HEALTH EDUCATION CHILD DEVELOPMENT

Dr. Anurag Bissu

Health Education
Child Development

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Preface

Health education plays a pivotal role in the comprehensive development of children, encompassing physical, mental, emotional, and social dimensions. At its core, health education empowers children with the knowledge, skills, and attitudes necessary to make informed decisions regarding their health and well-being. By instilling healthy habits early in life, such as proper nutrition, regular exercise, hygiene practices, and stress management techniques, health education lays the foundation for a lifetime of wellness.

Incorporating health education into child development programmes fosters a positive environment that prioritizes the holistic growth of children. Through interactive lessons, activities, and discussions, children learn to appreciate the interconnectedness of their physical and mental health, developing a sense of agency and responsibility for their own well-being. Moreover, health education equips children with essential life skills, such as communication, critical thinking, and problem-solving, which are invaluable for navigating various health-related challenges they may encounter.

A key aspect of health education in child development is promoting positive body image and self-esteem. By fostering a supportive and inclusive environment, educators and caregivers can help children develop a healthy relationship with their bodies and emotions, encouraging self-acceptance and resilience in the face of societal pressures and stereotypes. Additionally, health education addresses sensitive topics such as sexuality, substance abuse, and mental health, providing age-appropriate information and guidance to help children make responsible choices and seek support when needed.

Through health education, children also learn the importance of cultivating positive relationships and practicing empathy and compassion towards others. By promoting values of respect, kindness, and inclusivity, health education fosters a sense of belonging and community among children, laying the groundwork for healthy social interactions and emotional well-being. Furthermore, health education empowers children to become advocates for health promotion and disease prevention in their families and communities, fostering a culture of wellness and mutual support.

Health education is an essential component of child development, nurturing the physical, mental, emotional, and social well-being of children. By equipping children with the knowledge, skills, and attitudes to make healthy choices and navigate life's challenges, health education sets them on a path towards a fulfilling and resilient future. Through collaborative efforts among educators, caregivers, families, and communities, we can ensure that every child has the opportunity to thrive and lead a healthy and fulfilling life.

Unlocking the potential of young minds through holistic health education, nurturing lifelong habits for a vibrant and resilient future. This essential book equips educators, caregivers, and parents with tools to nurture resilient and empowered children in a supportive environment.

–Author

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Development of Child Health

INTRODUCTION

Your child's health includes physical, mental and social well-being. Most parents know the basics of keeping children healthy, like offering them healthy foods, making sure they get enough sleep and exercise and insuring their safety. It is also important for children to get regular checkups with their health care provider. These visits are a chance to check your child's development. They are also a good time to catch or prevent problems.

Other than checkups, school-age children should be seen for:

- Significant weight gain or loss
- Sleep problems or change in brhaviour
- Fever higher than 102
- Rashes or skin infections
- Frequent sore throats
- Breathing problems

EARLY CHILD DEVELOPMENT

Key facts:

- Early childhood is the most important phase for overall development throughout the lifespan.
- Brain and biological development during the first years of life is highly influenced by an infant's environment.
- Early experiences determine health, education and economic participation for the rest of life.

- Every year, more than 200 million children under five years old fail to reach their full cognitive and social potential.
- There are simple and effective ways for families and caregivers to ensure optimal child development.

During early childhood (from the prenatal period to eight years of age), children undergo rapid growth that is highly influenced by their environment. Many challenges faced by adults, such as mental health issues, obesity, heart disease, criminality, and poor literacy and numeracy, can be traced back to early childhood.

Every year, more than 200 million children under five years old fail to reach their full cognitive and social potential. Most of these children live in South Asia and sub-Saharan Africa. As a result of poor development, many children are likely to under-achieve in school and subsequently to have low incomes as adults. As adults, they are also likely to have children at a very early age, and provide poor health care, nutrition and stimulation to their children, thus contributing to the intergenerational transmission of poverty and poor development. Despite the overwhelming evidence, the health sector has been slow to promote early child development and to support families with appropriate information and skills.

EARLY BRAIN DEVELOPMENT

Early childhood is the most intensive period of brain development during the lifespan. Adequate stimulation and nutrition are essential for development during the first three years of life. It is during these years that a child's brain is most sensitive to the influences of the external environment. Rapid brain development affects cognitive, social and emotional growth. Such development helps to ensure that each child reaches his or her potential and is a productive part of a rapidly changing, global society.

The more stimulating the early environment, the more a child develops and learns. Language and cognitive development are especially important during the first six months to three years of life. When children spend their early years in a less stimulating, or less emotionally and physically supportive environment, brain development is affected and leads to cognitive, social and behavioural delays.

Later in life, these children will have difficulty dealing with complex situations and environments. High levels of adversity and stress during early childhood can increase the risk of stress-related disease and learning problems well into the adult years.

Risk Factors

Many factors can disrupt early child development.

Four risk factors affect at least 20–25% of infants and young children in developing countries:

1. Malnutrition that is chronic and severe enough to cause growth stunting
2. Inadequate stimulation or learning opportunities
3. Iodine deficiency
4. Iron deficiency anaemia.

Other important risk factors are malaria, intrauterine growth restriction, maternal depression, exposure to violence, and exposure to heavy metals. Developing an early emotional connection to a caregiver is also critical for an infant's well-being. Absence of attachment to a consistent caregiver–such as occurs in a poorly run orphanage–can have significant negative effects on brain development and cognitive functioning.

INTERVENTIONS

To reach their potential, young children need to spend time in a caring, responsive environment that protects them from neglect and inappropriate disapproval and punish-ment.

Parents and families are the key to early child development, but need support to provide the right environment. Children benefit when national governments adopt "family friendly" social protection policies that guarantee adequate family income, maternity benefits, financial support, and allow for parents and caregivers to devote time and attention to young children.

Globally, societies that invest in children and families in the early years–whether rich or poor–have the most literate and numerate populations. These are also the societies that have the best health status and lowest levels of health inequality in the world.Early child development (ECD) interventions provide direct learning experiences to children and families.

They are:

- Targeted to young and disadvantaged children
- High quality and long lasting
- Integrated with family support, health, nutrition, or education systems and services.

The health care system and health providers have pivotal roles to play, as they are often the points of early contact with a child and can serve as gateways to other early childhood services.

Health care providers are trusted sources of information for families and can give critical guidance about:

- How to communicate with infants and children
- Ways to stimulate children for better growth
- How to handle such common developmental problems as sleep, feeding and discipline
- Ways to reduce common childhood injuries.

Economic Impact

Investing in young children is an essential component for the development of a national economy. Early opportunities for learning in combination with improved nutrition, increases the likelihood that a child will attend school and become an adult with higher income, better health, lower crime rates, and lower levels of welfare dependence than those who do not receive early development support.

WHO Response

The Commission on Social Determinants of Health, established by WHO in 2005, identified early child development as a priority issue. WHO and UNICEF have developed a package of tools for primary health care workers and community-based providers to assist parents, families and communities on how to promote child development and to prevent risks; it is a synthesis of the most effective approaches that have worked in the context of resource poor countries. These and other child development efforts incorporate the principles of equity, child rights, integration of services, a life course approach and community participation.

INFANT AND YOUNG CHILD FEEDING

Key facts:

- Every infant and child has the right to good nutrition just as to the Convention on the Rights of the Child.
- Undernutrition is associated with 35% of the disease burden in children under five.
- Globally, 30% (or 186 million) of children under five are estimated to be stunted and 18% (or 115 million) have low weight-for-height, mostly as a consequence of poor feeding and repeated infections, while 43 million are overweight.
- On average about 35% of infants 0 to 6 months old are exclusively breastfed.
- Few children receive nutritionally adequate and safe complementary foods; in many countries only a third of breastfed infants 6-23 months of age meet the criteria of dietary diversity and feeding frequency that are appropriate for their age.
- Optimal breastfeeding and complementary feeding practices can save the lives of 1.5 million children under five every year.
- Recommendations address the needs of HIV-infected mothers and their infants.

Undernutrition is associated with 35% of the disease burden for children under five. Infant and young child feeding is a key area to improve child survival and promote healthy growth and development.

The first two years of a child's life are particularly important, as optimal nutrition during this period will lead to reduced morbidity and mortality, to reduced risk of chronic diseases and to overall better development. In fact, optimal breastfeeding and complementary feeding practices are so critical that they can save the lives of 1.5 million children under five every year.

WHO and UNICEF recommendations for optimal infant and young child feeding are:

- Early initiation of breastfeeding with one hour of birth;
- Exclusive breastfeeding for the first six months of life; and

- The introduction of nutritionally adequate and safe complementary foods at six months together with continued breastfeeding up to two years and beyond.

However many infants and children do not receive optimal feeding; for example, on average only around 35% of infants 0 to 6 months old are exclusively breastfed.

Recommendations have been refined to address the needs for infants born to HIV-infected mothers. Antiretroviral drug interventions now allow these children to exclusively breastfeed until six months old and continue breastfeeding until at least 12 months of age with a significantly reduced risk of HIV transmission.

BREASTFEEDING

Exclusive breastfeeding for six months has many benefits for the infant and the mother. Chief among these is protection against gastro-intestinal infections which is observed not only in developing but also in industrialized countries.

Early initiation of breastfeeding, within one hour of birth, protects the newborn from acquiring infections and reduces newborn mortality. The risk of mortality due to diarrhoea and other infections can increase in infants who are either partially breastfed or not breastfed at all.

Breast milk is also an important source of energy and nutrients in children 6 to 23 months of age. It can provide one half or more of a child's energy needs between 6 and 12 months of age, and one third of energy needs between 12 and 24 months. Breast milk is also a critical source of energy and nutrients during illness and reduces mortality among children who are malnourished.

Adults who were breastfed as babies often have lower blood pressure and lower cholesterol, as well as lower rates of overweight, obesity and type-2 diabetes. Breastfeeding also contributes to the health and well-being of mothers; it reduces the risk of ovarian and breast cancer and helps space pregnancies—exclusive breastfeeding of babies under six months has a hormonal effect which often induces a lack of menstruation.

This is a natural (though not fail-safe) method of birth control known as the Lactation Amenorrhoea Method.Mothers and families need to be supported for their children to be optimally breastfed.

Actions that help protect, promote and support breastfeeding include:

- Adoption of policies such as the ILO Maternity Protection Convention 183 and the International Code of Marketing of Breast-milk Substitutes;
- Implementation of the Ten Steps to successful breastfeeding specified in the Baby-friendly Hospital Initiative, including:
  - Skin-to-skin contact between mother and baby immediately after birth and initiation of breastfeeding within the first hour of life
  - Breastfeeding on demand (that is, as often as the child wants, day and night)
  - Rooming-in (allowing mothers and infants to remain together 24 hours a day)
  - Babies should not be given additional food or drink, not even water;

- Supportive health services providing infant and young child feeding counselling during all contacts with caregivers and young children, such as during antenatal and postnatal care, well-child and sick child visits, and immunization; and;
- Community support including mother support groups and community-based health promotion and education activities.

Complementary Feeding

Around the age of six months, an infant's need for energy and nutrients starts to exceed what is provided by breast milk and complementary foods are necessary to meet those needs. At about six months of age, an infant is also developmentally ready for other foods. If complementary foods are not introduced when a child has reached six months, or if they are given inappropriately, an infant's growth may falter.

Guiding principles for appropriate complementary feeding are:

- Continue frequent, on demand breastfeeding until two years old or beyond;
- Practise responsive feeding (*e.g.*, feed infants directly and assist older children. Feed slowly and patiently, encourage them to eat but do not force them, talk to the child and maintain eye contact);
- Practise good hygiene and proper food handling;
- Start at six months with small amounts of foods and increase gradually as the child gets older;
- Gradually increase food consistency and variety;
- Increase the number of times that the child is fed, 2-3 meals per day for infants 6-8 months of age, and 3-4 meals per day for infants 9-23 months of age, with 1-2 additional snacks as required;
- Feed a variety of nutrient rich foods;
- Use fortified complementary foods or vitamin-mineral supplements, as needed; and
- Increase fluid intake during illness, including more breastfeeding, and offer soft, favourite foods.

Feeding in Exceptionally Difficult Circumstances

Families and children in difficult circumstances require special attention and practical support. Wherever possible, mothers and babies should remain together and be provided with the support they need to exercise the most appropriate feeding option available.

Breastfeeding remains the preferred mode of infant meeting in almost all difficult situations for instance:

- Low-birth-weight or premature infants;
- HIV-infected mothers;
- Adolescent mothers;
- Infants and young children who are malnourished;

- Families suffering the consequences of complex emergencies; and
- Children living in special circumstances such as foster care, or with mothers who have physical or mental disabilities, or children whose mothers are in prison or are affected by drug or alcohol abuse.

HIV and Infant Feeding

Breastfeeding, and especially early and exclusive breastfeeding, is one of the most significant ways to improve infant survival rates. However, a woman infected with HIV, can transmit the virus to her child during pregnancy, labour or delivery, and also through breast milk.

In the past, the challenge was to balance the risk of infants acquiring HIV through breastfeeding versus the higher risk of death from causes other than HIV, in particular malnutrition and serious illnesses such as diarrhoea and pneumonia, when infants were not breastfed.

The evidence on HIV and infant feeding shows that giving antiretroviral drugs (ARVs) to either the HIV-infected mother or the HIV-exposed infant can significantly reduce the risk of transmitting HIV through breastfeeding.

This enables HIV-infected mothers to breastfeed with a low risk of transmission (1-2%). These mothers can therefore offer their infants the same protection against the most common causes of child mortality and the benefits associated with breastfeeding.

Even when ARVs are not available, mothers should be counselled to exclusively breastfeed in the first six months of life and continue breastfeeding thereafter unless environ-mental and social circumstances are safe for, and supportive of, replacement feeding.

WHO's Response

The *Global Strategy for Infant and Young Child Feeding*, endorsed by WHO Member States and the UNICEF Executive Board in 2002, aims to protect, promote and support appropriate infant and young child feeding. The Strategy is the framework through which WHO prioritizes research and development work in the area of infant and young child feeding, and provides technical support to countries to facilitate implementation.

WHO and UNICEF developed the 40-hour *Breastfeeding Counselling: A Training Course* and more recently the five-day *Infant and Young Child Feeding Counselling: An Integrated Course* to train health workers to provide skilled support to breastfeeding mothers and help them overcome problems. Basic breastfeeding support skills are also part of the *Integrated Management of Childhood Illness* training course for health workers. In 2010, WHO released revised guidelines on infant feeding in the context of HIV. At the same time, new recommendations were also released on antiretroviral therapy for preventing mother-to-child transmission of HIV. Together, the recommendations provide simple, coherent and feasible guidance to countries for promoting and supporting improved infant feeding by HIV-infected mothers.

FACT SHEETS ON CHILD HEALTH

PNEUMONIA

Key facts:

- Pneumonia is the leading cause of death in children worldwide.
- Pneumonia kills an estimated 1.4 million children under the age of five years every year–more than AIDS, malaria and tuberculosis combined.
- Pneumonia can be caused by viruses, bacteria or fungi.
- Pneumonia can be prevented by immunization, adequate nutrition and by addressing environmental factors.
- Pneumonia can be treated with antibiotics, but around 30% of children with pneumonia receive the antibiotics they need.

Pneumonia is a form of acute respiratory infection that affects the lungs. The lungs are made up of small sacs called alveoli, which fill with air when a healthy person breathes. When an individual has pneumonia, the alveoli are filled with pus and fluid, which makes breathing painful and limits oxygen intake.

Pneumonia is the single largest cause of death in children worldwide. Every year, it kills an estimated 1.4 million children under the age of five years, accounting for 18% of all deaths of children under five years old worldwide. Pneumonia affects children and families everywhere, but is most prevalent in South Asia and sub-Saharan Africa. Children can be protected from pneumonia, it can be prevented with simple interventions, and treated with low-cost, low-tech medication and care.

Causes

Pneumonia is caused by a number of infectious agents, including viruses, bacteria and fungi.

The most common are:

- *Streptococcus Pneumoniae*: The most common cause of bacterial pneumonia in children;
- *Haemophilus Influenzae Type b:* The second most common cause of bacterial pneumonia;
- Respiratory syncytial virus is the most common viral cause of pneumonia;
- In infants infected with HIV, *Pneumocystis jiroveci* is one of the commonest causes of pneumonia, responsible for at least one quarter of all pneumonia deaths in HIV-infected infants.

Transmission

Pneumonia can be spread in a number of ways. The viruses and bacteria that are commonly found in a child's nose or throat, can infect the lungs if they are inhaled. They may also spread via air-borne droplets from a cough or sneeze. In addition, pneumonia may spread through blood, especially during and shortly

after birth. More research needs to be done on the different pathogens causing pneumonia and the ways they are transmitted, as this has critical importance for treatment and prevention.

Symptoms

The symptoms of viral and bacterial pneumonia are similar. However, the symptoms of viral pneumonia may be more numerous than the symptoms of bacterial pneumonia.

The symptoms of pneumonia include:

- Rapid or difficult breathing
- Cough
- Fever
- Chills
- Loss of appetite
- Wheezing.

When pneumonia becomes severe, children may experience lower chest wall indrawing, where their chests move in or retract during inhalation. Infants may be unable to feed or drink and may also experience unconsciousness, hypothermia and convulsions.

Risk Factors

While most healthy children can fight the infection with their natural defences, children whose immune systems are compromised are at higher risk of developing pneumonia. A child's immune system may be weakened by malnutrition or undernourishment, especially in infants who are not exclusively breastfed. Pre-existing illnesses, such as symptomatic HIV infections and measles, also increase a child's risk of contracting pneumonia.

The following environmental factors also increase a child's susceptibility to pneumonia:

- Indoor air pollution caused by cooking and heating with biomass fuels
- Living in crowded homes
- Parental smoking.

Treatment

Pneumonia can be treated with antibiotics. These are usually prescribed at a health centre or hospital, but the vast majority of cases of childhood pneumonia can be administered effectively within the home. Hospitalization is recommended in infants aged two months and younger, and also in very severe cases.

Prevention

Preventing pneumonia in children is an essential component of a strategy to reduce child mortality. Immunization against Hib, pneumococcus, measles and whooping cough is the most effective way to prevent pneumonia. Adequate

nutrition is key to improving children's natural defences, starting with exclusive breastfeeding for the first six months of life. In addition to being effective in preventing pneumonia, it also helps to reduce the length of the illness if a child does become ill.

Addressing environmental factors such as indoor air pollution and encouraging good hygiene in crowded homes also reduces the number of children who fall ill with pneumonia.In children infected with HIV, the antibiotic cotrimoxazole is given daily to decrease the risk of contracting pneumonia.

Economic Costs

Research has shown that prevention and proper treatment of pneumonia could avert one million deaths in children every year. With proper treatment alone, 600,000 deaths could be avoided.

The cost of antibiotic treatment for all children with pneumonia in 42 of the world's poorest countries is estimated at around US$ 600 million per year. Treating pneumonia in South Asia and sub-Saharan Africa–which account for 85% of deaths–would cost a third of this total, at around US$ 200 million. The price includes the antibiotics themselves, as well as the cost of training health workers, which strengthens the health systems as a whole.

WHO Response

In 2009, WHO and UNICEF launched the *Global action plan for the prevention and control of pneumonia*.

The aim is to accelerate pneumonia control with a combination of interventions to protect, prevent, and treat pneumonia in children with actions to:

- Protect children from pneumonia include promoting exclusive breastfeeding and hand washing, and reducing indoor air pollution;
- Prevent pneumonia with vaccinations;
- Treat pneumonia are focused on making sure that every sick child has access to the right kind of care—either from a community-based health worker, or in a health facility if the disease is severe—and can get the antibiotics and oxygen they need to get well.

CHILDREN: REDUCING MORTALITY

Key facts:

- 7.6 million children under the age of five die every year, just as to 2010 figures.
- Over two-thirds of these early child deaths are due to conditions that could be prevented or treated with access to simple, affordable interventions.
- Leading causes of death in under-five children are pneumonia, diarrhoea, malaria and health problems during the first month of life.
- Over one third of all child deaths are linked to malnutrition.
- Children in low-income countries are nearly 18 times more likely to die before the age of five than children in high-income countries.

A child's risk of dying is highest in the neonatal period, the first 28 days of life. Safe childbirth and effective neonatal care are essential to prevent these deaths. About 40% of child deaths under the age of five take place during the neonatal period. Preterm birth, birth asphyxia, and infections cause most neonatal deaths. From the end of the neonatal period and through the first five years of life, the main causes of death are pneumonia, diarrhoea and malaria Malnutrition is the underlying contributing factor in over one third of all child deaths, making children more vulnerable to severe disease.

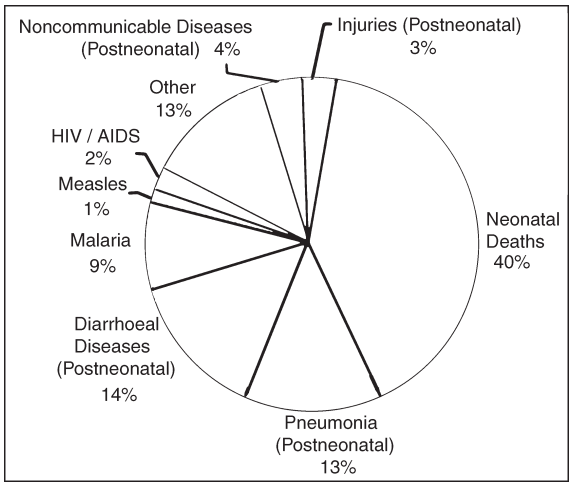

Fig. Major Causes of Death in Neonates and Children under Five Globally-2008

Geographically

About three quarters of all child deaths occur in Africa and South-East Asia. Within countries, child mortality is higher in rural areas, and among poorer and less educated families.

Neonates

Three million babies die every year in their first month of life and a similar number are stillborn. Within the first month, one quarter to one half of all deaths occur within the first 24 hours of life, and 75% occur in the first week. The 48 hours immediately following birth is the most crucial period for newborn survival. This is when the mother and child should receive follow-up care to prevent and treat illness. Prior to birth, the mother can increase her child's chance of survival and good health by attending antenatal care consultations, being immunized against tetanus, and avoiding smoking and use of alcohol. At the time of birth, a baby's chance of survival increases significantly with the presence of a skilled birth attendant.

After birth, essential care of a newborn should include:

- Ensuring that the baby is breathing;
- Starting the newborn on exclusive breastfeeding right away;
- Keeping the baby warm; and
- Washing hands before touching the baby.

Identifying and caring for illnesses in a newborn are also very important, as a baby can become very ill and die quickly if an illness is not recognized and treated appropriately. Sick babies must be taken immediately to a trained health care provider.

Children under Age Five

Over two thirds of under-five child deaths are due to diseases that are preventable and treatable through simple, affordable interventions. Strengthening health systems to provide such interventions to all children will save many young lives. About 20 million children worldwide suffer from severe acute malnutrition, which leaves them more vulnerable to serious illness and early death. Most of these children can be successfully treated at home with ready-to-use therapeutic foods. Globally, in 2010, an estimated 171 million children below five years of age, were stunted and 104 million were underweight. Optimal breastfeeding and complementary feeding help prevent malnutrition and can save about a million child lives.

Prevention with Vaccines

For some of the most deadly childhood diseases, such as measles, polio, diphtheria, tetanus, pertussis, pneumonia due to *Haemophilius influenzae* type B and *Streptococcus pneumoniae* and diarrhoea due to rotavirus, vaccines are available and can protect children from illness and death.

Table. Leading Causes of Death in Children: Risk Factors and Response.

Cause of Death	Risk Factors	Prevention	Treatment
Pneumonia, or other acute respiratory infections	Low birth weight	Vaccination	Appropriate care by a trained health provider
	Malnutrition	Adequate nutrition	Antibiotics
	Non-breastfed children Overcrowded conditions	Exclusive breastfeeding	Oxygen for severe illness
Childhood diarrhoea	Non-breastfed children	Exclusive breastfeeding	Low-osmolarity oral rehydration salts (ORS)
	Unsafe drinking water and food Poor hygiene practices	Safe water and food Adequate sanitation and hygiene	Zinc supplements
	Malnutrition	Adequate nutrition Vaccination	

Global Response: Millennium Development Goals 4 and 5

The Millennium Development Goals adopted by the United Nations in 2000 aim to decrease child and maternal deaths worldwide by 2015. The fourth Millennium Development Goal is to reduce the 1990 mortality rate among under-five children by two thirds. Child mortality is also closely linked to MDG 5 to improve maternal health.

Since more than one third of all child deaths occur within the first month of life, providing skilled care to mothers during pregnancy, as well as during and after birth, greatly contributes to child survival. Member States have set targets and developed specific strategies to reduce child mortality and monitor progress.

CHILD MALTREATMENT

Key facts:

- Approximately 20% of women and 5–10% of men report being sexually abused as children, while 25–50% of all children report being physically abused.
- Consequences of child maltreatment include impaired lifelong physical and mental health, and the social and occupational outcomes can ultimately slow a country's economic and social development.
- Preventing child maltreatment before it starts is possible and requires a multisectoral approach.
- Effective prevention programmes support parents and teach positive parenting skills.
- Ongoing care of children and families can reduce the risk of maltreatment reoccurring and can minimize its consequences.

Child maltreatment is the abuse and neglect that occurs to children under 18 years of age. It includes all types of physical and/or emotional ill-treatment, sexual abuse, neglect, negligence and commercial or other exploitation, which results in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power. Exposure to intimate partner violence is also sometimes included as a form of child maltreatment.

Scope of the Problem

Child maltreatment is a global problem with serious life-long consequences. There are no reliable global estimates for the prevalence of child maltreatment. Data for many countries, especially low-and middle-income countries, are lacking.

Child maltreatment is complex and difficult to study. Current estimates vary widely depending on the country and the method of research used.

Estimates depend on:

- The definitions of child maltreatment used;
- The type of child maltreatment studied;
- The coverage and quality of official statistics;
- The coverage and quality of surveys that request self-reports from victims, parents or caregivers.

Nonetheless, international studies reveal that approxi-mately 20% of women and 5–10% of men report being sexually abused as children, while 25–50% of all children report being physically abused. Additionally, many children are subject to emotional abuse and to neglect. Every year, there are an estimated 31 000 homicide deaths in children under 15. This number underestimates the true extent of the problem, as a significant proportion of deaths due to child maltreatment are incorrectly attributed to falls, burns, drowning and other causes.

In armed conflict and refugee settings, girls are particularly vulnerable to sexual violence, exploitation and abuse by combatants, security forces, members of their communities, aid workers and others.

Consequences of Maltreatment

Child maltreatment causes suffering to children and families and can have long-term consequences. Maltreatment causes stress that is associated with disruption in early brain development. Extreme stress can impair the development of the nervous and immune systems.

Consequently, as adults, maltreated children are at increased risk for behavioural, physical and mental health problems such as:

- Perpetrating or being a victim of violence
- Depression
- Smoking
- Obesity
- High-risk sexual behaviours
- Unintended pregnancy
- Alcohol and drug misuse.

Via these behavioural and mental health consequences, maltreatment can contribute to heart disease, cancer, suicide and sexually transmitted infections. Beyond the health and social consequences of child maltreatment, there is an economic impact, including costs of hospitalization, mental health treatment, child welfare, and longer-term health costs.

Risk Factors

A number of risk factors for child maltreatment have been identified. These risk factors are not present in all social and cultural contexts, but provide an overview when attempting to understand the causes of child maltreatment.

Child

It is important to emphasize that children are the victims and are never to blame for maltreatment.

A number of characteristics of an individual child may increase the likelihood of being maltreated:

- Being either under four years old or an adolescent
- Being unwanted, or failing to fulfil the expectations of parents
- Having special needs, crying persistently or having abnormal physical features.

Parent or Caregiver

A number of characteristics of a parent or caregiver may increase the risk of child maltreatment.

These include:

- Difficulty bonding with a newborn
- Not nurturing the child
- Having been maltreated themselves as a child
- Lacking awareness of child development or having unrealistic expectations
- Misusing alcohol or drugs, including during pregnancy
- Being involved in criminal activity
- Experiencing financial difficulties.

Relationship

A number of characteristics of relationships within families or among intimate partners, friends and peers may increase the risk of child maltreatment.

These include:

- Physical, developmental or mental health problems of a family member
- Family breakdown or violence between other family members
- Being isolated in the community or lacking a support network
- A breakdown of support in child rearing from the extended family.

Community and Societal Factors

A number of characteristics of communities and societies may increase the risk of child maltreatment.

These include:

- Gender and social inequality;
- Lack of adequate housing or services to support families and institutions;
- High levels of unemployment or poverty;
- The easy availability of alcohol and drugs;
- Inadequate policies and programmes to prevent child maltreatment, child pornography, child prostitution and child labour;
- Social and cultural norms that promote or glorify violence towards others, support the use of corporal punishment, demand rigid gender roles, or diminish the status of the child in parent–child relationships;
- Social, economic, health and education policies that lead to poor living standards, or to socioeconomic inequality or instability.

Prevention

Preventing child maltreatment requires a multisectoral approach. Effective programmes are those that support parents and teach positive parenting skills.

These include:

- Visits by nurses to parents and children in their homes to provide support, education, and information;

- Parent education, usually delivered in groups, to improve child-rearing skills, increase knowledge of child development, and encourage positive child management strategies; and
- Multi-component interventions, which typically include support and education of parents, pre-school education, and child care.

Other prevention programmes have shown some promise:

- *Programmes to Prevent Abusive Head Trauma:* These are usually hospital-based programmes targeting new parents prior to discharge from the hospital, informing of the dangers of shaken baby syndrome and advising on how to deal with babies that cry inconsolably.
- *Programmes to Prevent Child Sexual Abuse*: These are usually delivered in schools and teach children about:
  - Body ownership
  - The difference between good and bad touch
  - How to recognize abusive situations
  - How to say "no"
  - How to disclose abuse to a trusted adult.

Such programmes are effective at strengthening protective factors against child sexual abuse but evidence about whether such programmes reduce other kinds of abuse is lacking.The earlier such interventions occur in children's lives, the greater the benefits to the child and to society.

In addition, early case recognition coupled with ongoing care of child victims and families can help reduce reoccurrence of maltreatment and lessen its consequences.

To maximize the effects of prevention and care, WHO recommends that interventions are delivered as part of a four-step public health approach:

1. Defining the problem;
2. Identifying causes and risk factors;
3. Designing and testing interventions aimed at minimizing the risk factors;
4. Disseminating information about the effectiveness of interventions and increasing the scale of proven effective interventions.

WHO Response

WHO, in collaboration with a number of partners:

- Provides technical and normative guidance for evidence-based child maltreatment prevention;
- Advocates for increased international support for and investment in evidence-based child maltreatment prevention;
- Provides technical support for evidence-based child maltreatment prevention programmes in several low-and middle-income countries.

2

Importance of Play in Child Development

Play is universal throughout the animal kingdom — whether it's a puppy chasing its tail, or young birds swooping through the air. The importance of play to youngsters should not be underestimated. Play is an essential part of growing up and researchers believe it's critical to ensure children reach their full potential in life. Research in animals show that brain connections develop during periods of play, and there's no reason to suppose the same is not true of young humans. Parents don't always understand the importance of play however, and in today's competitive world, the temptation is to stop your children "wasting time" and to put the time to what they believe is more constructive use. For a child, however, there is no more constructive activity than play. When analysing the importance of play, particularly if you're tempted to introduce a more "worthwhile" activity such as flash cards, educational computer games or dancing lessons, you should take into account the following points:

Play allows a young child to be "in charge." Think about this — in their everyday lives, they're small and powerless, always being told what to do, and how to do it. Without an adult around, they're running the show!

Play helps children learn about the world in which they live. They can investigate and discover, test their theories, spatial relationships, explore cause and effect, societal roles and family values. Such is the importance of play, that there's virtually no area of life about which it can't teach a child something.

Play builds self-esteem. Children will often play at something they know they can do well, at which they can be successful. Play builds social skills.

Children will begin playing with inanimate and non-threatening objects, like cuddly toys, bricks, *etc.*, so practising their interactive skills. Later, playing with other children will build on this foundation as they learn to share, take turns, assert themselves and begin to empathise with others.

Play with parents shouldn't be underestimated either, as research shows that children whose parents play with them ultimately develop superior social skills.

Play also provides the opportunity for children to work out their feelings. The importance of dealing with difficult or unpleasant emotions is immense. A child who's worried about going to the dentist, for example, may deal with the anxiety by setting up a clinic for dolls with toothache. Play helps with language development. Think of the vast number of words a toddler uses during play, many of them repeatedly, enhancing their language skills. Play allows children to grow beyond their years. They can pretend to be all sorts of things in play-a doctor, a surgeon, a civil engineer even!

Finally, don't forget to consider the importance of stimulating your child's creativity and imagination-making a castle in the sand, or a car garage out of a shoe box, taking an order in their own (imaginary) restaurant or dressing up as a king or queen-these all allow children to stretch the limits of their world and experience the fun in make-believe.

SPORTS AND CHILD-PHYSIOLOGICAL CONSIDERATIONS

The sports physical is an annual rite for many students who have to get a check-up to participate in school athletics — but it's also a great opportunity to track your child's health and educate him or her on proper diet and fitness techniques.

Every year more than seven million high school students participate in interscholastic athletics. Almost all of these athletes are required to undergo a physical evaluation prior to starting practice. For the vast majority of students, these physicals serve as their only contact with the health care system, and should not be considered as an annual inconvenience.

The purpose of the sports physical is to:

- Identify medical or musculoskeletal conditions that might make participation in a particular sport unsafe
- Screen for any previously undetected health problem
- Assure that any previous injuries have been adequately rehabilitated so that the athlete is not at risk for further injury.

But these visits can also provide an opportunity to educate athletes and parents about injury prevention, conditioning, and training appropriate for level of physical maturity, as well as healthy nutritional approaches to sport participation. Many youth are seen in mass screenings in high schools or sports medicine clinics; such physicals should not replace an annual evaluation by the student's primary care provider.

However, at an annual evaluation a pediatrician can incorporate the essential elements of the pre-sports physical into a yearly checkup. With access to the medical record, including growth charts and previous blood pressures, chances of identifying medical problems are significantly increased. In addition, referrals to specialists for additional evaluation are more easily coordinated by the primary care provider.

WHEN TO GO

Timing for the sports physical is very important. Ideally, the sports physical should be at least six to eight weeks prior to start of practice.

