strokes him gently with the palm of her hand, he will relax and become quiet. If she picks him up roughly, he will probably take offence and cry. Holding, stroking, rocking, and cuddling him will quieten the infant when upset and make him more alert when he is drowsy. It will also send a message of her love and affection for him. Long before he understands a word she says, he will understand her moods and feelings from the way that she touches him (Shelov & Hannemann, 2004:157-158).

The most obvious way to make contact is through touching. The sense of touch is not only centred on the fingers and hands, but the whole skin. Physical contact with other human beings has an impact on the infant's development. Especially during infancy, socialization takes place through touch. Physical contact being reciprocated is in a sense necessary for survival. The infant explores his surroundings and world through touch (compare Schoeman, 1996:47). The researcher is of the opinion that the caregiver must guide the infant in acceptable behaviour. When he touches something that he is not supposed to, the caregiver should explain to the infant why he is not allowed to touch it or why it is not acceptable to touch it. The infant can rather use his other senses, for example looking at it or smelling it. Giving him an alternative or a reason why he should not touch something will help the infant understand, as he grows, why certain behaviour is acceptable and others not.

The best way for the infant to learn to walk is barefoot. By walking barefoot he can learn to balance on the different textures that he feels with his feet.

To stimulate the sense of touch the caregiver can give the infant the following commands, which they can discuss:

- "bury" each other under the sand, which will stimulate the sense of touch over the whole body;
- feel the roughness of the sand between your fingers and toes (let him feel the difference between dry and wet sand);
- focus on polarities, for example hard and soft and cold and warm.

By using natural mediums such as sand, water, paint, and dough, the infant can be stimulated creatively by using different body parts, for example to paint with the feet.

Smell

According to Schoeman (1996:45) the sense of smell is used to gather information about the environment, and to discriminate between pleasant and unpleasant smells. Experimenting with breathing through the nose, mouth, and each nostril can stimulate awareness of the sense of smell, according to Oaklander (1988:119). As the air is blown out, it can be felt in the palm of the hand.

The researcher is of the opinion that the infant's sense of smell and awareness of his surroundings can be stimulated by letting him identify different aromas around the house. According to Schoeman (1996:45) aromas are connected to certain emotions, pleasant memories, anxiety, or sadness. The caregiver can stimulate the infant's sense of smell and try to connect different smells with memories through the following examples:

- Letting the infant smell his mother's perfume will remind him of her.
- The smell of cinnamon can remind the infant of his favourite comfort food.
- Smelling an orange reminds him of picking oranges with his father in the orchard.
- The aroma of flowers can bring back memories of a picnic in the park.

By connecting different experiences with smell, the infant can own the smell and his awareness will be stimulated. Through these experiences he will come in contact with other people and his environment.

Taste

Taste is a sensory observation, and the organ associated with taste is the tongue. The tongue is very sensitive and is part of the individual's uniqueness to develop a taste for certain food and liquids. The researcher is of the opinion that the caregiver should stimulate the child's sense of taste by experimenting with different tastes and textures (sweet, salty, sour, bitter and soft, hard, lumpy, coarse) and respects what he prefers. According to Schoeman (1996:47) the individual who does not value food and tasting loses out on an important opportunity to be in contact with the environment.

The researcher is of the opinion that the infant specifically makes contact with and experiences his environment by sucking and licking everything he can reach. The tongue is used for the verbalization of feelings and emotions (by sticking one's tongue out at someone to satisfy the expression of anger or greetings). The tongue is an important organ as it helps with the processing of food and is essential for talking (compare Oaklander, 1988:119).

Talking

As a contact function, talking has two dimensions, namely voice and language. The caregiver can make contact with the infant and can encourage the development of speech by talking to the infant (Sears & Sears, 2002:60-63):

- The caregiver should engage the infant's eyes before beginning a conversation. By doing this she will be able to hold his attention longer and it is more likely that she will get a response from him.
- Infants tend to watch a speaker's mouth and try to mimic the tongue and lip movements. The caregiver can encourage this by making fun sounds, exaggerating words, and encouraging the infant to repeat them. Mimicking the infant's sounds will encourage him to practice his sounds and try new ones. The caregiver can encourage speech by repeating the infant's sounds back to him, but turning it into a word that it sounded like.
- While the infant may not at first associate a name with himself, hearing it frequently will trigger pleasant associations of caring and recognition.
- Speech can be encouraged by using short word sentences and one-syllable or two-syllable words with drawn-out, exaggerated vowels: "sweeeet baaby".
- The caregiver could say, "Wave bye-bye to Mama," as she waves to the infant's mother when the mother leaves for work. Infants are more likely to

recall words that are associated with animated gestures, which is why they love sign language. The caregiver can vary her speech with inflection at the end of a sentence or exaggerate cue words. The infant will be more attentive when she talks in a singsong way.

- Talking in a question fashion will naturally raise the pitch at the end of a sentence, as the caregiver anticipates the infant's response.
- As she goes through the infant's daily routine of dressing, changing diapers, feeding, and playing, the caregiver should talk about what she is doing. This may feel awkward at first, but the caregiver should keep in mind that the infant's developing brain processes every word he hears. This may help him to become talkative and a good listener.
- Singing uses more language centres in an infant's brain, than do words alone. Infants like songs they hear over and over again. The caregiver can make up her own songs or borrow them from familiar sources and repeat them frequently.
- Expanding on an infant-initiated word is a valuable language-learning tool. For example, when the infant point to a "bu" (bird), the caregiver can add "Birds fly in the sky." Words or ideas that an infant imitates present a teachable moment, and the caregiver should not let this moment go by. A responsive relationship that the mother and the caregiver establish during infancy will carry over into future learning. Secure, confident children learn better no matter what their natural abilities. The knowledge of the infant begins with responding to his cries and other cues, which will help him in future homework in school and the workplace.
- Reading to the infant involves more than just following the text. While reading to the infant the caregiver will do more talking about the pictures than actually reading words on the page. The authors suggest using books with one large, simple picture on each page. The caregiver should ask, "See the dog? What does the dog say?" The infant will love the ritual of barking together. They can then talk about his puppy dog or the stuffed dog on his bed. The caregiver can involve the infant in the reading time process by saying "turn" at the end of each page so the infant knows that he can then turn the page. Lift-the-flap books will also involve the infant. With the older infant, the caregiver can ask him what he thinks is happening in the story or what might happen next.
- Books can initiate conversations about important events in the infant's life. A book about a visit to the doctor's office can prepare him for his upcoming appointment. A book about his day can bring back memories about the

previous week's outing to the local zoo. A book about an airplane trip can help prepare him for his vacation. A book about a new baby can help her explain the changes that are expected in his home. Besides reading for pleasure, the infant will enjoy looking forward to reading as a ritual.

The researcher views reading time as a special alone time between the caregiver and the infant, where they can have an enjoyable conversation while the infant is learning.

2.5 COGNITIVE DEVELOPMENT

Cognitive development is an ongoing process and happens rapidly during the infant years. The infant is eager to accumulate knowledge of his environment in order to give meaning to his life. At birth, the infant experiences being comfortable or uncomfortable and being secure or insecure. As he grows and develops, he learns to give meaning to actions and to form associations. The infant orientates himself through his actions and what he perceives (Du Toit & Kruger, 1991:78-79).

2.5.1 Piaget's theory of intelligence

Piaget (in Newman & Newman, 1987:79-80) viewed intelligence as following regular, predictable patterns of change. The researcher is of the opinion that the infant's development will progress best when he is allowed to discover on his own, with guidance. The caregiver must allow the infant to learn through discovery and must not provide him with instructions on how to solve a problem or complete a task.

2.5.1.1 Structures

According to Piaget, (in Bjorklund, 1989:17) cognition develops through the refinement and transformation of mental structures. Structures refer to unobservable mental knowledge that underlies intelligence and intelligent behaviour. The infant knows his world in terms of structures which represent reality. These structures change as development progresses.

2.5.1.2 Intrinsic activity

Piaget (in Bjorklund, 1989:17) viewed the child as intrinsically active and a curious seeker of stimulation. The child initiates interactions with objects and people in his world, and is therefore primarily responsible for his own development. It is essential that the caregiver stimulate the infant in a playful manner in his process of growth and development.

2.5.1.3 Construction nature of cognition

During the developmental process, the infant interprets the objects and events that surround him in terms of what he already knows. Reality is not an absolute, rather a construction based on past experiences and current cognitive structures. New knowledge must be built on what the infant already knows. It is an active construction process, in which the infant, through his own activities, builds increasingly differentiated and comprehensive cognitive structures (compare Piaget in Bjorklund, 1989:18-19 & Crain, 2004:116).

2.5.1.4 Epigenesis

Piaget (in Bjorklund, 1989:19) believes in the bi-directional relationship between structure and function, in that the infant's activity (structure) influences development of those structures. New structures arise as a result of changes in the organization of earlier structures. Cognitive development develops gradually through a series of transformations. Piaget uses the term "genesis" to refer to the transformation of one structure into a more advanced structure. The researcher is of the opinion that routine and repetition gives the infant security. Activities must therefore be repeated until they are part of the infant's cognitive structures.

2.5.2 Sensory-motor intelligence

According to Piaget's theory, there are four stages of cognitive development, namely the sensory-motor stage, the pre-operational stage, the concrete operational stage, and the formal operational stage. At each new stage, the competences of the earlier stages are not lost but are integrated into a qualitative approach to thinking and knowing. For the purposes of this study, the sensory-motor stage will be discussed, which begins at birth and continues until the infant is two years old.

