

Child Development

Children's Needs	2
How To Really Love Your Child.....	3
Attachment (Bonding) And Foster Care	5
Long Term Effects Of Lack Of Normal Attachment	10
What Can Be Done To Help An Unattached Child To Bond With A “Parent(s)”	11
The Development Of A Child’s Brain	15

Children's Needs

"Every child has the right to belong to a family where they are safe and loved."

Children are entitled to grow up within a family and community, which is committed to their well-being.

- Children need commitment
- Children need to bond to parent figures and know they belong.
- Children need to be loved unconditionally.
- Children need good food, water, air, shelter, clothing and health care.
- Children need positive guidance and to be kept safe.
- Children need to be affirmed and encouraged as they grow.
- Children need to receive an education which allows their potential to develop and flower.

When children grow up with people who deeply care for them, their well being and their safety, they have every chance of developing into happy and responsible adults.

Sadly, when children do not experience unconditional love, nurture, bonding, protection, guidance, affirmation and encouragement, their opportunities to grow into happy and responsible adults are considerably reduced. When the basic physical, emotional and social needs of children are not met, they tend to develop demanding, neurotic, psychotic and delinquent behaviours which not only cause stress and difficulty for them and others, but which inhibit their ability to form satisfying relationships and to learn. Such children grow into adult life severely handicapped by the circumstances of their upbringing, over which they had no control. They can be emotionally, socially and sometimes physically stunted, a condition which can remain with them all their life unless the grace of God intervenes.

"Each child needs someone who is crazy about them."

In fact, each child needs a family who is crazy about them, and a community who is crazy about them.

Children need caring families and caring communities. They need to be surrounded by people who cherish them and value them and enjoy them.

Children need caring governments. They need governments who give children's needs highest priority, and who work to ensure that every child can grow up safe and loved and educated, free from the evils of neglect, abuse, exploitation, poverty, illiteracy, abandonment and violence.

Families and communities are more likely to look after their children when there is basic security, when economic conditions are good, when there is employment, and access to good education and health care, when there is a shared sense of values and social cohesiveness and when government policies both protect and enhance family life.

Abuse and neglect flourish in families and communities locked in poverty, unemployment, crowded housing and poor facilities; where illness, violence, addiction, crime and relationship breakdown are endemic. A neglected community impoverishes children's lives.

Everyone in a community is responsible for the children of the community. While our prime responsibility is for the children of our own immediate and wider family, we also have a responsibility for the children we live next door to, the children we teach, the children we coach, the children we pass on the street, the children we may never see, but whose education, health and welfare we contribute to through our taxes and donations.

Children belong to the entire community. Human beings evolved not as individuals but as members of families within communities. No individual, no single parent, no nuclear family can survive alone. Human beings grew and survived as clans, as communities - interdependent socially, emotionally and biologically. In this there was belongingness, safety, well being for children, and support for their parents or guardians. Too often these factors are missing from our modern societies, to the detriment of children and their parents.

Children need committed adults building networks of love around them. The social work task is to see these networks are in place for every child.

How To Really Love Your Child

Every child needs someone who is “nuts” about them. Every child needs to know they are loved in the depths of their being.

The most important question a child asks, not always in words, but more by their behaviour, is “*Do you love me?*” **How** we answer this question is the most important answer we will ever give our child.

How do we show our children that we love them **no matter what?**

1. Spending time with our children; lots of time, quality time. When we spend time with our children we are saying to them “*I enjoy being with you; you are a great person to be with.*”
2. Listening to our children; really listen to them so that we can understand what is happening for them. When we listen to our children we are saying to them. “*You are so important to me I want to hear what you are thinking and feeling.*”
3. Touching our children; in an acceptable and safe way. Our touch conveys the depth of our love. Our children need our touch, our hugs. When we touch our children we are saying to them, “*You are a special person and it is good to be close to you.*”
4. Smiling at our children with our eyes and mouth. Our eyes show the love we hold in our hearts for our children; our smile shows our pleasure in them. When we use our eyes and mouth to smile at our children we are saying to them, “*I love you*”.
5. Praising our children. Our children respond to praise. Praise helps them to feel good *about* themselves; they feel worthwhile. When we praise our children we are saying to them – “*I admire you and I am pleased with you.*”
6. Disciplining our children. Our children need clear and firm boundaries around them. Our children feel safe when they know what they can and cannot do and what will happen to them

if they go over the set boundaries. When we discipline our children we are saying to them - *“I care so much for you I want you to have good values to guide your life.”*