Too often parents forget how quickly the year has gone, and end up scheduling a visit in urgent fashion — "She needs this form filled out today because tryouts are tomorrow." This does not allow sufficient time for any further evaluation of a newly found medical condition or rehabilitation of an injury. Unfortunately, this may keep an athlete from trying out for a sport.

MEDICAL HISTORY IS KEY

Studies show that the vast majority of significant medical conditions identified at pre-participation evaluations are picked up through a detailed history. Although many schools use limited, outdated sports physical forms, pediatricians have access through the American Academy of Pediatrics to a more complete, standardized form endorsed by the majority of sports medicine organizations in the US.

Parents and athletes should jointly complete the history portion of any sports form prior to arriving at the office to assure accurate responses. Family history is especially important.

Premature death or significant disability from cardiovascular disease in a close relative under 50 years of age or specific knowledge of close relatives with certain cardiovascular conditions such as hypertrophic cardiomyopathy, long QT syndrome, or Marfan's syndrome, all require further evaluation and, in many cases, clearance by a cardiologist before participation in sports.

DIETARY CONCERNS

A complete nutritional history, including use of supplements, is also important. The sports physical provides an early opportunity to identify athletes with disordered eating patterns, and those at risk for a true eating disorder. This is where a growth chart covering several years is essential. In addition to dietary intake information (servings of dairy, fruits, vegetables, meat, soda), information should be obtained about the athlete's highest and lowest weight over the past 12 months, as well as the athlete's perceived ideal weight.

Your pediatrician should ask about use of any pathogenic weight control behaviours, such as self-induced vomiting, use of laxatives or diet pills, or excessive exercise. If an athlete is developing disordered eating patterns, careful follow-up and early intervention is critical in preventing a potential life-threatening condition.

BEST DIET FOR PERFORMANCE

Many athletes are interested in the best diet for athletic performance or to gain weight. For endurance athletes, like cross country runners or soccer players, it is important that at least 55 percent of their total calories come from carbohydrates like breads and pasta. This saturates their muscles with glycogen, the optimum energy source for working muscles.

Non-athletic adolescents age 15 to 18 need only 0.8 gram of protein per kilogram (2.2 pounds) of body weight each day. Some adolescent athletes who are training intensively and trying to put on muscle mass may need as much as 1.5 gm of protein per kilogram body weight per day. For many American children, their standard diet already fulfills this need; rarely are expensive protein supplements needed — or helpful. Vegetarian athletes need to pay special attention to both their protein and iron intake.

PROPER HYDRATION

During the school year, most adolescents exist in a state of relative dehydration — they just don't drink enough throughout the day. In addition to the recommended eight to 10 glasses of liquid as baseline, athletes with fluid losses in sweat may require as additional 1 to 3 liters of fluid per day. Attention to hydration is important both to maximize athletic performance as well as decrease susceptibility to heat illness.

Guidelines for fluid intake are:

- Drink 16 ounces of water 30 to 60 minutes before activity
- Drink 4 to 8 ounces water every 15 to 30 minutes during activity
- Drink 16 ounces (1 pint) water for every pound of weight lost after activity.

Signs and symptoms of heat illness should be reviewed. Any athlete exercising in the heat who experiences muscle cramps, dizziness, nausea, severe headache, or unusual muscle weakness should stop exercising, get in as cool a place as possible and start drinking cool water. Many sports programmes are now willing to reschedule or cancel practices when conditions of extreme heat and humidity occur.

WEIGHT LOSS GUIDELINES

Many athletes who want or need to lose weight (body fat) do not have the luxury of consultation with a dietitian. These athletes can follow some basic guidelines:

- Aerobic activity (walking, running, biking) can be increased by 30 minutes a day
- Consume more fruits and vegetables
- Water should be the primary fluid source; Drink less soda, juice, and sports drinks
- Use reduced-fat or fat-free dairy

- Limit use of butter, margarine, mayonnaise, and dressings. Mustard can be used on sandwiches and salsa on salads and baked potatoes
- Portion sizes of meat can be decreased, and only served at one meal a day
- Never try to lose more than two pounds per week

WEIGHT TRAINING

Weight training can play an important role in preventing athletic injuries as well as improving athletic performance. Weight training can serve to balance the strength in muscle groups around specific joints and reduce the risk of injury; consultation with an athletic trainer, physical therapist or sports medicine physician may help design such programmes. As the adolescent grows and develops, the design and goal of a weight training programme changes. For the pre-teen, a programme using lighter weights with 12 to 15 repetitions per set and a maximum of two sets per exercise will improve muscle strength by causing more of the muscle fibers to respond to nerve stimulation; a significant increase in muscle bulk will not occur until after the athlete stops growing taller. It is important that proper technique be used by the athletes, and that careful stretching is done before and after lifting to maintain or improve flexibility.

OFF-SEASON WORKOUTS

It is important for the one-season athlete to maintain fitness throughout the year by engaging in at least 30 minutes of moderately vigorous activity five days a week. In anticipation of the start of the season, slowly advance training loads to reduce the risk of stress fractures. Workouts should be increased by no more than 10 percent per week. This means that fall sport athletes need to begin their conditioning programme early in the summer to be ready when school practices officially begin.

FOR FEMALE ATHLETES

Finally, for the female athlete, attention should be paid to menstrual function. An athlete who hasn't begun menstruation by age 16 or misses more than three consecutive cycles after regular monthly cycles are established should be evaluated for nutritional adequacies as well as other hormonal abnormalities that can affect menstrual function. Missing repetitive periods is not normal for an athlete. A history of stress fractures should prompt evaluation for the "female athlete triad": eating disorder, menstrual abnormalities, and osteoporosis.

PLAY

Play refers to a range of voluntary, intrinsically motivated activities that are normally associated with pleasure and enjoyment. Play may consist of amusing, pretend or imaginary interpersonal and intrapersonal interactions or "interplay". The rites of play are evident throughout nature and are perceived in people and animals, particularly in the cognitive development and socialization of those

engaged in developmental processes and the young. Play often entertains props, tools, animals, or toys in the context of learning and recreation. Some play has clearly defined goals and when structured with rules is entitled a game. Whereas, some play exhibits no such goals nor rules and is considered to be "unstructured" in the literature.

Concerted endeavour has been made to identify the qualities of play, but this task is not without its ambiguities. For example, play is commonly perceived as a frivolous and non-serious activity; yet when watching children at play, one can observe the transfixed seriousness and entrancing absorption with which they engage in it. Other criteria of play include a relaxed pace and freedom versus compulsion. Yet play seems to have its intrinsic constraints, as in, "You're not playing fair."

When play is structured and goal-orientated it is often presented as a game. Play can also be seen as the activity of rehearsing life events, *e.g.*, young animals play fighting. Play may also serve as a pretext, allowing people to explore reactions of others by engaging in playful interaction. Flirting is an example of such behaviour. These and other concepts or rhetorics of play are discussed at length by Brian Sutton-Smith in the book *The Ambiguity of Play*. Sometimes play is dangerous, such as in extreme sports. This type of play could be considered stunt play, whether engaging in play frighting, sky-diving, or riding a device at high speed in an unusual manner.

CHILDHOOD AND PLAY

Play is freely chosen, intrinsically motivated and personally directed. Playing has been long recognized as a critical aspect of childhood and child development. Some of the earliest studies of play started in the 1890s with G. Stanley Hall, the father of the child study movement that sparked an interest in the developmental, mental and behavioural world of babies and children. The American Academy of Pediatrics (AAP) published a study in 2006 entitled: "The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds". The report states: "free and unstructured play is healthy and – in fact – essential for helping children reach important social, emotional, and cognitive developmental milestones as well as helping them manage stress and become resilient".

Many of the most prominent researchers in the field of psychology (including Jean Piaget, William James, Sigmund Freud, Carl Jung and Lev Vygotsky) have viewed play as endemic to the human species; indeed, the attributions projected upon an imaginary friend by children are key to understanding the construction of human spirituality and it pantheon(s) of deification (and demonization). Play is explicitly recognized in Article 31 of The Convention on the Rights of the Child (adopted by the General Assembly of the United Nations, November 29, 1989). which states:

1. Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.

2. Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activities.

Childhood "play" is also seen by Sally Jenkinson (author of *The Genius of Play*) to be an intimate and integral part of childhood development. "In giving primacy to adult knowledge, to our 'grown-up' ways of seeing the world, have we forgotten how to value other kinds of wisdom? Do we still care about the small secret corners of children's wisdom?"

Modern research in the field of "affective neuroscience" has uncovered important links between role playing and neurogenesis in the brain. Sociologist Roger Caillois coined the word *ilinx* to describe the momentary disruption of perception that comes from forms of physical play that disorient the senses, especially balance.

In addition, evolutionary psychologists have begun to expound the phylogenetic relationship between higher intelligence in humans and its relationship to play. Stevanne Auerbach mentions the role of play therapy in treating children suffering from traumas, emotional issues, and other problems. She also emphasizes the importance of toys with high play value for child development and the role of the parent in evaluating toys and being the child's *play guide*.

Sudbury model of democratic education schools assert that play is a big part of life at their schools where it is seen as a serious business. They maintain that play is always serious for kids, as well as for adults who haven't forgotten how to play, and much of the learning going on at these schools is done through play.

So they don't interfere with it. Hence play flourishes at all ages, and the graduates who leave these schools go out into the world knowing how to give their all to whatever they're doing, and still remembering how to laugh and enjoy life as it comes.

BEHAVIOURAL CUSP

A behavioural cusp is any behaviour change that brings an organism's behaviour into contact with new contingencies that have far-reaching consequences. A behavioural cusp is a special type of behaviour change because it provides the learner with opportunities to access (1) new reinforcers, (2) new contingencies (3) new environments, (4) new related behaviours (generativeness), (5) competition with archaic or problem behaviours, and it (6) impacts the people around the learner, and (7) these people agree to the behaviour change and support its development after the intervention is removed. The concept has far reaching implication for every individual, and for the field of developmental psychology, because it provides a behavioural alternative to the concept of maturation and change due to the simple passage of time, such as developmental milestones. The cusp is a behaviour change that presents special features when compared to other behaviour changes. The concept was

first proposed by Sidney W. Bijou, an American developmental psychologist. The idea of the cusp was to link behavioural principles to rapid spurts in development.

A behavioural cusp as conceptualized by Jesus Rosales-Ruiz & Donald Baer in 1997 is an important behaviour change that has an impact on future behaviour changes. The behavioural cusp, like the reinforcer, is apprehended by its effects. Whereas a reinforcer acts on a single response or a group of related responses, the effects of a behavioural cusp regulate a large number of responses in a more distant future.

The concept has been compared to a developmental milestone, however, all cusps are not milestones. For example, learning to play soccer is not a milestone, but it was life-changing for Pelé.

As a result of learning to kick grapefruits (the initial important change or cusp), Pelé accessed (1) new environments, (2) new reinforcers, (3) new soccer moves, (4) dropped competing behaviours (smoking), and (5) gained international acclaims for his skill. Soccer is not a developmental milestone because is not a necessary skill in most environments.

PROPERTIES OF A BEHAVIOURAL CUSP

The following properties are special features of a behavioural change that lead to more change, and an increased likelihood of social adaptation, independence, and cultural fitness.

NEW REINFORCERS

New reinforcers are accessible and enrich the perspective of the learner. Additionally these reinforcers may lead to an increase in the variety of behaviours.

If the reinforcers are promoting health and social behaviours, they will lead to an improved quality of life.

CASE EXAMPLE

A child who learns to open a door may access the swing for the first time and learns to use the swing. Here, the new skill (swinging motion is the reinforcer) may lead to more complex and social activities such as (1) turn taking, (2) asking someone to share the swing, (3) taking turn pushing someone, which in turn (4) may provide more social opportunities to speak and (5) interact with the play partners, *etc.*

CASE NON-EXAMPLE

A child learns to open a door and walks outside. He finds some ants behind a shrubbery and watches the ants. His parents are looking for him, they get worried and are calling him.

The child is usually mesmerized by columns of ants on the ground and does not hear the calls. His parents find him shortly after, but they are frantic from

their 5 minute search and accidentally scare him from going outside. In this non-example, learning to open doors that lead outside resulted in consequences that did not directly benefit the child and maybe decrease important skills related to exploration and search.. In this case, no new reinforcers were contacted and learning to open the backyard door (that has a special latch) was effectively a waste of time because the child's parents don't usually approve being alone in the backyard.

NEW CONTINGENCIES OF REINFORCEMENT

New contingencies are responsible for the selection of novel and more adaptive behaviours while decreasing problematic or archaic behaviours. Contingencies of reinforcement produce and maintain each and every learned behaviour. New contingencies establish the control of new stimuli over our behaviours, and therefore make us more sensitive and aware of our surrounding.

NEW ENVIRONMENTS

New environments are geographical and/or virtual areas of potential change (receiving environments). New environments regulate, maintain, and set the micro-cultural boundaries for reinforcers, (and punishers), and their antecedents. They include tools and stakeholders controlling the pace and content of instruction and, as a result, they regulate boundary of what the learner learns (*e.g.*, school curriculum). New environments must contain some of the stakeholders' preferences and reinforcers to create lasting positive reinforcement practices for the learner.

GENERATIVENESS

Generativeness describes the ability of the receiving environment to regulate novel responses, functions, values or response products derived from the original cusp response. For a behaviour, it is the ability to recombine or merge into more complex units, or the ability to contact environments.

CASE EXAMPLE

A child learns phonetic reading and can recombine the 50 or so English phonemes into 50.000 words by recombining the individual sounds he has learned to read. The generative index for this act of learning the basic English phonemes is approximately 10.000 (where one new behaviour results in a potential 10.000 applications).

CASE NON-EXAMPLE

A child learns sight reading for 50 words. When a new word is presented the child learns by listening to a teacher and memorizes the words rather than using what he has previously learned (reading 50 words). Additionally, he is now dependent on a someone for learning each new vocabulary word.

COMPETITION WITH ARCHAIC BEHAVIOURS

Behaviour competition is the ability of cusp behaviours (killer app) to displace previously established behaviours on a continuum of intensity and rate, across repertoires, and environments. Competing archaic behaviours occur on a corresponding continuum of severity.

IMPACT ON STAKEHOLDERS

Impact on others comes from the learner's behaviour impacting the stakeholders who control reinforcers and punishers in a specific environments. It is important to identify these stakeholders' motivations and reinforcers in selecting potential cusps. Impact refers to the changes in values & behaviours of the stakeholder resulting from a cusp in the learner. The initial and gradually more complex behaviours that constituted the entry point for an important behaviour change that, once initiated, so profoundly alters, displaces, or transforms one's behavioural repertoire that it renders preexisting behavioural repertoires obsolete. A behavioural cusp is an important behaviour change that alters the probability of the learner's future repertoires and interactions with stakeholders repertoires.

SOCIAL VALIDITY

Social validity is an indicator of social acceptability of a behaviour and its consequences for the stakeholders representing the communities which the learner is accessing or will access. Some seemingly insignificant changes in a stakeholder may dramatically impact the learner. All stakeholders (*e.g.*, government officials, teachers, parents, and other interventionists) should agree to the goals, methods, and tools for the intervention and the norms from the local community suggest the boundaries of what should be learned.

APPLICATIONS

Life Span/Development Guidelines

The behavioural cusp has implications for the selection and sequencing of skills during the life span. While milestones are mainly concerned with the chronology of behaviours, the concept of behavioural cusp is concerned with the fitness of the behaviour within a context or a receiving environment. As Rosales-Ruiz and Baer (1997) stated, "One child's cusp may be another child's waste of time." Thus, there is a great need for empirically based guidelines in making decisions related to the initial selection of skills.

3

The Need for Early Childhood Education

Research shows clearly that the first four or five years of a child's life are the period of most rapid growth in physical and mental characteristics and of greatest susceptibility to environmental influences. Consequently, it is in the early years that deprivations are most disastrous in their effects. They can be compensated for only with great difficulty in later years, and then probably not **in** full. Furthermore, it appears that it is harder to modify harmful learnings than to acquire new ones. Finally, experience indicates that exposure to a wide variety of activities and of social and mental interactions with children and adults greatly enhance a child's ability to learn. Few homes provide enough of these opporltunities. It is reasonable to conclude that the postponement of an educational contribution by society until children reach the age of six generally limits the flowering of their potentials.

Family life and family love are among the most cherished of American values. In addition, they are important to the healthy development of the individual physically and spiritually, and they are basic to his happiness. They are regarded as a birthright of every child and parent. Moreover, except in extreme cases of neglect and mistreatment at home, it is hard to conceive of an institutional alternative to the home and family that could do as well.

Therefore, although early schooling is needed, family life must be strengthened, not replaced. The need is for a complement, not an alternative, to family life. But the need is compel-ling. Those children commonly called "disadvantaged" are **in** the greatest need of early schooling, for they are most in

need of help in developing their ability to live independently and creatively in a modern society. They are disadvantaged precisely because the cultures into which they are born prepare them poorly for modern life. Many are further disadvantaged because, victimized by racial prejudice, they develop a disparaging image of themselves by the age of five or six. It is imperative that American society provide these children, in their most formative years, with helpful cultural characteristics and the healthy image of their human worth that their personal progress requires. At the present time, schooling for four-year-olds is rarely free of cost to the parents and therefore is least available to many children in most desperate need of it.

But not only those commonly considered disadvantaged are disadvantaged in their lives at home. The pampered also are disadvantaged; so are those whose parents are obsessed with the need to impress and achieve; so are those, whatever their economic background, whose parents show them little love; so are those who have little chance to play with other children or with children of other backgrounds; so are those with physical handicaps. Early education could help all these children.

Early education is advisable for all children, not merely because of the need to offset any disadvantages in their back-ground, but also because they are ready by the age of four for a planned fostering of their development and because educators know some of the ways to foster it through school programmes. Early education has long been available to the well-to-do, and it is commendable that governments are now acting on the need to make it available to some of the poor. But the large middle group should have the same opportunities.

The opportunity for early education at public expense should therefore be universal. The nation would benefit in the greater development of its people's talents and in the reduction of the need for expensive remedial work and of the incidence of drop-out with its attendant economic and social ills. The nation would benefit, too, from the knowledge that public educational funds are being spent with greater efficiency, from a new national unity based on increased respect for nonwhite groups as they develop their talents more completely, and from the awareness that greater recognition is being given to the ideal of human dignity. Individuals would benefit in all these ways, as well as in the enjoyment of a richer childhood and a lifetime lived at a higher level of achievement than is typical today.

Beginning at what age should the opportunity for education be offered at public expense? For several reasons, the Educational Policies Commission recommends that it begin at the age of four. These two additional years are years about which there is considerable knowledge regarding the contribution that organized education can make. These are years in which many parents deem it desirable for children to have a few hours away from home during the day. A two-year extension is also more feasible financially than a longer extension; indeed, public kindergartens are already common, and for many places the extension would amount to only one year.

The first three years of life are probably even more crucial than the fourth and fifth. But too little is known about the ways in which such young children can be helped outside their homes. Efforts to help present or future parents improve family living would perhaps be more effective. We strongly endorse such efforts.

PRESSURES ON THE YOUNG CHILD

Every young child living in any period of time has had to meet and deal with the pressures in his environment. Growth in any human being relies on the ability of the person to find solutions to his problems and to move forward in becoming an increasingly mature person.

Growth requires conflict. Without conflict life would be dull and static. The young child of every environment has the drive and the inner strength to grow. Our recent experiences with the young child of poverty provide an excellent illustration of the ability of children to want to learn even though the child may come from a family in adverse circumstances. One of the great joys of working with the three- four- or five-year old is that he is an aggressive learner and thus grower. He constantly seeks and strives for growth and thus meets conflict.

Everyone engaged in child rearing needs to recognize the fact that conflict carries constructive possibilities. To deny this proposition is probably to deny that children can be educated.

THE YOUNG CHILD'S WORLD

If growth requires conflicts, why then are we so concerned with the pressures upon today's young child? What is there about his world that makes pressures a topic discussed in most journals? How much stress and conflict can he undertake and still maintain his equilibrium? Which pressures are realistic and positive and which are limiting and negative? How can we help our young children further develop their inner strengths so they are able to cope with their world?

There is general disagreement and also lack of agreed upon knowledge on how much pressure should be applied to children. It is undisputed, however, that the young child is living in a fast paced, rapidly changing, increasingly complex and uncertain world. This world is reflected in our children. It is not uncommon to find the four-year-old taking tranquilizers, attending sessions with a psychiatrist and talking about "when I go to college."

The rapidly increasing number of emotionally disturbed young children suggests that the child's world is becoming more and more anxiety-laden; yet this may also suggest that we are becoming better able to diagnose disturbances. However, the adult world must be made aware of the undue pressures being pushed on children. Overprotection brings on its own conflicts and is not the answer to helping children face their world. The security found in a home with loving parents and realistic demands provides some of the foundation needed for coping.

The changing family itself brings new conflicts in living. David, who is just five years old and has been to nursery school for two years, lives with his working

mother and two younger siblings in a high-rise apartment. He has moved twice. He goes to school with 35 other five-year-old children in kindergarten. He has to take the elevator 10 floors to get down to the cement playground.

David has flown in a jet, watched the astronauts blast-off into space, seen many beautiful books, and above all has the love and respect of his parent. Already David has learned he is a worthy person. He can meet the many stresses in his life because he knows the limits and recognizes his strengths. David is not an atypical five-year-old in 1965. His life is like many others but he has the extra important ingredient of having an unusually knowing and thoughtful parent. Many other children living under these circumstances may not be as fortunate as David.

Judy is an overprivileged suburban child who is loved by her parents but who is caught up in the pressures of status and rush towards early learning. She too goes to kindergarten but with 25 other five-year-olds. She knows that she is in the slow reading group and this upsets her parents. She has learned that the challenges of school mean defeat in the eyes of the adults she wants to please. Judy is learning fast that failure is an uncomfortable and insurmountable conflict.

Judy, too, is not atypical. Were the demands of reading too much for her at this time? Was the preoccupation of her parents with her success in this area too overwhelming? What had happened in her previous learning to justify her inability to cope with this problem? Was love only given to her on a "pay as you go" basis? How will the many Judy's meet future confficts in learning and living?

RELIEVING PRESSURES

Each child in his own way, from his own background of experience will meet pressures with either assurance or defeat. The very experience of attending nursery school or kindergarten can be an expansion of or a limitation upon the child's ability to cope with his environment. Educators in the field of early childhood education believe firmly that the experience of early schooling can be most beneficial to the young child.

There is no doubt that each entrance of each child into nursery school or kindergarten is fraught with pressure. This pressure should be one of significant growth to the child. At the same time, such a pressure can be one of extreme pain and stress. Much has been written on preparing the child for school, yet have we thought deeply of the many pressures that encom-pass the child as he enters the new environment of school?

There are the new adults who will make different demands on me. There are more children together in one place than I have experienced before and they are all my age though different. Some are bigger, some a different colour, some noisy, some afraid. How do I feel? There are all those toys. Which one should I try out first? There is a book like one I have at home. Mother is leaving and I feel lonely and afraid in this strange place. Everyone lies on the floor for rest. I don't want to rest and where is my bed and my stuffed dog?

Pressures, the new classroom is full of them. Can the child cope and learn and flourish in this environment? The trauma of first experience is always difficult. Life is continually presenting new, first adventures. Each successful previous experience provides the basis for coping with the new. A good school for young children is planned to assist each child in confirming his world and in extending his horizons. It is organized so that each child may move towards progressive, positive self-fulfillment and self-realization. The sensitive, knowledgeable teacher can help each child to meet constructively the pressures in his envi-ronment and thus to reach his own maximum growth.

WHEN AND WHAT TO TEACH TO WHOM

One of the major questions asked by today's adults is "Can the young child learn more?" There is no doubt that the young child is learning rapidly. A brief glance at a kindergarten child brings complete awe at what has been learned in five short years. Yet can this flve-year-old learn more? More of what? Do we want him to know more about himself, more about how to learn, more about working with others, or more academics? The latter is emphasized in some schools of thinking. No knowing adult is going to prohibit the child from learning all he can about the subjects of our common schools. At the same time no knowing adult is going to thrust or heap on work for work's sake nor is he going to "water down" the second grade curriculum.

The rapid changes in the world about us make us re-examine what a child can and should learn. This is a different world than we knew as children or young adults. No one wishes to return to the world of yesterday, but rather to catch up with the world of today so that as leaders of children we may be knowing in how to use the best of all worlds. Perhaps this is part of our confusion. The selection of what is to be taught, to whom and when is a continuing, unsolved pressure on the adults.

The constant dilemma faced by parents and teachers is when to teach what to specific children. It is in this area that we find the greatest disagreements. Reputable persons are writing in periodicals that babies can and want to learn to read, that the typewriter provides an incentive and method of early learning, that the young years are wasted, that America has become a nation of child worshipers, and that early training prevents future failure.

In contrast we read and hear that the early years must provide time for exploration and discovery, that the development of the first five years of life provides the psychological foundation for later learning, that childhood is a time of play which has unchallenged learning potential, that any normal child of two can learn to read but should he, or what else is more important and basic in the learning process in the early years?

The recent explosion of knowledge and the over-whelming amount of knowledge to be learned has put all adults in a panic. The panic is transferred to the child and the pressures mount for all. If we stop and examine the claims at either extreme of the pendulum it becomes apparent that everyone is attempting

to help the child meet his world more successfully. Each is attempting to resolve the question of what to learn when. One's basic belief about learning and child growth and development becomes evident. It is my belief that young children *can* learn more but in the milieu of their environment and under the positive pressure of growth, rather than under the limiting pressure of satisfying the adults' needs in a restricted situation.

The young child is interested in a myriad of topics and thus is eager to learn about the world in which he lives. Jets, wheels, animals, age-mates, home, the far away, himself, his family, economy and politics, water, snow and rain, make believe and now, and on and on. The selection of areas of knowing is unending. It may become necessary to learn to read to satisfy insatiable curiosity and then he will begin to read with adult help. This he will do, not because the adult wanted him to read or because it will build the adult images or ego, but because the child wants to know and is willing to undergo the tasks necessary to read. The adult will not prevent, nor will he demand but rather he will encourage each child to build on his inner strengths and needs to move towards new steps in learning. This learning will not be accidental but the true outgrowth of the developing mind and experiences of the child nurtured by the knowing adult.

The significant growth that will have its permanent effect on the child must come as the child develops a clear and realistic image of himself as a learner. The role of each adult who lives with children must first and foremost provide the opportunity for children to experience success and support and to meet fail-ure honestly. Each new experience should help the child increase his strength to come to grips with each new situation with openness and security.

Pressures become less threatening as one understands and respects the drive and strengths that each child brings to the conflicts in his challenging world. As each young child moves forth with love and direction his ability to cope with his world in 1965 becomes less overwhelming to him as a person. The healthy child is in the process of becoming and is developing a positive approach to life and learning.

WHY KINDERGARTEN?

The five-year-old has come into new national prominence. As the former stepchild of educational programmes and curricula, he now emerges as an important concern in the minds of many from groups of varied interest.

The cure for the ills of a host of educational, economic, and social diseases in now being sought in this tiny personage. These ills range from the high dropout rate in our secondary schools and colleges, through the low reading, writing and arithmetic achievement of a whole new generation of pupils, to the rising unemployment due to automation and the lack of skilled labour.

The kindergarten today is the product of its own rich past as well as the modern expression of a culture's determination and concern to provide its young with the best. The kindergarten is the leading proponent of the belief in education as a process of self-expression, and the belief as well that the character of early

education should be determined by the child's growth and development. It stands for an attitude towards childhood that has not only influenced its own practices and procedures but also those of the other grades of the school.

It is difficult to single out one particular year of a child's life and point to it as being the most important—the culprit year, or the savior year. Growth and development are continuous. But certainly a good year at any level is desirable for the child's overall success. Conversely, a poor year in which the child is deprived of learning opportunities in a rich environment is not desirable, whether for his present development or his future success.

IDENTIFICATION OF INADEQUATE PROVISIONS, GAPS AND NEGLECTED AREAS

The review of status of implementation of various initiatives in the field of ECE leads us to identify the inadequacies of the provisions, gaps and neglected areas which are discussed in the following paragraphs.

NATIONAL FRAMEWORK, POLICY DIRECTIONS AND DEVELOPING DATA BASE

It is being continuously observed not only by professionals but in the Mid Term Appraisal of 10th Five Year Plan also that the exclusion of the ECE from fundamental right is set to deprive many children in the three to six age group of ECE, which may lead to greater school drop out rates and other problems. In the recently held conference (6th June,06 of State Secretaries of WCD and Elementary Education on Early Childhood Education [the conference was also attended by professionals, practitioners, representatives of international bodies, members of civil society, members of national advisory council, and representatives of prominent NGOs] it has been again reiterated that ECE should be made a fundamental right duly backed by adequate resources and initiatives for capacity building.

Both, the National Policy on Education, 1986 and subsequently the Programme of Action(1992),which was designed to implement the recommendations of NPE in an action plan mode, categorically stated that day care centres should be established to provide support services not only for universalisation of primary education and enabling the girls to attend primary schools by way of discharging them from taking care of siblings but also as a supportive role to working women belonging to poorer sections. POA, 1992 had also recommended the conversion of AWCs in to Anganwadi cum crèches in a phased manner.

Though this was done under National Crèche Fund initiative, which was designed partly with a corpus fund made available out of the social safety net adjustment credit from the World Bank but with the merger of NCF with Rajiv Gandhi National Crèche Scheme, this initiative of converting the AWCs into AWCs -cum –crèches has come to an end. Thus, overall, the policy recommendations of NPE, 1986 and POA, 1992 were though partially

implemented in the past, but currently remains unimplemented. Thus, in XI Five Year Plan, provisions to fulfil these aspects need priority in the right earnest.

There has been no national database of various aspects of ECE. In the absence of such data base, currently, we find it difficult to prepare the status report of EFA goal 1 concerning ECE for the purpose of its Mid Decade Assessment (the report demands comprehensive data base/information related to policy and governance framework, resource deployment, delivered curricula and learning outcomes etc). In order to do so, state specific data base/state profiles concerning ECE need to be developed.

While developing the state specific ECE profiles, the data on specific indicators like state specific policy and governance framework, target setting, policies and directives, stakeholders participation, national and international development partners, monitoring and evaluation mechanism, assessment of the effectiveness of ECE intervention, strategies being adopted, implementing agencies, resource inputs in terms of financial, infrastructure, material, programmes/services, delivered curricula and learning outcomes etc,needs to be collected and collated. Some of these indicators have already been identified in various studies.

Tamil Nadu Early Childhood Environment Rating Scale (TECERS) can be used as a starting point for such a comprehensive exercise. Further, though effective convergence and coordination has been identified as one of the objective of ICDS (the largest state initiative in India to provide ECE) and the same has also been envisaged in various policy documents for effective run of centre based ECE initiatives, yet several commissioned studies have come out with the recommendation of further strengthening of this aspect.

In order to accomplish this task, under XI Five Year Plan, a well designed and well thought institutional monitoring system concerning ECE for all sectors (public, private, NGOs) has to be established in every State/UT administration at the sub national system level and at the national level. This will not only facilitate the convergence and coordination mechanism across various players of ECE but would also ensure the flow of data base information right from grass root to GOI level. The data base, as envisaged should cover all kinds of centres i,e – private (centre and home based ECE interventions), NGOs(aided and unaided),public initiatives as well as statutory crèches.

This national and state specific ECE data and statistical indicators so collected and calculated would also smoother the ways in developing proper national/ state specific action plans concerning ECE and in designing mid decade/term end progress assessment report of goal 1 (universal provision of ECE) of EFA project.

ACCESS AND COVERAGE

As per census, 2001, the country has approximately 60 million children in the age group of 3-6 years. The approximate figures of covering about 34 million children by pre schooling initiatives under ICDS and other private initiatives

(not counting NGOs initiatives as the variation in expected coverage is too large from 3 to 20 million), leaves apart a large segment of about 26 million in the 3-6 years population bracket unattended for pre school activities. Thus, the gap between the numbers of pre school children and the available pre school services seems to be very large.

Here, pre school education services will have to be provided for 70 million children by the end of 2011 (the near end period of XI Five Year Plan) and 73 million of children by 2016 (or the near end period of XII Five Year Plan). Though, it needs to be acknowledged here that in a country as diverse and large as India, with approximately 60 million children in the age group of 3-6 years (as per census, 2001), achieving universal access is not an easy task. However, the current and futuristic magnitude of uncovered ECE children is a major challenge in the XI Five Year Plan.

The uncovered and unreached children of ECE are found in both rural and urban areas. While in rural areas, they are located in isolated and remote hamlets, dalit hamlets and settlements, seasonal migrants road side workers, construction and quarry workers, fishing hamlets, in urban areas, they may be broadly identified as living on those pavements, unauthorized settlements, small slums, construction workers, temporary/seasonal workers, rural migrants, itinerants, *etc.* Children living in difficult circumstances like children of long term patients, children with special needs and children of sex workers, women prisoners, riot and disaster affected, refugees and displayed, orphanages and founding homes, militancy affected children may also be identified as uncovered and unreached children for ECE.

In order to extend the benefits of ECE to such large number of presently uncovered, unreached and projected population of 3-6 years age children for the next one decade, it is urgently needed to come out with contextually suited, locally relevant innovative strategies and approaches and also strengthening of resources being required to fill this huge gap. In order to do so, setting of one ECE centre for a group of about 25 children within accessible distance from the home of the child needs to be considered.

The home based model of ECE tried out by NCERT some times back needs to be encouraged and experimented with far flung and smaller community helmets, scattered population, areas affected by floods and other disasters and especially in tribal and hilly zones. Support for various forms of mobile services/ crèches (crèches in flexi time, flexi space, transitory/temporary, mini AWCs) may also be enhanced for this purpose. Further, these strategies ought to be linked with primary schooling system either by way of locating ECE centres in proximity to local primary schools or peripheral feeder schools.