Piaget (in Biehler, 1981:252-261) refers to the first two years as the sensory-motor period, because the infant develops schemes primarily through sensory-motor activities. There are six stages in the sensory-motor period:

Stage 1: (Birth to one month). The use of reflexes

As early as the first days of life, the infant assimilates and adapts to developing schemes through his sucking behaviour. At first the infant makes sucking movements between feedings, and then sucks almost anything that touches his lips. In addition to sucking for food, he engages in sucking for the sake of exercise. The infant sucks, gasps, or roots in response to specific types of stimulation. These responses are the genetic origins of intelligence (compare Biehler, 1981:252, Newman & Newman, 1987:174 and Crain, 2004:117).

Stage 2: (One to four months). Primary circular reactions

The infant engages in an activity (sucking on any part of the hand, developing a preference for the thumb) that satisfies him, which he then repeats to make it part of his behaviour. He makes the necessary accommodations (bringing his hand in contact with his mouth) in order to assimilate his hand into the sucking scheme. Intellectual development is a construction process, according to Piaget (in Crain, 2004:117). The infant actively organizes and coordinates separate movements and schemes after repeated failures. Piaget (in Biehler, 1981:254) believes the self-starting aspect of human behaviour is due to curiosity and to the inborn tendency of the infant to seek stimulation.

Rheingold (in Biehler, 1981:255) endorses the hypothesis that boredom bothers infants. She notes that placing an infant in a non-stimulating environment (empty crib) often leads to fussing and crying. An infant, who had no playthings to handle or objects or people to look at, had an irrepressible urge to occupy himself. The infant who had access to too many interesting objects seem to possess an innate urge to explore with zest and enthusiasm whenever the opportunity arises. Assimilation and accommodation can be distinguished as the infant starts to alter his sensory-motor action patterns (schemes) on the basis of the responses of his environment and the caregiver.

Stage 3: (Four to ten months). Secondary circular reactions

Developments during the second stage are called primary circular reactions because they involve the coordination of parts of the infant's own body. Secondary circular reactions occur when the infant discovers and reproduces an interesting event outside him. The intellectual development of the infant consists of adding to reactions centring on the body and to those involving the external environment. He understands that an object continues to exist even when it is no longer perceived.

The key aspect of secondary circular reactions is the ability of the infant to reproduce activities involving objects initially discovered by chance. A feature of this stage is that, if the infant can produce a sound by hitting a rattle, he will repeat the act. He has the ability to interrupt an act and to then return to it after a while (compare Biehler, 1981:256, Crain, 2004:117-118 & Thomas, 1992:287).

Stage 4: (Eight to twelve months). Coordination of secondary schemes

In stage three, the infant performs a single action to get a result. In stage four his actions become more differentiated as he learns to coordinate two separate schemes to get a result. He can, for example, move an obstacle out of the way in order to reach an object. At this stage, the infant shows a sense that some

objects are in front of others in space, and that some events must precede others in time (Crain, 2004:118).

The average infant develops the ability at nine months to pick up an object between the thumb and fingers. When he can manipulate objects with considerable precision and control, he has reached the point where his interactions with the environment have produced a repertoire of schemes. The switch from playful to purposeful manipulation are separate skills learned in interacting with the environment which are put together or coordinated to achieve a specific goal (compare Biehler, 1981:258-259 and Newman & Newman, 1987:174).

The infant also begins to comprehend cause and effect that certain acts will bring about predicted results. His behaviour is intentional, which is the beginning of practical intelligence (Thomas, 1992:288).

Stage 5: (Twelve to eighteen months). Tertiary circular reaction

At stage five, the infant will experiment with different actions to observe the different outcomes. When the infant is able to walk, his investigation of the environment takes on greater self-direction. He actively seeks new and interesting things on his own. The first type of circular reaction centres on the infant's own body, the second on external objects or events, and the third is characterized by exploration and interest in novelty (Biehler, 1981:259).

The tendencies to seek equilibration, and to assimilate and accommodate, stimulate the infant to examine new objects carefully, and to either incorporate them into an existing scheme or form a new one. This potential for both physical and mental exploration leads the infant to engage in constant manipulation of his world.

As he investigates things, the infant expands his understanding of relationships between himself and the objects he handles, thereby learning to institute and imitate all kinds of actions. These imitations are not exact repetitions of the original act. According to Piaget (in Thomas, 1992:288) the infant tries through a sort of experimentation, to find out in which respect the object or the event is new. In other words, he will not only submit to, but will even provoke, new results instead of being satisfied merely to reproduce them once they have been revealed fortuitously. He is learning on his own, without adult teaching. He is developing his schemes solely out of an intrinsic curiosity about the world (Crain, 2004:118-119). The caregiver should give the infant the space and time to discover and experiment on his own, in order to grow and develop successfully through the six stages of infancy.

Stage 6: (Eighteen months to two years). Beginning of thought

Before he is two years of age, the infant will show the first signs of substituting thinking for action. A cognitive image has been formed in imitating an action hours or days after the model was observed. If an object is removed from sight, the infant will show comprehension that it still exists (Biehler, 1981: 259-261). The infant can now anticipate the outcome of some actions in his mind, without going through a variety of physical manipulations. This mental experimentation leads to the development of insight (Newman & Newman, 1987:174-175).

By using his senses, the infant assimilates similar experiences into schemes. The researcher is of the opinion that the infant is capable of learning how to stimulate himself and his environment. These capabilities make the infant independent, with a unique personality. Continuous support, interest and stimulation by the caregiver are essential for the infant to grow and develop to his fullest potential and as a self-actualized individual.

2.6 LANGUAGE DEVELOPMENT

The infant's cognitive abilities help him to gather information about his social and physical environment. The ability to speak a language helps the infant to communicate. To learn a language is a complicated and creative task. Even before the infant can speak a language, he has an understanding thereof. The infant develops the ability to look at what he is listening to (Louw, 1990:197-198).

2.6.1 Language development

During the infant's first year, there is a high degree of sensitivity to spoken language. He uses vocalization in a playful way as a source of sensory stimulation. The infant gradually produces vocalizations that imitate spoken language. In the second year he will be able to understand words and phrases and will develop a vocabulary by forming two-word phrases. Lenneberg (in Newman & Newman, 1987:206-207) and Lerner and Hultsch (in Louw, 1990:199-200) distinguish various phases of vocalization in relation to approximate age periods:

- Undifferentiated crying – birth to one month. The infant uses crying as a means to get his needs met. Undifferentiated crying is viewed as a reflex action. The mother or the caregiver can not distinguish whether the infant is crying because he is hungry, uncomfortable or in pain.

- Differentiated crying – from the second month. The infant communicates better, because the mother and the caregiver can distinguish between the different patterns and forms of crying.
- Cooing and babbling – two to six months. Cooing are the sounds the infant makes when he is happy, pleased and excited. Babbling refers to the repeating of vowel-like sounds and consonantal sounds, for example “ma-ma-ma-ma” or “da-da-da-da”. These sounds are usually made when the infant is happy and alone. At twelve weeks there is markedly less crying. When the infant is talked to, he smiles and makes squealing-gurgling sounds. He responds to human sounds more definitely, by turning his head and searching with his eyes for the speaker. According to Shelov & Hannemann (2004:209) the infant will accomplish the following language milestones at between four and seven months: responds to his own name, begins to respond to no, distinguishes emotions by tone of voice, responds to sound by making sounds, uses voice to express joy and displeasure, and babbles chains of consonants.
- Lal – seven to eight months. The infant now repeats words and sounds that he has heard, which forms an important base for communication.
- Egoalali – nine to ten months. Unlike in the previous stage where the infant repeated words and sounds without meaning, he is now able to use words in the correct contents and purposefully.
- Single word sentences – from one year. The infant now can use words that are understandable. He also uses a single word to communicate complex ideas, for example the single word “mamma” to get his mother’s attention, to communicate that he is hungry, and to ask to be picked up. The infant is using single words to express entire sentences. The caregiver must, however, not read too much into the infant’s speech.
- Two word sentences – beginning at eighteen months, the infant puts words together and his language becomes structured. He has a definite repertoire of words, which consists of more than three but less than fifty. His understanding of the spoken word is rapidly increasing (compare Crain, 2004:356).

The infant has the ability to learn any language. Having started even before he was born, the sounds and patterns will not seem foreign to the infant. He will be able to associate certain sounds as definable speech and language, and will reject sounds that do not fit a linguistic grid that is established very early in life. According to Gordon & Adderly (1999:76-77) the best time to begin language training for the infant is before he is six months old. After age three the child’s ability to learn a second language will gradually decline, as he becomes “deaf” to

sounds other than those from his native tongue. The caregiver must keep in mind that the infant is taking in everything around him. He will not only pick up the caregiver's speech, but also her tone, temperament, and facial expressions when she speaks. Music and song can be helpful, because it generally ensures that you will be animated and happy. To stimulate the infant's brain, and help him develop language abilities, the caregiver can sing, talk and read aloud to the infant.

Leach (2002:299-302) is of the opinion that a lot of loving, interesting, two-way talk is the best overall help that the caregiver can give to the infant's development. The following are suggestions:

- Talk directly to the infant. He cannot pay attention and listen carefully to general conversation in a room filled with other family or friends. The caregiver should focus on talking directly to the infant during alone time.
- The mother should hire a caregiver who is fluent in the mother's language. A caregiver cannot model good speech for the infant unless she is fluent herself. If the mother feels a good fit with the caregiver, but the caregiver is not fluent in the mother's language, she might still consider employing her. They must come to the understanding that the caregiver should only speak to the infant in her own language, and the mother in her own language, and the infant will therefore be brought up as a bilingual person.
- Make sure to use the key labelling words when talking to the infant. When the caregiver is looking for the infant's shoes, she should say, "Where are your shoes?" instead of saying, "Where are they?"
- Talk to the infant about things that are physically present. This will enable him to make a connection between the object and the recurring key word.
- Talk about things that will interest the infant according to his specific developmental stage.
- The caregiver should overact while talking to the infant, by using gestures and expressions.
- Try to understand the infant's words or invented words. This will motivate him toward increasing efforts at speech if the caregiver shows that she cares what he says.
- Help the infant to use his own few words in obviously useful situations. While playing together and you can both see where the ball has rolled to, ask him to

go get it. When he crawls back, the caregiver can confirm that he understood her correctly, by thanking him and by using the word again: "Good boy, you have brought the ball".