7. Giving our children an example of love. Our children learn how to relate to others through the example of the love shown between a mother and a father. Our children flourish when they grow in a loving environment. When we set an example of love by deeply caring for each other as husband and wife we are saying to our children – *“We love you so much we want you to feel safe in the love we have for each other and to learn from us.”*

8. Praying for our children., Our children need our prayers. The most powerful thing a mother and father together can do, day after day, is to bow before God in prayer and seek His grace poured out into the lives of their children. This joint prayer also deepens the marriage relationship which in turn blesses our children. When parents pray together for their children we are saying – *“Our children are a precious gift from God and we want His love to enfold them.”*

Attachment (Bonding) And Foster Care

An attachment may be defined as an affectionate tie that one person forms between him/her self and another person. Attachment is an emotional bond that binds two people together and endures over time. It is a compelling human need.

In a parenting situation, attachment is an emotional/feeling process which takes place between parent(s) or parent figure(s) and a child. A secure, warm attachment is essential for healthy child development.

Attachment is usually talked about in relation to mothers and their infants. But it is a term which applies to whoever is the main parental figure, and the child, as well as other significant people with whom the child has a relationship. It is well recognised today that children can form multiple attachments.

Attachment is a two way process. The key factor for the parent is being able to respond in a sensitive, caring way to the child's signals of need. In return, the child responds with warmth, and contentment. A close relationship built on acceptance, trust and security is being established.

Models of Attachment

Attachment is a consequence of the arousal/relaxation cycle in a normal parent/child relationship.

This is reflected in the following two models.

(1)

Child expresses physical or psychological need.

State of High Arousal

Sensitive Satisfaction of need by Parent

Relaxation of Tension for child as need is met

Growing sense of Security Trust and Attachment

(2)

Parent initiates loving/caring interactions with child

Child responds Positively

Growing sense of Acceptance, self worth, self esteem and Attachment

Management of Anxiety and Fear

One of the most important aspects of the attachment relationship between infant and parent is the management of anxiety/fear. During infancy, children do not have the mental ability to make sense of what is happening around them in space or in time. Therefore as their needs develop, so too does their sense of anxiousness that their needs will be met.

This sense of anxiety and fear is overcome by sensitive and consistent response to the child's need. Their world becomes increasingly safe and reassuring that all is well; that a special person or persons, are always nearby to take care. Thus trust develops and anxiousness fades.

The opposite to the above is, if need is not met, or is only partially met, or is met inconsistently, and/or in an indifferent or uncaring manner, anxiousness and fear grow and affect behaviour.

Attachment and a Child's Development

There is a clear link between secure attachment and a child's development. An enormous amount of learning takes place during the pre-school years. Growth and change take place on a daily basis. Children learn from the world around them. Warm attachment provides a frame of reference and the security necessary for the child to undertake this learning. This is because they know they are safe and loved and are free to explore and know their world around them. Language development is critical in this learning.

Attachment and Behaviour

Attachment also is an important factor in a child learning appropriate standards of behaviour. As a child feels safe and loved, he/she knows to behave in a way that does not put this secure, loving environment at risk. The desire to retain the ongoing approval of the special people with whom the child is attached, is a powerful motivation to behave in a certain way and not to give expression to the urges and feelings which seemingly could put this approval at risk. Thus, values and standards of behaviour are learned and internalised.

Attachment and Relationships

Attachment during infancy also lays the foundation for future relationships. Human beings are social beings and dependency during infancy is not just physical. There are examples of children in institutional and other care, failing to thrive, not because their physical needs were not being met, but because there was no warm, caring relationships associated with this physical care.

Some attachment behaviours which have been identified are; - approaching, following, clinging, smiling, calling or crying. These are behaviours which are designed to bring the child close to, or in contact with, the persons caring. As this two way relationship develops, the child learns how to relate to other people. They have their attachment model as the basis for building relationships with others. If a child feels safe and loved he/she can reach out in confidence to others and begin the process of building relationships with them, based on the values and patterns of behaviour which feature in their attachment relationships.