The ECE provision is also pronounced to rural/urban slums disparities. As per findings of the study conducted by National Institute of Urban Affairs, though the share of urban population in the country is approximately 27.78 per cent (expected to go up by 33 per cent), corresponding provision of ECE facilities in these areas are insufficient. Urban slums are under represented in ICDS also, as

majority of these projects are located in rural areas (out of total 5671 sanctioned projects, 4548 are rural, 763 are tribal and 360 are urban). The greater access to ECE in urban settlement also needs to be accelerated. For this, in the XI plan, rules pertaining to area/town planning may be amended so as to provide the space for neibourhood ECE centre. The schedule for urban local bodies also needs to be strengthened to ensure responsibility for allocation of space for AWCs, Crèches, *etc.*

DAY CARE SERVICES

As per NSSO 55th Round Survey, 1999-2000, there are around 106 million women in the work force, out of which 40-45 per cent are in the reproductive age group. Day care support services are an essential requirement for these women. The total number of operational crèches, though have increased up to 22038 till 31st March, 2006, however, keeping in view the enormous number of ECE children, this figure of crèches seems to be inadequate. Though, crèches are mandated by law also in different areas like mines, plantations, factories, salt and dolomite mines, cigar making units, contract labours,inter state migrant labourer and construction sites, however, in practice, very few crèches are being run in obedience of these laws.

Further, whatever the crèches are being run, they are in very bad shape. Thus, the existing crèche facilities need to be expanded exponentially. This can partly be attained, as rightly observed in Mid Term Assessment of 10th FYP, if the obligatory legal stipulation for provision of crèches at the place or site of work is strictly enforced.

Thus learning from the past experiences, it is amply clear that placing the entire liability on employers is a non-starter and thus, under XI Five Year Plan, some form of shared liability is required to be designed. The ICDS programme does not have the critical component of day care in the package of services being provided. One consequence of the lack of day care is its impact on the education of the girl child, since she is made to stay home to take care of younger siblings.

Further, in order to cover the ECE needs of children of working mothers engaged in unorganised sectors, there persists a need to convert the AWCs into the AWCs – cum- crèches. Though, under the scheme of National Crèche Fund, a provision of conversion of 10 per cent AW centres into Anganwadi Cum Crèches was made, however, the initiative has come to end with merger of NCF with Rajiv Gandhi National Crèche Scheme.

INFRASTRUCTURE

ICDS scheme does not provide for construction of AWCs except in World Bank Assisted ICDS projects. However, as a special case, Government has permitted construction of AWCs in NE states. Further, from 2005-06, it has been decided to undertake construction of AWCs in NE States at enhanced cost, which is to be met out from NE component of the Departments Plan budget.

The feasibility of construction of AWCs buildings in other parts of the country besides of World Bank Projects needs to be given a serious thought. In the XI plan, there is a need to consider the possibilities of construction of all AWCs in a phased manner with priority to those areas, where educational indicators are weak.

SSA, DPEP AND OTHER INNOVATIVE PROGRAMMES

Although, the SSA initiative has accommodated the ECE but has not carried forward all the initiatives undertook under DPEP. Instead, it has only provided for a limited 'innovations grant' of Rs 15 lakh for ECE for each district, which does not allow for scaling up of the facility. However, subsequent to the launching of the SSA, the GOI has recently also launched the National Programme for Education of Girls at Elementary Level (NPEGEL) under the umbrella scheme of SSA for especially backward administrative blocks. Provision has been made under this programme for opening of ECE centres at the cluster level to facilitate girls' participation in elementary education.

Though linking of ECE in previous initiatives concerning primary education like DPEP, Janshala and other innovative initiatives taken under various state run programmes have yielded good results for wider provision of ECE but these have now been closed.

Thus, it is felt that in the XI plan, not only there is a need to have a relook at these initiatives once again but also allocate more financial and structural inputs to these.

DATA BASE ON ECE

There exists no viable information about operative numbers, infrastructure, manpower and process indicators especially of private ECE centres since none of the educational surveys, census and even sample survey has considered this aspect as worthwhile. Further, as registration of these ECE centres has not been made compulsory due to which, there seems to be a general agreement that majority of these ECE centres either lack basic requirements and/or practice pedagogical inappropriate practices.

Thus, a comprehensive survey needs to be undertaken in to address these issues pertaining not only to quality control but also to universal provision of ECE. Data base should cover all kinds of centres, private (centre and home based both), NGO (Govt aided and unaided both) as well as statutory crèches including information on number and age group of children, staff strengths and other basic indicators.

The national level organizations such as NCERT, NIEPA, NIPCCD could be requested to look at this issue also in addition of taking care of certification of training courses, documentation and research. Analytical studies are required to be carried out by these organisations on lines similar to those in case of primary and elementary schools.

MINIMUM STANDARDS AND REGULATORY MECHANISMS

In the absence of any minimum specifications concerning ECE centres, the current approach in the public sector ECE seems to be of a minimalist approach, which is not likely to pay dividends. On the other hand, little is known about standards in other sectors. Given this over all situation, NCERT,NIEPA and NIPCCD may be required to evolve minimum specifications incorporating different pedagogical, infrastructure, administrative, staffing and training parametres of ECE centres, which can later on be applied to all categories of centres,using different instrumentalities appropriate to each sector.

NGOS/CORPORATE INVOLVEMENT

As for private initiatives in ECE, NGOs/Corporate sectors involvement is yet another area about which little is known since no census or educational surveys have come out with estimated number of NGOs engaged in ECE, or the kind of services that they provide. Thus, it is urgently needed to conduct a national survey of ECE initiatives by NGOs and corporate sectors. Further the innovative practices being adopted by different leading NGOs like Ruchika, SEWA, Nutan Bal Sangha located in different parts of the country have not been properly documented, and as a result, one finds it difficult to replicate them in other parts of the country after making contextual corrections.

WORKING CONDITIONS OF ECE TEACHERS/CHILD CARE WORKERS

Currently under public initiative of ICDS, nearly eight lakh AWWs and an equal number of helpers totalling about more than one and half million women, have been engaged in imparting centre based ECE to 23 million of children. Most of the time, these workers are subjected to treatment at par with other regular government employees (before and on the job structured training inputs, some times transferred from one place to other, subjecting to disciplinary actions like other regular employees), however, they are having poor working/service conditions due to the honourary status of their work. The situation gets further compounded as due to absence of the term child care workers/nursery school teacher in 27th schedule of the minimum wages act, the minimum wages and working conditions of these workers are not subject to the regulation of any law in the country. The similar situation is true with private sector and NGOs run ECE initiatives also, where they are victims of exploitatively low wages with no security of service as in case of primary/elementary/secondary school section. The basic reason behind poor working conditions of ECE teachers/child care workers is first, that that they have not yet been recognised as skilled workers, though ECE involves set of both productive and reproductive skills, second the proclaimed lack of financial requirements and third, the unavailability of the pool of trained manpower of ECE in scattered and inaccessible areas. This unworthy situation needs to be properly corrected, while designing out the ECE inputs under Eleventh Five Year Plan.

TRAINING AND CAPACITY BUILDING

While there is wide spectrum of training provisions, there are marked variations as well, which reduce the scope for any standardisation or quality control of ECE training initiatives. A cursory look of these courses discussed earlier reveal the fact that training inputs vary considerably on numerous counts i,e from institutions to institutions, courses to courses and state to state and on pedagogical aspects like duration of training, methodology, and exposure to theory and practice. While minimum educational eligibility criteria ranges from no bar (as in case of ICDS community workers) to primary standard (as in case of crèche workers) to high school pass (as in case of NTT) to class XII (as in case of IGNOU and Integrated Pre primary and Primary Teachers Training), there exists marked variation in duration of training too. This varies from a few days (in case of several NGOs which run their own courses) to fortnight (as in case of ICDS) to relatively longer time frame (as in two years) for the integrated training.

While minimum educational eligibility criteria ranges from no bar (as in case of Anganwadi Workers) to primary standard (as in case of crèche workers) to high school to class XII (as in case of IGNOU and Integrated Pre primary and Primary Teachers Training), there exists marked variation in duration too varying from few days (in case of several NGOs which run their own courses for internal consumptions only) to fortnight (as in case of ICDS) to relatively larger time framework (as two years in case of Integrated pre primary and primary teachers training, one to four years in case of IGNOU programme).

Further, taking advantage of absence of minimum accepted guidelines for teacher preparation curriculum of ECE, most of these institutions have adopted different curriculum from their own point of view. While State run Integrated pre primary and primary teachers training courses have adapted the National Council of Educational Research and Training (NCERT) prescribed curricula. Just opposite to these frameworks, the institutions being run within the territory of ICDS have adopted the National Institute of Public Cooperation and Child Development (NIPCCD) prescribed curricula, which has superficial theoretical connotation and practical knowledge having no term end examination and evaluation mechanism.

Due to lack of employment opportunities of the products of ECE teacher training, the system has not grown up in proportion of increase of ECE centres. The employment opportunity of ECE trained teacher is only available in private sector, where most of the cases, service conditions are often deplorable. The number of available posts of trained nursery teachers in the government sector in almost all the states are negligible, Further, as there has been no demand for trained staff in ECE, so none of the state government has laid down any norms for staff qualifications or remuneration, nor any guidelines for recognition of ECE staff as teacher. This under developed teacher training system of ECE can be easily seen from the dichotomy between the ECE teacher training and secondary/elementary teacher training system. Thus state governments under XI Five Year Plan are required to be advised to take corrective measures in the matter.

Though Programme of Action (POA) 1992 and NCTE draft approach document, 2004 had recommended of having different courses of ECCE at certificate, diploma and postgraduate diploma level [the certification at various levels is based on the assumption that while postgraduate diploma holders may take up the job of teacher educators, the certificate holders may be engaged in running the ECE centres], yet existing programmes have not accommodated these needs. It might be due to the fact of absence of ECE as a subject in any of the social science faculties in Indian Universities. Thus, there seems a urgent need to bring up the Universities, Institutes and other centres of higher learning in teacher education within the realm of ECE also.

There is a popular perception that special training is not necessary for teachers of pre primary and nursery schools as their job simply involves teaching of alphabets, numbers etc, and taking care of young children. It is felt that any person who has passed higher secondary or senior secondary examination can easily handle the job of nursery teacher. Even any person who has caring temperament towards children, or who herself is mother, will be a good staff member in early childhood programmes. It is because of this perception that untrained teachers are posted in a majority of nursery schools in the unrecognized private sector. Nearly over three-quarters of teachers engaged in ECE have not received any type of pedagogical training. There exist tendencies to recruit untrained or poorly qualified teachers, which often have serious consequences for pre schooling quality. Needless to say, these assumptions are professionally not sound and need to be corrected after educating the community to be more selective and/or demanding as consumers,which could serve as an effective monitoring device of ECE in private sector. This awareness aspect needs to be promoted using different modes of mass media during XI Five Year Plan. Adequate budgetary provisions for such awareness generation campaigns should be made available in XI Five Year Plan.

A glance at the structure of privately managed early childhood teacher training programmes shows that it lacks both academic rigour and professionalism. So far as former view of academic rigorousness is concerned, scarcely any attempt is made to the true meaning of early teaching learning repertoire (a set of skills, strategies, methods, knowledge and understanding) presumed valid for achieving preferential learning outcomes. From later view of professionalism, it is noticed that these ECE courses are not only of shorter duration but also lack the opportunity of transforming the class room based learning experiences into real context.

The ultimate result is that most of the ECE teacher's falls downward from the depths of what they learned during their training inputs. Further, several studies speak about the truth that privately managed teacher training institutions have either not come up properly or they have not been functioning efficiently and effectively. Further, many of them have not yet developed a professional work culture that may enable them towards quality improvement. It has also been pointed out in studies that the kinds of faculty placed or recruited in these

institutions are questionable. This is substantiated by the fact that in quite a few institutions, there is hardly any recruitment or placement policy. NCTE may be suitably strengthened under XI Five Year Plan period so as to keep an eye on these concerns by putting appropriate accreditation system.

Though the country has well defined system of ICDS training but often it is observed that system is confronting organisational problems in terms of standardized training package, fragmented and centrally designed curriculum and of low financial norms. Further, considering the large number of ICDS training centres across the country, the monitoring of the training programme has been posing serious problems.

In the absence of any well defined monitoring mechanism of training programme being organised by these training centres, some of the spinal parametres of training such as trainer strengths and their academic background, organization of programme for prescribed number of days, full coverage of syllabus, sequencing of delivery of contents etc are not being observed properly. Further, most of the prevalent institution based ICDS training programmes are being organized in haste through deployment of contingency measures such as course based release of funds, short tenability of ICDS training centres, short lived increase in honourarium of trainers, contractual time bound appointment of faculty, *etc.*

At the initial phase of implementation of ICDS, the duration of JTC for ICDS functionaries was 72 days. However, it was subsequently reduced to 52 working days and finally to 26 working days. This reduction of working days has been done without compromising of content areas delivered during institutional setting. The suppression of duration has drastically reduced the opportunities for hands on experiences of PSE skills in the field situation. Currently, the ECE component under JTC of various ICDS functionaries only figures for 4 days. This aspect needs to be looked into.

The curriculum content of the existing ECE teacher education programmes by and large, lacks relevance and state/UTs based context specificity. In most of the cases, it is modeled on the pattern of elementary teacher education programme. Besides, the training methodology generally lacks cultural flavour and local specificity.

In this connection, it is recommended that state specific courses needs to be devised within the broader framework provided by NCTE. There is also a need to initiate dialogue with NCTE on evolving a need based, practical oriented and flexible curriculum. In order to have state based flavour in training of ECE functionaries, it may be suggested that SCERTs and DIETs need to be strengthened in a sustained manner with regular guidance of lead institutions like NCERT and NIPCCD. In addition to these, decentralised training capability for ECE has to be nurtured in Block and Cluster Resource Centres. Documentation and case studies of best practices in training needs to be prepared for wide dissemination, replication as well as to feed into the training process itself.

Under XI plan, lead institutions like NCERT and NIPCCD also need strengthening by developing a suitable resource pool at the national level so as to work as clearing house in all matters concerning ECE. While separate department of Pre school education may be established in NCERT, a resource centre of ECE should be developed at NIPCCD. Similarly while, NCERT may be assigned the task of doing work in pedagogical aspect, NIPCCD may be given responsibility of continuing with training, research and resource material availability of ECE under ICDS.

There has been an unplanned and unmapped distribution of ECE teacher training courses. Though POA, 1992 had committed the adequate training facilities for this sector through 2 year vocational course at +2 level and creating a system of accreditation of institutions dealing with ECE training, yet, NCTE has till date recognised only 124 courses at the pre primary level. The state wise distribution of these courses present a very grim picture. No institutions have been reported from NE region.

This poor scenario underscores the need for creating workforce requirement in a more systematic way. Further, due to the uneven geographical distribution of training centres, majority of ECE providers are forced to undergo training not only at distant places, but almost in decontexualised way with lack of responsiveness to local needs. Thus, NCTE may come out with more appropriate method after adopting simplified norms of accrediting training institutes/courses. Further, a wellestablished accreditation system recognised by the government for monitoring ECE training institutes has to be set up in XI Five-Year Plan.

A revolutionary change has taken place during 1990s across the globe in staff training and development sphere of ECE. The training task of teachers and teacher educators of kindergarten and early childhood education centres has now become the responsibility of colleges and university system in most of the countries like China, Australia, Finland, Hongkong, Japan, *etc.* However, the same case is not true with India despite of the fact that we have more than 50 Institutes of Advanced Studies in education and about 450 District Institute of Education and Training (DIETs) across the country.

Besides this more than 100 education departments in various universities are also in operation. The scope of these Institutes/Centres needs to be widened so that they not only take up the training task of teachers from early to secondary stage through diverse ways of different certification level but also discharge their responsibilities in research and extension dimensions too. NIPCCD may provide a torch-bearing role in this regard by adopting cascade model and by imparting training to trainers of these institutions. The launching of Diploma and Certificate level course in ECE by the Universities like IGNOU, Jamia Millia Islamia and prominent institutes like State Council of Educational Research and Training (SCERT), Delhi from the academic year of 2004/5 in the field of early childhood education may be seen as a lead role model in this direction. Other universities, which are implementing self-financing courses, may also be encouraged to opt for same model under XI Five Year Plan.

Based on the rich experiences of training of ECE functionaries in India and training of similar manpower in other countries of Asia and Pacific, one of the stronger alternate of getting them trained through distance mode needs to be put on the priority agenda of discussion among trainers fraternity. This juncture, especially when ECE has found a specific and explicit mention in the constitution for the first time under Directive Principles of State Policy, seems to be the right time to usher in such a dispassionate and informed discussions on the proposal in a collective manner.

As traditional way of institutionalised training is certainly unequipped to cater emerging demands of imparting training on several counts, the distance mode of training by its innate potentiality of quick delivery mechanism, boundary less operation, taking care of contextual sensitive pedagogies and cost effective way may only be viewed as an alternate to surpass these contemporary training weaknesses. Since training through distance mode requires moving in altogether different paths in contrast to contemporary practices, the proposal needs to be thoroughly contested and debated.

Here, it has to be mentioned that NIPCCD had already taken a lead by facilitating the states to get the ECE functionaries enrolled in IGNOU run distance learning ECE programme. NIPCCD has also started discussions with NIOS to develop tie ups with NIOS run distance mode ECE programme. The committee appointed by Government of India for contemporary look into the training aspects of ECE services has also recommended designing courses of shorter duration using distance mode. State open universities (SOUs) may also take up these courses so as to take into consideration the contextual responsiveness of the programme. Though, all these developments present case for application of distance mode training system in context of early schooling but still the proposal needs to be put on the priority list in the agenda for discussion amongst professionals and academic fraternity working for the XI Five Year PLan.

Here it would also be in fitness of things if a planned and systematic feasibility study may be undertaken before actualizing the project on pilot basis.This will have the advantage of not only speeding up the innovations but also providing a continuous source of excitement and interest.

CURRICULUM OF ECE: PRESCRIPTION VS PRACTICE

Though appropriate curricular guidelines are available in the country for ECE; the reality is that there is a large gap between what is prescribed or suggested and what is practiced. It can be generally seen that in the private sector pre schooling, the overriding emphasis is placed on pedagogical concerns of formalised cognitive domains by way of down ward extension of primary schooling and thus marginalising a dozen of other affective and psycho motor domains, which are also required to be attended too.

In fact, the early childhood education centres have to offer such activities in which cognitive development may occupy an important place but not an

overriding focus of attention. In a study conducted by the NCERT (1998) it was found that almost all the ICDS centres observed adhered to teaching of 3 R's (reading, writing and arithmetic) and there was a virtual absence of any play activities. Typically, the activities of pre school education under ICDS are conducted for a period ranging from 45 minutes to two hours duration daily, with minimal play and learning material support.

Though, unprepared and untrained status of ECE worker is the root cause of this phenomenon, however, most of the time, it is the demand of the community/ parents also to prepare the PSE children in formalized way of primary schooling. These practices are acknowledged to be detrimental to the health of children and of the system as a whole. Thus there emerges a pressing need to educate the community on various aspects of joyful learning and to be more selective and/ or demanding as consumers which could serve as an effective monitoring/ regulating device.

Another unequivocal view pertaining to early childhood education relates to the issue of transition of the child from early to primary schooling. There has been a global consensus that child's successful transition from early stimulating centres to primary education is particularly important because her performance and behaviour in the first few years of school substantially affects subsequent achievement transistories. After all, there has been interdependence of various sub sectors of education.

It is a matter of ground reality that either early childhood education providers are least concerned on this issue or if concerned, they make the early education activities as down ward extension of primary schooling irrespective of age specific and contextually sensitive pedagogical considerations.

They do not further organise various stimuli and interventional strategies keeping the onus on adjustment of these entrants in new physical settings, larger class size and comparatively slighter structured academic inputs and formalised core process practiced in primary schooling system. This unwanted wider gap between two root streams might perhaps not only act as strongest reason for prevalence of high drop out phenomenon in first few years of primary schooling against nearly universal enrolment rate but also of producing unprepared state of school readiness skills.

Thus, there emerges a definite need to further develop close tie-ups between primary schooling and ECE initiatives (as in case of DPEP by way of synchronisation of timings, locating AWC in primary school, allowing AWW to act as teacher of grade 1 and 2 by giving special training etc). Adequate financial resources for this purpose may be allocated under XI Five Year Plan on the estimated cost under DPEP initiatives. Though language intervention thorough mother tongue has been scientifically proved as most appropriate way of working with pre school children, however, due to increased urbanisation and privatisation, the child's learning in English medium schools has now a days comes out as a legitimate desire even in rural parts of the country. The committee appointed by GOI on ECE (2004) also substantiated it by stating

that these days socially and economically upward mobile families are often fleeing from public initiatives towards locally available private alternatives in search of so called English medium pre schooling.

Though some of the pedagogical/curricular experts, located in the developed and advanced countries, favour the introduction of second language from very early stage, however, in our case, keeping in view the socio - political realities, the pre schooling has to be done in mother tongue only, with options of oral introduction of a second language and regular with introduction of second language only in grade one. Thus, while detailing out the provisions for ECE under XI Five Year Plan, the popularity/advocacy of language reality in pre schooling through mother tongue has to be kept in mind by involving mass campaigns and fully utilisation of print/electronic media so that this language policy will eventually be applicable to all categories of pre schools and schools.

4

Emotional Intelligence Development in Children

Emotional intelligence is the ability, capacity, skill; or, in the case of the trait EI model, a self-perceived ability to identify, assess, and control the emotions of oneself, of others, and of groups. Different models have been proposed for the definition of EI and there is disagreement about how the term should be used. Despite these disagreements, which are often highly technical, the ability-EI and trait-EI models enjoy support in the literature and have successful applications in various domains.

HISTORY

The earliest roots of emotional intelligence can be traced to Darwin's work on the importance of emotional expression for survival and second adaptation. In the 1900s, even though traditional definitions of intelligence emphasized cognitive aspects such as memory and problem-solving, several influential researchers in the intelligence field of study had begun to recognize the importance of the non-cognitive aspects. For instance, as early as 1920, E.L. Thorndike used the term social intelligence to describe the skill of understanding and managing other people. Similarly, in 1940 David Wechsler described the influence of non-intellective factors on intelligent behaviour, and further argued that our models of intelligence would not be complete until we can adequately describe these factors. In 1983, Howard Gardner's *Frames of Mind: The Theory of Multiple Intelligences* introduced the idea of multiple intelligences which included both interpersonal intelligence and intrapersonal intelligence. In

Gardner's view, traditional types of intelligence, such as IQ, fail to fully explain cognitive ability. Thus, even though the names given to the concept varied, there was a common belief that traditional definitions of intelligence are lacking in ability to fully explain performance outcomes.

The first use of the term "emotional intelligence" is usually attributed to Wayne Payne's doctoral thesis, *A Study of Emotion: Developing Emotional Intelligence from 1985*. However, prior to this, the term "emotional intelligence" had appeared in Leuner. Greenspan also put forward an EI model, followed by Salovey and Mayer and Goleman. The distinction between trait emotional intelligence and ability emotional intelligence was introduced in 2000.

DEFINITIONS

Substantial disagreement exists regarding the definition of EI, with respect to both terminology and operationalizations. There has been much confusion about the exact meaning of this construct. The definitions are so varied, and the field is growing so rapidly, that researchers are constantly re-evaluating even their own definitions of the construct.

Currently, there are three main models of EI:

- Ability EI model
- Mixed models of EI
- Trait EI model

Different models of EI have led to the development of various instruments for the assessment of the construct. While some of these measures may overlap, most researchers agree that they tap different constructs.

Ability Model

Salovey and Mayer's conception of EI strives to define EI within the confines of the standard criteria for a new intelligence. Following their continuing research, their initial definition of EI was revised to "The ability to perceive emotion, integrate emotion to facilitate thought, understand emotions and to regulate emotions to promote personal growth." The ability-based model views emotions as useful sources of information that help one to make sense of and navigate the social environment. The model proposes that individuals vary in their ability to process information of an emotional nature and in their ability to relate emotional processing to a wider cognition. This ability is seen to manifest itself in certain adaptive behaviours.

The model claims that EI includes four types of abilities:

(1) *Perceiving emotions*: The ability to detect and decipher emotions in faces, pictures, voices, and cultural artifacts—including the ability to identify one's own emotions. Perceiving emotions represents a basic aspect of emotional intelligence, as it makes all other processing of emotional information possible.

(2) *Using emotions*: The ability to harness emotions to facilitate various cognitive activities, such as thinking and problem solving. The emotionally intelligent person can capitalize fully upon his or her changing moods in order to best fit the task at hand.

(3) *Understanding emotions*: The ability to comprehend emotion language and to appreciate complicated relationships among emotions. For example, understanding emotions encompasses the ability to be sensitive to slight variations between emotions, and the ability to recognize and describe how emotions evolve over time.
(4) *Managing emotions*: The ability to regulate emotions in both ourselves and in others. Therefore, the emotionally intelligent person can harness emotions, even negative ones, and manage them to achieve intended goals.

The ability EI model has been criticized in the research for lacking face and predictive validity in the workplace.

Measurement of the Ability Model

The current measure of Mayer and Salovey's model of EI, the Mayer-Salovey-Caruso Emotional Intelligence Test is based on a series of emotion-based problem-solving items.

Consistent with the model's claim of EI as a type of intelligence, the test is modeled on ability-based IQ tests. By testing a person's abilities on each of the four branches of emotional intelligence, it generates scores for each of the branches as well as a total score. Central to the four-branch model is the idea that EI requires attunement to social norms.

Therefore, the MSCEIT is scored in a consensus fashion, with higher scores indicating higher overlap between an individual's answers and those provided by a worldwide sample of respondents. The MSCEIT can also be expert-scored, so that the amount of overlap is calculated between an individual's answers and those provided by a group of 21 emotion researchers. Although promoted as an ability test, the MSCEIT is most unlike standard IQ tests in that its items do not have objectively correct responses.

Among other problems, the consensus scoring criterion means that it is impossible to create items that only a minority of respondents can solve, because, by definition, responses are deemed emotionally "intelligent" only if the majority of the sample has endorsed them. This and other similar problems have led cognitive ability experts to question the definition of EI as a genuine intelligence.

In a study by Føllesdal, the MSCEIT test results of 111 business leaders were compared with how their employees described their leader. It was found that there were no correlations between a leader's test results and how he or she was rated by the employees, with regard to empathy, ability to motivate, and leader effectiveness.

Føllesdal also criticized the Canadian company Multi-Health Systems, which administers the MSCEIT test. The test contains 141 questions but it was found after publishing the test that 19 of these did not give the expected answers. This has led Multi-Health Systems to remove answers to these 19 questions before scoring, but without stating this officially.

Mixed Models

The model introduced by Daniel Goleman focuses on EI as a wide array of competencies and skills that drive leadership performance.

Goleman's model outlines four main EI constructs:

(1) *Self-awareness*: The ability to read one's emotions and recognize their impact while using gut feelings to guide decisions.
(2) *Self-management*: Involves controlling one's emotions and impulses and adapting to changing circumstances.
(3) *Social awareness*: The ability to sense, understand, and react to others' emotions while comprehending social networks.
(4) *Relationship management*: The ability to inspire, influence, and develop others while managing conflict.

Goleman includes a set of emotional competencies within each construct of EI. Emotional competencies are not innate talents, but rather learned capabilities that must be worked on and can be developed to achieve outstanding performance. Goleman posits that individuals are born with a general emotional intelligence that determines their potential for learning emotional competencies. Goleman's model of EI has been criticized in the research literature as mere "pop psychology".

Measurement of the Emotional Competencies (Goleman) Model

Two measurement tools are based on the Goleman model:

(1) The Emotional Competency Inventory which was created in 1999, and the Emotional and Social Competency Inventory which was created in 2007.
(2) The Emotional Intelligence Appraisal, which was created in 2001 and which can be taken as a self-report or 360-degree assessment.

Bar-On Model of Emotional-Social Intelligence

Bar-On defines emotional intelligence as being concerned with effectively understanding oneself and others, relating well to people, and adapting to and coping with the immediate surroundings to be more successful in dealing with environmental demands. Bar-On posits that EI develops over time and that it can be improved through training, programming, and therapy. Bar-On hypothesizes that those individuals with higher than average EQs are in general more successful in meeting environmental demands and pressures. He also notes that a deficiency in EI can mean a lack of success and the existence of emotional problems. Problems in coping with one's environment are thought, by Bar-On, to be especially common among those individuals lacking in the subscales of reality testing, problem solving, stress tolerance, and impulse control. In general, Bar-On considers emotional intelligence and cognitive intelligence to contribute equally to a person's general intelligence, which then offers an indication of one's potential to succeed in life.

Measurement of the ESI Model

The Bar-On Emotional Quotient Inventory is a self-report measure of EI developed as a measure of emotionally and socially competent behaviour that provides an estimate of one's emotional and social intelligence. The EQ-i is not meant to measure personality traits or cognitive capacity, but rather the mental ability to be successful in dealing with environmental demands and pressures. One hundred and thirty three items are used to obtain a Total EQ and to produce five composite scale scores, corresponding to the five main components of the Bar-On model. A limitation of this model is that it claims to measure some kind of ability through self-report items. The EQ-i has been found to be highly susceptible to faking.

Trait EI Model

Petrides and colleagues proposed a conceptual distinction between the ability based model and a trait based model of EI. Trait EI is "a constellation of emotional self-perceptions located at the lower levels of personality". In lay terms, trait EI refers to an individual's self-perceptions of their emotional abilities. This definition of EI encompasses behavioural dispositions and self perceived abilities and is measured by self report, as opposed to the ability based model which refers to actual abilities, which have proven highly resistant to scientific measurement. Trait EI should be investigated within a personality framework. An alternative label for the same construct is trait emotional self-efficacy.

The conceptualization of EI as a personality trait leads to a construct that lies outside the taxonomy of human cognitive ability. This is an important distinction in as much as it bears directly on the operationalization of the construct and the theories and hypotheses that are formulated about it.

Measurement of the Trait EI Model

There are many self-report measures of EI, including the EQ-i, the Swinburne University Emotional Intelligence Test and the Schutte EI model. None of these assess intelligence, abilities, or skills but rather, they are limited measures of trait emotional intelligence. One of the more comprehensive and widely researched measures of this construct is the Trait Emotional Intelligence Questionnaire which is an open-access measure that was specifically designed to measure the construct comprehensively and is currently available in many languages.

The TEIQue provides an operationalization for the model of Petrides and colleagues, that conceptualizes EI in terms of personality. The test encompasses 15 subscales organized under four factors: Well-Being, Self-Control, Emotionality, and Sociability. The psychometric properties of the TEIQue were investigated in a study on a French-speaking population, where it was reported that TEIQue scores were globally normally distributed and reliable.

The researchers also found TEIQue scores were unrelated to non-verbal reasoning which they interpreted as support for the personality trait view of EI. As expected, TEIQue scores were positively related to some of the Big Five personality traits as well as inversely related to others. A number of quantitative genetic studies have been carried out within the trait EI model, which have revealed significant genetic effects and heritabilities for all trait EI scores.

Two recent studies involving direct comparisons of multiple EI tests yielded very favourable results for the TEIQue Alexithymia and EI Alexithymia from the Greek words lexis and thumos is a term coined by Peter Sifneos in 1973 to describe people who appeared to have deficiencies in understanding, processing, or describing their emotions. Viewed as a spectrum between high and low EI, the alexithymia construct is strongly inversely related to EI, representing its lower range.

The individual's level of alexithymia can be measured with self-scored questionnaires such as the Toronto Alexithymia Scale or the Bermond-Vorst Alexithymia Questionnaire or by observer rated measures such as the Observer Alexithymia Scale.

CRITICISMS OF THE THEORETICAL FOUNDATION OF EI

EI cannot be Recognized as a Form of Intelligence

Goleman's early work has been criticized for assuming from the beginning that EI is a type of intelligence. Eysenck writes that Goleman's description of EI contains assumptions about intelligence in general, and that it even runs contrary to what researchers have come to expect when studying types of intelligence:

- "[Goleman] exemplifies more clearly than most the fundamental absurdity of the tendency to class almost any type of behaviour as an 'intelligence'... If these five 'abilities' define 'emotional intelligence', we would expect some evidence that they are highly correlated; Goleman admits that they might be quite uncorrelated, and in any case if we cannot measure them, how do we know they are related? So the whole theory is built on quicksand: there is no sound scientific basis."

Similarly, Locke claims that the concept of EI is in itself a misinterpretation of the intelligence construct, and he offers an alternative interpretation: it is not another form or type of intelligence, but intelligence—the ability to grasp abstractions—applied to a particular life domain: emotions. He suggests the concept should be re-labeled and referred to as a skill. The essence of this criticism is that scientific enquiry depends on valid and consistent construct utilization, and that before the introduction of the term EI, psychologists had established theoretical distinctions between factors such as abilities and achievements, skills and habits, attitudes and values, and personality traits and emotional states. Thus, some scholars believe that the term EI merges and conflates such accepted concepts and definitions.

EI has little Predictive Value

Landy claimed that the few incremental validity studies conducted on EI have shown that it adds little or nothing to the explanation or prediction of some common outcomes.

Landy suggested that the reason why some studies have found a small increase in predictive validity is a methodological fallacy, namely, that alternative explanations have not been completely considered:

- "EI is compared and contrasted with a measure of abstract intelligence but not with a personality measure, or with a personality measure but not with a measure of academic intelligence."

Similarly, other researchers have raised concerns about the extent to which self-report EI measures correlate with established personality dimensions. Generally, self-report EI measures and personality measures have been said to converge because they both purport to measure personality traits. Specifically, there appear to be two dimensions of the Big Five that stand out as most related to self-report EI—neuroticism and extroversion.

In particular, neuroticism has been said to relate to negative emotionality and anxiety. Intuitively, individuals scoring high on neuroticism are likely to score low on self-report EI measures. The interpretations of the correlations between EI questionnaires and personality have been varied. The prominent view in the scientific literature is the Trait EI view, which re-interprets EI as a collection of personality traits.

CRITICISMS OF MEASUREMENT ISSUES

Ability EI Measures Measure Conformity, Not Ability

One criticism of the works of Mayer and Salovey comes from a study by Roberts, which suggests that the EI, as measured by the MSCEIT, may only be measuring conformity. This argument is rooted in the MSCEIT's use of consensus-based assessment, and in the fact that scores on the MSCEIT are negatively distributed.

Ability EI Measures Measure Knowledge

Further criticism has been offered by Brody who claimed that unlike tests of cognitive ability, the MSCEIT "tests knowledge of emotions but not necessarily the ability to perform tasks that are related to the knowledge that is assessed". The main argument is that even though someone knows how he should behave in an emotionally laden situation, it doesn't necessarily follow that he could actually carry out the reported behaviour.

Self-Report Measures are Susceptible to Faking

More formally termed socially desirable responding, faking good is defined as a response pattern in which test-takers systematically represent themselves with an excessive positive bias. This bias has long been known to contaminate

responses on personality inventories, acting as a mediator of the relationships between self-report measures. It has been suggested that responding in a desirable way is a response set, which is a situational and temporary response pattern.