- Do not correct or pretend not to understand own-words. It is important to give the infant the correct version of a word he has mispronounced, but trying to make him say that word again "properly" will only bore him. The infant is not imitating language, but developing it.

2.7 PERSONALITY AND SOCIAL DEVELOPMENT

According to Hurlock (in Louw, 1992:212-213) development of personality is a critical period during infancy, because the base for future development is being laid. The infant's environment and experiences are limited. The nature and quality of his surroundings will have an influence on his developing personality. The views of Maslow, Freud and Erikson on personality and social development are discussed.

2.7.1 Maslow's hierarchy of needs

Maslow (in Thompson & Rudolph, 1992:11-13) believes that human beings have basic needs that must be met in order to become self-actualized and to reach our potential in all areas of development. Lower basic needs must be met successfully, in order to meet higher order needs. Maslow's hierarchy of needs consists of five levels:

The **first level** comprises **physiological needs**, which include the need for food, shelter, water, and warmth. There is a correlation between a child's diet and academic as well as behavioural problems. A poor diet may be related to problems like hyperactivity and the inability to learn. In conjunction with the parent, the caregiver must give the infant a nutritionally balanced diet as part of meeting his physiological needs.

Maslow's **second level** of the hierarchy is the **need for safety**. Some children feel afraid in their own homes, because they fear for their physical safety. Adults, frustrated that their own needs are not adequately met, may take their frustration out on children through physical or psychological abuse.

The term *shaken baby syndrome* refers to shaking a baby, which is a serious form of child abuse. It occurs mostly in infants in the first year of life. A parent or caregiver severely or violently shakes an infant, which is often the result of frustration or anger in response to the infant's constant crying or irritability. As the infant is shaken, his fragile brain moves back and forth within the skull.

Serious injuries associated with this syndrome may include blindness or eye injuries, brain damage, damage to the spinal cord, and delay in normal development. Signs and symptoms may include irritability, lethargy (difficulty staying awake), tremors (shakiness), vomiting, seizures, difficulty with breathing, and coma. The American Academy of Paediatrics feels that no one should ever shake an infant. If the parent suspects that the caregiver has shaken her infant or if the caregiver has done so in a moment of frustration, they should take the infant to a paediatrician or an emergency room immediately. Any brain damage that might have occurred will only get worse without treatment. Shelov and Hannemann (2004:155) suggest that if the caregiver feels as if she might lose control when caring for the infant, she should:

- Take a deep breath and count to ten.
- Put the infant in his crib or another safe place, leave the room, and let him cry alone.
- Call a friend or relative for emotional support.
- Give the paediatrician a call, since there might be a medical reason why the infant is crying.

It is essential that the caregiver be in contact with herself. The caregiver must deal with her own unfinished business, in order to be aware of her responsibilities and has the energy to care for the infant optimal.

The **third level** is the **need to feel loved and to belong**. It emerges after the infant's physiological and safety needs have been met. Humans are social beings and want to feel part of a group, to satisfy the need of love and belonging. While the parent is at work, the caregiver must fulfil in the infants need to be loved and accepted. This will help him build meaningful personal relationships.

The **fourth level** in Maslow's hierarchy is the **need for self-esteem**. Children are often ordered, criticized, ignored, and put down. All humans, adults and children, need to be respected as worthwhile individuals, capable of feeling, thinking, and behaving responsibly. While caring for the infant, the caregiver must avoid cruel and thoughtless remarks, reduce criticisms, and rather engage in positive interactions to build self-respect and self-confidence.

Self-actualization is the **fifth level** in Maslow's hierarchy. Fulfilling the need of self-actualization implies that the lower needs have been met successfully. When the child reaches the fifth level of Maslow's hierarchy, hunger, fear, lack of love or feelings of belonging or low self-esteem should not block him. With the help of

the caregiver, the infant can learn problem-solving skills and can move forward to become all that he can be.

2.7.2 Freud's psychoanalytic theory

According to Newman and Newman (1987:65-67) Freud's psychoanalytic theory focuses on the development of the individual's emotional and social life. He focused on the impact of sexual and aggressive drives on the individual's psychological functioning. Freud differentiated the impact of sexual drives on mental activity from their effect on reproductive functions. Freud recognized the influence of sexuality on the mental activity of children, and argued that although they are incapable of reproduction, their sexual drives operate to direct aspects of their fantasies, problem solving, and social interactions. Freud suggested that all behaviours are motivated. He hypothesized that there are two basic psychological motives, namely sexuality and aggression. Freud also hypothesized that the conscious as well as the unconscious motives may simultaneously motivate behaviour.

2.7.2.1 Personality development

Freud described three components of personality, namely the id, the ego, and the superego. The **id**, which exists at birth, is the source of instincts and impulses. The id operates according to the pleasure principle and avoids pain regardless of the constraints or norms imposed by society. The **ego** is the composite term for mental functions that are involved with reality, which includes perception, memory, judgment, self-awareness, and language skills. The **superego** evolves later in childhood, and includes prohibitions about moral behaviour and ideals about one's potential as a moral person (compare Louw, 1992:53-55 and Newman & Newman, 1987:67-68).

2.7.2.2 Psychosexual development

According to Freud (in Newman & Newman, 1987:68-71) the most significant developments in personality take place during five life stages occurring from infancy through adolescence. Freud viewed sexuality positively, suggesting that sexual impulses convey a thrust toward growth and renewal. Each of the five stages identifies a period of life during which a particular body zone is thought to be of heightened sexual importance. The five stages in Freud's theory of psychosexual development include the oral, anal, phallic, latent, and genital stages.

For the purposes of this study, the oral stage, and the anal stage will be discussed:

During the **oral stage**, which occurs during the first stage of life, the mouth is the site of sexual and aggressive gratification. The mother's breast is the most natural object to satisfy the infant's oral sexual needs. Around the sixth month, when the infant starts teething, he tends to bite on everything he can bring to his mouth. Freud viewed this biting as the first expression of the oral-aggressive needs (Meyer & Van Ede in Louw, 1992:55-56). It is natural for the infant to suck and bite on everything he can bring to his mouth. It is important to follow a feeding routine according to the age and developmental stage. The caregiver must secure the infant's surroundings and pay attention to small and dangerous objects lying around that he can put in his mouth.

The **anal stage** begins during the second year, and is the period in which the anus is the most sexualized body part. The infant becomes increasingly aware of the pleasurable sensations that bowel movements produce on the mucous membranes of the anal region. With the development of the sphincter muscles, the infant learns to expel or withhold faeces at will. Conflict during this stage focuses on the subordination of the infant's will to the demands of the culture, via the parents and the caregiver, for appropriate toilet habits (compare Crain, 2004:256, Meyer & Van Ede in Louw, 1992:56 and Newman & Newman, 1987:69). The researcher is of the opinion that toilet training is an important milestone that must be handled positively and with patience. Through toilet training the infant will become more aware of his body. Once he achieves this milestone, it will enhance his self-image. It is essential that the mother and the caregiver utilize the same method of toilet training, since the caregiver will be responsible for continuing the training in a positive manner while caring for the infant.

2.7.3 Erikson's theory of development

Erikson's theory addresses growth across the lifespan, and divides development into eight stages. In each stage there is a psychosocial crisis situation, which refers to the individual's psychological efforts to adjust to the demands of the social environment. The outcome of the crisis at each developmental stage is an integration of the two opposing forces. The central process for coping with the challenges of each life stage provides personal and societal mechanisms for taking in new information and reorganizing existing information. It also suggests the means that will lead to a revision of the inner space in order to resolve the crisis. The infant will create his own strategies for coping with life's challenges. The infant's unique coping behaviour will reflect his talents, motives, and the responses of relevant others to a particular strategy in his developmental stage. For the purposes of this study, the two stages, basic trust versus basic mistrust, and autonomy versus shame and doubt, will be discussed, since they occur during

the first two years of life (compare Erikson, 1993:247-254; Meyer & Van Ede in Louw, 1992:62; and Newman & Newman, 1987:30-45).

2.7.3.1 Basic trust versus Basic mistrust (synthesis: hope)

Trust emerges in the course of the relationship with the caregiver as the infant seeks warmth, nurturing, comfort, and stimulation. A trusting relationship links confidence about the past with faith about the future. For the infant, trust is an emotion, an experiential state of confidence that his needs will be met, and that he is valued by his caregiver. His sense of trust is an emotional state that provides an undifferentiated sense of oneness with the world (compare Meyer & Van Ede in Louw, 1992:62 and Newman & Newman, 1987:182).

According to Newman and Newman (1987:183-184), experiences of mistrust during infancy can arise if the caregiver is unable to differentiate between the infant's needs and respond appropriately to them. The infant can also experience the power of his own rage, by doubting his own lovability as he encounters the violence of his own capacity for anger. The growth of mistrust stems from the infant's inability to gain physical or psychological comfort, and can manifest in withdrawal from interaction and in symptoms of depression, lack of emotion, and loss of appetite. The caregiver can play a central role in helping the infant resolve the conflict between trust and mistrust. The energy expended to resolve the psychosocial conflict serves as an integrating force in the individual's efforts to succeed in the developmental tasks of the stage. A positive resolution of the crisis of trust versus mistrust will facilitate psychological growth.