The quality of the attachment relationships formed in infancy have a marked influence on the quality of relationships formed during school and adult years. They are of life long importance.

Attachment and Self Esteem

Attachment influences the way a person perceives themselves and their feeling of self esteem. It influences the way they perceive and relate to others, and the way they perceive and make sense of the world around them. All that a child internalises during attachment, provides the framework for organising and understanding the world in which the child grows to adulthood. A securely attached child is likely to feel good about themselves and the relationships they have with others.

Attachment helps a Child to

- attain full physical, emotional, social, intellectual and spiritual development.
- handle fear and worry.
- cope with stress and frustration.
- reduce jealousy.
- develop future relationships.
- develop values and a conscience.
- think logically and to make sense of the world around them.
- develop their own special identity and their view of themselves.
- become confident in who they are as a person and developing their personal attributes.

Attachment Within Family

Ideally, attachment occurs within a family setting with parent(s) or parent figure(s).

Parents provide a child with:-

Unconditional love, acceptance,
commitment, partiality,
permanence,
genetic inheritance (adoption etc. excepted)
spiritual care,
physical and emotional care,
intellectual stimulation,
relationship model,
values, boundaries, discipline,
safety, security,
stability, consistency,
family history, sense of belonging,
identity and self worth,
cultural inheritance, language and
attachment.

Attachment is critical for all the other attributes listed to happen well, but in turn, they are critical for attachment to happen.

Types of Attachment

Secure

Parent is sensitive and responds to child.
Child becomes confident and resilient.

Infants are usually distressed by separation from their parent(s). On reunion they greet their parent, accept comfort, and then return to normal activity.

Insecure – Avoidant

Parent is rejecting or emotionally unavailable, often very controlling.
Child seeks little contact, expects rejection, becomes angry, fearful, emotionally starved and forced to become self sufficient.

These children show few observable signs of distress on separation, and ignore their parent on reunion. They remain wary and watchful and inhibited in their play.

Insecure – Ambivalent

Parent is inconsistent – sometimes available, sometimes not.
Child is bewildered, uncertain, so tries to get more care by clinging or conflict.

These children are distressed by separation and not easily pacified on reunion. They seek contact with their parent, but then resist physically (kicking, squirming, turning away). They alternate between these angry behaviours and clinging. Their exploratory play is inhibited.

Insecure – Disorganised

Parent with major problems – psychiatric, grief stricken, changing relationships.

Parent's personal world is disorganised, with consequent disorganised relationship with child.

Child's behaviour undergirded by fear and uncertainty as they respond to parent's disorganisation in their relationship.

A child on return after separation shows a diverse range of confused behaviours, reflecting the confusion of the parent's circumstances. There is no set pattern of response to make sense of the chaos.

Barriers to Attachment

The attachment process is based on the way the parent and child respond to each other. Good attachment is dependent upon sensitive, consistent and unconditional love.

Barriers to good attachment arise when sensitive, consistent, unconditional love is absent (temporarily or permanently) or is only partially present. For example:-

- Parent – child separation due to illness, marriage breakdown, employment requirement etc.
- Parent psychological absence due to mental illness (e.g. depression, psychoses) or grief.
- Chaotic, changing family circumstances which work against stability and the day in, day out presence of the parent
- Violent, abusive family environment in which fear and anxiousness dominates relationships.
- Rejection, hostility, indifference by the parent.
- Over crowded, poor living conditions associated with parent tiredness, exhaustion.
- Family disintegration due to war, poverty, illness and the like.

Effects of Secure and Insecure Attachment

Research has shown a connection between secure attachment and later development. Securely attached children do better in all aspects of life than non attached children. There is a definite link between insecure attachment and subsequent relationship and behavioural problems.

Long Term Effects Of Lack Of Normal Attachment

From Vera Fahlberg “Attachment and Separation”.