This is contrasted with a response style, which is a more long-term trait-like quality. Considering the contexts some self-report EI inventories are used in, the problems of response sets in high-stakes scenarios become clear. There are a few methods to prevent socially desirable responding on behaviour inventories. Some researchers believe it is necessary to warn test-takers not to fake good before taking a personality test. Some inventories use validity scales in order to determine the likelihood or consistency of the responses across all items.

Claims for the Predictive Power of EI are too Extreme

Landy distinguishes between the "commercial wing" and "the academic wing" of the EI movement, basing this distinction on the alleged predictive power of EI as seen by the two currents. Landy, the former makes expansive claims on the applied value of EI, while the latter is trying to warn users against these claims. As an example, Goleman asserts that "the most effective leaders are alike in one crucial way: they all have a high degree of what has come to be known as emotional intelligence....emotional intelligence is the sine qua non of leadership".

In contrast, Mayer cautions "the popular literature's implication—that highly emotionally intelligent people possess an unqualified advantage in life—appears overly enthusiastic at present and unsubstantiated by reasonable scientific standards." Landy further reinforces this argument by noting that the data upon which these claims are based are held in "proprietary databases", which means they are unavailable to independent researchers for reanalysis, replication, or verification. Thus, the credibility of the findings cannot be substantiated in a scientific way, unless those datasets are made public and available for independent analysis.

In an academic exchange, Antonakis and Ashkanasy/Dasborough mostly agreed that researchers testing whether EI matters for leadership have not done so using robust research designs; therefore, currently there is no strong evidence showing that EI predicts leadership outcomes when accounting for personality and IQ. Antonakis argued that EI might not be needed for leadership effectiveness. A recently-published meta-analysis seems to support the Antonakis position: In fact, Harms and Credé found that overall, EI measures correlated only r =.11 with measures of transformational leadership. Interestingly, ability-measures of EI fared worst; the WLEIS did a bit better and the Bar-On measure better still. However, the validity of these estimates does not include the effects of IQ or the big five personality, which correlate both with EI measures and leadership. In a subsequent document analysing the impact of EI on both job performance and leadership, Harms and Credé found that the meta-analytic validity estimates for EI dropped to zero when Big Five traits and IQ were controlled for.

EI, IQ and Job Performance

Research of EI and job performance show mixed results: a positive relation has been found in some of the studies, in others there was no relation or an inconsistent one. This led researchers Cote and Miners to offer a compensatory model between EI and IQ, that posits that the association between EI and job performance becomes more positive as cognitive intelligence decreases, an idea first proposed in the context of academic performance. The results of the former study supported the compensatory model: employees with low IQ get higher task performance and organizational citizenship behaviour directed at the organization, the higher their EI.

DEVELOPMENT OF CHILDREN IN PEER GROUP

A peer group is a social group consisting of people who are equal in such respects as age, education or social class. Peer groups are an informal primary group of people who share a similar or equal status and who are usually of roughly the same age, tended to travel around and interact within the social aggregate Members of a particular peer group often have similar interests and backgrounds, bonded by the premise of sameness. However, some peer groups are very diverse, crossing social divides such as socio-economic status, level of education, race, creed, culture, or religion.

DEVELOPMENTAL PSYCHOLOGY

Developmental psychologists, Lev Vygotsky, Jean Piaget, Erik Erikson, and Harry Stack Sullivan, have all argued that peer relationships provide a unique context for cognitive, social, and emotional development, with equality, reciprocity, cooperation, and intimacy, maturing and enhancing children's reasoning abilities and concern for others. Modern research echoes these sentiments, showing that social and emotional gains are indeed provided by peer interaction.

BONDING AND FUNCTIONS OF PEER GROUPS

- Serve as a source of info.
- Teaches gender roles.
- Serves as a practicing venue to adulthood.
- Teaches unity and collective behaviour

REGULATION OF EMOTION DEVELOPMENT IN CHILDREN

Regulation of Emotion is the term that describes individual differences in how people regulate their emotions through growth, specifically the ways we attempt to regulate our emotions, by denying, intensifying, weakening, curtailing,

masking, or completely hiding them. Emotion Regulation is also described as the process in which we modify our emotional reactions, the coping processes that increase or decrease the intensity of the moment.

There are three major stages in our lives: Childhood, Adolescence and Adulthood. During each of these phases our regulation of emotions drastically improves. Regulation of Emotions has been shown to be a good and a bad thing for individual growth; People who are good at it are seen as more emotionally intelligent, while those who struggle with it tend to be less social. Emotion regulation is essential to socialization and is dependent on the culture one lives in as well as the specific social context of the situation.

The process to which we regulate our emotions is very complex and involves four stages:

1. Internal feeling states
2. Emotion-related cognitions
3. Emotion-related physiological processes
4 Emotion-related behaviour.

Strong emotional reactions are not always desirable, may be inconsistent with social norms, or may cause physical or psychological suffering. Thus people attempt to inhibit undesirable or painful emotions and enhance desirable or pleasant emotions.

CHILDHOOD

When an individual is a child he is in most ways unable to regulate his emotions. This is why whenever a child needs or wants something they often cry or throw temper tantrums until they get it. As children get older the frequency and intensity of these outbursts decline. When children learn to talk it gives them a different way to regulate their emotions. The child can now talk about what is bothering him instead of only being able to communicate through expressions or actions. Being able to talk about emotional issues may also have a major impact on the relationship between child and parent. And as children mature they begin to argue instead of using physical violence, wait rather than wail, and contain their emotions instead of exploding into emotional rage. Something else that factors into this is the development of mobility, because along with walking comes the child's ability to satisfy some of his own desires without parental involvement. This acquired autonomy also lessens the child's need for an intense signaling system.

ADOLESCENCE

It has been shown that the neurological changes improve the regulation of emotion over the course of adolescence, particularly maturation of the frontal lobes. The frontal lobes are essential for controlling attention and inhibiting thoughts and behaviours. This leads to them being able to inhibit undesirable or painful emotions and enhance desirable or pleasant emotions. By learning this adolescents can attempt to suppress their emotions and attempt to reappraise

the situation. Suppression may decrease expression but it tends to increase arousal and it tends to impair memory. While reappraisal may be more difficult to do, it can decrease the subjective experience of the emotion the expression of the emotion, and it does so without impairing memory. Therefore, as adolescents grow in maturity they also learn how to regulate their emotions which has both positive and negative effects on their relationships with family and friends.

ADULTHOOD

Issues of emotional regulations affect us especially in our later live. When people get older their motivation increases to take out the emotional meaning in live, instead of expanding their emotional boundaries. Things such as social losses and health changes increase as we get older, however people have a tendency to increase their emotional regulation skills as they age. Which can lead to certain other emotional problems. As we progress into our older years our autonomic nervous system decreases, yet our emotional experiences do not change as we get older. Adults have several motivations for regulating emotions include hedonic motivation, conform to social roles, facilitate task or role performance, manage self-presentation and regulate the feelings of others.

EMOTIONAL EFFECTS DEVELOPMENT IN CHILDREN

Regulation of emotion is something that becomes a habit through out our lives. However it is something that is essential to our socialization. Emotional dysregulation is something that happens to individuals who cannot sway their emotions or change them to the social situation are often more likely to have emotional disorders.

The types of emotional disorders that come out of having greater intensity, greater lability, and less effective regulations were more liable to depression and problem behaviours. Impairment of emotion regulation among women who were exposed to interpersonal violence and suffer from related posttraumatic stress disorder has been shown to adversely affect their caregiving behaviour with their young children and, in turn, their young children's development of emotion regulation.

Individuals who habitually suppress negative emotions tend to find short-term relief, but suffer longer term health consequences, thought suppression and rumination. Not all emotional regulation is bad however, the ability to regulate one's emotions could determine the amount or quality of ones relationships and social interactions. This idea suggests that people who are able to regulate their emotions should have a higher level of emotional intelligence.

Therefore, they develop a deeper understanding of how other people might feel in different situations, which most likely would result in well-developed interpersonal and intrapersonal skills. This means that these individuals would be considered better friends than individuals with a lower understanding of

emotion regulation. Emotion regulation occurs at different levels in individuals and situations. A higher amount of emotional intelligence allows for an effective regulation of emotions. Individuals who reappraise negative emotions tend to share their emotions with others which may cause short-term discomfort. However reappraisal tends to facilitate long-term emotional adjustment and physical and psychological health.

EMOTION SUPPRESSION

Emotion regulation would not help people relief their negative emotions, such as hatred, angry and sadness, instead, Excessive emotion regulation would bring negative effects to personal mental health, which is so called emotion suppression. People who frequently suppress their emotion may be easy to get tired, depressed, hysteria and lose their temper. Those negative mental conditions would cause people doing impropriate interaction. For example, excessive eating is a common behaviour people would do under a negative mental condition.

Emotion suppression not only brings people depressed feeling, but also cause physical diseases. Those diseases always have close relationship with the behaviour caused by the negative mental condition. Obesity, is a typical example that caused by excessive eating. People with negative living attitude have a much bigger probability of getting obesity, because they try to get rid of their depression. Raised blood, is another health problem always found in bodies of people who easily get angry. College students and officers, who work in highly required companies, are very likely to have emotion suppression than other groups.

The reason is they both live in a competitive environment, suffered from the living pressure. The busy schedule, fierce competition and complicated social relationship make their lives full of nervous and anxiety. If they cannot find a proper way to release those negative emotions, they may fail to meet the challenges in college or in career life.

FAMILY AND CHILD DEVELOPMENT

In human context, a family is a group of people affiliated by consanguinity, affinity, or co-residence. In most societies it is the principal institution for the socialization of children. Extended from the human “family unit” by affinity, economy, culture, tradition, honour, and friendship are concepts of family that are metaphorical, or that grow increasingly inclusive extending to nationhood and humanism. There are also concepts of family that break with tradition within particular societies, or those that are transplanted via migration to flourish or else cease within their new societies. As a unit of socialisation and a basic institution key to the structure of society, the family is the object of analysis for sociologists of the family. Genealogy is a field which aims to trace family lineages through history. In science, the term “family” has come to be used as a means to classify groups of objects as being closely and exclusively related. In the study of animals it has been found that many species form groups that have similarities to human “family”—often called “packs”.

PROCREATION

One of the primary functions of the family is to produce and reproduce persons, biologically and socially. Thus, one's experience of one's family shifts over time. From the perspective of children, the family is a family of orientation: the family serves to locate children socially and plays a major role in their enculturation and socialization. From the point of view of the parent, the family is a family of procreation, the goal of which is to produce and enculturate and socialize children. However, producing children is not the only function of the family; in societies with a sexual division of labour, marriage, and the resulting relationship between two people, it is necessary for the formation of an economically productive household. A conjugal family includes only the husband, the wife, and unmarried children who are not of age. The most common form of this family is regularly referred to in sociology as a nuclear family. A consanguineal family consists of a parent and his or her children, and other people. Although the concept of consanguinity originally referred to relations by "blood", Cultural anthropologists have argued that one must understand the idea of "blood" metaphorically and that many societies understand family through other concepts rather than through genetic distance. A matrilocal family consists of a mother and her children. Generally, these children are her biological offspring, although adoption of children is a practice in nearly every society. This kind of family is common where women have the resources to rear their children by themselves, or where men are more mobile than women.

KINSHIP TERMINOLOGY

Archaeologist Lewis Henry Morgan performed the first survey of kinship terminologies in use around the world. Although much of his work is now considered dated, he argued that kinship terminologies reflect different sets of distinctions. For example, most kinship terminologies distinguish between sexes and between generations. Moreover, he argued, kinship terminologies distinguish between relatives by blood and marriage. Morgan made a distinction between kinship systems that use classificatory terminology and those that use descriptive terminology. Morgan's distinction is widely misunderstood, even by contemporary anthropologists. Classificatory systems are generally and erroneously understood to be those that "class together" with a single term relatives who actually do not have the same type of relationship to ego. What Morgan's terminology actually differentiates are those kinship systems that do not distinguish lineal and collateral relationships and those kinship systems that do. Morgan, a lawyer, came to make this distinction in an effort to understand Seneca inheritance practices. A Seneca man's effects were inherited by his sisters' children rather than by his own children.

Morgan identified six basic patterns of kinship terminologies:

- *Hawaiian*: Only distinguishes relatives based upon sex and generation.
- *Arabic*: No two relatives share the same term.

- *Eskimo*: In addition to distinguishing relatives based upon sex and generation, also distinguishes between lineal relatives and collateral relatives.
- *Iroquois*: In addition to sex and generation, also distinguishes between siblings of opposite sexes in the parental generation.
- *Crow*: A matrilineal system with some features of an Iroquois system, but with a "skewing" feature in which generation is "frozen" for some relatives.
- *Omaha*: Like a Crow system but patrilineal.

Western Kinship

Most Western societies employ Eskimo kinship terminology. This kinship terminology commonly occurs in societies based on conjugal families, where nuclear families have a degree of relative mobility.

Members of the nuclear use descriptive kinship terms:

- *Mother*: A female parent
- *Father*: A male parent
- *Son*: A male child of the parent
- *Daughter*: A female child of the parent
- *Brother*: A male child of the same parent
- *Sister*: A female child of the same parent
- *Grandfather*: Father of a father or mother
- *Grandmother*: Mother of a mother or father
- *Cousins*: Two people that share the same Grandparent

Such systems generally assume that the mother's husband has also served as the biological father. In some families, a woman may have children with more than one man or a man may have children with more than one woman. The system refers to a child who shares only one parent with another child as a "half-brother" or "half-sister".

For children who do not share biological or adoptive parents in common, English-speakers use the term "stepbrother" or "stepsister" to refer to their new relationship with each other when one of their biological parents marries one of the other child's biological parents. Any person who marries the parent of that child becomes the "stepparent" of the child, either the "stepmother" or "stepfather".

The same terms generally apply to children adopted into a family as to children born into the family. Typically, societies with conjugal families also favour neo-local residence; thus upon marriage a person separates from the nuclear family of their childhood and forms a new nuclear family. However, in the western society the single parent family has been growing more accepted and has begun to truly make an impact on culture. The majority of single parent families are more commonly single mother families than single father. These families face many difficult issues besides the fact that they have to rear their children on their own, but also have to deal with issues related to low income.

Many single parents struggle with low incomes and must cope with other issues, including rent, child care, and other necessities required in maintaining a healthy and safe home. Members of the nuclear families of members of one's own nuclear family may class as lineal or as collateral.

Kin who regard them as lineal refer to them in terms that build on the terms used within the nuclear family:

- Grandparent
  - Grandfather: A parent's father
  - Grandmother: A parent's mother
- *Grandson*: A child's son
- *Granddaughter*: A child's daughter

For collateral relatives, more classificatory terms come into play, terms that do not build on the terms used within the nuclear family:

- *Uncle*: Father's brother, mother's brother, father's/mother's sister's husband
- *Aunt*: Father's sister, mother's sister, father's/mother's brother's wife\
- *Nephew*: Sister's son, brother's son, wife's brother's son, wife's sister's son, husband's brother's son, husband's sister's son
- *Niece*: Sister's daughter, brother's daughter, wife's brother's daughter, wife's sister's daughter, husband's brother's daughter, husband's sister's daughter

When additional generations intervene, the prefixes "great-" or "grand-" modifies these terms. Also, as with grandparents and grandchildren, as more generations intervene the prefix becomes "great grand-", adding an additional "great" for each additional generation. Most collateral relatives have never had membership of the nuclear family of the members of one's own nuclear family.

- *Cousin*: *The most classificatory term; the children of aunts or uncles*. One can further distinguish cousins by degrees of collaterality and by generation. Two persons of the same generation who share a grandparent count as "first cousins"; if they share a great-grandparent they count as "second cousins" and so on. If two persons share an ancestor, one as a grandchild and the other as a great-grandchild of that individual, then the two descendants class as "first cousins once removed"; if they shared ancestor figures as the grandparent of one individual and the great-great-grandparent of the other, the individuals class as "first cousins twice removed" and so on. Similarly, if they shared ancestor figures as the great-grandparent of one person and the great-great-grandparent of the other, the individuals class as "second cousins once removed". Hence one can refer to a "third cousin once removed upwards".

Cousins of an older generation, although technically first cousins once removed, are often classified with "aunts" and "uncles". Similarly, a person may refer to close friends of one's parents as "aunt" or "uncle", or may refer to close friends as "brother" or "sister", using the practice of fictive kinship.

English-speakers mark relationships by marriage with the tag "-in-law". The mother and father of one's spouse become one's mother-in-law and father-in-law; the female spouse of one's child becomes one's daughter-in-law and the male spouse of one's child becomes one's son-in-law. The term "sister-in-law" refers to three essentially different relationships, either the wife of one's sibling, or the sister of one's spouse, or, in some uses, the wife of one's spouse's sibling. "Brother-in-law" expresses a similar ambiguity. No special terms exist for the rest of one's spouse's family. The terms "half-brother" and "half-sister" indicate siblings who share only one biological or adoptive parent.

ECONOMIC FUNCTIONS

Anthropologists have often supposed that the family in a traditional society forms the primary economic unit. This economic role has gradually diminished in modern times, and in societies like the United States it has become much smaller, except in certain sectors such as agriculture and in a few upper class families. In China the family as an economic unit still plays a strong role in the countryside. However, the relations between the economic role of the family, its socio-economic mode of production and cultural values remain highly complex.

EARLY EMOTIONAL DEVELOPMENT

In his journal of the early years of his daughter's life, reporter Bob Greene depicted the important roles that emotions ply in children's development. He noted the impact that his daughter' first smile had on him, washing away the worry and fatigue of early parenting. He also revealed the belief that emotions make us human and contribute significantly to the meaning of relationships. His daughter's smile was interpreted to mean that she was gaining awareness of her environment.

Moreover, her smile meant that she was no longer merely a creature who needed feeding and cleaning, but that she was telling him that "she's with us"—becoming an active contributor to family relationships. Although the diary entry points out the importance of emotions in everyday life, a national survey released by the organization Zero to Three revealed that parents have relatively little knowledge and information about their children's emotional development. Although parents believed that what they did as parents had the greatest influence on their children's emotional development, they also said that they had the least information in this area. This lack of information about children's emotional development may stem in part from emotions being internal processes that are difficult to study. Because of this, for many decades researchers ignored the study of emotions. More recently, the study of emotions and emotional development has seen a resurgence of interest as developmental scientists agree that the study of emotions is central to an understanding of child development.

Additionally, more sophisticated methods have been developed to study emotions. Historically, emotions have proved remarkably difficult to define.

This might seem surprising given that emotions are such a common human phenomenon. Emotions have been considered to be synonymous with certain patterns of facial expression, physiological reactions, muscular feedback, or brain activity. None of these definitions has proved adequate, and emotions are now considered to be closely linked with what a person is trying to do: They reflect a person's attempt or readiness to establish, maintain, or change the relation between the person and his or her environment. For example, a child who overcomes obstacles to a goal is likely to experience happiness. In contrast, a child who has a goal blocked is likely to experience anger.

A child who gives up a goal is likely to experience sadness. These are not the only ways that emotions can be generated, but this functional definition of emotion helps us understand that emotions organize and coordinate both intrapsychic and interpersonal processes.

SELF-CONSCIOUS EMOTIONS

Around eighteen months of age, toddlers develop a more sophisticated sense of self that is marked by self-recognition and the emergence of self-conscious emotions, such as shame, pride, and embarrassment. Michael Lewis developed a poignant method to study this development. A toddler is placed in front of a mirror and then the parent wipes some rouge on the child's nose before moving the child back to the mirror. Although children under eighteen months are unlikely to show signs of embarrassment at the rouge on their nose, children between eighteen and twenty-four months do. Self-recognition makes possible a more sophisticated understanding of the self and brings about new levels of emotional development. During childhood, children's emotionality becomes more advanced. Their emotionality is focused less on themselves, and their advanced cognitive skills allow for more sophisticated responses when emotions are experienced.

VICARIOUS EMOTIONAL RESPONDING

As noted earlier, emotions are viewed as important determinants and consequences of interactions with others. Thus, emotions can be caused by observing and recognizing what is happening to others. For example, when five-year-old Rachel became sad when her infant sister cried because she was sick, Rachel's feeling of sadness was the result of the condition of her sister rather than what was happening directly to herself.

This type of emotional responding is known as vicarious emotional responding—responses that occur because of exposure to someone else's emotional state. Janet Strayer and Nancy Eisenberg identified different types of vicarious emotional responses.

For example, empathy is an emotional state that matches another person's emotional state—feeling bad because someone else is feeling bad. In contrast, sympathy refers to feeling sorry or concerned for others because of their emotional states or conditions.

When Rachel felt sad when her sister cried, she was displaying sympathy. Sympathy frequently, but not always, results from empathy. Martin Hoffman found that empathy appears fairly early and increases across childhood. Although infants cannot distinguish their own feelings from those of others, they occasionally respond to others' emotions. For example, infants often cry when they hear another infant crying. During early childhood, children tend to act and think in ways that focus on their own needs and desires.

They are likely to respond to another's emotional distress in ways that they themselves find comforting. When three-year old Ben saw his mother crying, he became sad and brought her his favourite stuffed animal to cheer her up. In this situation, Ben projected his own needs onto his mother. As children develop the capacity to take the perspective of others, they increasingly become aware of other people's feelings. Until later childhood, however, children's empathic and sympathetic responses are limited to the feelings of familiar persons in familiar situations. Preschoolers, for example, are likely to be emotionally responsive to everyday events that cause distress to familiar people or animals. During later childhood, the scope of children's concerns generalizes to conditions of unknown others who are less fortunate than themselves.

CHILDHOOD ANGER

Anger is a common emotion at any developmental period. The causes of anger, however, change across childhood. For instance, at age five months, Carlos may become angry because he is hungry, with the anger occurring out of Carlos's basic needs not being met. At five years of age, however, Carlos may become angry because his sister took away his toy, with this anger resulting from Carlos's lack of control over the situation. Most of young children's anger occurs as a result of conflicts over materials, resources, and space. With age, anger is more likely to result from how one is treated. Thus, the causes of anger become increasingly social. How children express anger also changes with age. For instance, when his sister took his toy away when he was age three, Carlos expressed his anger in the form of a tantrum. His mother, however, helped him find better ways to express his feelings, and by age six Carlos is able to tell his sister he is angry and request that she give him back his toy. As a result, the temper tantrums of the "terrible twos and threes" diminish as children find better ways to express their anger and make adjustments.

LANGUAGE AND EMOTION

Before the age of two or three, children's expression of emotion occurs non-verbally, through facial, vocal, and gestural expressions. Once children develop the ability to use their words to express how they are feeling, they become better able to express, regulate, or explain their own emotions. The increased understanding that comes from the use of emotion language promotes, maintains, and regulates social interactions. Emotion language has been found to emerge around twenty months and increases rapidly during the third year.

By two years of age, children refer to a range of feeling states in themselves and others. Lois Bloom and her colleagues found that once children acquire the words for naming the emotions they are feeling, they begin to integrate these into their conversations. Because emotions are relevant and important, young children's talk often focuses on their emotional experiences.

Parents' use of emotion language has important consequences for children's emotional development. For example, when Kaneesha's mother saw her crying and asked her why she was sad, her mother had defined Kaneesha's emotional state. Repeated exposure to these labels can lead to differences in how children experience and express emotions. Parents, for instance, are more likely to talk about sadness and less likely to discuss anger with their daughters than their sons. After repeated exposure to these emotional labels, it is not be surprising that boys may be more likely to experience or express anger than girls, whereas girls are more likely to experience or express sadness. This pattern is consistent with common gender-emotion stereotypes in many Western countries.

UNDERSTANDING EMOTIONS

As cognitive development becomes more advanced, young children become increasingly aware of their own and others' emotions. As a result, children begin to develop a more complex understanding of the causes and consequences of emotions, how to control emotions, and the nature of emotional experiences. For example, although infants as young as one year of age can express ambivalence, a child's understanding of mixed emotions does not emerge until later in childhood. The work of Susan Harter and her colleagues has shown that children are first able to understand that people can experience two different, consecutive emotions at age six. Soon thereafter, children are capable of understanding that two related emotions of can co-occur. By age ten, they are able to understand that mixed and unrelated emotions can occur simultaneously. This type of enhanced understanding gives children a better grasp of how emotions are tied to their social lives.

EMOTION AND AUTONOMY/IDENTIFY FORMATION

During this transition period, adolescents confront the challenge of developing autonomy—the capacity to think, feel, and act on their own. The quest for autonomy not only involves separation from parents and the development of self-reliance but also raises issues related to emotionality. One aspect of autonomy involves the need for the adolescent to realise that her emotions are independent from those of her parents, a process referred to as "emotional autonomy."

During this period, adolescents may feel pulled between the need for close emotional ties with their parents and the need to develop their own emotional responses. For parents, the difficulty arises as to how to encourage emotional autonomy and independence while avoiding tension and conflict. If parents and teens can compromise and adapt during this period of change, it can be a positive time of exploration for both.

ANXIETY AND DEPRESSION

When emotional development becomes distorted, outcomes for children and teens can be put at risk. If not effectively dealt with, unresolved issues of emotional development can lead to more serious emotional disorders. At least one in five children and adolescents displays symptoms of emotional disorders, with anxiety and depression as the most common types.

Anxiety disorders include, among others, panic disorder, obsessive-compulsive disorder, and phobias.

Although most children encounter feelings of anxiety or fear, these usually do not become debilitating. Anxiety disorders generally have an onset early in childhood and persist into adulthood. Additionally, anxiety disorders may become exacerbated over time and sometimes lead to other disorders, such as depression.

Depression is generally characterized by hopelessness, low self-esteem, and sadness, and not only affects children's emotionality but also their physical well-being.

Beginning in the 1970s, the age of onset of depression started decreasing, and by the early twenty-first century, depression commonly begins during adolescence. Estimates of clinical depression range from 4 per cent to 12 per cent of adolescents, with older adolescents having higher rates. Before puberty, rates of depression are low and occur equally in boys and girls.

After puberty, girls report increased depression, with rates about twice those of boys. Evidence is growing that problems with hormonal activity in the brain and nervous system often result in depression. The onset of puberty and associated hormonal changes may influence adolescents' emotional states. Also, some teens seem more prone to depression because they have cognitive styles in which they define their circumstances in terms of hopelessness and self-blame.

THE FUNCTION OF EMOTIONS

What good are emotions? Why do we have emotions? Until we begin to understand the functions of emotions, why we have them, what their effect is on others, we cannot expect ourselves to change them.

EMOTIONS COMMUNICATE TO AND INFLUENCE OTHERS

We communicate our emotions to other with verbal and non-verbal language. Some expressions of emotion have an automatic effect on others. When there is a difference in what a person communicates non-verbally *versus* verbally, the other person will usually respond to the non-verbal expression. For many years I showed little or no expression on my face while feeling very intense feelings, and I got little response from others.

Other people have talked about showing very strong emotions on their face, while expressing less strong emotions with their voice. People responded to the facial expressions. DBT teaches that one of the main problems experienced by

people with Borderline Personality Disorder is that their non-verbal emotional expressions do not match their inside feelings. So we are often misread. People misunderstand what we are feeling.

Exercises:

- Can you give some examples of situations where your expressions of emotion were misread?
- Can you also think of some times when you misread the emotions of someone else? Maybe their face looked one way, while they meant to express something else.
- Give some examples of how your emotions have influenced others.
- Give some examples of how others' emotions have influenced you.

I will give an example of my own. When I walked into my class after hearing that my father was critically ill, I felt very sad and my face looked sad. People asked me what was wrong, and when I told them, they offered sympathy and comfort. One of the people I teach with is often very depressed, and it shows in her body posture and facial expression. I try to reassure her and encourage her. Sometimes this strategy has backfired, and my expression of emotions gave me something I didn't want. A friend suggested an outing, and I got very excited and kept telling her how happy I was to go. In the end, she did not go. I was very disappointed. After thinking for awhile, I realise it was not my fault that she decided not to go. I can't make things like that happen. I can only be responsible for myself. What does expression of these emotions do for you? How do they influence others? What do they communicate?

- Fear
- Anger
- Sadness
- Disappointment
- Joy
- Guilt and shame
- Surprise
- Love

EMOTIONS ORGANIZE AND MOTIVATE ACTION

Emotions prepare for and motivate action. There is an action urge connected to specific emotions that is hard-wired. "Hard-wired" means it is an automatic, built-in part of our behaviour. For example, if you see your two-year old child in the middle of the street and a car coming, you will feel an emotion, fear, and this emotion will prompt you to run to save your child. You don't stop to think about it. You just do it. Your emotion has motivated your behaviour without you having to take the time to think. Emotions can also help us overcome obstacles in our environment. This anxiety, though it's uncomfortable, helps to motivate you to study so you will do well on the test. Anger may motivate and help people who are protesting injustices. The anger may override the fear they might feel in a demonstration or protest. Guilt may keep someone who is dieting stick to her diet.

Exercises

See if you can come up with a couple of examples where your emotion prompted you to take action before you thought about it. See if you can come up with a situation where an emotion helps you overcome an obstacle in your environment, where it makes it easier for you to get something done, for example. It may not be a pleasant emotion but it does help you get the job done. During the week, notice when your emotions motivate your action, save you time, or help you get something done.

EMOTIONS CAN BE SELF-VALIDATING

Emotions can give us information about a situation or event. They can signal to us that something is going on. Sometimes signals about a situation will be picked up unconsciously, and then we may have an emotional reaction, but not be sure what set off the reaction. Feeling "something doesn't feel right about this" or "I had a feeling something was going to happen and it did" are some of the signals we might get. Think of some times when your feel for a situation turned out to be right. Is there some time when you felt anxiety or apprehension that turned out to be justified? Or that you had a good feeling about someone that turned out to be right? When dealing with our feelings this way is carried to extremes, though, we may think of the emotion as fact. "I love him, so he's a good person." If I feel stupid, I am stupid." While our emotions are always valid, it doesn't necessarily make them facts. This is difficult for people with Borderline Personality Disorder and others, because one of our biggest issues is that we have been in invalidating environments—so much that we don't trust our emotions.

If our emotions are minimized or invalidated, it's hard to get our needs taken seriously. So we may increase the intensity of our emotions in order to get our needs met. And then if we decrease the intensity of our emotions, we may find again that we are not taken seriously. Think of some times when emotions are self-validating.

For example: I am going to a party, but I feel uneasy about it, as if something is going to happen. At the party, a friend and I have an argument and I leave. My feeling about something happening is right. I am at work, and there seems to be a lot of tension. I sense that something is up.

At lunch, my coworkers hold a surprise birthday party for me. Again my emotion is validated. I am home alone and feeling very lonely. I am getting more and more anxious and angry. I call friends and try to get someone to come and stay with me.

No one will come. So this intense negative emotion also validates my feeling that I am lonely and no one cares. Think of some examples of your own. Remember that we are not evaluating or judging anyone's feelings or behaviour. We are just trying to look at how emotions function.

Exercises

Fill out an emotion diary for several days. For each day choose your strongest emotion, or the one that lasted the longest, or was the most difficult or painful. Describe the prompting event, the event that caused or triggered the emotion.

And describe the emotion's function:

- To communicate to others
- To motivate action
- To communicate to yourself

PRODUCTION OF EMOTION

Emotion Production is a Serbian media company. Based in the Belgrade municipality of Stari Grad and registered as a limited liability company, Emotion produces television content. The company's ownership is divided between two parent entities: IMGS and Multikom Group. IMGS is owned by Goran Stamenkoviæ while Multikom Group is 50 per cent owned by influential Serbian businessman and politician Dragan Đilas, currently the mayor of Belgrade. In its portfolio it has some of the highest rated reality programmes that air throughout the Balkans such as: Leteæi start, 48 sati svadba, Veliki brat, Sve za ljubav, Veliki brat VIP, Operacija trijumf, Uzmi ili ostavi, Menjam •enu, 1 protiv 100, Ruski rulet, *etc*. Additionally, the company is responsible for putting various individual personlities on the map such as Milan Kaliniæ, Ana Mihajlovski, Maca Marinkoviæ, *etc.* who have become household names throughout the Balkan region as a result of their appearances in Emotion programmes.

5

The Psychological Development of the Child

The child can only live his childhood; to understand childhood is the province of the adult. But whose vantage point is to prevail, the adult's or the child? The adult recognises differences between himself and a child. But these differences are usually reduced to the quantitative, to a matter of mere degree. When he compare himself with a child, an adult sees the child as relatively or eve totally incapable of actions or tasks he himself can accomplish. These inabilities can shed light on differences in mental organisation between the child and the adult.

An adult demonstrates his egocentrism through his conviction that all mental development must naturally and inevitably lead to modes of thought and feeling exactly like his own and bearing the particular stamp of the time and place in which he lives. If he does somehow manage to achieve the insight that a child's thoughts an feelings do follow paths quite different from his own, it does not occur to him to consider this as anything more than an oddity. Since this oddity is constant and seems as necessary and normal as his own ideological system, he feels an attempt should certainly be made to understand its mechanism. But he first finds he must understand the nature of this oddity. Is it true that the mentality of the child and that of the adult follow different paths and conform to different principles; that the transition from one to the other involves a total transformation; that the principles the adult believes govern his own thought constitute an immutable and inflexible norm in the light of which a child's thought may be dismissed as outside the domain of reason; and that the intellectual inferences of a child bear no relation whatever to an adult's? Could

adult intelligence have remained so rich and productive if it really had been forced to abandon the sources from which the child's intelligence springs?

After all, it is the world of adults that the environment imposes on the child, so that at each stage the structures and contents of the mind display a certain uniformity. But it does not follow that the adult need take into account only those aspects of a child's thought that the adult imposes. Even the manner in which a child assimilates material may bear absolutely no resemblance to the way an adult utilises it. If the adult surpasses the child, the child in his way surpasses the adult.

The child's frequent inability to use a previously acquired skill has been pointed out by several authors. The explanations given by W. Stern and, later, by Piaget are more or less similar. A particular mental operation extends over different levels, and during the course of mental development the passage from one level to the next always occurs in the same sequence. The circumstances under which an operation must be carried out present obstacles of widely varying difficulty. If the difficulty increases, the operation may then be performed at a lower level. Thus, the same person, at the same age, can perform the same operation at a variety of levels. Piaget, by way of explanation, uses concepts such as causality, which the child seems to know how to apply objectively to everyday activity, though in his explanations at the "verbal level" he regresses to much more subjective forms of causality, such as voluntaristic or affective ones.