2.7.3.2 Autonomy versus Shame and doubt (synthesis: will power)

During his second year, the infant becomes aware of his separateness. Through a variety of experiences he discovers that his caregiver does not always fulfil his needs, or understand his feelings. In the early phase the infant uses primitive devices to explore his independence. He may say no to everything offered to him, whether he wants it or not. The infant may develop well-ordered rituals for going to bed or getting dressed. The infant will then insist that these rituals be followed precisely and will threaten to become extremely angry if the rituals are violated. These rituals represent efforts to bring control, order and predictability to the environment. In the development of autonomy, behaviour is characterized by the phrase "I can do it myself". The infant is less concerned with doing things his way and more concerned with doing them on his own. Each new accomplishment gives the infant great pride, and the sense of autonomy grows (compare Meyer & Van Ede in Louw, 1992:62 and Newman & Newman, 1987:219-220).

Erikson (1993:252) is of the opinion that outer control at this stage must be firmly reassuring. The infant must come to feel the basic faith in existence and that he will not be jeopardized by this sudden violent wish to have a choice, to appropriate demandingly, and to eliminate stubbornly. The caregiver must be firm with the infant in order to protect him against the potential anarchy of his as yet untrained sense of discrimination and his inability to hold on and let go with discretion. As his environment encourages him to become independent, it must protect him against meaningless and arbitrary experiences of shame and of early doubt.

The infant can develop an overwhelming sense of shame and self-doubt, because of failure at most attempted tasks or continual discouragement and criticism from the parent and the caregiver. In order to avoid the experience of shame, the infant may refrain from all kinds of new activities. The acquisition of new skills becomes slow and painful, because he lacks confidence in his abilities, and expects to fail at what he attempts to do. The caregiver must allow the infant to experience autonomy, in order for him to have a strong foundation of self-confidence and feelings of delight in behaving independently. To establish a sense of autonomy requires tremendous effort by the infant and patience and support from the parent and the caregiver (Newman & Newman, 1987:220).

2.7.4 Layers of neuroses (structure of personality)

According to Sinay (1997:169) neurosis is defined in the gestalt approach as a state of rupture of the homeostatic equilibrium in the individual. It appears when a person, group, or the environment of which the person forms part, experiences different necessities and the individual cannot determine which is the dominant one. Perls (in Sinay, 1997:169) states that "the neurotic is not able to see his own necessities clearly, and so is not able to satisfy them". By fragmenting his life the neurotic prevents himself from succeeding and maturing. Neurosis is a series of unfinished gestalts in a relation between the organism and his medium (Sinay, 1997:84).

The five layers of neuroses form a series of counselling stages for the counselling process. According to Thompson and Rudolph (1992:112) they could be considered as five steps to a better gestalt way of life. The researcher views these five layers of neurosis as a process of healing. It is essential that the organism reaches equilibrium through awareness in every layer. Caretaking of the infant is discussed within each of the five layers. Although a caregiver is not a therapist, it will be helpful to have this knowledge, in order to understand the infant's behaviour.

2.7.4.1 Phoney layer

The outer layer is known as the phoney layer and represents the different roles the infant conveys. The infant in the phoney layer find himself trapped in trying to be what he is not. This places pressure on him to deny those parts of himself that do not fit his fantasy and games. Denial of certain parts of the personality leads to unfinished business and to not being satisfied. This layer is characterized by many conflicts that are never resolved (compare Aronstam, 1989:635-636, Belkin, 1995:242 and Thompson & Rudolph, 1992:112). The infant will strive to please the caregiver in order for him to befriend her. By pleasing the caregiver, the infant suppresses his feelings and withholds himself from personal growth.

2.7.4.2 Phobic layer

The client becomes aware of his phoney games, which is often a frightening experience. He becomes aware of his fears that maintain the games (Thompson & Rudolph, 1992:112). This layer is characterized by the client's resistance to function as an integrated whole (Aronstam, 1989:636). In this layer the infant can experience conflict between the true self and the ideal self.

2.7.4.3 Impasse layer

An impasse is a situation in which external support is not forthcoming and the client believes he cannot support himself. It is largely due to the client's strength being divided between impulse and resistance. The coping mechanism that the client uses is to manipulate others. External support becomes a replacement for self-support, rather than a source of nourishment for the self (Yontef & Simkin in Corsini & Wedding, 1989:337).

According to Sinay (1997:167) impasse arises when the client gets close to being a phobic in the course of the therapeutic process point. He generally falls into repetitions, refuses to go on, and all his mechanisms of avoidance arise. He has to adopt new paths that should gradually allow crossing the successive layers of neurotic conduct to touch the most authentic layers. This generally occurs with an emotional outburst that breaks the block. In gestalt therapy, clients can get through the impasse because of the emphasis on loving contact without doing the clients work, by rescuing or infantilizing (Yontef & Simkin in Corsini & Wedding, 1989:337). The infant realizes that external support is not forthcoming, and may show resistance by revolting against discipline and authority. The caregiver must be a consistent secure attachment figure to the infant. She must show him unconditional support, love, and understanding in order for him to adopt new paths in his strive to become his true self.

2.7.4.4 Implosive layer

In the implosive layer, the client becomes aware of how he limits himself, and he begins to experiment with new behaviours (Thompson & Rudolph, 1992:112). By experimenting with new behaviours, the infant discovers his internal strengths and resources. The caregiver can teach him new problem-solving strategies by encouraging him to try to achieve his goals on his own. She must be aware that she should not do everything for the infant, even if it takes longer. The infant will become more aware of the self and will behave according to his internal locus of satisfaction.

2.7.4.5 Explosive layer

The explosive layer is the last layer and can be reached if experiments with the new behaviours are successful. This layer is characterized by an explosion where the intention differs from client to client. The client will find much unused energy that had been tied up in maintaining a phoney existence. He will experience a feeling of complete satisfaction in this layer (compare Belkin, 1995:242 and Thompson & Rudolph, 1992:112).

Perls (in Thompson & Rudolph, 1992:112-113) believes that progress through the five layers of neurosis could best be achieved by observing how psychological defences might be associated with muscular position. The infant's body language would be a better indicator of the truth than his words. Perls also believes that by acting out feelings, awareness of hidden issues could be facilitated. The researcher is of the opinion that every infant will progress through the five layers of neurosis, according to his own process, in his striving towards a better gestalt. During the training of the caregiver, she will be equipped with the necessary skills, techniques and aids to identify the infant's emotional state and make him aware thereof. Handling his emotions in a constructive manner will help him to develop appropriate and acceptable social skills.

2.7.5 Attachment

The infant will develop a strong emotional attachment with the people who provide him with a caring and nurturing relationship. He will show his desire to be held by his mother or caregiver, and will become upset or distressed when separated from them. According to Warwick and Bolton (2004:256-258), attachment derives from three key factors in the mother/caregiver-infant relationship, namely body contact, familiarity, and responsive parenting. The soft, warm body gives the infant a safe haven from which to explore his surroundings. It is also a safe place to turn to when he needs emotional support. The caregiver's body allows the infant a sense of security. Familiarity is based on the critical period shortly after birth in which the infant is exposed to stimuli that will

produce proper development. According to Newman and Newman (1987:165-172), social attachment refers to the process through which people develop specific positive emotional bonds with others. An infant may establish an early positive emotional relationship with his mother, as well as with any other person who is performing a large portion of child care activities, and who expresses warmth and affection toward him.

2.7.5.1 Stages of attachment

Ainsworth (in Newman & Newman, 1987:166) describes four sequential stages in the development of social attachment. In the first stage, which occurs during the first three months, the infant uses a variety of behaviours in order to maintain closeness with the caregiver. These behaviours include sucking, grasping, smiling, cuddling, and visual tracking. The infant learns about the unique features of his caregiver through these sensory contacts.

The second stage occurs at three to six months. During this stage the infant smiles more when he interacts with a familiar person, shows more excitement at that person's arrival, and appears to be upset when that familiar person leaves.

In the third stage, which occurs at seven months to nine months, the infant actively tries to get close to the objects of his attachment and tries to maintain contact.

In the fourth stage, which occurs at about nine months, the infant uses a variety of behaviours to influence the behaviour of his parents and other objects of attachment, in order to satisfy his continuing needs for closeness, contact, and love. The infant may ask to be read to, to be cuddled at bedtime, or to be taken along on errands.

The researcher is of the opinion that the infant is not a passive participant in the relationship, but rather influences the type of relationship and attachment between himself and his mother or caregiver. An infant with a positive temperament can have a positive influence on the development of the attachment. This will benefit the relationship so that it can become one in which he can feel safe and cared-for.

2.7.5.2 Quality of attachment

The caregiver should act with sensitivity and attentiveness toward the infant, in order for him to develop secure attachment. Her acceptance of the infant and her ability to respond to his varying communications are important for a secure attachment (Tracy & Ainsworth, 1981:1341-1343). Three general patterns of

attachment are described by Ainsworth, Blehar, Waters, and Wall (in Newman & Newman, 1987:168 and Louw, 1992:227):

Secure attachment. The infant who has a secure attachment will actively explore his environment and will interact with strangers while his mother or caregiver is present. After a brief separation, the mothers' return reduces his distress and permits him to return to exploration of the environment (compare Warwick and Bolton, 2004:257-258).

Anxious-avoidant attachment. After separation from his mother, the infant who shows anxious-avoidant attachment will avoid contact with his mother or will ignore her efforts to interact. He shows less distress at being alone than other babies. Even in his mother's presence, this infant is not eager to explore his environment.

Anxious-resistant attachment. Even before the mother leaves, the infant shows signs of anxiety. This infant seems angry with his mother after separation but resists being comforted. He is cautious of strangers, even in his mother or caregiver's presence. The infant is not eager to explore his surroundings or the environment.