Psychological or behavioural problems

<p>Conscience development</p> <ul style="list-style-type: none"> - May not show normal anxiety following aggressive or cruel behaviour. - May not show guilt on breaking laws or rules. - May project blame on others. <p>Impulse control</p> <ul style="list-style-type: none"> - Exhibits poor control; depends upon others to provide external controls on behaviour. - Exhibits lack of foresight. - Has a poor attention span. <p>Self esteem</p> <ul style="list-style-type: none"> - Is unable to get satisfaction from tasks well done. - Sees self as undeserving. - Sees self as incapable of change. - Has difficulty having fun. 	<p>Interpersonal interactions</p> <ul style="list-style-type: none"> - Lacks trust in others. - Demands affection but lacks depth in relationships. - Exhibits hostile dependency. - Needs to be in control of all situations. - Has impaired social maturity. <p>Emotions</p> <ul style="list-style-type: none"> - Has trouble recognising own feelings. - Has difficulty expressing feelings appropriately; especially anger, sadness and frustration. - Has difficulty recognising feelings in others.
---	---

Cognitive Problems

Developmental Problems

<ul style="list-style-type: none"> - Has trouble with basic cause and effect. - Experiences problems with logical thinking. - Appears to have confused thought processes. - Has difficulty thinking ahead. - May have an impaired sense of time. - Has difficulties with abstract thinking. 	<ul style="list-style-type: none"> - May have difficulty with auditory processing.. - May have difficulty expressing self well verbally. - May have gross motor problems. - May experience delays in fine motor adaptive skills. - May experience delay in personal-social development. - May have inconsistent levels of skills in all of the above areas.
---	---

What Can Be Done To Help An Unattached Child To Bond With A “Parent(s)”

Prayer

Pray for wisdom and discernment in the social work process, and for bonding and healing for the child.

Understanding

Understand that the basic needs of the baby are still unmet in the child who is not securely attached, regardless of age.

These include:

- the need to be held.
- the need to be enjoyed and admired.
- the need to be safe and loved.
- the need to be understood.

An unattached child needs a response which takes into account their emotional development as well as their chronological age.

Commitment

Unattached children need a parent(s) who are totally committed and available to them, and who offer unconditional love, warmth and understanding. If their own birth family cannot be there for them in this way, other carers must be found for them with urgency. The longer the delay in this process, the more injurious it is for children. When it is remembered that children normally form attachments between 6 – 12 months, the negative effects of delay in attachment are obvious.

Focused Attention

One to one time with the child is necessary. An unattached child needs time which is especially their own, with the parent. Persistence and patience are essential requirements in putting this into practice as it may be a long time before the child responds. The purpose is to demonstrate to the child that they are important enough to receive undivided attention and to understand what they are thinking and feeling.

Touch

Touch is very important. Touch such as hugs, holding hands, and the like, convey love. They convey love in a tangible way, with the message *I like being near you*.

Clearly, touch has to be used wisely with older children, or children who have been abused and always taking into account cultural considerations.

Unattached children need touch. Touch can heal. Sitting by a child watching television, having a fun fight, tucking a child into bed, holding hands, saying a prayer together, going on a walk together, are all variants of touch and saying *“It is nice to be near you”*.

Holding a child when they are distressed or out of control is also helpful, even if the child is resistant. Firmly, but lovingly holding a child in these circumstances, can give a profound sense of security, of acceptance and understanding.

Warm Eye Contact

Eye contact is also important. Our eyes reflect our love. Children sense this and respond to it. An unattached child may be so withdrawn that they have no experience in receiving love in this way. Warm eye contact, accompanied by a smile, conveys a depth of message. It cannot be forced upon a child, but in an appropriate time and manner, it can happen, and after it has happened once, the child is likely to look for it happening again.

Cultural considerations have to be taken into account with eye contact, but even allowing for this, with every child there is a time and place where positive, warm, loving eye contact is appropriate.

Safe Boundaries

Unattached children need to be safe. They need fair and consistent boundaries to their behaviour. When children feel safe and accepted they are set free to develop trusting relationships. An important question they ask, not verbally but through their behaviour is, *“Can I trust you? Can I depend on you not to let me down?”*

When a child knows the answer to this question is *“Yes,”* they are ready to form attachments.

Expression of Feelings

Withdrawal, or on the other hand, anger, may dominate a child’s behaviour, or these emotions may co-exist within a child who may alternate between them. The child needs guidance and encouragement to find a middle way in which to express feelings. Fair, firm boundaries, understanding and imagination can provide a safe place for activities which the child enjoys doing with the parent, and through which it is able not only to share thoughts and feelings, but to build a trusting, warm relationship.