Although a child's mental development presupposes a kind of network in which internal and external factors are intertwined, it is possible to unravel their distinct, respective roles. The internal factors are presumably responsible for the strict sequence of developmental phases, the chief determinant of which is the growth of the organs. Substances of relatively simple chemical composition seem to perform the decisive roles of stimulating and regulating the differentiation of organs. This differentiation sets the stage for the emergence of the future organism's structures from the embryo (in which they are latent, though invisible). These substances are the hormones, secreted by the endocrine glands. Each hormone is endowed with a strict specificity, although hormones are often mutually dependent. They control the appearance and development of different kinds of tissues, and the sequence in which they are activated is precisely attuned to the needs of growth. In addition to their morphogenic role, they also exercise an equally specific elective action on physiological and mental functions. Von Monakow regarded them as the material substrate of the instincts.

The problem of the relations between functional maturation and functional learning now arises. Obviously, to systematically impute every development to the maturation of the corresponding organs would be only to repeat, in modified form, the old explanations in which every effect was merely referred to an entity modeled after it. But to contend a priori, as Piaget does in his book La naissance de l'intelligence chez l'enf ant (1936), that during the course of mental development new activities emerge that must necessarily have their source in

the functional activation of matured organic structure, is to mistake a simple description, however rich, penetrating, and ingenious, for the deep-seated mechanisms of mental life.

PLAY

It has been said that play is the activity uniquely appropriate to the child; and as a child often sees deeply engrossed in his play, certain authors (W. Stern, for example) have felt obliged to attribute to children what they call serious games. According to Charlotte Bühler, play is a stage in the total development of the child that disappears of its own accord at succeeding periods. Indeed, play is mingled in all of the child's activity so long as that activity remains spontaneous and untouched by objects introduced for educative purposes. At the beginning, games are purely functional; then come games of make-believe and games of practical skill.

In his play the child repeats the impressions of events he has just experienced. He reproduces; he imitates. For the very young child, imitation is the only rule of the game so long as he is unable to go beyond the concrete, living model to abstract instructions. Initially, children's comprehension is no more than the assimilation of others to themselves and themselves to others, and in this process imitation plays an important role. Imitation, as the instrument of this fusion, demonstrates a contradiction that explains certain contrasts on which play thrives. Imitation is not random; the child is very selective. He imitates people who enjoy the most prestige in his own eyes, those who evoke his positive, affectionate feelings. At the same time, the child "borrows" or becomes these persons. Always totally immersed in what he is doing, he accordingly imagines and wishes himself to be them. But soon his latent awareness of this borrowing arouses in him feelings of hostility against the person serving as a model, whom he cannot eliminate. He finally comes to resent this person whose absolutely incontestable and frustrating superiority he often continues to experience.

Between the ages of six and seven it becomes possible to disengage the child from his spontaneous activity and to divert his interest to others. Until comparatively recently, productive labour, including factory work, began at this age. Indeed, in some colonial countries this is still the case. In France, the child enters school at this age and tackles the demands of formal education—which include self-discipline.

Some Aspects Of Imitation

Two contradictory elements are basic to all imitation. One is a plastic union in which the external impression is taken in and then discharged again gently from its strange receptacle, leaving only those elements that are able to be incorporated into existing mental structures. The result is a new, albeit rudimentary, capacity. The second and active aspect, equally important to the first, is execution and completion. The ensuing act requires tentative, and sometimes obvious, gropings. Separation and recombination of suitable elements

are operations whose often long-enduring imperfections indicate the difficulties these processes involve. In particular, the rediscovered gestures and movements may not yet be in the right order. Taken by themselves they by no means reproduce the model; they must conform to the requirements of an internal prototype. However, as they become more explicit, they make possible and even encourage objective comparisons with the external model. Alternation between these two contrary but complementary phases of intuitive assimilation and controlled execution may then assume a more or less rapid cadence until the imitation appears adequate.

CHILDHOOD PSYCHOLOGY

Childhood has become such a distinct period that it is hard to imagine that it was not always thought of in that way. However, in medieval times, laws generally did not distinguish between child and adult offenses. After analysing samples of art along with available publications, historian Philippe Aries concluded that European societies did not accord any special status to children prior to 1600. In paintings, children were often dressed in smaller versions of adult-like clothing. Some believe that children were actually treated as miniature adults with no special status in medieval Europe. Aries interpretation has been criticized, however. He primarily sampled aristocratic, idealized subjects, which led to the overdrawn conclusion that children were treated as miniature adults and not accorded any special status.

In medieval times, children did often work, and their emotional bond with parents may not have been as strong as it is for many children today. However, in medieval times, childhood probably was recognized as a distinct phase of life more than Aries believed. Also, we know that in ancient Egypt, Greece, and Rome rich conceptions of children's development were held. Through history, philosophers have speculated at length about the nature of children and how they should be reared. Three such philosophical views are original sin, tabula rasa, and innate goodness. In the original sin view, especially advocated during the Middle Ages, children were perceived as basically bad, being born into the world as evil beings.

The goal of child rearing was to provide salvation, to remove sin from the child's life. Towards the end of the seventeenth century, the tabula rasa view was proposed by English philosopher John Lock. He argued that children are not innately bad but, instead, are like a "blank tablet," a tabula rasa. Locke believed that childhood experiences are important in determining adult characteristics. He advised parents to spend time with their children and to help them become contributing members of society.

In the eighteenth century, the innate goodness view was presented by Swiss-born philosopher Jean-Jacques Rousseau, who stressed that children are inherently good. Because children are basically good, said Rousseau, they should be permitted to grow naturally, with little parental monitoring or constraint. In the past century and a half, our view of children has changed dramatically. We

now conceive of childhood as a highly eventful and unique period of life that lays an important foundation for the adult years and is highly differentiated from them. In most approaches to childhood, distinct periods are identified, in which children master special skills and confront new life tasks. Childhood is not longer seen as an inconvenient "waiting" period during which adults must suffer the incompetence of the young.

We now value childhood as a special time of growth and change, and we invest great resources in caring for and education our children. We protect them from the excesses of the adult work world through tough child labour laws; we treat their crimes against society under a special system of juvenile justice; and we have governmental provisions for helping children when ordinary family support systems fail or when families seriously interfere with children's well-being.

PSYCHOLOGICAL TESTING FOR CHILDREN

Typically, during an initial special education evaluation, a psychological assessment, which may also be called a cognitive assessment, will be conducted by a school psychologist. A school psychologist is a professional that is trained to work with school aged children and adolescents, and has gained specific training in assessing students in order to gain information that guides appropriate educational decision making. These school professionals also receive training on effective teaching strategies, child and adolescent development, behaviour, data collection, individual and group counseling and social skills training, providing consultation to school staff, and other school related practices.

Whether a psychological evaluation is administered for your child may be dependent on your state or school district, and on the reason for the assessment. For example, if a student is referred for speech and language concerns, she is not necessarily going to be referred for or receiving a psychological evaluation. A psychological assessment should contain a series of measures. These measures often include a standardized cognitive battery of tests (common tests include the Woodcock Johnson or the Wechsler series of scales), measures of personality, behaviour, social and emotional functioning, and/or adaptive functioning. The team typically relies on the assessor to use their professional judgment in selecting measures, but at times, a parent, educator, outside service provider, or other team member may request that a specific concern be evaluated. The selection of tests should be based on the reason that the child was referred. For example, if parents report that their child has difficulty maintaining his attention during academic activities, a rating scale form that measures attention, hyperactivity and other related behaviors may be given to the teacher and parents to complete, along with a classroom observation of the student during academic tasks.

PSYCHOLOGICAL TESTING: GATHERING INFORMATION

A major component of a psychological assessment is information gained from those who know the student well. Rating scales may be completed by

teachers, parents/guardians and the student (dependent upon their age) in order to gain information about the child in various environments and situations. This is an important part of the evaluation process, and allows those who interact with the student to share any concerns that they have about academics, attitudes towards school and home, behaviors (such as inattention, withdrawn behaviour, hyperactivity, conduct issues), socialization, *etc.* Other relevant background information (*e.g.*, health history, development, any home situations such as divorce, illness of family members, languages spoken at home, *etc.*) may be collected by an interview, a developmental history form, and or/with a review of school records. Gaining historical information about the child is vital, as it may help the team in its decision making.

For example, a struggling student who was referred for an evaluation by his classroom teacher due to limited progress but has had poor attendance during the last and current school year. The IEP team would have to take into consideration whether the students lack of progress has to do with adequate exposure to high quality education, which, in this case, determining whether they presented with a disability may not be appropriate at that time due to their attendance. Another example may be a referral for a first grade student who is having difficulty learning to read. When school records are reviewed, the home language survey identifies that the primary language spoken at home by the child's parents is Spanish, while the child is only English speaking. The evaluator would have to take this into consideration when determining whether this child required specially designed instruction due to a disability, or whether his language acquisition is impacting his learning.

FACTORS THAT INFLUENCE THE GROWTH AND DEVELOPMENT OF A CHILD

Although the terms growth and development are used synonymously, they have different meanings biologically. Growth refers to the incremental changes in physical characteristics such as height, weight, size, *etc.*, while development refers to qualitative changes to growth in an orderly and meaningful fashion which results in maturity. Growth and development contribute to each other, are inseparable, and occur simultaneously. For example, most babies, by the time they grow up to be 8 months old, can weigh around 8 to 10 kilograms and can sit up.

Nature and nurture both contribute to the growth and development of children. Although what's endowed by nature is constant, nurture tends to make a big difference too. Here are a few factors affecting children's growth and development.

HEREDITY

Heredity is the transmission of physical characteristics from parents to children through their genes. It influences all aspects of physical appearance such as height, weight, body structure, the colour of the eye, the texture of the hair, and even intelligence and aptitudes. Diseases and conditions such as heart

disease, diabetes, obesity, *etc.*, can also be passed through genes, thereby affecting the growth and development of the child adversely. However, environmental factors and nurturing can bring the best out of the already present qualities in the genes.

ENVIRONMENT

The environment plays a critical role in the development of children and it represents the sum total of physical and psychological stimulation the child receives. Some of the environmental factors influencing early childhood development involve the physical surroundings and geographical conditions of the place the child lives in, as well his social environment and relationships with family and peers. It is easy to understand that a well-nurtured child does better than a deprived one; the environment children are constantly immersed in contributes to this. A good school and a loving family builds in children strong social and interpersonal skills, which will enable them to excel in other areas such as academics and extracurricular activities. This will, of course, be different for children who are raised in stressful environments.

SEX

The sex of the child is another major factor affecting the physical growth and development of a child. Boys and girls grow in different ways, especially nearing puberty. Boys tend to be taller and physically stronger than girls. However, girls tend to mature faster during adolescence, while boys mature over a longer period of time. The physical structure of their bodies also has differences which make boys more athletic and suited for activities that require physical rigour. Their temperaments also vary, making them show interest in different things.

EXERCISE AND HEALTH

The word exercise here does not mean physical exercise as a discipline or children deliberately engaging in physical activities knowing it would help them grow. Exercise here refers to the normal playtime and sports activities which help the body gain an increase in muscular strength and put on bone mass. Proper exercise helps children grow well and reach milestones on time or sooner. Exercise also keeps them healthy and fights off diseases by strengthening the immune system, especially if they play outside. This is because outdoor play exposes them to microbes that help them build resistance and prevent allergies.

HORMONES

Hormones belong to the endocrine system and influence the various functions of our bodies. They are produced by different glands that are situated in specific parts of the body to secrete hormones that control body functions. Their timely functioning is critical for normal physical growth and development in children. Imbalances in the functioning of hormone-secreting glands can result in growth

defects, obesity, behavioural problems and other diseases. During puberty, the gonads produce sex hormones which control the development of the sex organs and the appearance of secondary sexual characteristics in boys and girls.

NUTRITION

Nutrition is a critical factor in growth as everything the body needs to build and repair itself comes from the food we eat. Malnutrition can cause deficiency diseases that adversely affect the growth and development of children. On the other hand, overeating can lead to obesity and health problems in the long run, such as diabetes and heart disease. A balanced diet that is rich in vitamins, minerals, proteins, carbohydrates and fats is essential for the development of the brain and body.

FAMILIAL INFLUENCE

Families have the most profound impact in nurturing a child and determining the ways in which they develop psychologically and socially. Whether they are raised by their parents, grandparents or foster care, they need basic love, care and courtesy to develop as healthy functional individuals. The most positive growth is seen when families invest time, energy and love in the development of the child through activities, such as reading to them, playing with them and having deep meaningful conversations. Families that abuse or neglect children would affect their positive development. These children may end up as individuals who have poor social skills and difficulty bonding with other people as adults. Helicopter parenting also has negative effects as they render children dependent on the parents even as young adults and unable to deal with difficulties in life on their own.

GEOGRAPHICAL INFLUENCES

Where you live also has a great influence on how your children turn out to be. The schools they attend, the neighbourhood they live in, the opportunities offered by the community and their peer circles are some of the social factors affecting a child's development. Living in an enriching community that has parks, libraries and community centres for group activities and sports all play a role in developing the child's skills, talents, and behaviour. Uninteresting communities can push some children to not go outside often but play video games at home instead. Even the weather of a place influences children in the form of bodily rhythms, allergies and other health conditions.

SOCIO-ECONOMIC STATUS

The socio-economic status of a family determines the quality of the opportunity a child gets. Studying in better schools that are more expensive definitely has benefits in the long run. Well-off families can also offer better learning resources for their children and they afford special aid if the kids need it. Children from poorer families may not have access to educational resources

and good nutrition to reach their full potential. They may also have working parents who work too many hours and cannot invest enough quality time in their development.

LEARNING AND REINFORCEMENT

Learning involves much more than schooling. It is also concerned with building the child up mentally, intellectually, emotionally, and socially so they operate as healthy functional individuals in the society. This is where the development of the mind takes place and the child can gain some maturity. Reinforcement is a component of learning where an activity or exercise is repeated and refined to solidify the lessons learned. An example is playing a musical instrument; they get better at playing it as they practice playing the instrument. Therefore, any lesson that is taught has to be repeated until the right results are obtained.

FUNCTIONAL DOMAINS IN CHILD DEVELOPMENT

EMOTIONS

Emotions, affectivity's outward expression, trigger changes that tend to reduce the emotions themselves. * Emotions are the underlying basis for the gregarious drives that constitute a rudimentary form of communication and community. The relations made possible through emotions create finer and more subtle forms of expression and transform these into more and more specialised instruments of social interaction. But as their significance becomes more precisely defined, these modes of expression become more autonomous and detached from emotion. Instead of releasing the floodtide of emotion, they tend to dam up emotion and compartmentalise it, thus destroying its pervasiveness and power of contagion. As soon as speech and convention become the media of mimicry, convention multiplies nuances, tacit understandings, and innuendos. Subtlety is thus introduced, in contrast to the undivided expression of pure emotion.

Emotion and intellectual activity follow the same evolution and present the same antagonism. Even before a situation is analysed the activities that a situation provokes and the dispositions and attitudes it arouses give it meaning.

In mental development this practical insight appears long before the ability to discriminate and compare. It is a first form of comprehension, wholly dominated by the interest of the moment and thoroughly absorbed in the particular.

The sharing of attitudes is the first crude form of mutual contact or understanding between individuals, even though it is still totally engrossed in desires or impulses of the moment. An image that is useful for comparison or expectation can emerge from these pragmatic and concrete relations only by gradully reducing the role of body reactions—that is, of emotions and affectivity.

Conversely, each time that affective attitudes and the corresponding emotion again become dominant, an image loses its richness, becomes blurred, and vanishes. This phenomenon is commonly observed in adults: suppression of emotion through intellectual control or by simple translation of its motives or conditions into intellectual modes; or, on the other hand, the routing of reason and objective representations by emotion. In the child, progress from purely casual, personal, and emotional reactions to a more stable conception of things is a slow process. Regression is very frequent.

In the domain of affectivity, this conflict produces transformations. If rationalist theories of emotion have seemed plausible, it is by virtue of the importance of intellectual motives and images in the realm of feelings and passion.

In reality there is a transfer between emotion and the latter feelings. This tranfer is dependent on the age of the child. But the most emotional children do not necessarily become the most sentimental or the most passionate. Rather, it is a question of different types of children, in whom the various psychic functions are balanced differently.

Language

The beginnings of speech in the child coincide with marked progress in his practical skills. In this respect, a comparison of the child's behaviour with that of the monkey is particularly striking. Thus, Boutan, followed by others, particularly Kellog and his wife, compared a child in the preverbal and verbal period with a young monkey in identical situations. Child and monkey were even raised together in the same environment. During the initial period, behaviour was very similar. But as soon as the child acquired the use of speech he rapidly outstripped his companion. For example, when presented with several boxes arranged in a row, one of which contained a treat, the training necessary to find the special box without error at first yielded similar results. But if the order of the boxes was altered, the monkey became perplexed and had to rely on trial and error, whereas the child, once he could speak, was quickly able to discover the change.

Obviously, speech was still at a level too primitive to warrant the hypothesis of an internal instruction or some sort of mental calculation. Rather, the child was displaying a capacity to imagine a displacement, a line, or a direction that did not exist between the objects perceived. This capacity is possible only if vision, instead of being total absorption in the objects themselves, deploys them over an imaginary canvas of stable and interdependent positions. Without this ability, there is no way to conceptualise any sort of order or to mentally construct a sequence. This capacity is also necessary to give order to the successive parts of discourse. The loss of one of these abilities entails the loss of the other. An aphasic cannot indicate the directions up, down, right, left, *etc.*, with his eyes closed. When his eyes are open, that which he points out, according to Sieckmann, is not a direction, but an object—for example, the ceiling, the floor, the hand holding the razor, the hand that is not writing, *etc.*

A necessary but not sufficient condition is the awareness that objects and movements are seen successively or in transition. This by no means explains all the functions of language, nor its important implications for the species and the individual. Without going into the social relations made possible by, and patterned after, language, or into the fact that each dialect is a bearer and transmitter of history, one may at least state that it is language that has transformed into consciousness the compact mélange of things and actions that constitute the raw material of experience. Actually, language is not the cause of thought; it is the indispensable tool and sustaining element in thought's progress. If one sometimes falls behind the other, their reciprocal action quickly re-establishes a harmonious balance.

Through language, the object of thought need no longer be confined to things presently perceived. Language provides a means whereby the representation of things no longer present, or of things that might appear, can be evoked and compared and contrasted between themselves and with current perceptions. In reintegrating the absent into the present, language provides a means of expressing, fixing, and analysing the present. It imposes the world of signs, the marks of thought, on direct experience, in circumstances in which thought can imagine and pursue a free course, unite what was disjointed, and separate what had been simultaneous. But this substitution of the sign for the thing is not without its problems and pitfalls. It forces the practical solution of problems that can be dealt with only later through speculative reflection. In clarifying what was unclear and permanently establishing what was transitory, representational thought, delimited by means of signs, gives rise to an opposition between the same and the other, the like and the unlike, the one and the many, the permanent and the transitory, the identical and the changing, the stationary and the moving, and the being and the becoming. Many inconsistencies and incongruities that startle us in a child have their actual source in the clash between these contradictory notions, however adept the child may be at evasion through omission or at circumvention with the aid of speech and thinking habits acquired from adults. The advance that language permits thought to make and the effort it demands from thought in return may be clearly seen in the setback thought suffers when language appears to regress—as in aphasics.

Problems of Discontinuity in Development

The discontinuity in the thought of the child has another cause whose consequences are no less significant: the inadequacy of accommodation to an object, whether it activates motor, perceptual, or intellectual mechanisms. Accommodation long remains hesitant and irresolute. It oscillates back and forth around its object, its precise focus remains elusive, and its fluctuations are out of step with those of its objective. Like a kitten that on seeing its ball of yarn disappear into an inaccessible place stops short and becomes uncertain, the most lively and playful child has his moments of sudden disorientation and loss of objective. The moment the object of his thought eludes him, a faintly

bewildered expression passes over his face. Thus, a fluctuating image of things results, making it difficult to identify any one object and easy to confuse one with another. The notion of possible transformations of things, far from being diminished through contact with reality, instead finds its base in this contact. Hence, the phantasmagorias a child finds so believable should cause us no surprise.

Confusion between the Self and Others

The initial lack of distinction between the self and others implies inadequate discrimination of others. When a small child pursues every man he sees with the name "Daddy," it would be premature to say that he identifies them all with his father or that he puts them into a class denoted by the name of the individual because he does not know the collective name for them. He experiences a reaction to the whole, which evokes by means of certain of its features a specific quality in which the parts are confused with the whole and hence are liable to entail a confusion of totalities otherwise mutually distinct.

6

Childhood Stress and Development

STRESS IN EARLY CHILDHOOD

What is the impact of stress on child development? The answer to that question is complex and depends on several factors including the number of stressors, the duration of stress, and the child's ability to cope with stress.

Children experience different types of stressors that could be manifest in various ways. Normal, everyday stress can provide an opportunity for young children to build coping skills and poses little risk to development. Even long-lasting stressful events, such as changing schools or losing a loved one, can be managed fairly well.

Some experts have theorized that there is a point where prolonged or excessive stress becomes harmful and can lead to serious health effects. When stress builds up in early childhood, neurobiological factors are affected; in turn, levels of the stress hormone cortisol exceed normal ranges. Due in part to the biological consequences of excessive cortisol, children can develop physical, emotional, and social symptoms. Physical conditions include cardiovascular problems, skin conditions, susceptibility to viruses, headaches, or stomach aches in young children. Emotionally, children may become anxious or depressed, violent, or feel overwhelmed. Socially, they may become withdrawn and act out towards others, or develop new behavioral ticks such as biting nails or picking at skin.

TYPES OF STRESS

Researchers have proposed three distinct types of responses to stress in young children: positive, tolerable, and toxic. Positive stress (also called eustress) is

necessary and promotes resilience, or the ability to function competently under threat. Such stress arises from brief, mild to moderate stressful experiences, buffered by the presence of a caring adult who can help the child cope with the stressor. This type of stress causes minor, temporary physiological and hormonal changes in the young child such as an increase in heart rate and a change in hormone cortisol levels. The first day of school, a family wedding or making new friends are all examples of positive stressors. Tolerable stress comes from adverse experiences that are more intense in nature but short-lived and can usually be overcome. Some examples of tolerable stressors are family disruptions, accidents or the death of a loved one. The body's stress response is more intensely activated due to severe stressors; however, the response is still adaptive and temporary.

Toxic stress is a term coined by pediatrician Jack P. Shonkoff of the Center on the Developing Child at Harvard University to refer to chronic, excessive stress that exceeds a child's ability to cope, especially in the absence of supportive caregiving from adults. Extreme, long-lasting stress in the absence of supportive relationships to buffer the effects of a heightened stress response can produce damage and weakening of bodily and brain systems, which can lead to diminished physical and mental health throughout a person's lifetime. Exposure to such toxic stress can result in the stress response system becoming more highly sensitized to stressful events, producing increased wear and tear on physical systems through over-activation of the body's stress response. This wear and tear increases the later risk of various physical and mental illnesses.

CONSEQUENCES OF TOXIC STRESS

Children who experience toxic stress or who live in extremely stressful situations of abuse over long periods of time can suffer long-lasting effects. The structures in the midbrain or limbic system, such as the hippocampus and amygdala, can be vulnerable to prolonged stress (Middlebrooks and Audage, 2008). High levels of the stress hormone cortisol can reduce the size of the hippocampus and affect a child's memory abilities. Stress hormones can also reduce immunity to disease. If the brain is exposed to long periods of severe stress, it can develop a low threshold, making a child hypersensitive to stress in the future. With chronic toxic stress, children undergo long term hyper-arousal of brain stem activity. This includes an increase in heart rate, blood pressure, and arousal states. These children may experience a change in brain chemistry, which leads to hyperactivity and anxiety. Therefore, it is evident that chronic stress in a young child's life can create significant physical, emotional, psychological, social and behavioral changes; however, the effects of stress can be minimized if the child has the support of caring adults.

COPING WITH STRESS

Stress is encountered in four different stages. In the first stage, stress usually causes alarm. Next, in the second or appraisal stage, the child attempts to find

meaning from the event. Stage three consists of children seeking out coping strategies. Lastly, in stage four, children execute one or more of the coping strategies.

However, children with a lower tolerance for stressors are more susceptible to alarm and find a broader array of events to be stressful. These children often experience chronic or toxic stress.

MANAGING STRESS

Some recommendations to help children manage stressful situations include:

- Preparing children for everyday stressful situations, such as traveling to new places or going to the doctor. For example, talk to children about the experience to help them understand that it is okay to be stressed and scared.
- Keeping communication open. This includes making sure that the child feels comfortable talking to a person. This may include being in a comfortable space, such as their bedroom, where they feel safe. The comfort level of the child is important because if a child is not comfortable, or feels forced to speak, they may not open up at all.
- Spending time together as a family so that no one's feelings go unseen; ensuring that a child knows that their feelings are valued, and should be expressed in healthy ways.
- Modeling healthy and successful coping mechanisms (such as going for a walk).
- Encouraging children to express themselves creatively (as an outlet or to help others to understand what is stressing the child). Some healthy outlets of stress relief include sports or running, writing, reading, art, as well as playing musical instruments.
- Teaching children to act and think positively when they are faced with a situation to manage the stress before it becomes overwhelming.
- Providing a safe and healthy home and environment for children.
- Providing children with proper nutrition and attention.
- Ensuring children are not exposed to substance abuse or violence. When a healthy environment is provided, children are more likely to be emotionally and physically healthy

TRAUMA IN CHILDHOOD

Childhood trauma is referred to in academic literature as adverse childhood experiences (ACEs). Children may go through a range of experiences that classify as psychological trauma, these might include neglect, abandonment, sexual abuse, physical abuse, parent or sibling treated violently, separation or incarceration of parents, or having a parent with a mental illness. These events have profound psychological, physiological, and sociological impacts and can have negative, lasting effects on health and well-being.

Kaiser Permanente and the Centers for Disease Control and Prevention's 1998 study on adverse childhood experiences determined that traumatic experiences during childhood are a root cause of many social, emotional, and cognitive impairments that lead to increased risk of unhealthy self-destructive behaviors, risk of violence or re-victimization, chronic health conditions, low life potential, and premature mortality. As the number of adverse experiences increases, the risk of problems from childhood through adulthood also rises.

Nearly 30 years of study following the initial study has confirmed this. Many states, health providers, and other groups now routinely screen parents and children for ACEs.

HOW TO SPOT STRESS AND ANXIETY IN CHILDREN

Signs of stress and anxiety in children often show up as physical or behavioral changes. Children respond differently to stress depending on their age, individual personalities, and coping skills, which can cause many parents to overlook the underlying issues that may be causing their child's behaviour.

It is important for parents to recognize the signs of childhood stress and to look for possible causes. Parents can usually help children manage stress and anxiety, but some children may have an anxiety disorder and can benefit from professional help.

SIGNS OF ANXIETY IN CHILDREN

Children may not recognize their own anxiety and often lack the maturity to explain their real or imagined stressful issues. This can cause a variety of physical and behavioral signs to emerge, and parents may be unsure whether these are symptoms of anxiety or a health problem.

BEHAVIORAL OR EMOTIONAL

Anxiety can cause children to act out in ways that can be frustrating or confusing to parents, but it is important for caregivers to recognize that these behavioral and emotional issues may be related to feelings of anxiety.

Some common behavioral signs of stress and anxiety include:

- Behavioral changes, such as moodiness, aggression, a short temper, or clinginess
- Development of a nervous habit, such as nail-biting
- Difficulty concentrating
- Fears (such as fear of the dark, being alone, or of strangers)
- Getting into trouble at school
- Hoarding items of seeming insignificance
- Refusal to go to school
- Withdrawing from family or friends

PHYSICAL

Stress and anxiety can also manifest in physical complaints. Some of these signs include:

- Bedwetting
- Complaints of stomachaches or headaches
- Decreased or increased appetite
- Other physical symptoms
- Sleep problems or nightmares

It can help to think about whether these signs typically occur before or after certain activities, and whether there are physical symptoms, such as pain, fevers, rash, or diarrhea, that could signal a medical problem.

COMMON CAUSES OF CHILDHOOD STRESS

The source of anxiety and stress in children can be something external, such as a problem at school, changes in the family, or a conflict with a friend. Anxious feelings can also be caused by a child's internal feelings and pressures, such as wanting to do well in school or fit in with peers.

Some common causes of stress in children include:

- *Academic pressure:* Many children experience anxiety about wanting to do well in school. Academic pressure is particularly common in children who are afraid of making mistakes or who are afraid of not being good at something.
- *Big changes in the family:* Major life changes such as divorce, a death in the family, moving, or the addition of a new sibling can shake your child's sense of security, leading to confusion and anxiety. For example, a new sibling can make a child feel threatened and jealous. A death in the family can create alarm and grief and may trigger fears about death and dying.
- *Bullying:* Bullying is a serious problem for many children. It can be subtle, or obvious, and may lead to physical harm. Children who are bullied often feel embarrassed about being targeted, and they may hide the bullying from parents or teachers for fear of drawing attention to their perceived weaknesses.
- *Catastrophic event on the news:* News headlines and images showing natural disasters, terrorism, and violence can be upsetting for children. When kids see and hear about terrible news events, they may worry that something bad might happen to them or to someone they love.
- *Parental instability:* Money and job concerns, family turmoil, and parental agitation can lead to an overwhelming sense of powerlessness for children who may feel that they want to help, but don't have the means to do so.
- *Popularity:* For younger grade-schoolers, separation anxiety can be a common problem. As they get older, most children want to fit in with

other kids and be liked; the pressure to fit in and be popular can be agonizing. Cliques and the feeling of being excluded usually become an issue once kids enter grade school.

- *Overly-packed schedules:* Constantly running from one activity to another can cause a great deal of stress for children who usually need some quiet downtime every once in a while.
- *Scary movies or books:* Fictional stories can also cause distress or anxiety in children. Children are commonly affected by frightening, violent, or upsetting scenes from a movie or passages in a book.

Some kids might be more sensitive to media content than others, and it's a good idea to know what might upset your child, to limit violent media content, and stick to age-appropriate movies, books, video games, and other media.

HOW TO HELP YOUR CHILD

There are healthy ways in which your child can cope and respond to stress, they just need some help and guidance. You can help in the following ways.

AT HOME

- Create a relaxed home atmosphere and commit to a routine. Family dinners or game nights can prevent anxiety and help relieve stress.
- Make your home a calm, safe, and secure place to come to.
- Monitor your child's television shows, video games, and books.

KEEP THEM INVOLVED

- Allow for opportunities where your child can have control over a situation in their life.
- Give your child a heads up on any anticipated changes and talk through the new scenarios with them. For example, if you will be taking a new job in a new city, what will that mean for them in terms of a new school, new friends, and a new home?
- Involve your child in social and sports activities where they can succeed.

YOUR ACTIONS

- Adopt healthy habits such as exercise and self-care to manage your own stress in healthy ways. Children often mimic their parents' behaviors.
- Keep an eye out for new signs and behaviors of unresolved stress.
- Learn to really listen to your child without being critical or solving problems for them. Provide guidance to teach your child ways to understand and solve the problems that upset them.
- Provide affection and encouragement.
- Use positive reinforcement and methods of discipline that promote healthy self-esteem.

Seek the advice of a healthcare practitioner, counselor, or therapist if the signs of stress do not lessen or if your child becomes more withdrawn, depressed, or more unhappy. Problems in school or when interacting with friends or family is also another cause for concern.

STRESS AND CHRONIC ILLNESS

What are the effects of persistent emotional stress on human health? Fifty years ago this question would have seemed irrelevant to the goals of medical research. The principal illnesses of the day were ascribed to the aging process, to a variety of "mechanical defects," such as blockages and ruptures, to a poor genetic endowment and to bacterial infection. Germs satisfied the need for precise explanations of disease.

They entered the body in a limited number of ways; they could be isolated, cultured and tested on animals and human volunteers. With further knowledge, it was believed, all the effects produced by harmful bacteria would be understood and eventually controlled by some form of therapy. Emotional stress, on the other hand, was vague. It seemed to represent a generalized response on the part of the body to countless, often intangible stimuli. Although medicine was not unaware of the fact that emotional disturbances influenced the functioning of the heart and gastrointestinal tract, there seemed little reason to believe that stress played a causal role in the major diseases of man.

As chronic illnesses began to gain in importance, however, it became evident that the earlier approach was inadequate. Many arthritic conditions, for example, could not be explained by infection. Beginning slowly and insidiously, arthritis often produced in the end a hopelessly crippled, bedridden patient who faced a lifetime of pain and inactivity. At the same time, such words as "strain" and "anxiety" began to acquire real physiological meaning, denoting conditions that involved glandular conditions, biochemical changes in tissues and involuntary activity of the nervous system. It was soon found that these physiological changes could produce or alleviate many of the symptoms associated with the common chronic diseases of our time.

A growing number of physicians now agree that emotional stress is a very important disease-promoting factor. It is safe to say that some disorders, such as peptic ulcers, arise primarily from anxiety and tension. During the latter part of the nineteenth century, peptic ulcers were regarded as a relatively uncommon disorder and there arose very confused explanations of what caused the illness. Physicians generally believed that it occurred more frequently in women than in men; it was looked upon as a disorder primarily of "chlorotic," or anemic, girls.

In the medical textbooks of the day, discussions of peptic ulcers were confined to descriptions of symptoms and dietary therapy. With the passing years, however, the disease became a widespread and serious problem. Today, peptic ulcers afflict about 2½ million Americans; each year nearly 400,000 are disabled for more than a week. Although a case of ulcers may often arouse a great deal of

levity, the disease can reach grave proportions. About ten thousand Americans die of peptic ulcers every year. According to data compiled by the U. S. National Health Survey of 1957-9, the overwhelming majority of ulcer victims (73 per cent) are men. More cases appear in the thirty-five-to-forty-four age group—the years of greatest business and vocational activity—than in any other ten-year period of life.

Emotional stress is also deeply implicated in disorders of the blood vessels and the heart. "Physicians have long felt that the rapid pace of modern civilization might somehow be contributing to the development of heart disease," notes a report by the National Heart Institute. "The man who develops coronary artery disease is very frequently a hard-driving individual living in a state of more or less constant tension. In recent years evidence has accumulated that one way in which nervous tension may accelerate the development of coronary artery disease is through an elevation of the [blood] serum cholesterol level."