A secure attachment is a representation based on the infant's confidence that his attempts to make contact with the caregiver will be accepted. A caregiver who repeatedly rejects an infant's efforts to make contact will produce an insecure avoidance attachment. A caregiver may be unpredictable, sometimes allowing the infant access and other times blocking, rejecting, or even punishing attempts to make contact. This behaviour will produce an insecure, ambivalent representation of the relationship (Newman & Newman, 1987:169-171). The infant who uses the mother as a security base will be eager to become independent and will explore the unknown with a positive attitude. Secure attachment relationships are essential for the infant to establish interpersonal relationships and to show greater resilience, self-control, and curiosity (compare Louw, 1992:227-228).

The infant's first social achievement, according to Erikson (1993:247), is his willingness to let his mother or caregiver out of sight without undue anxiety or rage, because they have become an inner certainty as well as an outer predictability. Such consistency, continuity, and sameness of experience provides a rudimentary sense of ego identity. It depends on the recognition that there is an inner population of remembered and anticipated sensations and images, which are correlated with the outer population of familiar and predictable things and people.

2.7.6 Interaction with peers

As the infant grows, the boundaries of his social world expand. When he gets into contact with other children of his age, it will enable him to interact with a new source of social stimulation. Interaction between infants of six months is very simple, in the sense that they primarily smile, touch, or make noises at each other. This is the beginning of peer interaction, which is an important component of social development (Vandell, Wilson & Buchanan, 1980:481-488). Infants between the age of ten months and twelve months cry when they hear other children cry. At thirteen months, the infant will cuddle and comfort a crying child. By eighteen months the infant will help the child by, for example, trying to fix a toy and giving a bandage for a cut (Louw, 1992:236).

2.7.7 Developing the self and self-confidence

If the infant expresses negative self-feelings, the caregiver must be careful not to contradict him. Contradicting the infant's openly expressed feelings would serve only to increase his bad self-feelings, not to change them, because the implicit message is that he is wrong to think so. The change must come within the infant himself, who can accomplish the change only by allowing and accepting his bad feelings. An infant with low self-esteem needs many activities involving experiences with the senses focusing on similarities and differences between himself and objects, animals, people, and fruits. Through awareness of differences he can begin to view himself with new appreciation and can begin to see, approach, and contact others in the same light (Oaklander, 1988:283-284).

For Oaklander (1988:284), body awareness is basic to a strong sense of self. A technique to promote self-awareness is to let the infant lie down on a sheet of paper so that the caregiver can draw around his limbs to make a live silhouette. While filling in the silhouette, the caregiver and the infant can discuss each part of the body, every feature, and each piece of clothing. Schoeman (1996:67) suggests that the infant be asked to name all the bad and good characteristics of the silhouette. When he gets the opportunity to project all his own characteristics into the silhouette, he is busy growing and changing from the way he manifests, to a fuller manifestation of his potential. The researcher is of the opinion that infants enjoy looking at their reflections in a mirror. A similar technique can be carried out with the infant standing, looking at himself in a mirror.

The caregiver must keep in mind that although she is taking care of an infant, he has the potential to develop and grow to self-regulation and self-actualization. When the caregiver is leading the infant, is dictating to him or is doing the interpretations of his projections, she hinders his development of self-confidence and denies him as an individual. She must provide her unconditional support and

acceptance in order for the infant's self-acceptance to come to the fore and to determine the infant's optimal growth.

2.7.8 Emotional expression

Emotions are central in infant-caregiver communication. They mark the infant's changing awareness of the self, the situation, and the predictable and unpredictable events in his life. According to Wolff (in Newman & Newman, 1987:177), emotions during infancy are characterized by differences in respiration, muscle tone, motor activity, and alertness. The earliest differentiation is among distress (crying), interest (alert inactivity), and excitement (walking). The infant's state of arousal will influence his capacity to respond to the environment, which serve to cue different responses from the caregiver. The caregiver will usually try to comfort and soothe the crying infant. Visual alertness is likely to prompt social interaction. Mothers and caregivers are led to believe that if they pick up their infant every time he cries, he will not learn to settle himself and will become more demanding as time goes by. According to Sears (1997:94) an infant whose cries have been promptly responded to early on learns to trust and to anticipate that a response will be forthcoming. The infant cries to communicate, not manipulate. Crying is the only way in which he can communicate his needs, it is necessary for his survival and for developing his mother and caregiver's caregiving skills (Sears & Sears, 2002:15).

The infant is learning that being friendly is rewarding because of the way the caregiver responds to him with cuddles, love, and soothing sounds. According to Cooper (2003:159) at two to four months one of the most significant developments that the infant's sharpened memory brings is that he now has a very detailed image of the people closest to him, and he can recognize them as individuals. Now that his memory has developed, he may have distinct responses to the caregiver's voice that may make him excited. At this stage the infant will be naturally outgoing and not shy or self-conscious. He will charm everyone with his smile, and will love to "talk" to people, even to his own reflection. He is learning to take the lead, which is important for his self-confidence. As the caregiver follows his lead, she can learn more about his emerging character and sense of fun. By his fourth month, he may be in a routine of regular naptimes, walks outside, feeding, bath time and bedtime. This helps him learn to anticipate the events of the day, and teaches him that his life has a pattern to it. It will help him feel emotionally secure and will increase his confidence. Establishing a routine also helps him to trust that the caregiver is near, even if he cannot see her.

Between four and six months, the infant may be happy to be held by strangers, but he is now able to distinguish between people, and will show a definite preference for familiar faces. He will enjoy social situations such as watching

other children play, sitting in his high chair at family mealtimes, and being taken to the park. These events also help him to interact with other people and to feel comfortable in new situations. As the infant becomes more mature emotionally, he will show a wider range of emotions in different situations. He will bounce up and down to demonstrate his excitement. He may remain quiet and watch warily when he is unsure of a situation (Cooper, 2003:159).

During the period of six to eight months, the infant will join in conversations, responding to the caregiver with a range of gestures and facial expressions. Part of his deepening attachment to the caregiver comes from his realization that he is a separate individual from the caregiver. Cooper (2003:171) considers this a huge and important milestone. Over the next few months, he may become much clingier and increasingly anxious when separated from his mother and caregiver, even for a moment. The caregiver must reassure him with love and attention, and in time he will be more relaxed when left alone for a while. He may be sociable and confident one minute, then fearful and shy the next. When he meets new people, he will cling to the caregiver and cry. Becoming anxious when unfamiliar people directly approach him is one of his first emotional milestones. Stranger-anxiety is normal and can last for up to two years. The caregiver should not force the infant to be friendly, and she should not tell him that he is silly if he is shy, because this will undermine his self-confidence. Instead, she should praise him when he has the confidence to smile back at someone.

As the infant's self-awareness develops, he will become more assertive and turn everyday activities into a battle of wills. He may arch his back when he does not want to be put in his car seat or shake his head if the caregiver tries to feed him something he does not like. As frustrating as this behaviour can be, the caregiver should remember how easily he can be distracted. His memory is short, and some fast thinking can refocus his attention. The infant is also developing a sense of humour during eight to ten months. He will enjoy teasing the caregiver by doing things she will probably not like, which includes running to a forbidden door and then looking back to see if she is watching him. At the other extreme, this is the time when the infant may develop fears about things that have not upset him before, for example the noise of the vacuum cleaner. If he seems frightened of something, the caregiver should stay relaxed, comfort him and reassure him that he is safe. Slowly familiarizing him with the object of his fear can help conquer this tendency (Cooper, 2003:175).

From ten to twelve months the infant will be eager to get involved in household chores, and will become attached to a comfort object. He may become attached to a blanket or a stuffed animal, which he may insist on taking everywhere. Known as a "transitional" or "comfort" object, this item will have a special place in his life. This object will help him sleep when he is tired and will reassure him if he is unhappy, especially if his mother or caregiver is not around to comfort him.

This will help comfort the infant when his mother leaves for work in the morning, while he is dealing with anxiety separation. Feeling at ease in the company of other infants will help him take his first steps toward learning how to make friends. The caregiver should discuss with the mother whether the infant should join a playgroup. The infant is still egocentric at this stage, and although he will play alongside other infants, he will assume that all the toys there is just for him alone. He will not be able to understand the concept of sharing for another year or so (Cooper, 2003:159).

Making sure that all the infant's physical needs have been met will help his emotional development during twelve and sixteen months. It is difficult to concentrate on learning if he is tired or hungry. Whenever possible, the caregiver should plan new activities or experiences for the infant when he is well rested, in order for both of them to have an enjoyable time (Cooper, 2003:187).

Between sixteen to twenty months, the infant now knows what pleases the caregiver. He will try out new behaviours to see what her reactions are. This is an extension of his learning about how he can influence his world, and it is a way that he learns to engage the caregiver's attention. It is best if the caregiver ignores any behaviour that displeases her, so that the infant does not get attention for doing them. Positive feedback should be given for desirable behaviour (Cooper, 2003:191).

At between twenty and twenty-four months, the infant will learn to think about others, since he is developing empathy to those individuals who are closest to him. Oaklander (1988:122-123) alleges that children are not familiar with what feelings are and they have limited ability to communicate their feelings. The infant should be given experience with the vast variety of feelings and their nuances. By using songs, books, games and exercises, the caregiver can help the infant contact his own feelings. He needs to know what kinds of feelings there are, that everyone has feelings, that feelings can be expressed, shared, and talked about. He needs to learn that he can make choices about ways of expressing feelings and what the constructive ways are. The caregiver must talk to the infant about feeling words, in order for him to become familiar with the many variations of feelings, and to help him get in touch with what he is feeling. The caregiver may try to point out that an older child is upset, and the infant may express sympathy by giving the child a kiss and a hug. As the infant experiences more of the world, and develops the language to talk about his experiences, he begins to think more about both how he feels and how others feel. This may become apparent through expressions of his own feelings, which can sometimes feel overwhelming and may be expressed in a tantrum. Feelings can now be expressed in a variety of ways, and learning how to manage them, especially in a group, is the beginning of the infant's social development.