Shared activities on a one to one basis in which there is parental empathy can be an effective way of reducing the extremes of withdrawal and anger, and freeing a child to form an attachment.

Life Story Book

A useful resource is a Life Story Book. Many children who come into care have complex and confusing life stories. They may not have any clear idea of the sequence of events, let alone

the reasons for these events. A Life Story Book in which the child is the central character is helpful to the attachment process as it helps make sense of the child's life. Children cannot be protected from their own lives. No matter how painful their experiences have been, we cannot take them away. Children can, however, be helped to live with them. Putting together a Life Story Book for a child can be a healing experience which gives them the opportunity to talk about significant people and events in their life.

Counselling

Some children with attachment issues respond to counselling. Counselling can include sessions for the parent figures and the child. This can provide a supportive environment in which to develop understanding, and activities which will empower the attachment process.

Counselling on its own will not make an unattached child attached to someone. Healing is a life long process for children who have experienced trauma. The most significant contribution to healing comes from everyday interaction of a child with a parent who provides a committed, safe, warm, and loving environment.

Counselling can support this interaction, but will never take its place.

Contact With Birth Family

Unattached children in care need ongoing contact with their birth family. In nearly all cases this is so, regardless of the focus of the foster care, whether it is a temporary arrangement with a planned return to their home, or it is permanent care with no plan for return home.

Children often remain loyal to their families of origin in spite of the way they have been mistreated. They have a deep down need for their parent(s) to show them love.

Many children who come into care have problems of attachment. As a consequence, it is difficult for them to know who can be trusted, and what is real in their lives. As they attempt to establish new and meaningful relationships with their foster family, they continue to come to terms with the complexities of their relationships with their birth family. If nothing else, these relationships are important for the child's ongoing sense of identity and of family history.

In foster care, access arrangements must always be carefully monitored. If contact with family is to be successful for children with attachment problems, it must take place within a safe and supportive context. The best base for contact is from a secure, nurturing and understanding family environment, where difficulties which may be experienced during visits to or from the birth family, will not put at risk the placement itself. For an unattached child, a secure placement is the first prerequisite for contact with family, to go ahead.

A sense of identity, of knowing who they are, from whom they have come, is critical for any child growing up. Children with attachment issues need this knowledge. That is why it is important they have contact with their birth family, and within their unique circumstances, build relationships with them, which enhance their ability to heal hurts and grow as a person in their own right.

It is important that the child's needs are the focus of contact arrangements with family, and that the impact of the access is monitored. Emotional reactions to visits (often reactions which are symptomatic of grief) are to be expected and not reasons to stop the visits. However, if family visits are causing so much disruption that they are preventing the child from forming attachment with other parent figures, then arrangements must be reviewed. While visits to family are important, they cannot be made at the cost of attachment. If a child does not form warm attachments, their prognosis for a happy, fulfilling life, are not great, no matter how well they know their family of origin.

A critical issue in determining the frequency and nature of family visits is whether or not primary attachment is seen to be with the birth family. If this is so, the appropriate goal of the foster care is "return home", and can only be achieved as relationships between the child and parents improve. If the goal is for the child to live permanently with their foster family and within this family to form attachments, the contact with birth family is not as crucial in terms of frequency and duration of visits. However, some contact is necessary in terms of continuity of family relationships and the child's sense of identity. In the end, it is difficult for a child to attach if they do not know, in the depths of their being, who they are.

Committed, Loving Carers

Unattached children, above all else, need carers who are committed to them, believe in them, listen to them, encourage them, pray for them, love them, advocate for them, want the best for them. It is in this environment that children with attachment problems have the best chance of establishing relationships which bond them to others and thus set them on the road of healing and wholeness.

Network of Love

Caring for children with attachment difficulties is not easy. It can take a long time of patient, loving care before they begin to respond in a positive way. Many foster carers find such children to be a constant drain on emotional and physical energy. A great deal of support is required to care for these children in a way which creates the opportunity for secure attachment to begin to develop. A network of support is needed for both the child and the foster carers. It is the responsibility of the Foster Care Agency to see that this network of love is in place. Caring for these children requires a team effort of which the foster care family is but a part.