The evidence is impressive. In 1957, Friedman, Rosenman and Carroll, of Mount Zion Hospital in San Francisco, began a study of the serum cholesterol level and blood-clotting time in forty male accountants during and after the tax season—sharply contrasting periods of high and low occupational stress. Blood was taken from the accountants twice weekly from January to June and detailed records were kept of weight, diet and changing work loads. "When studied individually," the investigators report, "each subject's highest serum cholesterol consistently occurred during severe occupational or other stress and his lowest at times of minimal stress. The results could not be ascribed to any changes of weight, exercise, or diet. Marked acceleration of blood clotting time consistently occurred at the time of maximum occupational stress, in contrast to normal blood clotting during periods of respite."

Studies of a similar nature have been made of medical students during examination week. In 1958 a report of P. T. Wertlake at the College of Medical Evangelists in Los Angeles showed that the average serum cholesterol level of the students rose 11 per cent during the four-day period in which they took school tests. The investigators found that nearly half of the students responded to the stress situation with increases ranging from 16 to 137 milligram per cent over a mean control level of 213. The serum cholesterol level of one student rose from an average control level of 259 milligram per cent prior to the school examinations to a peak of 536 during one of the examination days—an increase of more than 100 percent.

It would be wrong to suppose, however, that our knowledge of the link between emotional stress and illness is based entirely on statistical findings. During the past two decades, researchers have discovered a number of the biochemical effects that persistent anxiety produces in the human body.

Attention has focused primarily on the adrenal glands, which cap the kidneys. The surface layer, or cortex, of these glands produces a number of highly potent regulatory chemical substances, or hormones. The cortical hormones, or corticoids, help the body to ward off disease and resist the effects of physical damage.

A number of adrenal corticoids (aldosterone and DOC, for example) promote inflammation—the heat, swelling and redness with which tissues react to common injuries.

Although inflammation protects the body from bacterial invasion by "walling off" an injured area, the inflammatory process would go too far if it were not for anti-inflammatory corticoids, such as cortisone, which limit the process and prevent it from becoming needlessly widespread. The output of cortisone, in turn, is stimulated by ACTH, a hormone produced by the pituitary gland, situated at the base of the skull. The control of inflammation requires a balanced secretion of ACTH, of the pro-inflammatory corticoids and of the anti-inflammatory corticoids. If the balance in the secretion of these three types of hormones is altered, the inflammatory process may damage parts of the body.

Secretions of ACTH and the corticoids are influenced by the emotional state of the individual as well as by physical injury. This discovery has aroused strong suspicions that the corticoids and, by inference, persistent nervous strain, anxiety and emotional conflicts play important roles in the occurrence of certain chronic disorders. In a review of the literature on rheumatoid arthritis and stress, Leon Hellman has suggested that "a more subtle form of stress in the guise of emotional conflicts is implicated in changes of the pituitary-adrenal system so as to render it less responsive or to alter the balance between various adrenal hormones secreted.

A patient with rheumatoid arthritis would cure himself if his hypothalamus [a nerve center in the forebrain] and pituitary would interlock to increase the secretion of ACTH."

According to Hellman, it is quite possible that the production of ACTH is inhibited by a "neural block" arising from deep-seated emotional conflicts. Both ACTH and cortisone have been used with considerable success in treating arthritic disorders. The hormones alleviate rheumatoid symptoms so dramatically that hopelessly crippled, bedridden arthritics have been restored to almost complete use of their limbs.

The adrenal corticoids, however, influence more than the inflammatory process. They exercise extensive control over the level of minerals and sugar (glucose) in the blood. An imbalance in corticoid secretion is likely to have far-reaching effects on the body's metabolism and on organs that are commonly damaged by metabolic disorders, notably the heart and kidneys.

By administering the pro-inflammatory hormone DOC to white Leghorn chicks, for example, Hans Selye and his co-workers at the University of Montreal were able to produce degenerative changes in the kidneys, with ensuing high blood pressure, hardening of the blood vessels and cardiac disease. During the course of the experiment, the DOCtreated chicks "began to drink much more water than the controls which were not given the hormone and gradually they developed a kind of dropsy.

Their bodies became enormously swollen with fluid accumulations under the skin and they began to breathe with difficulty, gasping for air, just like

certain cardiac patients." By degrees, Selye's results and those of other researchers in the field began to include a large number of common chronic illnesses.

Pro- and anti-inflammatory corticoids, it was found, seem to play roles of varying importance in diabetes, thyroid disorders, peptic ulcers and psychic disturbances. The anti-inflammatory corticoids have been very useful in combating many of these illnesses. Cortisone frequently produces striking though temporary remissions in cases of acute leukemia and the surgical removal of the adrenal glands often inhibits the growth of certain forms of cancer.

Selye has developed a general theory of stress from the data on the interplay of adrenal hormones. Stress consists of the physical changes within an organism which are caused by any environmental stimulus, whether it be heat, cold, infection, or a chemical irritant and by the emotional disturbances we encounter in man. All living things have an adaptive mechanism that produces changes in the organism in response to changes in its environment. The adrenal corticoids in man and higher animals are essentially chemical agents. that compel a living thing to respond internally to external stimuli. Every stimulus, desirable or harmful, produces a general stress reaction. Stress, in effect, is an important part of life.

But stress always results in a certain amount of "wear and tear" on the organism. "Many people believe that, after they have exposed themselves to very stressful activities, a rest can restore them to where they were before," Selye writes.

"This is false. Experiments on animals have clearly shown that each exposure leaves an indelible scar, in that it uses up reserves of adaptability which cannot be replaced. It is true that immediately after some harassing experience, rest can restore us almost to the original level of fitness by eliminating acute fatigue. But the emphasis is on the word *almost*. Since we constantly go through periods of stress and rest during life, just a little deficit of adaptation energy every day adds up—it adds up to what we call aging."

No one, to be sure, can eliminate the "wear and tear" of life, but a reasonably clear distinction can be made between the "stress of life" and stress that results in ill health. Stress that results in ill health is severe, persistent and one-sided. Selye has demonstrated that if stress is too severe, the resistance and life span of the organism are drastically reduced. An experimental rat may adapt itself for a time to a strong irritant, but the adaptation is made at a high price; longevity is decreased and general resistance is seriously impaired. If the animal is exposed to even minor but persistent stress, comparable to the "low-grade" nervous tension and anxiety usually found in modern urban man, it pays a similar price for adaptation. The animal is easily injured by irritants that ordinarily do not produce serious physical damage. The interplay of stress responses is so complex that the reader must turn to Selye's own work, *The Stress of Life*, for a detailed discussion. In nearly all cases of severe or persistent stress, Selye has found evidence of thickened arteries, heart abnormalities, kidney damage and increased blood pressure.

But Selye's work also demonstrates that stress need not be harmful, provided it is balanced and varied. A sheltered, sedentary life that lacks a variety of stimuli produces an undeveloped, often inadequate stress mechanism as well as an undeveloped personality. A sheltered person has great difficulty in coping with many of the stimuli and irritants inevitably encountered in the normal course of life. If there is any notion that sums up Selye's "stress of life" theory, it is the "pre-scientific" intuition that variety and balance—emotional, physical and intellectual—are the bases not only for true individuality but for lasting health.

Selye's plea for variety in life, however, rests on a well-thought-out hypothesis. Man, as a complex, multicellular animal, is composed of many organs and systems, each of which bears a different amount of stress.

The organs that compose his body do not "wear out" evenly. Death invariably comes "because one vital part has worn out too early in proportion to the rest of the body.... The lesson seems to be that, as far as man can regulate his life by voluntary actions, he should seek to equalize stress throughout his being, by what we have called *deviation*, the frequent shifting-over of work from one part to the other. The human body—like the tires on a car, or the rug on a floor—wears longest when it wears evenly. We can do ourselves a great deal of good in this respect by just yielding to our natural cravings for variety in everyday life. We must not forget that the more we vary our actions the less any one part suffers from attrition."

Conceivably, an informed individual can try to cultivate a mature outlook that will lend distance to the petty irritations produced by the urban milieu. If circumstances permit, he can establish a personal regimen of after-work exercise and frequent excursions to the countryside. But on the whole, the metropolis exposes him to limited, intense occupational stimuli that produce an equally limited, intense stress response. A few organs continue to bear nearly the entire burden of daily life. Organs and systems that are not activated by modern forms of work and play are likely to be sheltered by the "conveniences" that the city affords.

"One might question whether stress is peculiarly characteristic of our sheltered civilization, with all its comforts and amenities," observe P. C. Constantinides and Niall Carey in a general discussion of Selye's work. "Yet these very protections—modern laborsaving devices, clothing, heating—have rendered us all the more vulnerable and sensitive to the slightest stress. What was a mild stress to our forebears now frequently represents a minor crisis. Moreover, the frustrations and repressions arising from emotional conflicts in the modern world, economic and political insecurity, the drudgery associated with many modern occupations—all these represent stresses as formidable as the most severe physical injuries."

7

Children and Sports: Choices for all Ages

Children's sports promote fitness and prevent obesity, but not all children thrive in formal leagues. Help your child find the right sport and venue — school, recreation center or backyard.

Want to give your children a head start on lifelong fitness — and cut their risk of being overweight? One option may be to head to the town recreation center and sign them up for sports.

Of course, it's not always that simple. Many communities offer limited choices for children's sports and activities. And organised sports aren't right for every child — certainly not for every age.

If you encourage your child and set an example yourself, though, chances are a few sports will spark his or her interest. Fan the flame by taking your child to local sporting events and explaining how different games are played. Then, when the time is right, provide opportunities for your child to try out equipment and play informally with other children.

Most of all, if you like playing particular sports, share your pleasure and skill with your children. Show them that effort and practice are their own rewards, and that you can get great satisfaction from playing without even wanting to be the best.

What are age-appropriate activities?: Regardless of your child's age, he or she will show some natural preferences. Some children love the water from the first splash, while others react with fear. Some get a charge out of rough-and-tumble games; others dislike the shoves and bumps. You may have been the star of your football team, but your child may prefer dancing, and that's just fine.

Children don't need organised athletics to develop athletic skills or to get physical activity. "A healthy lifestyle doesn't have to include sports," says Edward Laskowski, M.D., co-director of the Sports Medicine Clinic at, Rochester Minn.

"It's more important that your child is involved in some sort of physical activity, whether it's hiking and biking with the family or playing pickup baseball or basketball with the neighbourhood kids."

Every child develops at a different rate. It's best to work within your child's maturity and skill level.

AGES 2 TO 3

Very young kids are beginning to master many basic movements — running, catching, jumping — and they're too young for most types of structured exercise. Try:

- Running and walking, in a yard or playground
- Swinging on a yard or playground set
- Supervised water play
- Toddler gymnastics classes led by professionals
- Tumbling

AGES 4 TO 6

- Dancing
- Games such as hopscotch or tag
- Jumping rope
- Playing catch with a lightweight ball
- Riding a tricycle or a bike with training wheels

After age 6, children's motor skills and sense of safety improve. Your child may also be ready for team sports.

AGES 7 TO 10

- Baseball
- Gymnastics
- Soccer
- Swimming
- Tennis
- Biking

AGE 10 AND UP

- Carefully supervised weight training
- Organised team sports
- Rowing
- Running and track and field events
- Softball

When it comes to organised sports, make sure your child really wants to play. Never force a child to participate or join a team. Also consider your child's schedule. Children who are already signed up for music lessons and the school play may feel overwhelmed if athletics are added to the mix.

Practical matters: If you want to get your child involved in sports, consider how sports differ, including the:

- Amount and cost of equipment
- Amount of physical contact
- Emphasis on individual skill
- Emphasis on team performance
- Size of the team
- Opportunity for each child to participate

If several sports are available in your community, allow your child to sample a range of activities. Younger children may benefit from exploring several options before settling on one or two.

"The more that children can try different sports and activities and find something they're good at doing, the more they'll enjoy the activity," says Dr. Laskowski.

Try team sports such as softball and soccer, as well as individual sports such as tennis, running and golf. Observe as you go. Is your child comfortable with contact sports? Does he or she have the hand-eye coordination to compete in certain sports that use a ball?

Assessing youth sports: To gauge whether your child is in good hands, consider these points.

Quality of coaching: Look first for an emphasis on safety and inclusive participation. Does the coach require that players follow the rules and use the proper safety equipment? Do only the best players play? Is the fitness or conditioning coach working with your child certified and sensitive to the fact that your child is not fully physically mature? Observe instructions. Children should be taught proper movement and body positioning to avoid injuries.

Also consider a coach's attitude towards the game. If a coach consistently yells at an umpire or the children or lets only the most skilled players into the game, your child may become discouraged. Get to know the coach and, if possible, talk to the coach's former team members about their experiences.

Once children get to be 11 or 12 years old, they may be ready for a greater emphasis on competition and winning. "But a win-at-all-costs attitude drives many children away from sports," says Dr. Laskowski.

Team assignments: Are the children in your child's sport grouped into teams simply by age, which can increase risk of injury? Or are they grouped according to physical maturity and skill? Do they take time to warm up and cool down before and after each practice or event? How the organization assigns teams and emphasises warm-ups and cool-downs may serve as an indication of the organization's interest in injury prevention.

Your role: Sit back and watch: Overall, be positive and encouraging. Emphasize effort and improvement over winning or personal performance.

Attend events and practices as your schedule allows, and act as a good model of sportsmanship yourself. Above all, keep your child's sport in perspective.

If your child decides to quit a sport or specific activity, look for signs of stress that seem tied to sports or overtraining. Your child can take up the same or another sport later, or build fitness through other activities, such as martial arts or dance.

Whether your child swims, runs track or plays frisbee, keep your eye on the long-term goal — encouraging your child to be a fit, healthy and happy adult.

CHILDREN'S SNACKS: DON'T BAN THEM, PLAN THEM!

When your child gets the munchies, be prepared to offer up that quick-and-healthy fix. Here is some helpful information to promote health on the go.

Snacking is a major pastime for many American children — so much so that nearly one-fourth of kids' daily energy intake comes from nibbling between meals.

Much of this nibbling is on prepackaged snack foods, which are high in calories and low in nutrients. The popularity of these fattening treats may be one of the factors responsible for the country's childhood-obesity epidemic.

But snacking itself isn't necessarily bad. The content of your child's snacks is what's most important. Providing healthy snack choices now will help your children learn to make healthy food choices in the future.

Snacks are essential: Young children actually need snacks. Their stomachs are small, so they often can't get all the nutrients they need in a day through meals alone. They need smaller portions of food more often. A good rule of thumb for toddler serving sizes is about 1 tablespoon of food for each year of age. You can always give them more if they're still hungry.

Children's growth rates slow down after their first birthday. Because they need fewer calories at this time, they tend to eat less. Continue to provide healthy food choices for meals and snacks. Don't get upset or force children to clean their plates.

Certain foods may cause choking in younger children. Avoid feeding raw vegetables, popcorn, nuts or peanuts, and dried fruits — such as raisins — to children under 3. Quarter hot dogs lengthwise and then cut into small pieces. Slice grapes in half.

Don't spoil your dinner: Children who attend child care may not be hungry at the family mealtime if their caregivers serve them a late afternoon snack. Consider asking your child care provider to not offer a snack too late. If your child is frequently in child care until 6 p.m. or later, you may even pack an evening meal for him or her to eat at 4:30 p.m., before going home. Then your child can have a healthy snack at home during the family dinnertime.

Fruit juice: Friend or foe?: Children often prefer fruit juice to water or fresh fruit because juice tastes better to them. And many parents see no problem with allowing their children to drink almost unlimited amounts juice, since juice is promoted as a good source of nutrition.

Although juice does contain some healthy nutrients, it's high in calories and it may contribute to weight gain and tooth decay if consumed in excess. Some juice drinks, even those with 100 percent juice, have more calories than sugary carbonated beverages do. Juice also lacks the healthy fiber that whole fruit has.

The American Academy of Pediatrics recommends that children drink no more than two 6-ounce servings of fruit juice a day. Consider juices fortified with calcium, especially if your child shies away from milk and dairy products.

Sugar attacks teeth: Sugary snacks, including sugared soft drinks and fruit juices, can cause cavities. Bacteria in the mouth convert sugar to a type of acid that eats away at tooth enamel. This acid continues to damage teeth for at least 20 minutes.

Gooey and sticky sweets usually result in the most damage because they spend more time in your mouth. Allowing toddlers to sip juice all day long gives their teeth a sugar bath that lasts the entire day.

Expanding choices: Once children begin attending school, their food options expand beyond what you choose to buy at the grocery store. But you still have some control over what's in the refrigerator for their after-school snack. They'll typically grab whatever's close and easy.

If cookies are available, they'll eat cookies. If there are no cookies, fresh fruits and raw vegetables will sound much more appealing. Try to have a selection of vegetables already cut up and ready to eat in the refrigerator.

Other healthy choices may include:

- Microwave popcorn
- Low-fat or fat-free milk, cheese or yogurt
- Low-sugar, whole-grain cereals

Sugar-filled beverages: Keep an eye on what your children are drinking as well. By the age of 14, a third of American girls and more than half the boys are drinking at least three 8-ounce servings of sweetened soft drinks daily.

When checking the sugar and calorie contents on soft drinks, keep in mind that every 20-ounce bottle contains 2.5 servings. That means a soft drink that contains 100 calories per serving provides you with 250 calories if you drink the entire bottle.

NUTRITION LABELS: READING BETWEEN THE LINES

Combat TV Ads: Kids may clamor for the latest fad snack food, especially if they see it advertised on television. Limiting the number of hours your children watch TV can reduce your children's exposure to these ads. It may also help reduce their risk of obesity.

Children who watch more than five hours of television a day are more than four times as likely to be obese as those watching less than two hours a day. Children typically become more physically active when parents limit recreational screen time — including televisions, computers and video games — to no more than two hours a day.

Eating in front of the television is a bad habit for any age group. People tend to eat much more than they realize during these episodes of mindless munching.

Snack-time tips: It's not always easy to persuade your children to eat healthy snacks. Try experimenting with the following techniques to promote snack-time health:

- *Offer similar choices:* For example, don't say: "Do you want ice cream or do you want pretzels?" Instead, offer comparable choices, such as regular or frozen yogurt, celery or carrots, graham crackers or soda crackers, apples or oranges.
- *Provide variety:* Select snacks from a variety of food groups. If you serve the same snacks repeatedly, your children might get bored and ask for unhealthy snacks instead.
- *Be creative:* Dress up fruits and vegetables for maximum appeal. Prepare celery with peanut butter, for example, or carrots with low-fat dip. Offer crackers with several varieties of cheeses. Cut vegetables in different ways to make them visually interesting.

Healthy eating: Don't forget to be a good role model for your children. You can't expect them to be content with broccoli and low-fat milk when you're washing down your potato chips with a quart of sugary carbonation.

Your children's snacking habits aren't going to change overnight, but look for positive changes over weeks and months. Teaching your children to make healthy snack choices today will reap your whole family an entire lifetime of benefits.

PSYCHOSOCIAL CONSEQUENCES OF OBESITY

Overweight children and adolescents may experience deleterious psychosocial sequelae, including depression, teasing, social isolation and discrimination, diminished self-esteem, behavioural problems, dissatisfaction with body-image, and reduced quality of life.

MENTAL HEALTH

It is not always clear whether depression is the cause or the result of obesity; both relationships may be true. Prospective studies have revealed that obese adolescents are at risk for major anxiety and depressive disorders later in life. When obesity becomes chronic, the failure to control weight gain over an extended period may predispose affected children to depression. The longer a child is overweight, the greater the risk for depression and other mental health disorders.

Furthermore, depression during childhood is associated with increased body mass index (BMI) during adolescence and adulthood. Depressed individuals tend to sleep poorly and feel less energetic or motivated to engage in PA. In some patients, depression is associated with craving carbohydrates. Insulin resistance may underlie this urge as well as the associated hyperphagia and weight gain occurring in some depressive syndromes.

BODY IMAGE

Dissatisfaction with body image relates to the discrepancy between an individual's perceived self-image and the internalization of a received — and idealized — body image. This dissatisfaction can influence mood and eating practices. Obese Caucasian girls appear to have greater body image dissatisfaction and are more prone to eating disorders such as binge eating and bulimia nervosa than their male counterparts.

SELF-ESTEEM

Children struggling to control their weight may suffer from poor self-esteem, with persistent unhealthy behaviours further lowering self-confidence, deepening frustration, and reducing motivations to change. It is important for clinicians to use positive language and motivational interviewing methods with overweight youth, to instill hope and courage as opposed to communicating negatively either verbally or non-verbally, and further lowering a patient's sense of self-worth.

HEALTH-RELATED QUALITY OF LIFE

Although BMI is an important medical indicator of health, it does not sufficiently capture a patient's ability to function in daily living. Quality of life, one measure of such function, is low in obese children. Youth with poor sleep habits due to obstructive sleep apnea, a frequent comorbidity of obesity, reported significantly lower quality of life scores. Obese children measure lower on self-esteem scores related to physical self-perception and physical quality of life than non-obese children. Such perceived deficits are often also associated with poor PA skills; both factors can interact as barriers to participation in games or sports. Low scores on perceived physical competence are consistently associated with reduced PA in children.

WORKING WITH PATIENTS AND FAMILIES IN THE CLINICAL SETTING

TOOLS FOR CLINICIANS

Addressing the psychosocial contributors to obesity requires clinicians to collaborate with patients and families to find practical interpersonal strategies for approaching unique situations. One useful technique is motivational interviewing (MI), defined as a person-centered goal-oriented method of communicating that elicits and strengthens intrinsic motivation for positive change. MI is especially useful for individuals who are less confident about their ability to change existing behaviours. Combining supportive and empathetic counselling with more directive methods, clinicians can help these patients move from ambivalence to commitment to adoption of healthier active lifestyles.

One resource used to identify health-related quality of life is the "Sizing them up score", which looks at emotional and physical functioning, teasing, marginalization, positive social attitudes, mealtime challenges and school functioning. This is a useful tool for clinicians in the office setting.

WORKING WITH PARENTS

Clinicians need to help educate and empower parents. By using MI, they can encourage parents to be more sensitive and nonjudgmental. The focus should be on helping an entire family become healthier. Two key strategies are to determine whether changing family behaviour is a priority; and to determine how confident the parent is about achieving the necessary changes.

Clinicians need to express their own concern when a patient is overweight/obese, as well as convey their confidence that a family can achieve a healthier lifestyle. Linking the child's weight to specific conditions in the family medical history might help to increase the motivation to change. Once a parent is engaged, they should be invited to become positive role models for the family and be encouraged to limit less appropriate food choices and sedentary activities. Parental eating choices, such as limiting high fat/sugar foods and providing healthy snacks in the home, can be hugely influential. Educating families to avoid casual snacking (a significant source of extra calories) throughout the day and evening is also important.

Counsel parents to avoid using food as a reward or bribe, or compelling a child to eat who does not wish to. Discourage "food pushing" (urging a child to eat foods especially prepared for them), while respecting the cultural impulses that may be behind this tendency, such as profound food insecurity in a family's country of origin. While less likely to be detrimental when food choices are healthy, the combination of exposure to fast foods and food pushing may increase obesity rates. Indeed, immigrants who have lived in Canada for 10 or more years have been shown to have a higher risk of developing obesity than recently arrived immigrants.

Consistent, healthy routines for the whole family should be promoted. Children and adolescents benefit significantly by eating meals regularly with their family. A meta-analysis of longitudinal studies suggests that youth sharing three or more family meals per week reduces the odds for overweight (12%), disordered eating (35%) and increases odds (24%) for eating healthy foods. The psychosocial benefits of shared mealtimes include quality time to communicate as a family. Skipping breakfast is not uncommon in busy homes but should be avoided; the prevalence of obesity is significantly higher in children and youth who miss breakfast.

DEVELOPING EFFECTIVE PUBLIC POLICY

The development of public policies that strengthen community frameworks for healthy active living is supported by the World Health Organization and other international bodies. The WHO Global Strategy on Diet, Physical Activity

and Health recommends broad, comprehensive and coordinated public health efforts at national, regional and local levels, including initiatives that reduce unhealthy eating and physical inactivity, and raise awareness around the influence of diet and PA on health. These strategies must be evidence-based, multisectoral, multidisciplinary and focused on a life-course perspective. They should address issues such as culturally sensitive diets, food security, food safety and the promotion of farmers' markets.

Young children would benefit directly from better nutritional regulation and the provision of age-appropriate PA in child care settings and schools. The WHO School Policy Framework on Healthy Eating and Physical Activity recommends that schools and communities work together on strategies that promote health information, improve health literacy, and promote healthy diet and daily physical education. Incentives to ensure safe sport and recreation for all age groups are important, and involve coordinating the efforts of decision-makers in health, education, transportation, justice, sport, finance, industry, environment and human resources. Children's hospitals should lead by example rather than rely (as they commonly do) on fast-food vending and sedentary activities. Hospitals need to develop and implement healthier nutrition and PA guidelines for patients, their families and staff.

School-based policies that prevent bullying, and policies and legislation that explicitly support mental health (as WHO recommends for all developed countries), would also help to resolve the psychosocial aspects of childhood and adolescent obesity.Make weight loss a family affair

Preventing and treating childhood obesity requires the entire family. Here's how you can encourage a healthy weight in your home.

Children can't change their exercise and eating habits by themselves. They need the help and support of their families and other caregivers. This is why successful prevention and treatment of childhood obesity starts at home.

Childhood obesity is usually caused by kids eating too much and exercising too little. So creating new family habits around healthy eating and increased physical activity can help a child lose weight and can also improve the health of other members of the family.

Change family behaviours: Many behaviours contribute to childhood obesity, whether it's the time spent in front of the TV or computer or the types and amounts of food eaten. These behaviours or habits are hard to change within a family, especially if members aren't ready, willing or able to make changes. Small, progressive steps can help. Keep in mind the following helpful hints.

- *It's not a race:* The first rule of change is to not make changes too quickly. It takes time and dedication to unlearn unhealthy behaviours and to develop new, healthy ones.
- *Think small:* Small, gradual changes are easiest to follow and incorporate into your daily lives. And small changes can make a big difference over time. Pick a few small changes that seem doable, for example, turning off the TV during dinner, switching from soda pop to milk or water, or taking a walk after dinner once a week.

- *Set individual and family goals:* Goals need to be achievable and measurable. Set specific goals for each family member, and then determine family goals. For example, your child's goal might be to eat fresh fruits and vegetables for afternoon snacks, and the family's goal might be to eat out at a fast-food restaurant only once a month.

The new changes might take some time getting used to. But stick to the plan as best you can and evaluate your progress. Sometimes goals need to be adjusted if they don't work for the family. It's better to create a new plan than to stick to one that isn't working.

Create a healthy-weight environment: As you work towards healthy habits and behaviours, create a home environment that supports these efforts. For example, make sure healthy foods are readily available. Serve fruits and vegetables with meals and remove high-calorie, high-fat foods from the home, buying them just occasionally.

A healthy-weight environment also means that exercise and physical activity are built into the day's routine. Encouraging the kids to play outside — to ride bike or play a basketball game with friends, for example — is a good way to keep kids active. Organize family outings that involve physical activity, such as walking to the library or playing at a park.

Parents can also set rules for the home that help reinforce the healthy lifestyle. For example, limiting the time spent watching TV or playing video or computer games encourages children to find other more active pastimes.

Other ways to create a healthy-weight environment:

- Remove sugar-sweetened drinks from the home.
- Offer more whole-grain foods with meals and snacks.
- Reduce the number of meals eaten out at fast-food and other restaurants.
- Sit down together for family meals and have that meal last at least 30 minutes.
- Remove TVs and computers from children's bedrooms.
- Include children in active chores, such as washing the car or walking the dog.

As your family establishes healthy behaviours, be sure that all members — including parents — stick to the plan. For example, if you take the TV out of your child's bedroom, make sure to take the TV out of your bedroom as well. Consistency is crucial to creating a healthy-weight home.

Be a positive role model: The best way to get your child on board with the new, active lifestyle is to commit to the changes yourself. Your actions teach your child what to eat, how much to eat and when to eat. You also encourage your child to be physically active every day if you make it a priority yourself.

Here's how you can be a positive role model:

- Eat more healthy, nutritious foods.
- Control your portion sizes.
- Limit the number of treats and high-calorie snacks you eat.
- Be physically active every day.
- Limit the amount of time you spend watching TV or playing computer games.

Reward successful changes: Rewards for successful behaviour changes keep your family motivated and more inclined to stick to the plan. Make a list of how your family has succeeded in changing certain eating and activity habits. Then celebrate your success. Rewards should be consistent with the goal and be given regularly, such as on a daily or weekly basis.

Celebrating progress can be as simple as offering your child praise and attention, or it could be more involved. Planning an activity the family likes to do together, such as skating or swimming, is a good option. Don't use food as a reward or punishment, however. You might unintentionally lay the groundwork for food-related power struggles.

A challenge for today's family: Making changes can be challenging, especially when today's families juggle busy schedules, time and money constraints, and other stressors and demands on daily living. But if your family works together and supports each others' efforts, then success is more likely.

Eventually the new changes will be incorporated into your family's everyday life and will be just the way things are done. Once healthy habits become routine, you're well on your way to maintaining a healthy weight and improving your health as a family.

HIGH BLOOD PRESSURE AND CHILDREN: WATCH YOUR CHILD'S WEIGHT

A specialist explains how obesity and high blood pressure threaten children's health.

Unhealthy snacks, sugar-laden sodas and too many hours playing video games are taking their toll on children. Among other problems, these unhealthy habits may be contributing to high blood pressure (hypertension). Once considered only a threat to adults, high blood pressure is now affecting more children — jeopardising their potential for a healthy future.

Bruce Morgenstern, M.D., chief of the Division of Pediatric Nephrology, Phoenix Children's Hospital, and a physician liaison at, Scottsdale, Ariz., is a national expert on diagnosing and treating high blood pressure in children. Here, he explains how high blood pressure is threatening children's health, and what can be done about it.

What causes high blood pressure in children?: For some children, high blood pressure is caused by problems with the kidneys or heart. But for a growing number of kids, poor lifestyle habits — such as an unhealthy diet and lack of exercise — contribute to high blood pressure. High blood pressure in children has become a natural extension of the nationwide obesity epidemic.

Why worry about high blood pressure in children?: High blood pressure can cause stroke, heart failure and kidney disease in children, just as in adults. And being overweight — with or without high blood pressure — increases the risk of other cardiovascular problems, as well as diabetes.

When should blood pressure checks begin?: For healthy children, blood pressure should be checked during routine medical visits beginning at age 3.

Blood pressure should also be checked at least once during a course of treatment for any acute illness. If your child has pneumonia, for example, and has two or three visits to the doctor, his or her blood pressure should be checked at least once.

If your child has a condition known to increase the risk of high blood pressure — including prematurity, low birth weight, congenital heart disease, and certain urinary or kidney problems — blood pressure checks may begin during infancy.

How often should children have their blood pressure checked?: If your child's blood pressure is normal, routine checks during well-child visits are enough. If your child's blood pressure is slightly elevated, it should be checked again within six months. If it's still high, more measurements should be taken on at least two separate occasions — generally within a few weeks — to confirm the diagnosis.

What if no other symptoms are present?: High blood pressure is a relatively silent condition. Often, signs and symptoms — such as headaches, visual changes, dizziness, shortness of breath and fatigue — don't appear unless high blood pressure becomes severe.

Can high blood pressure in children be prevented?: Changing modifiable risk factors may help. These are risk factors you can do something about. For example, a child who gets more exercise and eats a healthier diet is less likely to develop high blood pressure, even if high blood pressure runs in the family.

Smoking and drinking are other modifiable risk factors. Obviously you don't see a lot of that in 7-year-olds, but it's common among adolescents — and secondhand smoke is a risk at any age. Muscle-building steroids and other street drugs also may contribute to high blood pressure.

What if a child doesn't have high blood pressure but is a little overweight and doesn't get much physical activity?: This is still cause for concern. It's also an indication to act now. If blood pressure is elevated when a child is young, the odds are quite high that it'll be elevated in adulthood — putting the child at risk of potentially life-threatening conditions.

Besides healthy eating and regular physical activity, what else can parents watch out for?: Pay attention to breathing problems your child may have while sleeping. Children who have sleep-disordered breathing, such as sleep apnea, often have problems with high blood pressure — particularly children who are overweight. Screening for sleep-related breathing problems takes just a few minutes in the doctor's office.

What happens if a child is diagnosed with high blood pressure?: Treatment depends on what's causing the high blood pressure. Healthy lifestyle changes — such as more physical activity and a healthier diet — can have a dramatic effect on high blood pressure. Some children also need medication to control their blood pressure.

Aren't we just adding more labels to children by identifying high blood pressure as an issue?: Years ago, parents put babies to sleep on their stomachs, and children went without car seats and bike helmets. Although no one was

aware of the risks, the risks were still there. Likewise, it's important to increase awareness of the dangers of obesity and high blood pressure in children. Although heart attacks are unlikely in childhood, high blood pressure sets the stage for a lifetime of serious health problems.

KEEPING KIDS ACTIVE: IDEAS FOR PARENTS

Children have a natural love of playing hard, but without encouragement, they may opt to sit around. Here's how to help your kids stay active.

Children seem to become more sedentary every year, watching television and playing video games instead of biking to the playground or playing kickball in the backyard with their pals. Even schools have stopped emphasising fitness. In some school districts, physical education has vanished completely because of underfunding.

Kids need regular exercise to build strong bones and muscles. Exercise also helps children sleep well at night and stay alert during the day. Such habits established in childhood help adolescents maintain healthy weight despite the hormonal changes, rapid growth and social influences that often lead to overeating. And active children are more likely to become fit adults.

As childhood has become more sedentary, children have put on weight — lots of it. In the past 30 years, the rate of childhood obesity has more than tripled, leading to a dramatic increase in the number of children with type 2 diabetes, a disease once limited to sedentary, overweight adults.

The forces behind the obesity epidemic have been operating for several decades. They're pretty well beyond your control. But you do have the power to give your children a lifelong appreciation for activities that strengthen their bodies.

Set a good example: If you want an active child, be active yourself. Take the stairs instead of the elevator and park the car farther away from stores. Never make exercise seem a punishment or a chore. Find fun activities that the whole family can do together, such as:

- Swimming
- Nature hikes
- Cycling
- Canoeing
- Walks with the family dog

"If mom and dad exercise, it's a very powerful stimulus for a child to exercise," says Edward Laskowski, M.D., a specialist in physical medicine and rehabilitation and co-director of the Sports Medicine Center at, Rochester, Minn. "In addition to getting you active, exercising together gives you good family time. The key is to get kids moving. Free-play activities such as playing tag, hide-and-seek, hopscotch or jump-rope can be great for burning calories and improving fitness."