The infant's inability to manage overwhelming feelings may result in negative behaviour toward other children. The caregiver will want to help the infant to deal with this, but he has to have experiences with a social group in order to practice managing his feelings.

The caregiver should remember that a hungry, tired, or bored infant is much more likely to exhibit negative behaviour (Cooper, 2003:159). When planning group activities (example, going to the park or joining a reading session at the library) the caregiver should take along some healthy snacks and drinks in an insulated container. She should also schedule play dates after the infant's naptime, so that he is well fed and rested for social interaction with his peers.

The body has a relationship to feelings, because all feelings are experienced through body sensation and expressed through body musculature. Body posture and breathing patterns manifest what the individual is feeling. The caregiver can help the infant become aware of what he is doing with his body to express the feeling. It is only when he acknowledges his feelings and experiences them that he can release them and use his total organism for other things. Otherwise a part of him is continually harbouring the feelings he ignores, leaving him with only part of himself for the process of living. Oaklander (1988:123) suggests the awareness continuum technique for helping the caregiver and the infant to be more aware of their bodies.

By taking turns, they report inside and outside awareness:

- I am aware of your brown eyes/the flowers in the vase/the picture on the wall – outside awareness;
- I am aware that my heart is pounding/my mouth is dry/my shoulders are hunched up – inside awareness.

Through this technique, the infant will learn how to listen to his body to get to his feelings. The infant will come to learn that his body sensations are always changing just as the environment is always changing.

2.8 FORMS OF PLAY AND TECHNIQUES

Assessment play, biblio-play, dramatic play, and creative play are forms of play which the caregiver can include in her daily programme with the infant. By engaging in these various forms of play, the infant will grow and develop in a relaxing, natural, and playful manner in the safe environment of his home.

2.8.1 Assessment play

The caregiver can learn about the infant's attention span, his preferences, his temperament, his strengths, and his weaknesses through play. She can enter his world through play. By encouraging different kinds of play, the caregiver can challenge the infant to focus his energies and skills into new areas. The caregiver should select toys that will stimulate the infant's senses. Toys should be developmentally appropriate, build on skills he has already mastered, and provide some challenges. The selection should include toys that the infant can share with friends as well as enjoy alone. The caregiver must remember that she is the best "toy" the infant could ever have (Sears & Sears, 2002:67-70).

2.8.2 Biblio-play

Biblio-play is a form of play using books, reading, the written word and audio-visual mediums. Although the infant is unable to read, the caregiver can still use books. The infant can look at the pictures while she reads to him. The caregiver can select fantasy stories, which will expand the infant's knowledge. The infant must be stimulated to react verbally to the fantasy stories, in order to develop his verbal skills. After reading the fantasy story, the caregiver and the infant can discuss it. Discussions can centre on the characters' behaviour, feelings, relationships, causes and effects. The infant who is unable to verbalize his thoughts and feelings may find them expressed in books. Biblio-play offers possibilities for new behaviour patterns by providing models for positive behaviour modification. Awareness and insight will lead to growth and social development (compare Newman & Newman, 1987:204-205 and Thompson & Rudolph, 1992:199). The researcher is of the opinion that although the caregiver will not be doing the therapeutic process with the infant, the quality time spent together and the discussion in itself will have therapeutic value.

2.8.3 Dramatic play

According to Porter (1983:216-232) and Dunne (1988:149) dramatic play is a form of play that offers the infant the opportunity to grow by acting out situations and dramatizing in a safe, non-threatening environment. By acting out his experiences, the infant will come into contact with reality. It is a constructive way for the infant to remember situations through play and to have the opportunity to

repeat them and work through them. The researcher is of the opinion that emotional growth and development can occur when the infant plays out the situation of his mother going off to work while he and the caregiver stays home and play, and then his mother returns home from work. While playing through situations, the infant can manage his, as he prefers it to be. The infant might want to play a situation over and over. The caregiver can play along or just let the infant play it out by himself, giving him the opportunity to develop insight in certain aspects of his life. According to Oaklander (1988:139) creative dramatics can increase self-awareness. The infant can develop a total awareness of the self, the body, the imagination, and the senses. Dramatic play becomes a natural tool to help him find and give expression to lost and hidden parts, and to build strength and selfhood.

The researcher is of the opinion that telephone play is an effective way for the infant to pretend to make contact with his mother when he longs for her. By placing a picture or photo of his mother by the telephone, he can see her face while pretending to talk to her. It is advisable that the infant uses a toy telephone in order not to block incoming calls. According to Spero (1980:58), the use of a telephone is an accepted way of communicating. It has potential symbolic value as it combines talking and listening, and gestures of self-assertiveness that are invisible to the person at the other end of the line. Dialling a number and talking to someone is a mastery of adult skills, which can give the infant a feeling of power, pride and control.

2.8.4 Creative play

Creative play is inventive, as it can manifest in various forms of arts and handcrafts (Porter, 1983:242-271). Various authors are of the opinion that art is an important medium of communication with infants whose verbal skills have not yet developed properly (compare Crompton, 1980:156; Allan & Clark, 1984:116-124 and Oaklander, 1988:53). Crompton (1980:158) regards art therapy as a specialist area for which therapists are equipped through advanced study. The interpretation of children's art is a specialist area. Creative play is functional in establishing a rapport between the infant and the caregiver and thus promotes communication (compare Porter, 1983:242-271 & Van der Merwe, 1991:277). Artwork can be relaxing to the infant, and offers him an opportunity to release his feelings. This can be followed by personal growth as it activates change and leads to insight. When the caregiver praises the infant for his creativity, she may be enhancing his self-image, and he may experience a feeling of success (Porter, 1983:242-271). The caregiver is not trained as a therapist and will only engage in creative play with the infant with the infant as a means of play activity. By encouraging the infant to participate in various forms of art and mediums which can be utilized for creative play, such as drawings, paintings, clay, and the use of

puppets and masks, will provide him with opportunities for growth and development.

2.9 MASSAGE TECHNIQUES

An infant's future can be shaped by natural inclination of a need for bonding and by his desire for human contact and sensory stimulation. Active, loving adult involvement in an infant's first years is essential, because this is the time when his brain is receptive and his ability to learn is established. According to Gordon and Adderly (1999:1-2) infant therapeutic massage can dramatically improve an infant's test scores on every available scale of alertness, good health, and potential intelligence quotient (IQ) development.

According to Gordon and Adderly (1999:4) there are mainly two reasons why massage is essential:

- The principle of *vis medicatrix naturae* means that "the body heals itself". Massage prompts the body to release natural healing agents, specifically endorphins, that are the body's natural painkillers, and it increases the levels of serotonin, a natural antidepressant.
- Humans benefit from being touched. Kneading the muscles stimulates the vagus nerve, which is the largest and most complex nerve. The vagus nerve has two major branches – one links the brain to the heart, and relates to speech, alertness, relaxation, and stress hormones; the other links the brain to the gastrointestinal tract, and relates to digestion and hormones such as insulin, which promote food absorption.

2.9.1 The science of baby massage

By massaging the newborn and continuing massage throughout infancy, it will become a skill the caregiver can use for a lifetime. The power of touch is so vibrant, that the massage-giver enjoys as many significant health benefits as the massage recipient, which includes a decrease in depression and anxiety, increased feelings of self-worth, and improved sleeping patterns (Gordon & Adderly, 1999:11).

The Kangaroo Pouch

Gordon and Adderly (1999:15) recommended a method of touch therapy by using a sling, backpack, or frontpack to carry the infant. The important thing about "baby-wearing" is to have skin-to-skin contact, and it also offers the infant mental stimulation of all the sounds, smells, and sights of the outdoor world, as well as

the smiles, caresses, and speech of the person caring him. It has a physical benefit through encouraging the infant to exercise by flinging his arms and kicking his legs. It can even help develop a sense of balance, because the motion offered by baby wearing stimulates the vestibular apparatus of the infant's inner ear. The researcher is of the opinion that if the caregiver knows how these aids work and what they can achieve, she can create a more stimulating environment for the infant.

Massage promotes sleep

Massage teaches the infant how to relax. According to Gordon and Adderly (1999:15-16) drowsiness and quiet sleep increases immediately following a massage. Massaged infants make more baby noises, restlessness during infant play decreases and infants are more easy to soothe.

Massage stimulates appetite and digestion

For optimal development, which includes sleeping right through the night without crying, an infant needs a healthy appetite and a healthy digestive system that is not prone to constipation, gas, and colic. By using the correct massage techniques, typical observations reported during a study included: "eager eater," "retains feedings well," and "alert" (Gordon & Adderly 1999:17).

Improved breathing

An infant's respiration is characteristically shallow, unstable, and often inadequate in the first weeks after birth. This is stimulated reflexively through sucking and through physical contact with the mother. The infant who does not suck vigorously does not breathe deeply. Touch and massage can have the effect of higher hematocrit levels (ratio of red blood cells to whole blood), requiring less oxygen and fewer blood transfusions, which can reduce the risk of infant apnoea with infants who have respiratory distress syndrome (Gordon & Adderly, 1999:17-18).