Planning

The best chance of making the right decisions for the child, and providing good support for him/her and the family caring, is to ensure that all the significant people in the child's life meet together and plan together. It is important that working relationships are established and maintained between all the parties involved. This includes the child's family of origin, social workers, teachers, health professionals, counsellors, the foster carers, and possibly previous carers.

It is when people make the effort to come together, discuss together, plan together that the best decisions are made for children, including the nature of the support network, and the continuity of important past and present relationships.

Conclusion

Every child has the right to be securely attached to safe and loving parent figures. A critical social work task is to ensure this happens as early as possible in a child's life. This task is so critical because the implications for life are enormous. The task must always be given priority.

The Development Of A Child's Brain **(Implications for the care of children)**

A child's brain begins development shortly after conception. It develops in an awe inspiring way.

Nerve cells in the developing brain, from about 10 weeks onwards, begin sending electrical signals to other cells who in turn are calling other cells.

Neurons

These nerve cells are called neurons, which are long wing cells that carry electrical messages. Neurons are not transmitting signals in a scattergun fashion. Instead, the signals arise from co-ordinated waves of neural activity which in turn create patterns of mental circuits.

This electrical activity forms the basic pattern of brain activity. The rhythmic firing of electrical impulses by neurons is fundamental to brain development. A brain is not a computer. Nature does not put it together and then turn it on. The brain is working long before it is finished.

The same process that wires the brain before birth, drives the explosion of learning that occurs immediately afterwards. At birth a baby's brain contains 100 billion neurons. However, the pattern of wiring between them has yet to be stabilised. To date, what the brain has done is lay out basic circuits that are its best guess about what will be required for vision, for language, for whatever. It is in fact a rough blueprint that needs to be shaped by experience, and refined.

Synapses

During the first years of life the brain undergoes a series of extraordinary changes. Shortly after birth, a baby's brain produces trillions more connections between neurons (synapses) than it can possibly use. Then the brain begins to eliminate these connections that are seldom or never used. From around 10 years of age the excess synapses in a child's brain undergo pruning, leaving behind a mind whose patterns of thought and emotions are unique.

Genetic Impact

The brain then, is formed by genes and environment interacting together. It is as though they are dancing together to form their own unique dance. The dance begins when, from the third week of gestation onwards, a thin layer of cells form a fluid filled cylinder (neural tube) in which the neurons develop. As the neurons proliferate, the brain and spinal cord assemble themselves in a series of choreographed like steps. Genetic processes hold sway in this process but the environment still has its effect on development through factors like diet, cigarette and/or drug use, alcohol, viral infections. These things can upset the precision of neuron development.

Despite outside factors which can cause defects, the neurons continue to do amazing things, amongst which is to migrate to distant locations and accurately lay down connections that link one part of the brain to another.

Axons And Dendrites

After birth, each of the brain's billions of neurons forge links to thousands of others. First they spin out a web of wire like fibres (axons) which transmit signals, and dendrites which receive them. The object is to form a synapse through which the axon of one neuron beams a signal to the dendrites of another.

Before this can happen axons have to move so that they almost touch the desired dendrites. A 'growth cone' guides the axon on its journey, a growth cone which comes with its own sounding equipment like sonar or radar, to search out dendrites to which it is attracted. It will be repelled by other dendrites.

Up to this point, genes have controlled the unfolding of the brain. As soon as axons make their first connections, electrical impulses explode. Whereas, prior to birth the basic wiring system was laid down, after birth the brain has to ensure that wiring for all possible activities of a human being are in place. It is like electrical cables which have been laid from town to town (prior to birth) now having to be connected up to every house in all the towns (after birth).

Quadrillions Of Connections

Eventually a human brain has to forge quadrillions of connections. When a baby is born it can see and hear and smell and respond to touch, but only dimly. The brain stem which controls heartbeat and breathing has completed its wiring, but elsewhere the connections between neurons are weak. But after the first few months of life, the brain's higher centre explodes with new synapses. By the age of two, a child's brain contains twice as many synapses and consumes twice as much energy as the brain of a normal adult.

Synapses reach their highest density (15,000 synapses per neuron) at around the age of two and remain at this level until the age of ten or eleven. This profusion of connections lends the growing brain exceptional flexibility and resilience.