Limit screen time: "There are a lot of reasons why children are less active today, but the biggest culprit is the television set, followed closely by video games and computers," Dr. Laskowski says. "These activities encourage a sedentary lifestyle."

Watching television is directly related to childhood obesity. Children who watch more than five hours of television a day are eight times more likely to be obese than are children who watch less than two hours of television a day.

A surefire way to increase your children's activity levels is to limit the number of hours they're allowed to watch television each day. Other sedentary activities — playing video and computer games or talking on the phone — also should be limited.

Promote activity, not exercise: Children don't have to be in sports or take dance classes to be active. "Every kid is wired differently," says Dr. Laskowski. "We all have certain strengths and certain anatomical features and characteristics that permit us to do certain things better than others." Many noncompetitive activities are available for a child who isn't interested in organised athletics. The key is to find things that your child likes to do. For instance, if your child is artistically inclined, go on a nature hike to collect leaves and rocks that your child can use to make a collage. If your child likes to climb, head for the nearest neighbourhood jungle gym or climbing wall. If your child likes to read, then walk or bike to the neighbourhood library for a book.

For a youngster interested in sports, however, involvement can be the basis for a variety of activities, including training for better performance and developing skills to play several sports.

Before your child plunges into an organised sport or activity, learn as much as you can about:

- How much time you and your child will have to commit to practices and games
- How much participation and equipment will cost
- The characteristics of the sport — for example, the relative emphasis it places on agility, speed, coordination, endurance and strength
- Your child's physical maturity
- The quality of instruction
- What benefits your child hopes to derive from it, and how you hope it will benefit him or her

Start young: Remember your energetic toddler? Direct that energy into a lifelong love of physical activity. For instance, have your child show you how bunnies hop, eagles fly or dogs wag their tails.

Some other suggestions for keeping kids interested:

- Play games your elementary school child loves, like tag, cops and robbers, Simon says and red light, green light. If you don't remember the rules for these games, make up your own or walk to your local library and check out a book on games.
- Let your toddlers and preschoolers see how much fun you can have while being active. Don't just run with them. Run like a gorilla. Walk like a spider. Hop like a bunny. Stretch like a cat.
- Plan your family vacations around physical activities — hiking, biking, skiing, snorkeling, swimming or camping. Take along a ball or Frisbee disc to sneak in some activity at rest stops.

- Make chores a family affair. Who can pull the most weeds out of the vegetable garden? Who can collect the most litter in the neighbourhood? Have your kids help shovel the snow off the driveway and use that excess snow to build a huge snow fort.
- Vary the activities. Let each child take a turn choosing the activity of the day or week. Batting cages, bowling and fast-food play areas all count. What matters is that you're doing something active as a family.

"By incorporating physical activity into our children's lives at an early age, we are setting the foundation for good fitness habits in the years to come," says Dr. Laskowski. "In fact, it can have a ripple effect on future generations and contribute to overall enhancement of public health."

Nutrition for kids: Guidelines for a healthy diet: You want your child to eat healthy, but what makes up a healthy diet? Which nutrients are necessary and in what amounts?

Nutrition for kids essentially is the same as nutrition for adults. In fact, everyone, regardless of age, needs the same types of nutrients — such as, carbohydrates, protein, fat, vitamins and minerals — just in different amounts.

So what's the best formula to fuel your child's growth and development? Click on the tabs to the left for the recommended nutrients within the different age groups. If you have concerns specific to your child's diet, talk to your doctor or a registered dietitian.

SODA BEING PULLED FROM SCHOOL VENDING MACHINES

What happened? High-calorie beverages have lost their place in school vending machines. In a landmark agreement between major beverage distributors and the Alliance for a Healthier Generation — a joint initiative of the American Heart Association and the William J. Clinton Foundation — nearly all sales of soda to schools will stop.

Under the new guidelines, only lower calorie and nutritious beverages will be sold to schools. Cadbury Schweppes, Coca-Cola and PepsiCo have agreed to sell only water, unsweetened juice, and flavoured and unflavoured low-fat and fat-free milk to elementary and middle schools. In addition to these beverages, diet sodas, diet and unsweetened teas, flavoured water and low-calorie sports drinks will be sold to high schools. Whole milk and regular soda will not be offered to any schools.

The new guidelines shrink serving sizes as well — 8 ounces for elementary students, 10 ounces for middle school students, and 12 ounces for high school students.

Although the changes will take effect in some schools sooner than others, the companies who've agreed to follow the new guidelines will work to implement the changes at all schools in the United States by the 2009 to 2010 school year. Officials hope that other beverage companies will follow suit.

The shift to lower calorie, more nutritious beverages is expected to help curb rising rates of childhood obesity. Beverage sales at school events open to the public — such as concerts and sporting events — won't be affected.

What does this mean to you? The average teenager consumes an estimated 250 to 325 calories a day in soda. More nutritious beverage choices at school may save students hundreds of calories a day. Encourage your child to make healthy food and beverage choices part of an active lifestyle.

THE PATIENT'S PERSPECTIVE

Important psychosocial contributors to obesity may include stressors that trigger emotional eating: being bullied, suffering neglect and maltreatment or a living situation where consistency, limit-setting and supervision are lacking.

Stressed children are more prone to overeating or "emotional" eating, that is, eating excessively for comfort or to make oneself unattractive. Examples of stressors that commonly lead to overeating are parental separation/divorce, bullying, physical/mental maltreatment or abuse, and living in foster care with frequent placement changes. Such challenges can predispose a child or adolescent to use food as a coping mechanism.

Chronic stress can also compound poor sleeping habits, fatigue and a reluctance to engage in regular PA at school and at home. Inadequate sleep is a known risk factor for obesity. Stress can negatively impact the immune system, increasing the risk of viral upper respiratory infections, and further impede consistent PA. Stressful living situations, including poverty, or generalized anxiety or depression can stimulate neuroendocrine responses. An activated hypothalamic-pituitary axis and sympathetic nervous system may induce intra-abdominal adiposity, insulin resistance and metabolic syndrome through excessive cortisol production.

"Weight bias"—defined as the tendency to make unfair judgments based on a person's weight—is a significant social problem. Overweight individuals are often teased and have difficulty making friends. Overweight/obese children are more prone to being bullied, humiliated or ostracized, and they are also more likely to engage in bullying behaviour. It is difficult to facilitate weight loss through lifestyle changes alone if a bullied child is not identified and supported in these other respects as well. Some bullied children are unable to follow healthy nutritional plans because of their emotional eating behaviours. A fear of bullying may lead them to exercise less and stay indoors. Discrimination against obese individuals is a harmful, pervasive and significant social problem that needs to be addressed early, concretely, and as part of a child's or teen's treatment regiment.

THE PARENT'S ROLE

Parenting plays a pivotal role in promoting healthy active living and in managing childhood/adolescent obesity. The following parental responsibilities are particularly important: good role-modelling, setting limits, purchasing healthy foods for family consumption, keeping to healthy family routines (eg, eating meals and exercising together), effective time and money management, and ensuring that a divorce or separation remains as untraumatic as possible.

Children and youth who lack routine, consistency, limits and supervision at home are at greater risk of obesity. For reasons that are still unclear, there is also a higher incidence of obesity among children without siblings. Theoretically, the only child might eat more out of boredom or loneliness, or parents may treat their only child more like an adult, serving larger portions of food or sharing too much "screen time" instead of being physically active together. Sometimes children are pushed by parents to excel in a particular sport, which can result in an aversion for sport and exercise. They may become more sedentary because of "burn out" or disillusionment, and abandon any form of PA.

Divorce may be a sensitive topic for a parent to discuss with the clinician but it can be a significant psychosocial contributor to obesity. If divorced parents fail to communicate, or blame one another for their child's state of health, sustained behavioural changes are difficult. Separation and divorce strain parental resources (time, money and energy), making healthy eating and regular PA more challenging. Some children counter the stresses induced by divorce by emotional eating.

THE ROLE OF THE COMMUNITY

The cost of healthy eating (ie, lots of fresh fruit and vegetables) is often higher than eating less nutritious foods. Fresh produce is also more difficult to obtain (and more expensive) in remote regions and in Northern Canada. Families with limited income, education and access to fresh produce are more likely to be overweight. Moreover, foods high in fat and sugar continue to be a major focus of television advertisements during children's programming. Direct marketing to younger, susceptible children in an effort to develop early brand loyalty often succeeds. Poorer Canadians are more likely to purchase these foods because they are often more affordable than healthier alternatives.

First Nations, Inuit, some ethnic minorities and children living in apartments or public housing, or in neighbourhoods where outdoor play is curtailed by weather or a lack of safe facilities, are also at higher risk for obesity.

Limited access to recreational opportunities, parks and neighbourhood playgrounds, a byproduct of urban sprawl that especially impacts low-income families, also correlate to obesity. Although many provinces/territeries have eliminated quality daily physical education (PE) classes in favour of academics, current research demonstrates that regular PE actually improves academic performance and reduces stress. The benefits of PA and participating in sports or recreation programmes on the health and well-being of children and youth are all too often preempted by cost, lack of access or opportunity, and parental time constraints.

8

Knowledge of Child Development

Knowledge of child development is essential for all workers who come into contact with children and for their managers. The Children Act 2004 provides a mandate for all these practitioners to be concerned about children's safety and wellbeing.

Understanding development is an important step towards being clear about what constitutes children's safety and wellbeing and promoting and preserving wellbeing. For social workers a good working knowledge of child development is a crucial component in family support and child protection and in assessment and planning interventions.

The Children Act 1989 defines "development" as physical, intellectual, emotional, social or behavioural development and "health" as physical or mental health.

In determining and defining which children are in need of services the Children Act 1989 has at its heart the child's right to achieve and maintain a reasonable standard of health or development. A child's development must also be taken into account when a family court considers making a care or supervision order where the child's development is "compared with that which could reasonably be expected of a similar child." This comparison with a 'similar child' requires familiarity with the range of development any child might demonstrate. It also requires balancing the norms of development with the needs of the individual child.

FINDINGS

INTRODUCTION TO THE CHILDREN, THEIR EXPERIENCES AND THEIR DEVELOPMENT

The learning about the way these children's development interacts with maltreatment is presented in themes linked to age related stages, starting with the babies and toddlers and moving to the older children. The early parts of this section concentrate on professional responses to physical and emotional development in infants and young children in the context of bruising and faltering weight.

Later parts of this section widen out to consider older children and professional responses to social and behavioural and other aspects of development, focusing on behavioural distress among young people, including among children with disabilities. After discussing children in age related stages, the findings are analysed further by addressing crucial questions which help social workers and other professionals to think about and understand children's evolving development, namely, what does the child mean to the parent, and what does the parent mean to the child? The final part of the findings section summarises what has been learnt from these six cases about acting on maltreatment and development.

Each of the six children's lives and experiences were unique and different. However, there are some recurring themes in agencies' faltering responses to potential warning signs of abuse and neglect that could be seen to link to the child's development, or to an understanding of the child's likely developmental capacity. A central aim in presenting these findings is to highlight the messages from these individual cases for both practitioners and for Local Safeguarding Children Boards. Where possible the findings are illustrated with examples from the six serious case reviews. However, to respect confidentiality, only limited aspects of each child's story can be used.

ROTE MEMORY

In general, rote memory refers to the ability to recall material that was presented more or less outside a context of significant issues and events as regards the individual involved. The digit span test, in which the subject is required to repeat after the examiner a string of digits is the most popular test of this mental ability. From a structural point of view, rote memory ability Seems to appear relatively early in life, and the structures that mediate it do not seem to chance much with age. In recalling digits adults are forced to use the same mechanisms as children. Evidence for cognitive growth cycles in the attainment of rote memory ability is anecdotal but so common that its existence is easy to document.

Young children memorise materials of all kinds without being told to do so and apparently without any conscious intention of so doing. Most parents have had the experience of reading a book to a preschooler for the third or fourth time, and of then discovering that the child knows the story by heart. Indeed the

child will quickly correct the adult who misreads a word or who skips a page. But the adult, who has heard the story equally often, does not have it memorised.

One explanation of this phenomenon is that young children are just in the process of attaining rote memory ability and are, therefore, using any stimulus available upon which to practice their emerging memory skill. Gating and storage with respect to rote memory is evident in what Piaget has called "deferred imitation." Piaget gives many illustrations of children who observe a phenomenon early in the day and imitate it later in the day or on following days. A girl may observe a woman painting a picture and will later make believe she is painting one herself. Likewise, frequently young children will listen to songs which they will not repeat at the time but will sing at some later point. In addition, children who scold their siblings and peers in just the words and tone of voice of their parents—"What am I going to do with you!"—are demonstrating deferred imitation which consists of gating the stimulus before it can precipitate immediate action yet storing it for later utilisation.

Psychometric data as well as research studies suggest that rote memory matures relatively early in life and remains relatively constant thereafter until senescence. With advancing age, immediate memory is among the abilities most subject to deterioration. As it pertains to cognitive growth cycles, the early maturity of rote memory would lead us to expect evidence of rote memory "play" during the elementary school years. Such evidence can be found. A well-known formalised game of rote memory is the "spelling bee." While the spelling bee originated out of the spontaneous play of children seeing how many words they could spell, it became a highly competitive activity which lost most of its "playful" or freedom-from-tension aspect.

Other rote memory games that children used to play have become obsolete through the growth of technology. At one time many young children took delight in identifying and naming every make and model of car they saw go down the street. Today, however, the variety of models is so great that this game is no longer possible. Likewise, the collections of baseball and football player cards that were once so popular are a little less so today because of the large number of teams and players. Many young children, however, still delight in knowing the names of all the members on their favourite teams, and this is a playful use of their rote memory skills.

From the point of view of cognitive growth cycles, the early termination of the cycle for rote memory raises an important question. What becomes of the intrinsic growth forces that motivated its development and what determines its later utilisation? If we look at the fate of rote memory, some answers are suggested. In contrast to the preschool child, who spontaneously uses rote memory, the school-age child resists memorisation and educators are up in arms against it. Apparently, therefore, the growth forces that led to the structurisation of rote memory are dissipated once the structures are formed. Thereafter, as we shall discuss later, memorisation is put in the service of various social motives which take up where the growth forces left off.

SOCIAL-EXPERIENCE DYNAMISMS

Social experience, the sum of the child's interpersonal relationships, bears a complementary relationship to cognitive growth. This is true because the child's level of mental development structures the level of his social experiences and because his social experiences serve as a motivation for the utilisation and further elaboration of his cognitive abilities. I described some of the ways in which the child's mental abilities serve to organise his interpersonal relationships. The egocentrism of the preschool child makes him impervious to the needs and feelings of others when these are different from his own. In the same way, the egocentrism of the adolescent make him assume that everyone about him is as concerned as he about his long nose or acne.

The child's mental abilities determine the way he interprets and reacts to social interchanges. In stressing the role of cognitive structure in social experience in the chapter on understanding children, I did not mean to gainsay the importance of social experience in determining cognitive functioning. Indeed, the present section is concerned with some of the ways in which the child's interpersonal experiences encourage the utilisation and further elaboration of the child's mental powers. After a discussion of the role of these social motives in normative cognitive development and education, the part they play in learning disabilities will be briefly reviewed.

With these preliminaries out of the way, I want to talk about several different types of social motivations which seem, to me at my rate, to be of critical importance for the continued utilisation of fully formed cognitive structures. In this discussion, as in others in this book, it is necessary to draw upon clinical and anecdotal material as well as upon research data. We are, however, still at a very early point in our experimental understanding of the nature of social relations and may still have to rely upon the consensual validation of our observations rather than upon statistics as a basis for agreement if not for belief. There are three types of social interactions that seem to be of particular motivational significance, and I have called them, respectively, the attachment dynamism, the age dynamism, and the imitation-avoidance dynamism.

THE ATTACHMENT DYNAMISM

There is now a good deal of evidence that the attachment of the infant to particular adults comes about during the last trimester of the first year of life and that this attachment is increased during the second year of life, when fear of strangers and strange places is inordinate. By and large the infant remains attached to only a very small coterie of adults, usually his mother, father, and perhaps a caretaker. The adults to whom the child is attached are his primary source of self-esteem, and hence wield considerable power over the youngster without his always being aware of this fact.

This attachment of the child to significant adults is perhaps the most powerful motivation for the elaboration and utilisation of mental abilities. Although the phenomenon of attachment that I have just described is quite familiar, it seems

to me that its implications for mental development have not always been emphasized, particularly in special education. The importance of attachment in mental growth can be demonstrated in many different domains, but I would like to illustrate its importance in two practical situations. These situations are the teaching of reading to normal children and the teaching of tool subjects to youngsters with learning disabilities. In both of these contexts the role of attachment is often overlooked, and those concerned with instructing children in these situations may be primarily concerned with curriculum materials and instructional techniques rather than with interpersonal relationships.

It is often assumed that the selection of the right curriculum materials and instructional techniques will release the child's "innate" curiosity and eagerness to lean. But as I have already suggested, I do not think one can hope to build upon intrinsic motivation in each and every learning situation. Indeed, I am very much afraid that what appears to be intrinsic motivation is, in a good many cases, social motivation derived from the adults to whom the child is attached.· Learning to read is a case in point. Unlike walking and talking, reading is not something a child acquires spontaneously as a part of his normal, expectable, adaptive apparatus. Learning to read is a difficult task and, in addition to having the requisite mental abilities and experiences, children need powerful motivation.

In the majority of cases this motivation comes from attachment to adults who encourage and reward the child's efforts. In our study of early readers (children who read before coming to school), we found that many had a close friend (either an older child or adult) who spent a great deal of time helping the child to read. And in the biographies of blacks who have gotten out of the ghetto one often reads of particular adults or teachers who recognised and encouraged abilities and talents. Attachment to adults who encourage and reward reading behaviour is probably of major significance in all academic achievement. One other example of the role of attachment in academic achievement might help to strengthen the argument for its importance.

For the past six years I have been supervising, at the University of Rochester, an undergraduate practicum wherein the college students tutor children with learning handicaps for an entire year. Among the many things we learned in the course of running this programme was that remedial work could not be introduced or used effectively until an emotional relationship, an attachment, occurred between the tutor and the child. Once this occurred, the child's behaviour began to change at home and at school. Once a child began to feel that he was worthy of a young adult's liking and respect, there was a kind of spread of affect which made him feel good about himself and his abilities to learn in a variety of situations.

It seems to me that this spread of affect phenomenon is of crucial importance in working with learning-disabled children. Whatever the child's physical, neurological, or physiological handicaps, his impaired sense of self-esteem always plays a part in his difficulties with learning. When such a youngster is made to feel better about himself, from the attention, concern, and liking of

another person, he feels better about himself in general and about his capacity to cope with new learning situations. We have often observed how children our programme begin to do better work at school and begin to be more tractable at home as a result of the non-academic, but self-esteem-bolstering experience of our programme. Actually, the importance of emotional attachment in academic achievement is already implicit in Freud's conception of transference.

In Freud's view, a patient could not really begin to change his ideas about himself and his world until he established an emotional attachment to the therapist. This attachment was conceptualised as a failure to differentiate between the patient's parents and the therapist and hence involved "transferring" their feelings for the parents to the therapist. It is this "transferred" emotional attachment which, in therapy, motivates cognitive as well as emotional change in the patient. The importance of such attachments in educational settings has been made explicit by Redl and Wattenberg. It is important to say, however, that not all attachments between children and non-parental adults are of the transference variety. Transference is a specific form of attachment which derives from the peculiarities of the therapeutic situation.

In a less intense context, children, like adults, can become attached to other people on the basis of shared experiences and mutual positive regard. In such forms of attachment, although the patterns of attachment may be modeled after familial patterns (of attachment to parents and siblings), the feelings are less intense and involve a clear differentiation between the adult and familial figures. In short, there are many degrees of attachment of which the transference in psychotherapy is perhaps a more extreme form.

Even less intense modes of attachment can, however, have positive motivational effects. Although attachment to adults is a primary social motive for learning in young elementary school children, this effect diminishes with age. Between the third and fourth grades—when children are between eight and nine years of: age—the peer group becomes more important and parents and teachers become less important. How the peer group feels about academic achievement then becomes a powerful motive for doing or not doing school work. In adolescence, the attachment to friends and peer group almost completely eclipses the parents and teachers as the source of the attachment dynamism and as the motivation for succeeding in school. The relation between attachment and cognitive functioning does not cease in childhood. But in adulthood the causal directions can be reversed. An adult who is intellectually stimulated by a particular author or theorist not infrequently experiences an emotional attachment as well. One example of the relation between intellectual stimulation and attachment is provided by some of Freud's followers. Among some of these disciples, the commitment to Freud as a person was every bit as great as their commitment to him as a theorist. When Freud's words are taken as a gospel from which deviation is unthinkable, we have the end result of an attachment dynamism. In this case, the attachment to Freud as a person made it impossible to challenge him as a theorist. This melding of intellectual stimulation and

attachment is to be found among at least some of the followers of Hull, Skinner, Chomsky and Piaget. Although the end result is seldom as glaring as it was in the case of some of Freud's followers, emotional attachment to the master sometimes blurs critical judgement.

As the foregoing discussion suggests, the relationship between emotional attachment and intellectual stimulation among adults is fraught with dangers. Such attachment can make the followers of an intellectual innovator become protective of the master's work and thus violate the spirit of openness which the innovator espoused.

The history of science is replete with stories of men who made dogmas of new scientific theories and gods of the men who created them. The urge to deification is apparently a deep-seated archetype in man and it is easily released by the intellectual genius. In adults, therefore, the relation between attachment and intelligence can be just the opposite from what it was in childhood. Among children, emotional attachment can be the motivation for further intellectual growth, whereas in adults such attachment can lead to mental stultification and rigidity.

THE AGE DYNAMISM

In a rigidly age-graded society such as our own, age-related and age-appropriate behaviours are often clearly marked. Smoking and drinking are allowed after age eighteen and not before. Likewise, driving and voting are permitted only at a certain age as prescribed by law. There are many informal age rules as well. After about the age of eleven or twelve, it is no longer appropriate for young people to go out "tricking and treating" on Halloween. Adolescent girls may wear pantyhose and makeup but preadolescent girls, except on special occasions, may not.

Many more examples could be given, but these may suffice to illustrate the many age-related behaviours operative in our society. The age dynamism is essentially an awareness of these age-graded behaviours that serves to motivate cognitive growth. The age dynamism, like the attachment dynamism, operates at all levels of development and takes different forms at different phases of the life cycle. The following incident illustrates how the age dynamism works. Last spring I visited a school at the time the children were preparing decorations for an Easter programme.

I had the opportunity to talk about the activities with the children. In the course of our discussion, one third-grade youngster remarked that he "used to" believe in the Easter Bunny, but that he did not believe in it any longer. There was a certain quiet pride and a sense of new maturity in his recitation of this fact and, for him, it was clearly a step forward in personal intellectual growth. Children demonstrate the same sense of pride and maturity when they announce that they no longer believe in Santa Claus or in fairy tales. In all of these instances we see the age dynamism at work.

In essence there is pleasure in giving up ideas held at an earlier age and in mastering ideas common to a later age. Once a child has passed a certain stage,

awareness of this circumstance motivates him to consolidate his gains and to move towards further differentiation from "childish" ways of thinking and behaving. The age dynamism involves more than the giving up of "childish" ideas; it also involves the tendency on the part of children to imitate and copy the behaviours of young people who are slightly older than themselves. This aspect of the age dynamism helps to account for the perpetuation of the vast language and lore of children from generation to generation. The language and lore include everything from incantations about ladybugs and cracks in the sidewalk to parodies of adult manners and morals.

Much of this language and lore originated hundreds of years ago and has been passed down by oral tradition from older to younger children in the course of their spontaneous play, The existence of this extensive language and lore is ample witness to the proclivity of younger children to ape the behaviour of their elders. Evidence of this aspect of the age dynamism can be seen in children's choice of fictional heroes. Most authors who write for children know that the hero or heroine of the story has to be several years older than the children for whom the story is written. Peter Pan, who is about age ten, appeals to children of six, seven, and eight as does Christopher Robin who is about the same age. Tom Sawyer and Huckleberry Finn, however, who are young adolescents, appeal to the nine- and ten-year-old children.

The same holds true for the heroines in fiction for girls. Young adolescent girls eagerly read about Nancy Drew, a late adolescent girl. At least some of the appeal of these stories is the opportunity they provide for younger children to identify with leading characters who are older than themselves. An example of the age dynamism which reflects both the pleasure of overcoming childish ideas and the satisfaction inherent in acquiring more mature ones comes from the recent work on peer teaching.

The effectiveness of having older children tutor younger children rests, in part, on the operation of the age dynamism. In such tutoring situations the younger child is pleased to be the object of attention of an older one. In his turn, the older child takes a certain satisfaction in recognising how much more he knows and how much more mature he is than his younger counterpart. Of course the peer situation may not always operate this harmoniously. In the family situation the aspirations of the younger child to ape the older one, in manner of dress and speech, may be a cause of friction and conflict. If we look at the age dynamism in childhood more closely, we see that it involves a number of different elements.

There is, on the one hand, a sense of having passed a particular stage and being superior to it. There is also the sense that there are still further secrets, freedoms, and pleasures that await one at the next stage of development. The age dynamism in younger children is a kind of hunger for the special privileges and freedoms of those who are older and more mature. It is perhaps the prime motivation for younger children to model the behaviour and attitudes of older children. As in the case of the attachment dynamism, doing what the older

children do enhances self-esteem. The age dynamism, which appears in childhood, does not really disappear but rather undergoes a sort of metamorphosis in adolescence. At a certain point in development, within our society at any rate, the behaviour of adults no longer seems worthy of emulation.

To be sure, adolescents still smoke, drink, and have sex in part at least as a continuation of the attempt to give up childish things and adopt older "more mature" behaviours. But adopting adult manners, morals, and values begins to take on an aversive quality, hence the metamorphosis of the age dynamism. What happens after adolescence, I believe, is that the age dynamism gets separated from age and becomes a "newness" or "novelty" dynamism. Rather than enhancing selfesteem through emulating their elders, adolescents seek new language, modes of dress, and music as a means of enhancing self-esteem through giving up what is old and acquiring what is new. The creativity of adolescence is, in part at least, stimulated by this need to get rid of the old and to latch on to the new, which in childhood was the age dynamism.

In adulthood, the age dynamism can take on several different forms. Among many adults the original impetus to give up the immature ideas of an earlier age and adopt more mature notions becomes a desire to "keep up with the times," to keep abreast of local and national political and social events. In substituting a kind of "keeping up with the times" for a "catching up with the next age group," there is a shift from self-esteem enhancement to self- esteem maintenance. Among adults who take this path, keeping up with contemporary events is a means of sustaining and nourishing an established and solidly positive self-concept. Such individuals continue to grow by integrating the new with theold, which expands their knowledge and leads to a progressive' enhancement and enrichment of the self. Other adults handle the age dynamism differently.

Tot these individuals the passing of adolescence was seen as a great loss, and they try to perpetuate or maintain adolescence by an inversion of the age dynamism. Instead of emulating those who are older, or trying to keep up with the times, these adults adopt the manners, dress, and morals of adolescents. lust as among children the behaviour of younger children is regarded as negative and something to be avoided, so these adults are aversive to the behaviour and appearance of more mature people and they strive to emulate those who are younger. In effect these people invert the age dynamism by imitating the behaviour of younger age groups and avoiding behaviour, dress, and manners characteristic of an older generation. To be sure, in our society, the inversion of the age dynamism occurs to a certain extent in all individuals.

In a society wherein youth and beauty are ultimate goods, no one wants to grow older, gracefully or otherwise. Most people eventually accept the inevitable but extreme cases of age-dynamism inversion are common, and quite easily recognisable. It should be said, too, that in our society this inversion is likely to occur earlier among women than among men. This is true because, as matters stand now, men continue to advance in their careers in early adulthood and still seek to model their behaviour after older, more mature, sophisticated, successful

men, The inversion of the age dynamism in men is more Likely to occur in middle age when the next older generation of men is seen to be on the decline and the middle-aged man recognises that a similar fate is in store for him.

The crises of middle age in the male would be much alleviated if there were more available models of men who continue to function successfully in more mature years. While this is true for statesmen and intellectuals. it is not true for many white-collar, and blue-collar workers who provide the models for the majority of men in our society. Among women the inversion of the age dynamism comes earlier and is more gradual. A recent study supports the clinical observation that in women the inversion of the age dynamism occurs in young adulthood. The study in question dealt with self-disclosure between college women and young married women recently out of college. Results showed that the married women inevitably followed the college women's lead as to self-disclosure, but that the reverse was not true.

If the college student was open, the young married woman was likely to follow suit and if the college woman was closed, the young married woman was also reluctant to reveal herself. College students, in contrast, disclosed or did not disclose depending upon their own predilections and were not guided in their behaviour by the mode set by the young married women. My guess is that just the opposite results would be obtained with college student and young married males. The tendency of women to emulate younger women would seem to begin in young adulthood and is then gradually given up with increased maturity, family responsibilities, or career involvement. As more older women join the workforce and occupy more visible and responsible jobs, the inversion of the age dynamism in women is likely to parallel more closely the pattern of age dynamism inversion that one observes in males.

(It might be said—parenthetically because this is not the place to deal with the issue—that the discrepancy between the age at which the age dynamism undergoes inversion in men and in women can be, and frequently is, a cause of marital disharmony.) In adults, therefore, the age dynamism can be transferred into a keeping up with the times which results in continued self-esteem maintenance and self-realisation or it can be inverted, in which case there can be intellectual and personality stagnation. In the majority of individuals the age dynamism probably takes both forms to a certain extent and at different times in their lives.

THEMES ARISING FROM THE CASES WHICH LINK DEVELOPMENT AND ABUSE AND NEGLECT

YOUNGER CHILDREN — BRUISING AND MINOR INJURIES

Understanding the meaning and origin of bruising and minor injuries emerged from the analysis of two of the cases as a theme for pre-mobile babies and

toddlers. Bruising and minor injury tended not to be considered in the context of the child's own development and capabilities nor in the context of a good understanding of the care they were receiving.

The reasons that explanations for bruising were accepted by practitioners without sufficient scrutiny appeared to be because:

- Children had complex health needs or disabilities and the bruising was somehow (but implausibly) connected with this; or
- The child's development was otherwise good; or
- The person who posed a perceived risk of harm to the child (eg a dangerous male figure) was believed to be out of the picture; or
- The parents were hostile or difficult and somehow stopped the practitioner from seeing clearly.

The Welsh systematic review group provide a clear research evidence base for having child protection concerns when there is any bruising on any pre-mobile baby. In their review of patterns of bruising in childhood, they conclude that the prevalence, number and location of bruises in children are directly linked to motor developmental ability. They highlight that bruising in babies who are not independently mobile is very uncommon, whereas around 17 per cent of infants who are crawling or cruising have bruises, and the majority of preschool and school children have accidental bruises.

They also point out that a child with impaired motor development would not be expected to have the same bruising patterns as other children of the same age, but different developmental abilities. Thus an understanding of normal motor development in childhood is essential for evaluating the significance of bruising and for distinguishing potentially abusive from non-abusive injuries. Further information for practitioners about children's developmental capabilities and accidents is available through guidelines for practitioners on accidents and child development.

What should Professionals Know and Do?

The need for heightened concern about any bruising in any pre-mobile baby (up to the age of around six months) is explained through an understanding of the child's physical development. Because physical self control and independent movement is very limited in young babies, it is extremely difficult for them to bruise themselves. Any bruising is likely to come from external sources. The younger the baby the more serious should be the concerns about how and why even very tiny bruises on any part of the child are caused. The explanation, for example, as in the case of Sally, that a pre-mobile baby hurt herself while in her cot needs to be scrutinised very carefully and treated with suspicion.

Vignette - Sally

Sally was five months old when both the social worker and health visitor noticed a bruise on her face but they did not consider this to be a child protection concern. The fact that Sally was meeting developmental milestones (well

enough) and her mother was thought to be cooperating with the contact arrangements for Sally with her father (who had limited and supervised contact because of domestic violence) should not have stopped these workers extending their curiosity about what might be happening in Sally's life. They needed to see things not just from Sally's perspective but also from the perspective of her young mother – who was a child herself.

The serious case review revealed that Sally's mother had been feigning cooperation and was continuing her relationship with Sally's father. Since there were already concerns about Sally suffering harm (she was the subject of a child protection plan) this bruise should have put practitioners on high alert. The cause of this bruise should have been considered to be suspicious and urgent and robust enquiries should have been made. Sally's mother's supportive family and relatively problem free background are protective factors but they do not mean that the possibility of abuse can be disregarded.

BRUISING IN PRE-SCHOOL AGED CHILDREN

It is not surprising that bruising is more common in toddlers and especially in older pre-school age children. At this age children regularly have tumbles and accidents as they develop their gross motor skills and are exploring the world around them. However, any bruising will usually have a pattern and be on particular parts of the body, like the bony surfaces of the legs, arms and face which take the knocks in everyday falls. Frequent, repeated bruising in children of pre-school age might also signal that the child is not being kept safe and is not being appropriately supervised. There needs to be a sense of curiosity about how and why the bruising is occurring and how well the child is being kept safe and supervised.

BRUISING IN THE CONTEXT OF COMPLEX HEALTH NEEDS AND DISABILITY

Vignette - Ben

Another young child, Ben, had numerous episodes of bruising prior to the incident of physical assault which ultimately triggered the serious case review. He also had complex health needs, but these did not restrict his mobility. The prevailing view of the multi-agency team was that the bruising was linked to his being a lively toddler and also to the demands made by his health care and health problems. The unusual pattern and site of Ben's bruising (which was not compatible with what would be expected in a lively toddler) did not provoke curiosity or questioning. Again, the fact that Ben was the subject of a child protection plan should have put practitioners on high alert.

The pattern of Ben's bruising should have been considered in the context of his development with specific care taken not to explain away the bruises because of his health needs or disability without careful checking. In this case repeated bruising did not cause the social worker or others in the multi-agency team to

think more broadly about whether these might be non-accidental injuries, "S*ome (professionals) had difficulty in believing such a sick child could be harmed deliberately*".

These cases also show that the category and primary reason for the child protection plan is not always an indicator of where the risk of further harm or recurrence of harm is coming from. In Ben's case, although the child protection plan was linked to domestic violence, it was his mother not his violent step father who was inflicting the bruising.