Massage improves muscular coordination and physical development

Massage helps an infant who is uncurling from the fetal position to stretch his muscles and joints. It supports his flexibility and encourages coordination of his movements (Kluck-Ebbin, 2003:16-17). According to Gordon and Adderly (1999:18-19), the obvious benefits of massage are that it stimulates the muscular system, and relaxes and tones muscles. When the infant is relaxed, the activity of the sympathetic nervous system (the heart rate, blood pressure, and respiration) decreases and the parasympathetic nervous system (blood flow to the kidneys) increases. In infants, massage increases the production of growth

hormones. Massage helps with the aches and pains of growing muscles attached to the fast-growing bones of the infant, by reducing stiffness and tightness, and it keeps the growing body flexible. Massage increases the production of growth hormones in the infant. Because massage stimulates and activates receptors in the skin, muscles, and joints, it assists the infant in learning to coordinate his muscular movements. Improved general body tone, better head control, and improved hand-to-mouth coordination are possible through touch therapy.

Massage as an alternative to drugs

Gordon and Adderly (1999:18-19) do not imply that by using massage one should discontinue using medicine prescribed by a doctor, when pointing out that relaxation, produced by massage, aids in reducing the effects of certain disorders, by reducing the amount of stress hormones in the body. Tactile stimulation increases the body's production of a substance, which helps produce T-cells responsible for cellular immunity. Massage brings comfort to the infant who is teething, because it signals to the brain to release hormones that will help him bear the pain better (Kluck-Ebbin, 2003:17).

Massage enhances self-assurance

The stimulation of growth hormone production through massage is important in itself, but also in relation to the brain of the infant. During the first year of the infant's life, his brain more than doubles in volume, reaching almost sixty percent of its adult size. At the age of three, the brain has stopped growing, although learning continues over the lifespan (Gordon & Adderly, 1999:19).

Massage is a stress reliever

The infant will relax while he is being massaged. As the caregiver strokes and touches him, she will notice that he may "coo" or make other happy noises. This is a sign of contentment and of being comfortable. Her gentle stroking and words will ring of harmony and wholeness, helping the infant to be less fussy and irritable because he is getting enough multisensory attention.

2.9.2 The basics of infant therapeutic massage

Baby massage offers a unique way to communicate with the infant, and in a way that he will recognize from the time in the uterus. Massage continues that intimate physical bond from when he was constantly massaged by the amniotic fluid. Soft, loving, rhythmic massage can help give the infant a secure and positive attitude to life outside the womb (Mother & child, 1999:49).

The Adderly Method of Infant Therapeutic Massage is a type of massage especially developed for infants and young toddlers. Knowing the basics of the Adderly method, the caregiver can use this technique in addition to stimulating the infant toward greater intellectual and physical development.

It is important, in co-ordination with the mother, to check with the infant's physician before beginning to massage the infant. Massage can be repeated throughout the day and can be done any time of the day.

The caregiver must keep in mind, however, that infants like the comfort of a schedule, and should therefore stick with the time of day that works best. The researcher suggests that a massage will be effective just after bath time, followed by the infant's bedtime.

The caregiver must keep in mind that there are certain times and situations that are not recommended to massage the infant (Gordon & Adderly, 1999:21-22):

- Immediately after the infant has eaten - at least a half an hour is necessary to digest food.
- If the infant has an infectious disease, or has a skin irritation, infection, or rash. A massage can spread the infection or inflame the already irritated skin. Sickness often reduces tolerance for touch.
- When he has a fever - because massage increases body temperature.
- When there is a break in the infant's skin, or when he has an open wound or a cut. Massage will interfere with the body's natural attempt to bring the skin together and to close the wound, because it stretches the skin. It will be painful if the caregiver massages over purple or blue bruises.
- Against the infant's will. Massage should be a pleasurable experience for both the infant and the caregiver, not a power struggle. Massaging should be stopped if the infant cries and should be attempted again when he is more receptive. If the infant is not amenable the first time when the caregiver tries to massage him, she can stroke his back gently for about five minutes. Gradually he will get used to this new kind of touch and allow longer sessions. To comfort the infant while introducing massage, the caregiver can gradually add the legs, the arms and the tummy while the infant is playing with a toy, or take breaks and hold him as reassurance.

The caregiver can introduce the infant to massage by practicing this technique while bathing him. Soap acts as a natural lubricant, allowing the caregiver to glide her hands along to get her accustomed to massage movements. Baby oils

should be avoided when massaging the infant. Massage oil helps the hands to flow smoothly over the infant's skin. Mineral oil, which is a non-organic product (distilled from crude petroleum), forms the basis of baby oil. It is too heavy and thick for infants, and tends to clog pores, smother skin, and may require scrubbing with soap and water to remove. When choosing oil, one that is formulated especially for baby massage is recommended. A cold-pressed fruit or vegetable oil is recommended over commercial baby oils. Essential oils are aromatic liquid substances, which are extracted from certain species of flowers, grasses, leaves, trees, and fruit. Lavender, geranium, chamomile, eucalyptus, and tea tree are essential oils that are recommended for babies. Essential oils in their pure state are too concentrated to use directly on the skin. They are diluted in base oils, which includes vegetable, nut, or seed oils. The oil should first be tested on a small patch of the infant's skin, to observe whether the area develops a reaction. Oil should not be used on the infant's face, as it can get into his tender eyes, nose, and mouth. The oil should never be poured directly on the infant's skin. The caregiver should pour the oil onto her hands and rub her palms together to warm the oil (compare Gordon & Adderly, 1999:22-25 & Kluck-Ebbin, 2003:27-29).

Preparing for the therapeutic massage

According to Gordon and Adderly (1999:26-29) the following items should be organized before messaging the infant:

- the massage oil
- extra diapers (the infant may urinate during massage, as his sphincter muscles relax)
- a towel and pillow for the infant to lie on
- a soothing music selection – preferably classical music (Mozart). Playing the same music at each massage will teach the infant to relax, and will provide the comfort of routine.
- the room temperature should be an average of 75°F (24°C) and should be free from draughts.

It is important that the caregiver takes a few minutes to relax, because if she is tense, it can be communicated to the infant through her touch. The infant must be positioned in a position that is comfortable for both the infant and the caregiver. Before the caregiver begins the massage, she should ask the infant's permission to touch him. Even though she thinks that the infant does not understand at this age, or that he can not verbally respond, by asking his

permission she is showing respect for the infant's body and personal limits (Kluck-Ebbin, 2002:32).

The caregiver must develop her own massage routine, beginning with the same body part and follow the same sequence to reassure the infant of what is coming. To begin, she can hold the specific body part she wants to massage in her hands. Doing this will produce a calming contact and reassure that the next movements will be alright. All the massage strokes should be gentle, slow, long, rhythmic, and smooth. By watching the infant's facial expressions and listening to the satisfying sounds he makes, the caregiver can determine what he prefers. Sullivan (1998:200) states that one does not need to learn any special strokes to massage the infant. By exploring his body with gentle rhythmic or stroking movements, he will let you know what feels good. The caregiver must find a sequence of strokes that calm the infant rather than stimulate him. It is essential for the infant to see the caregiver's face while she is massaging him. Looking at the infant and smiling at him will comfort the infant, it will benefit the relationship, and it will build his self-esteem. Talking to the infant during the massage is important, because calming words will reassure him of what the caregiver is doing. Talking to the infant while providing increased attention, when his brain is relaxed yet attentive and receptive to stimuli, will contribute to his intellectual and language development.

2.9.3 The Mozart Effect: A link to baby intelligence

Classical music can enhance intelligence and shape minds. This phenomenon is called the "Mozart effect". Mozart's music has unique transforming properties, because of its rhythm, and its mathematical elegance which combines complexity and clarity, stimulates the body's autonomic nervous system, and rewires brain cell connections. Mozart's music provides feelings of well being, and develops brain connections needed for higher-order thinking. Mozart is well-known for the operas he wrote. The opera is an effective way to expose the infant to a Mozart Effect "tofer", which greatly enhances musical and foreign language skills (Gordon & Adderly, 1999:69-70).

Early exposure to music lessons can change the capacity of the brain in favour of musical ability. It is not the number of hours spent playing musical instruments that are important, but the age when the child starts playing instruments (Gordon & Adderly, 1999:71).

The researcher is of the opinion that it is essential with the infant to generate sound. For example loud sounds can imply an angry feeling, where as a lighter, softer sound can imply a happy mood. When the caregiver suggests using a wooden spoon to play out different emotions on a kitchen pot, the medium

evolves around experienced emotions, which are generated through the medium of sound.

2.10 MUSIC AS A TECHNIQUE

The interest in music as a cerebral stimulant stems from observation that premature infants seem to thrive better when exposed to classical music. Studies done in schools have shown that the attention and performance of students improves when they are listening to classical music in the background. Scientists theorize that music helps organize the brain areas associated with creative reasoning. The calming effect of music releases endorphin hormones, which can be viewed as the body's own mood-calmer (Sears & Sears, 2002:64-65).

According to Schoeman (1996:44-45), music offers the infant the opportunity to come into contact with what he hears and experiences. When reacting to music, the infant can come into contact with his own body, and particularly with the muscles in his body.

Oaklander (1988:128) professes: "As children become disconnected from their bodies, they lose a sense of self and a great deal of physical and emotional strength as well". The caregiver must make the infant aware of the relationship between body and emotions.

Through music and musical instruments, emotions are allowed to come forth that might otherwise be repressed. According to Oaklander (1988:116-117), there are songs about every feeling and life situation. Music can be used as a way of getting the infant to express himself and talking about a life situation which he experiences. Classical pieces are especially conducive for getting in touch with feelings and evoking moods and images. The researcher is of the opinion that music as an aid can empower the infant to make contact with his inner and outer worlds.

2.11 SUMMARY

Chapter two is a discussion of theoretical funding of the development of an infant. The infant is a unique individual and he will grow and develop at his own special pace. In order to grow and develop as an integrated whole, the infant needs to interact with, and be part of, the environment. Infancy involves dramatic and rapid growth and development. Optimal stimulation is essential during this life stage, in order to achieve the developmental tasks in future periods. For optimal care-taking of the infant, it is essential that the caregiver be educated in the tasks and skills which the infant has to accomplish.