Environmental Impact

After birth, it is experience (environment) which strengthens some synapses and leads to the pruning of others. Each time a child tries to touch an object, or gaze at a face, or listen to a voice, tiny bursts of electricity burst through the brain, knitting neurons into circuits as well defined as those etched in modern silicon chips.

The results are those behavioural milestones that never cease to delight parents, e.g. grabbing an object, responding to a voice, crawling, walking, talking, smiling.

However, these things require a positive environment to interact with the genetic development of the brain, if the brain is to develop appropriate synapses. Parents are the brain's first and most important teachers. The environment they provide will in large part determine the nature of the synapses reinforced into the brain's pattern of functioning. Experience is the chief architect of the brain. The nature of these experiences, positive and negative, are very powerful in determining the ultimate shape and functioning of the brain.

Role Of Parents

If, after birth, parents provide a warm, caring, safe and stimulating environment for a child, the brain, following upon the child's responses, will establish synapses which pattern behaviour akin to that which the child experiences from the parents.

However, when the brain does not receive messages of acceptance of love, of security, of attachment, of language, of positive stimulation, especially if it is within an environment of fear and tension, the brain responds by patterning into the neural activity responses which are defensive, anxious, fearful and inhibiting.

Children who are physically abused early in life, develop brains that are tuned to danger. At the slightest threat their hearts race, their stress hormones surge and they anxiously track the nonverbal cues that signal the next attack. Because the brain develops in sequence, with more primitive structures stabilising their connections first, early abuse is particularly damaging. These early experiences of fear and stress form a template, a pattern, around which later brain development is organised.

Emotional deprivation early in life has a similar effect. Children born of depressed mothers have reduced activity in the lobe area of the brain that serves as a centre for joy and laughter. Further the pattern of activity displayed by these children closely resemble the ups and downs of their mother's depression.

However, not all children born to depressed mothers develop these negative wave patterns. Mothers who manage to rise above their depression giving their babies attention and playing with them, have children with a more cheerful and positive disposition. The emotional tone of the interactions between mother and child helps to explain the differences.

Brain Plasticity

Although brain patterns are laid down in infancy, the brain remains remarkably fluid and flexible for some considerable time, and so is able to relearn and replace patterns of behaviour. However the older the child, the harder it is to reframe the brain's patterns of activity. The brain's greatest growth spurt draws to a close around ten or eleven years of age when the balance between synapse creation and synapse pruning shifts considerably. Over the next several years the brain destroys its weakest synapses, preserving only those who have been integrated with environmental experience.

By the age of 18 the brain has declined in plasticity, but is increased in power. Talents, gifts, and knowledge that have been nurtured are ready to flower. In its activity the brain is now quite patterned and focused. Replacing brain patterns is difficult at this stage.

Implications For Parents And Social Workers

Brain development has profound implications for parents, for social workers and for agencies. It emphasises how important it is for children, but especially babies and infants, to be cared for in an environment which is safe, loving and stimulating. It underscores the importance of hands-on parenting, of hugs, of shared times of play, of reading and doing other things together, of positive discipline and so on. Children who are raised in this kind of environment have every chance of developing brains rich in patterns which will benefit them life long.

On the other hand a child's brain suffers if deprived of a stimulating environment. It has been found that children who don't play much, or are rarely touched, develop brains 20% to 30% smaller than normal for their age, and sadly they are brains usually programmed to negative responses.

Responsibility Of Social Workers

Given all this, social workers working with children in need of care and protection have a huge responsibility to ensure they are placed in an environment which allows them to attach to caring adults and to develop brain patterns of activity which give to them the potential of living a full and satisfying life. The earlier this work is done the better, because the older the child becomes, the harder it is for the child to learn new ways of thinking, feeling and reacting. There must always be urgency (but not at the cost of good social work process) to ensure that as soon as is possible, babies, infants and little children are placed in a permanent home which offers nurture, security and stimulation. All children are entitled to live in this kind of home, but given our knowledge of brain development, it is critical that an all out effort is made to provide safe, nurturing, stimulating homes for little children. Intensive work done at this stage of a child's life can avert disaster for them later on.

The human brain is an amazing part of God's creation. To think about its development takes us beyond ourselves and leaves us in awe of the Creator. Thankfully we can come to the Creator seeking His healing for His children whose life experience have left them with patterns of thinking and feeling which are negative and damaged. He can restore and renew when all else seems too difficult.