From the above information, it is obvious that caretaking of an infant at home is an all-inclusive approach, which includes the total organism and his environment. The value of the internal interdependence between the organism and his environment is that the infant is not in isolation when his mother returns to work. The external factors have an influence on his socio-emotional functioning, which must be integrated during his caretaking.

The rapid development of the nerve system, the improvement of the bone structure, and the improvement of the muscles make it possible for the infant to achieve his developmental tasks. Cephalocaudal development is the development and control of muscles from the infant's head to his feet. Proximodistal development implies development from the body outwards.

How successful the infant will be in achieving his developmental tasks, depends on the opportunities he will be exposed to and the help and guidance he will receive from his mother and caregiver.

Achievement of competence in each of the motor tasks depends on the infant's maturation level, environment conditions, and the strength of his desire for mastery. As he achieves a motor task it brings him in contact with the environment in order to experience more varied stimulation, explore objects more deliberately, and to voluntarily pursue his goals.

The caregiver should childproof the infant's environment (house), in order for him to have a greater sense of freedom. Fewer areas will be off limits, and he will be able to make discoveries on his own, without the caregiver's intervention or assistance. The more opportunities he gets to discover, test, and strengthen his new capabilities, the more confident and adventurous he will be.

The human sensory system is a highly complex system, which enables individuals to experience the world and make contact through their involvement in the world. It is essential for the infant's sensory skills to develop in order for him to understand his surroundings. The infant experiences, discovers, develops and internalizes his surroundings and the world, as well as the self, through his senses. The mother and the caregiver must be aware of stimulating the infant's senses through caretaking and play. Sensory contact with his environment and his world is made through sight, hearing, touch, smell, taste and talking.

Cognitive development is an ongoing process and happens rapidly during infancy. The infant is eager to accumulate knowledge about his environment in order to give meaning to his life. He orientates himself through his actions and what he perceives. His cognitive abilities help him to gather information about his social and physical environment. The ability to speak a language helps him to communicate. To learn a language is a complicated and creative task. Even

before the infant can speak a language, he has an understanding thereof. He develops the ability to look at what he is listening to.

Piaget viewed intelligence as following lawful, predictable patterns of change. His theory explains the underlying structures and processes involved in the development of the infant's thinking and problem solving. According to his theory, there are four stages of cognitive development. At each new stage, the competence of the earlier stages is not lost but is integrated into a qualitative approach of thinking and knowing. For the purposes of this study, the sensory-motor stage is discussed, which begins at birth to two years.

The views of Maslow, Freud and Erikson on personality and social development are discussed. The infant's environment and experiences are limited. The nature and quality of his surroundings will have an influence on the infant's developing personality. Maslow believes that human beings have basic needs that must be met in all areas of development, in order to become self-actualized. Lower basic needs must be met successfully, in order to meet higher order needs. Maslow's hierarchy of needs consists of five levels, namely physiological needs, the need for safety, the need to feel loved and to belong, the need for self-esteem, and the need for self-actualization.

Freud's psychoanalytic theory focuses on the development of the individual's emotional and social life. He focused on the impact of sexual and aggressive drives on the individual's psychological functioning. He recognized the influence of sexuality on the mental activity of children, and argued that although they are incapable of reproduction, their sexual drives operate to direct aspects of their fantasies, problem solving, and social interactions. Freud suggested that all behaviours are motivated, and that there are two basic psychological motives, namely sexuality and aggression. Freud also hypothesized that the conscious as well as the unconscious motives may simultaneously motivate behaviour. Freud described three components of personality, namely the id, the ego, and the superego. The id, which exists at birth, is the source of instincts and impulses. The ego is the composite term for mental functions that are involved with reality, which includes perception, memory, judgment, self-awareness, and language skills. The superego evolves later in childhood, and includes prohibitions about moral behaviour and ideals about one's potential as a moral person. According to Freud, the most significant developments in personality take place during five life stages occurring from infancy through adolescence. Freud viewed sexuality in a positive way, suggesting that sexual impulses convey a thrust toward growth and renewal. Each of the five stages identifies a period of life during which a particular body zone is thought to be of heightened sexual importance. For the purposes of this study, the oral stage and the anal stage are discussed.

Erikson's theory addresses growth across the lifespan, and divides development into eight stages. In each stage there are psychosocial conflicts that must be resolved by the developing individual. The infant's unique coping behaviour will reflect his talents, motives, and the responses of relevant others to a particular strategy in his developmental stage. For the purposes of this study, the two stages, basic trust versus basic mistrust, and autonomy versus shame and doubt are discussed, since they occur during the first two years of life. Erikson and Piaget view change as a more active process in which the infant tries to solve conflicts and problems.

Neurosis is defined in the gestalt approach as a state of rupture of the homeostatic equilibrium in the individual. He experiences different necessities, and cannot determine which is the dominant. Neurosis is a series of unfinished gestalts in a relation between the organism and his medium. The researcher views the five layers of neurosis as a process of healing where the organism reaches equilibrium through awareness in every layer. Caretaking of the infant is discussed within each of the five layers. Although a caregiver is not a therapist, it will be helpful to have this knowledge, in order to understand the infant's behaviour.

The infant will develop a strong emotional attachment to the people who provide him with a caring and nurturing relationship. Attachment derives from three key factors in the mother/caregiver-infant relationship, namely body contact, familiarity, and responsive parenting. The infant who has a secure attachment will actively explore his environment and interact with strangers while his mother or caregiver is present. Secure attachment is a representation based on the infant's confidence that his attempts to make contact will be accepted.

As the infant grows, the boundaries of his social world expand. When he makes contact with his peers, it enables him to interact with a new source of social stimulation, peer interaction, which is an important component of social development.

Body awareness is basic to a strong sense of self. The infant can be asked to name all the bad and good characteristics of his silhouette. When he gets the opportunity to project all his own characteristics into the silhouette, he is busy growing and changing from the way he manifests himself to a fuller manifestation of his potential. Through awareness of differences he can begin to view himself with new appreciation and begin to see, approach, and contact others in the same light.

An infant whose cries have been promptly responded to early on, learns to trust and to anticipate that a response will be forthcoming. The infant cries to communicate, and not to manipulate. Crying is the only way in which he can

communicate his needs. He may become attached to a blanket or a stuffed animal, known as a “transitional” or “comfort” object. This item will have a special place in his life, and he may insist, on taking it everywhere. It will help him sleep when he is tired and will reassure him if he is unhappy, especially if his mother or caregiver is not around to comfort him. The infant should be familiar with what feelings are and should be able to communicate his feelings. By using songs, books, games, and exercises, the caregiver can help the infant contact his own feelings, express them constructively, share them, and talk about them.

Assessment play, biblio play, dramatic play, and creative play are forms of play which the caregiver can include, in her daily program with the infant. By engaging in these various forms of play, the infant will grow and develop in a relaxing, natural, and playful manner in the safe environment of his home. The caregiver can enter the infant’s world through play and can learn about his attention span, his preferences, his temperament, his strengths, and his weaknesses. The caregiver should select toys that will stimulate his senses, and which are developmentally appropriate, that will build on skills which he has already mastered, and that will provide him with some challenges. The infant who is unable to verbalize his thoughts and feelings may find them expressed in books. Biblio-play offers possibilities for new behaviour patterns by providing models for positive behaviour modification. Awareness and insight will lead to growth and social development. Dramatic play is a form of play that offers the infant the opportunity to grow and develop by acting out situations and dramatizing in a safe, non-threatening environment. By acting out his experiences, the infant will come into contact with reality, which will increase self-awareness. Creative play is inventive, as it can manifest in various forms of art and handcrafts. Artwork can be relaxing to the infant and offers him an opportunity to release his feelings. When the caregiver praises him for his creativity, she may be enhancing the infant’s self-image, and the infant may experience a feeling of success.

Baby therapeutic massage techniques are included, because by knowing the advantages of these techniques, and practicing the skill, the infant’s growth and development, as well as the relationship between the caregiver and the infant, will benefit from it. Classical music can enhance intelligence, shape minds, provide feelings of well-being, and will develop brain connections needed for higher-order thinking. This phenomenon is called the “Mozart effect”. The opera is an effective way to expose the infant to a Mozart Effect “tofer”, which is great for the enhancing of foreign language and musical skills.

Premature infants seem to thrive better when exposed to classical music. The attention and performance of infants improve when they are listening to classical music in the background, since it helps organize the brain areas associated with

creative reasoning. Music offers the infant the opportunity to come into contact with what he hears and experiences.

Chapter three is a theoretical chapter in which the caregiver is discussed within the family system. Attention will be given to the characteristics, roles and responsibilities of the caregiver, while caring for the infant at home.

Leaving her infant with a stranger can be difficult for the mother at first, as well as for the infant. The infant will gradually accustom himself to anyone who takes care of him, and who makes him feel secured, loved and nurtured.

Procedures for recruiting a caregiver will be discussed. A job description and an application profile are advisable when the mother decides to recruit a caregiver. Developing a good working relationship will start with the interview between the mother and the caregiver. Apart from the information the mother gathered from the interview, a reference check on the caregiver is essential, in order to gather information about her capabilities and her potential. When hiring a caregiver, she becomes part of the family, and should thus be someone the mother can trust and feel comfortable with. During the interview the caregiver can spend time with the infant. This will give the mother an opportunity to observe the caregiver's interaction with her infant. When hiring the caregiver, she should be given a "trial period," in which the mother can evaluate the infant, as well as the family's relationship with the caregiver.

Safety hazards in the infant's environment will be discussed. The caregiver should be aware of them and should eliminate them.