In these two cases involving pre-school aged children, the following questions were not sufficiently attended to:

- Does the explanation for the bruise match the child's developmental capability and likely behaviour? Was the child developmentally capable of causing these injuries to him or herself?
- Does this pattern of bruising match the particular developmental capabilities of a child of this age with these particular developmental needs?
- For a child who is otherwise meeting developmental milestones, might a parental explanation for injuries be too readily accepted?
- Is there a full understanding of the caregiving the child receives?

Who Provides Developmental Advice?

When making judgements about babies and children, social workers need access to both formal and informal advice and developmental expertise. Good relationships with health visitors and paediatricians will enable social workers to check out concerns, or to have a sounding board for discussing babies' and young children's development. A good paediatrician should be happy to talk through concerns about bruising or minor injuries in a baby or child.

We have argued elsewhere that skilled use of expertise and consultation in a coordinated manner could result in more rigourous assessments and promote greater professional trust and confidence. These routes through to advice and developmental expertise are important for social workers working with children of all ages. As children grow older the range of possible developmental experts with whom to consult expands. Sidebotham and Weeks have summarised the likely child development contributions made by different professionals in the multi-agency context.

EMOTIONAL DEVELOPMENT AND FALTERING WEIGHT IN YOUNG CHILDREN

Poor or faltering weight gain for babies and toddlers was an issue in three of these reviews. In all of these six cases, not just the three concerning faltering weight, there was little evidence of knowledge about or sufficient interest in the child's emotional development. This rarely featured in the individual management reviews or the chronologies and, in line with the findings from Ward's study of infants suffering harm was perhaps also often absent in practice.

There were complex and differing reasons why parents appeared not to be nurturing their child. There was, however, a pattern in professionals' failure to recognise problems in the children's relationship with their caregivers and their emotional development as a key part of their faltering growth.

The different issues presented in the cases and the professional responses are summarised as follows:

- Early difficulties in feeding could be linked, initially, with the baby's prematurity and subsequent complex health needs;
- in another case the baby was healthy at birth and the weight gain problems were not prompted by any easily recognised innate problems in the child; and
- in all three cases barriers to understanding development in cases of faltering growth included treating the issue primarily as a mechanical feeding problem rather than raising questions about emotional development, attachment and the parent child relationship.

What should Professionals Know and Do?

Practitioners need to be aware of the parents' reactions to their child, and to specifically observe and reflect on the child's responses to his or her caregivers. These are the foundations of emotional development and of attachment behaviour. What happens during feeding provides powerful clues to emotional development.

In each of these examples there was an emphasis in the professional response on the single issue of feeding and the mechanics of feeding rather than any concerted attempt to try to understand the child in the context of their caregiving environment and the different possible explanations for why the child was not gaining weight.

Usually, concerns about feeding and poor weight gain did prompt the social worker to request an additional or an enhanced developmental assessment for the child if this was not already taking place. This is good practice. However, in one instance the developmental assessment used by health staff, the NFER assessment, did not take account of faltering weight which was the particular problem highlighted. The serious case review noted that developmental assessments need to be global if they are to pick up the full range of developmental issues.

Vignette – Joe

Joe was born at term, healthy and within the normal weight range. Within a month of his birth, Joe had not regained his birthweight. Instead he had slipped rapidly down the weight percentile chart. Although his mother was perturbed by Joe's lack of weight gain, her rough handling of her newborn baby was not congruent with this and he was often prop-fed. When Joe was two months old he died of unexplained causes, however, a post mortem report concluded that his growth problem made him more vulnerable to stress thus contributing to his

death. The rough handling and prop-feeding are clues that point, not least, to the possibility of a lack of emotional warmth. There was also a pattern of faltering weight in his siblings.

Vignette - Melissa

Melissa was born prematurely with associated complex health needs, which meant that she was more difficult to feed and care for than a healthy baby born at term. There were concerns about her care from birth and these persisted. Melissa's mother continued to need to be prompted to feed her and it was noted that her mother was using her mobile phone almost constantly and not interacting or engaging with her. Melissa's lack of weight gain and her poor emotional development was assessed as non organic failure to thrive when she was a toddler, at which point she was made the subject of a child protection plan. This baby's failure to gain weight should have been assessed holistically in the context of her emotional need to be and feel connected with her mother as well as her physical need to be properly fed and well cared for. Poor care in this case was tolerated for a long period when evidence of impaired development had been apparent for many months.

OLDER CHILDREN

For the older children it was clear that to obtain a good picture of their current developmental state, professionals needed to get a sense of their developmental pathway over time. It was apparent in these cases that children who felt that their needs were repeatedly unrecognised, ignored or misunderstood were likely to become distressed, angry and desperate.

Issues that prevented practitioners paying sufficient attention to the impact of maltreatment on young people's development were as follows:

- Not making a relationship or getting to know the young person.
- Not taking account of what the young person has to say to make sense of them as a person, nor to make sense of the impact that their experiences (especially of care and nurture) had on their sense of themselves and on how they behaved.
- Not speaking to the child. In one case the only consistent efforts to gain the child's view were at school (he had disabilities and global developmental delay) and the child was not spoken to during an assessment: "*This assessment fulfils the function of confirming the developmental delay … it fails to analyse what that means to (the child) in terms of care, safety and welfare needs*"(IMR Health).
- Allowing the parents' voice to dominate (especially if they are volatile and difficult to confront).
- Seeing the disability not the child and viewing a case essentially as supporting disability rather than supporting or protecting the child (including identifying and responding to signs and symptoms of harm).

- Accepting a different and lower standard of parenting for a disabled child than would be tolerated for a non-disabled child. A secondary health service acknowledged that they had different expectations of care for disabled than non-disabled children when they confirmed that in high risk disability cases locking children in their bedrooms was an acceptable strategy.
- Pockets of good development in maltreated young people do not necessarily signal resilience.

What should Professionals Know and do?

One young person's good intellectual development, and his capacity to make relationships and confide in professionals, showed that not all aspects of his development were negative. Yet it would be a substantial leap from here to say that he was resilient.

Rees and colleagues have found that professionals can be prone to misinterpreting positive aspects of a young person's demeanour or development as resilience (good development in adverse circumstances) and that this can blunt their capacity to appreciate the impact that maltreatment has on the young person's overall development and sense of self.

The overview report author in one case suggested that things might have been better for the young person if he had been assigned inquisitive social workers who wanted to know why his behaviour was so difficult at this point in his life, and who were curious about the research behind neglect, attachment and child development.

Social workers in particular, should work hard to develop a relationship with children and young people, getting to know and understand them as individuals. This includes taking notice of what they have to say, considering what it means - and where it meets with their best interests - acting on what they have to say. The social worker should act as an advocate for young people who are being looked after or have child protection plans, or find them an independent advocate. They should make sure that specialist assessments are completed (in one case a full mental health assessment requested from CAMHS was never followed through). Clear plans for the future should be set out based on an understanding of the young person's developmental needs and young people should be involved in these plans and understand them.

All of these activities are legitimately within the social worker's role and sphere of expertise. If the social worker is not able to carry out all aspects of this role they should make sure that someone else does.

SIGNS OF DISTRESS IN OLDER CHILDREN

Vignette-Shelley

Shelley took her own life, as a young adolescent, while in a therapeutic unit. Shelley's care order and placement protected her, to an extent, from harm at

home (where she no longer wanted to be) providing her, in many respects, with safety and security. However, the meaning for her, of living for years with significant harm was not wholly taken into account when a standard strategy for managing challenging behaviour was imposed and when she perceived that contact with her family was dependent on her behaving well.

Shelley's behavioural and emotional development marked her out as different to other children from a young age. She had began to behave like a distressed, much older teenager when she was many years away from puberty engaging in defiant and risky behaviour, and also expressing suicidal thoughts and beginning to self harm. Shelley's exposure to years of neglect, physical and emotional harm at home had affected almost all aspects of her development, although her intellectual development was good. At all of her schools she was perceived as 'bright and able.' When tested, her reading age was well ahead of her chronological age.

Shelley's parents admitted that they had given up trying to control their children. Shelley's parents had never been able to see their daughter's distressed mental state. When she was very young and needed to have her distress and dysregulation recognised and contained, this parental sensitivity was missing. Instead, Shelley's parents either ignored her or lashed out at her. Because Shelley's parents were unable to take control of her safety and her needs, Shelley began to take these on for herself, a pattern commonly noted for children who develop a disorganised attachment. Part of the controlling strategy that Shelley adopted included compulsive caregiving of her siblings and to a lesser extent of her parents. The strategy children evolve to survive life at home is deeply ingrained and will be transported with them to any new environment. When she was away from home, in care, Shelley was consumed with anxiety about what was happening at home.

Vignette: Adam

Adam's disabilities were connected with a congenital neurological condition. Adam told teachers about being locked in his bedroom each night and how he tried to get out. Trapped in his room, isolated, and unable to get to the bathroom, Adam soiled and smeared faeces in his room which was described as being "in a terrible state."

The condition of his bare and filthy room contrasted with the rest of the house. Adam's parents spoke to the social worker and others in the multi-agency team about locking him in his room as a way of managing his sleep disturbance, sleep walking problems and to stop him hurting himself. Despite many years of involvement, social workers had only seen Adam's bedroom four times. There is no evidence that any professional had considered the impact that spending a considerable amount of time isolated and locked away in this bare room was having on this young person.

Adam's distressed behaviour (smearing) escalated frustration in his parents who, largely because of their own childhood experiences of rejection and abuse,

had a heightened sensitivity to their child's behaviour and disability which they interpreted as dependent, difficult and demanding. This triggered more coercive, rigid and insensitive care. In this example it was easy to see that the interaction of the vulnerabilities possessed by both child and parent played out to increase the risk of insensitive dangerous care and harm to the child.

DISCIPLINE

Probably the most pervasive and difficult issue in running a classroom is the matter of discipline. Before I attempt to describe the sort of discipline that would be present in an active classroom, some general discussion is necessary. Although Piaget does not often talk about affective issues, when he does it is usually around the matter of discipline and respect. Accordingly, a brief review of Piaget's position regarding discipline in general might be useful before describing how it might be instituted in practice. From a developmental perspective, discipline is not a unitary phenomenon but one that undergoes transformations with age and the development of cognitive abilities.

In young, preoperational children, discipline is largely external, and children behave in socially appropriate ways for fear of punishment from adults or in order to win adult approval. After the age of six or seven and the advent of concrete operations, discipline remains external but is now exercised by two agencies, adults on the one hand and the peer group on the other. It is only in adolescence that discipline becomes truly internal in the sense that the young person behaves in socially appropriate ways to satisfy himself as well as out of respect for others. It is for this reason that Piaget says that it is only in adolescence that a young person has a "true" personality. This general development from external to internal discipline comes about, according to Piaget, as a consequence of the child's progressive understanding of rules on the one hand, and the evolution of feelings of respect on the other.

Discipline, from this standpoint, is at once cognitive and affective, involving as it does the subordination of personal impulses and desires to the control of rules at first laid down from without, but eventually from within. In discussing the evolution of discipline, then, we can first look at the development of the child's understanding of rules and then at his evolving feelings of respect. In his book The Moral Judgement of the Child, Piaget suggests that the understanding of rules, evolves in a series of stages related to age. Among preschool children, rules are seen as part of physical reality and are believed to have existed forever and to be immutable.

During the concrete operational stage children come to see rules as man-made and changeable. Then, with adolescence and the attainment of formal operations, higher-order ethical and moral rules are constructed which are believed to hold for all mankind but which may not be obeyed by all. Coincident with this development is the evolution of respect. In his writings on this subject Piaget leans heavily on the work of Bovet. Bovet argued that, in the young child, rules are obeyed largely out of respect for adults.

For Bovet, respect is a complex emotion involving a combination of love and fear. In young children, according to Bovet, respect is unilateral inasmuch as It constrains the child to obey adults but not the reverse (except in pathological cases where children dominate parents by the use of tantrums and so on). Adults may respect children but in another way—*i.e.*, through love and fear for their immediate and future well-being. But it is not a respect that entails following the commands of the child. This period of unilateral respect coincides with the belief that rules are fixed and immutable. During childhood proper, after children attain concrete operations, a new form of respect emerges. This form of respect grows out of the concrete operational child's newfound ability to relate to peers in meaningful ways. Thanks to his egocentrism, the preoperational child cannot take the point of view of others when it is different from his own. Two young children thus talk at rather than to one another.

For example, two children in a sandbox were heard to carry on the following conversation:

1. "My mommy is going to buy me some new shoes, red ones!"
2. "This block is too big, I need a small one."

"My Mommy is going to buy me a new coat too!" But once a child has concrete operations, he can put himself in another child's position and see things from his perspective. This is crucial to meaningful conversation that requires both parties to follow the other's train of thought as well as his own. Out of this new mode of communication among peers emerges a new form of respect, mutual respect. Like unilateral respect, mutual respect involves a combination of positive and negative emotions. The positive emotion is that of "liking" one's age mates and enjoying their company.

The negative emotion is fear of being disliked, rejected, or made fun of by peers. Unlike unilateral respect, mutual respect puts children on an equal plane with one another. It goes along with the understanding-that rules are people-made and changeable. At this stage children often make up their own rules (of a game) and follow them with considerable exactitude. Although neither Piaget nor Bovet discusses it directly, it seems to me that their work suggests that a new form of respect emerges in adolescence with the attainment of formal operations. This is self-respect. Like the other forms of respect, self-respect also grows out of a combination of love and fear, this time directed towards the self. It is a new form of respect because only in adolescence, thanks to formal operations, can young people develop a sense of themselves as a totality, putting together into some working whole all the diverse and contradictory things that they know about themselves. Self-respect waits upon what Erikson calls a "sense of ego identity."

Self-respect involves a love for one's positive qualities and a fear that one will not have the will power to follow courses of action, to obey rules, that one has committed oneself to. Self-respect thus coincides with conception of rules as ideas that one can understand and try to live up to because they have been incorporated into the self. A failure to live up to rules and commitments

incorporated into the self damages its integrity. Hence, in adolescence self-respect becomes a powerful motive for obedience to social norms. From a developmental point of view, self-respect, which is the basis for principled social life, grows out of mutual respect. The concern about acceptance and rejection by peers gets transformed, in adolescence, into concern about acceptance and rejection of the self. The importance of the peer group in this transformation was stressed by Sullivan in his concept of "chumship."

Sullivan believed that it was through close chumships, formed in late childhood, that young people were able to elaborate their self- concepts and to establish principled modes of interaction and true intimacy in adult life. At each stage of development then, discipline involves a relation between rules on the one hand, and respect on the other. What mediates obedience to rules is a sense of obligation, the interface between rules and respect. But the feeling of obligation occurs only in relation to someone the child respects, towards whom he or she feels both love and fear.

In To Understand is to Invent Piaget writes: The small child does not feel obligated to obey an order from a brother whom he loves, or from a stranger whom he only fears, while orders from the mother or father make him obligated and this continues to be felt even if the child disobeys. This first type of relationship (obligation based on unilateral respect) assuredly the earliest in the formation of clinical sentiments, is capable besides of remaining at work during the entire childhood, and to outweigh all others, depending on the type of ethical education adopted. Piaget argues that unilateral respect is insufficient to provide children with a moral and ethical rudder in later childhood and adolescence:

- While it is unilateral, this initial type of respect is a factor of dependency. Doubtless the child discovers in growing up that the adult subjects himself - or at least endeavors to subject himself without always being able to do so in fact-to the orders that he gives. The rule is thus sooner or later felt to be superior to those he respects. On the other hand, the child one day experiences a multiplicity of instructions, sometimes contradictory, and finds himself in the position of having to make choices and establish hierarchies. But without a source of outside ethical behaviour other than unilateral respect alone, he will remain what he was at the beginning—an instrument submissive to readymade rules, and to rules whose origin remains external to the subject accepting them.

During the concrete-operational period and the formation of mutual respect, a different feeling of obligation emerges. This obligation is different in that at this level children, in Piaget's words, "participate in the elaboration of the rule that obligates them." Piaget argues that this new mode of obligation imposes upon children not just obedience to the rules, but also to the method of forming rules. That is, the child begins to feel obligated to construct or elaborate rules by "coordinating the points of view of others with his or her own." From Piaget's standpoint the problem of moral or ethical education, the attainment of a sense of obligation or discipline by the child, is directly parallel to the problem of

education generally. That is to say, whether it is a sense of obligation or understanding of mathematics, the question is whether it is best learned by being imposed from without or constructed by the child in the course of his own efforts.

Piaget writes:

- Education, founded on authority and only unilateral respect, has the same handicaps from the ethical standpoint as from the intellectual standpoint. Instead of leading the individual to work out the rules and the discipline that will obligate him or to work with others to alter them, it imposes a system of ready-made and immediately categorical imperatives on him. In the same way that a contradiction exists in adhering to an intellectual truth from outside (without having rediscovered and verified it) so it can be asked whether there does not exist some moral inconstancy in recognising a duty without having come to it by an independent method ·

What one might add to Piaget's description is that in adolescence the sense of obligation is directed not towards persons, nor to the method of arriving at rules, but rather to the idea of obligation itself, that is to say, to a sense of duty. In adolescence young people feel obliged to honour their commitments, in the general sense, whether these obligations are to other persons or to rules or to the methods of their formation. The mutual respect and involvement in rule-making in childhood thus give rise, in adolescence, to a higherorder sense of obligation, the sense of duty, that is the motive behind much ethical and moral behaviour. The implications of these developmental considerations for classroom practice seem to be clear and unambiguous.

Classrooms permitting group decision-making, with regard to rules and punishments for transgression, are more beneficial to psychological growth than classrooms where the rules are laid down from without. Children who are not allowed to participate in constructing some of the rules governing their own behaviour are in the same position as children who are not permitted to reconstruct actively the concepts they are learning. In other words, just as a pupil can recite his lessons without understanding them and can substitute verbalism for rational activity, so a child obeying is sometimes a spirit subjugated to an external conformism, but does not understand the real meaning or facts surrounding the rules he obeys, or the possibility of adapting them or making new ones in different circumstances.

For Piaget an active classroom has children who are involved not only in reconstructing reality but also in working out their own disciplines, where the sense of obligation comes from having been involved in the formulation of the rules and not from the authority of the teacher. In active classrooms, matters of property rights, of one child disturbing another, of keeping materials in good working order and the classroom reasonably neat can be matters for the group to deal with and to regulate. It is important, too, that children not only be allowed to make some classroom rules but that they be allowed to change them as circumstances demand.

A danger that has to be avoided in allowing children to make rules is the adult's tendency to codify and make permanent that which is transient for children. It must be remembered that it is the very process of making rules cooperatively that fosters mutual respect and obligation. Frequent repetition of the process is thus developmentally healthy and should not be prevented out of some sense of "you made the rules end you have to stick to them." Remaking the rules is part of the learning process. Closely related to the matter of permitting the children to originate some (but certainly not all!) classroom rules is the matter of punishment. When children have a part in making the rules and in designating the consequences of breaking them, the result is far different from the adult making the rules, deciding on the punishment, and meting it out.

When children break rules they themselves have made and accept the consequences they them- selves have established, confidence in themselves is supported at the same time as is confidence in the system of rules. In contrast, arbitrary rules and punishments are "degrading to the person who administers them and whose principle is felt to be totally unjust by the child". In conclusion, then, from a developmental perspective, discipline is not something separate from active education but is an integral part of it.

If discipline is to be more than figurative, tacked on from outside without comprehension or commitment, then children have to be involved in the construction of at least some of the rules that regulate classroom life. Establishing and re-establishing rules is thus another very important activity in which children are encouraged to rediscover and reconstruct reality. Social reality, no less than physical reality, must be reconstructed by the child if it is to lead to true discipline based on respect for others in general and respect for one's self in particular.

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Stage of Development: Physical, Mental, Social, Emotional and Moral

Adolescents are generally perceived as a homogenous group, yet they can be stratified on the basis of gender, caste, class, geographical location (urban/rural) and religion. Adolescents also include a whole gamut of categories. School and Non-School going, drop outs, sexually exploited children, working adolescents both paid and unpaid, unmarried adolescents as also married male and females with experience of fatherhood and motherhood. Adolescents are on account of the influence of electronic media, Indian adolescents cannot remain unaffected by globalization. Nevertheless, following interests, aspirations and attitudes of Indian adolescents are discernible although it is very difficult to generalize as there are several sub groups on account of the vastness of the county and its plural culture.

PHYSICAL DEVELOPMENT

This chapter will identify the typical, average ages when youth reach certain developmental milestones; but, it is important to keep in mind that individual youth will develop according to their body's own timetable. As such, a youth's development may not always follow these averages but their development may still be considered healthy and normal. If parents have concerns about their child's growth or development, they should discuss these concerns with their child's health care provider.

Because the rate of physical development is so varied during adolescence, it often becomes a source of difficulty and discomfort for youth. Some teens will

develop more slowly than their peers. As a result, they may feel self-conscious about their bodies' lack of maturity, relative to their peers. They may even feel disappointed or resentful they are not receiving the same kind of attention their more physically mature friends seem to enjoy. This can lead to feelings of frustration because their bodies aren't maturing as fast as they would like, or they may worry that something might be wrong with them.

Conversely, some teens may mature more quickly than their peers. This earlier development may also cause feelings of frustration and self-consciousness. These teens may be teased about their changing bodies and they may receive more attention than they desire, which can cause them to feel uncomfortable and conspicuous. This can be especially true for teen girls as the overt admiration of the female body is generally considered an acceptable practice in our culture. A young female teen may not be emotionally prepared to be viewed and admired in a sexual manner. Parents may wish to assist their daughters to determine the limits of what is respectful and acceptable to them, and to develop strategies for handling situations that make them feel uncomfortable. Teenage boys who develop sooner than their male peers may have an easier time because although physical prowess in males is respected and admired, it is less common for them to receive unwanted public attention.

Changes in Height and Body Composition

During adolescent growth spurts, the arms and legs also lengthen and eventually become proportional to the rest of their body. However, teens may suddenly feel awkward and uncoordinated during this time because growth does not always occur at a perfectly proportional rate. Their limbs may become longer or shorter relative to the rest of their bodies and it may confuse or frustrate young teens to inhabit a body that no longer seems familiar.

Besides significant changes in height, adolescents also experience changes in body composition; *i.e.*, the ratio of body fat to lean muscle mass. Teen boys' lean muscle mass greatly increases during adolescence due to the rising levels of male hormones, such as testosterone, that cause an increase in muscle mass. In general, boys' straight-lined, square bodies become broader at the shoulders and more tapered at the waist, forming the familiar triangular shape of adult males. Their arms and legs will become more muscular and bulkier. However, factors such as heredity, nutrition, and muscle-building exercise can influence muscular development. If adolescents play sports, lift weights, or routinely workout in other ways, they are more likely to gain muscle mass. Many teen boys may feel self-conscious about their body if they believe they are not building enough muscle in comparison to their friends and classmates.

Teen girls continue to develop muscle mass while also adding body fat. During adolescence, girls' percentage of body fat will increase, relative to muscle mass. This additional fat is deposited in her body's midsection (hips, buttocks, and chest). Girls' straight-lined, square bodies become wider and broader at the hips, buttocks, and chest, forming the familiar hour-glass shape of adult females.

Often, teen girls feel uncomfortable or upset during this growth phase because of the increase in body fat. In some rare cases, an Eating Disorder may develop as a result. For information about the early signs of an Eating Disorder please refer to the topic center on eating disorders. Girls should be encouraged to view this change to their body composition in a positive light: as yet another indication they are becoming young women. While girls may feel "fat" during this maturation process, it may be helpful for them to understand that some additional body fat is necessary for women to have healthy pregnancies and in order to nurse babies.

While their bodies are changing and growing it's particularly important for teens and older adolescents to maintain a healthy lifestyle that includes a balanced, nutrient-rich diet, with plenty of exercise, and adequate, restful sleep. Maintaining this healthy balance helps to prevent medical problems such as obesity and diabetes and also protects mental health by creating a healthy and confident self-image.

Perspectives and Advancements in Adolescent Thinking

There are two perspectives on adolescent thinking: constructivist and information-processing. The *constructivist perspective*, based on the work of Piaget, takes a quantitative, state-theory approach. This view hypothesizes that adolescents' cognitive improvement is relatively sudden and drastic. The *information-processing perspective* derives from the study of artificial intelligence and explains cognitive development in terms of the growth of specific components of the overall process of thinking.

Improvements in basic thinking abilities generally occur in five areas during adolescence:

- *Attention:* Improvements are seen in selective attention (the process by which one focuses on one stimulus while tuning out another), as well as divided attention (the ability to pay attention to two or more stimuli at the same time).
- *Memory:* Improvements are seen in both working memory and long-term memory.
- *Processing Speed:* Adolescents think more quickly than children. Processing speed improves sharply between age five and middle adolescence, levels off around age 15, and does not appear to change between late adolescence and adulthood.
- *Organization:* Adolescents are more aware of their own thought processes and can use mnemonic devices and other strategies to think more efficiently.
- *Metacognition:* Adolescents can think about thinking itself. This often involves monitoring one's own cognitive activity during the thinking process. Metacognition provides the ability to plan ahead, see the future consequences of an action, and provide alternative explanations of events.

Metacognition and Relativistic Thinking

Metacognition is relevant in social cognition and results in increased introspection, self-consciousness, and intellectualization. Adolescents are much better able to understand that people do not have complete control over their mental activity. Being able to introspect may lead to two forms of egocentrism, or self-focus, in adolescents, which result in two distinct problems in thinking: the *imaginary audience* (when an adolescent believes everyone is listening to him or her) and the *personal fable* (which causes adolescents to feel that nothing harmful could ever happen to them). Adolescents reach a stage of social perspective-taking in which they can understand how the thoughts or actions of one person can influence those of another person, even if they personally are not involved.

Adolescents are more likely to engage in relativistic thinking—in other words, they are more likely to question others' assertions and less likely to accept information as absolute truth.

Through experience outside the family circle, they learn that rules they were taught as absolute are actually relativistic. They begin to differentiate between rules crafted from common sense (don't touch a hot stove) and those that are based on culturally relative standards (codes of etiquette). This can lead to a period of questioning authority in all domains.

Cognitive Development and Changes in the Brain

Adolescence is a time for rapid cognitive development. Cognitive theorist Jean Piaget describes adolescence as the stage of life in which the individual's thoughts start taking more of an abstract form and egocentric thoughts decrease. This allows an individual to think and reason with a wider perspective.

This stage of cognitive development, termed by Piaget as the formal operational stage, marks a movement from an ability to think and reason from concrete visible events to an ability to think hypothetically and entertain what-if possibilities about the world. An individual can solve problems through abstract concepts and utilize hypothetical and deductive reasoning. Adolescents use trial and error to solve problems, and the ability to systematically solve a problem in a logical and methodical way emerges.

Biological changes in brain structure and connectivity in the brain interact with increased experience, knowledge, and changing social demands to produce rapid cognitive growth.

These changes generally begin at puberty or shortly thereafter, and some skills continue to develop as an adolescent ages.

Development of executive functions, or cognitive skills that enable the control and coordination of thoughts and behaviour, are generally associated with the prefrontal cortex area of the brain. The thoughts, ideas, and concepts developed at this period of life greatly influence one's future life and play a major role in character and personality formation.

MENTAL GROWTH

As a child develops, he makes increasingly complex adaptive responses to his physical and social environment. Mental development can be inferred from this behaviour. While children differ widely in both rate and pattern of mental development, developmental progression can be observed and, to an extent, measured.

Mental growth curves have been developed for infants. In one of the earlier studies of mental development, a group of thirty-one male and thirty female infants were studied. During the first two years of life yearly increases in point scores were noted, as shown in the accompanying graph. Scores indicate that the infants' mental development was rapid to about the ninth or tenth month, after which deceleration was evident. Since tasks required on an infant test are of a motor and perceptual nature, behaviour growth in the early months of infant development has been demonstrated to have little predictive validity for the later tests of development of intelligence.

To understand individual mental development, it is necessary to study longitudinally the development of intelligence in individuals.

Curves derived from averages of the mental development of a group of children differ from repeated tests of individual children over a period of time.

In any study of mental development, we should always be cautious about inferring the rate of development from mental test scores. These scores do not represent absolute measurements, the size of which are necessarily equivalent at each point on the scale. For example, the year's mental development, even in the case of an average child, may not be the same between any two successive years. The intellectual increment between the ages four and five is not necessarily the same size as the increments between eight and nine or twelve and thirteen. We do not have an absolute scale for measurement in the intellectual area.

Intelligence in young children is measured by functions considerably different from those used to measure older children. Thus, it is obvious that the scales are far from equivalent. On the Binet a four year old is asked to identify objects in a picture vocabulary, name objects from memory, discriminate between forms, draw opposite analogies, and do simple comprehension items. At age eleven he would be required to produce a design from memory', comprehend verbal absurdities, define abstract words, memorise a sentence, solve problems, and indicate how certain objects are similar. The abilities being measured at eleven are somewhat different and cannot be assumed to be merely an extension or expansion of four year-old abilities.

Curves representing scores made on repeated administrations of tests may not reflect actual intellectual development. Courtis maintains that no single type of growth curve can adequately express the pattern of mental growth because of the nature of the items included on the typical intelligence test. These curves lack stability, he believes, because they do not measure a uniform function in a uniform manner. Courtis thinks adequate study of mental growth will come only when developmental progress in the performance of a single act is

considered. Courtis indicates that we must get back to single-variable research if we are to study development accurately. Growth curves have value because they make it possible for us to note the child's rate of progress, spurts, plateaus, and regressions in relation to his unique pattern.

Researchers in mental development have attempted to determine the point of mental maturity when mental growth ceases. The finding of Terman and Merrill that mental age does not increase after the age of fifteen years has since been attributed to the limited ceiling on the 1937 Revision of the Stanford-Binet. Evidence based on a wider sample and retesting of the same population shows that the age of terminal growth may be twenty-five or even beyond. There are reports of gains in intelligence test scores at age twenty-five on the Wechsler-Bellvue, and even at age fifty on the Army Alpha and Concept Maturity Test.

Bayley studied five boys from the age of one month to twenty-five years. She found that each child had an individual pattern, and after the infancy period there was an underlying pattern of development constancy. These five boys were tested at twenty-five years of age and all had continued to improve in their Wechsler-Bellevue scores. Bayley indicates that the intellectual processes measured had not reached a ceiling, with fourteen out of fifteen participants continuing to show gains. Thus the issue of terminal growth in development of a cognitive process varies considerably from individual to individual.

Research in mental development has pointed to some general trends. During infancy and the preschool period, the abilities measured by intellignce tests are genrally perceptual and sensory-motor in nature. Following this early stage of development, the lementary school years use tests in which abstract intelligence tends to be most important.

Abstract abilities are highly correlated. During predolescence and later on, tests show a considerable differentiation of intellectual abilities. Thurstone domonstrated a differential growth rate for mental abilities. Perception, reasoning, and space abilities develop somewhat earlier than numerical and momery abilities, while verbal abilities develop more slowly. In its time, The Harvard Growth Study was probably one of the most comprehensive longitudinal studies in the field of physical and mental growth.

Some of the conclusions of Dearborn and Rothney are significant for our study of intellectual growth:

1. Physical and mental growth are essentially individual affairs. No two cases have been found to have exactly the same developmental history as indicated in terms of their deviation from the averages of groups of which they are members.
2. The relationship between physical measurements and mental measurements is so low that the knowledge of one does not enable us to predict the other.
3. The use of different mental tests over the years indicates that each test is characterised by its own single and peculiar differences with respect to the problems of practise effect and its relation to individual test problems.

4. The group mental tests used in this study yielded higher IQ's than the Stanford-Binet tests.
8. In general, children tend to remain throughout the period of their mental growth (to age sixteen) in the same classification as they were at age eight.
9. In general, individuals tend to Perform at the same level on verbal and non-verbal material which appears in group mental tests.
10. Complete substitution of non-verbal for verbal material in mental tests, would result in handicapping as many children as does the use of tests using verbal material only.
11. Mental growth, as measured by the type of group mental tests used in this study, continues much beyond the age of adolescence, although with markedly decreased rate after the age of twenty.
12. The possibility of using the percentage of growth based on the estimated maximum growth of the individual, or of an unselected group, in preference to the mental age technique, and the inadequacy of the commonly employed intelligence quotient, as an index of mental growth has been demonstrated.
13. The advantage of using individual growth curve constructed with the above described "growth unit" has been noted.
15. Performance on mental tests does not seem to be related in any way with pubescent growth spurt.

In a more recent analysis of the Harvard Growth Study, Ethel Cornell and Charles Armstrong found general patterns of mental growth occurred in spurts.

1. A single growth curve theoretically reaching maturity between the ages twenty-six and twenty-seven, maturity being indicated by a mean level of ability regarded as just above average.
2. Two growth curves—the earlier one terminating around age thirteen, the second one not becoming evident until age fifteen or sixteen, with maturity theoretically indicated at about twenty-three to twenty-four years of age, at a level slightly above average. (Female)
3. Two growth curves-most rapid development from nine to thirteen, the later period one of slow increase with maturity theoretically reached at age twenty-eight to twenty-nine years, at the highest mean level of ability of all the patterns. (Male)

   Individual differences in mental growth are observed in early infancy. When compared to a group, the mental growth of children seems to remain at a fairly fixed position, unless some serious changes in conditions of development occur. The child who fails to grow consistently cannot be predicted. The growth curve of intelligence can be generalised, but without certainty because of individual differences in both rate and maximum.
4. What are the implications of the nature of mental development for the instructional process? How much information regarding the mental development of a child do you feel is important for classroom planning?

Nancy Bayley pointed out some striking examples of variation in mental growth. One child in her study, Mark, varied from his highest score when tested at one month, to group norm at one year, to the lowest one-fourth at two years; he remained at this position relative to the group until age seven, then rose steadily until he received the following IQ scores: at nine years 117; at ten years 122; at twelve years 130. Gerald, the brightest six month old, was consistently slow from then on, scoring 85 at nine, 84 at ten and 76 at eleven. Charles rose from the twenty-fifth percentile at age one year to average intelligence at four years and scored 146, 149, and 153 at nine, ten, and eleven years of age. These scores would place him in the ninety-ninth percentile of the Stanford-Binet scale.

In the Berkeley Guidance Study, one girl rose from the thirty-first percentile at twenty-one months to the ninety-ninth at six years. Another at the same age dropped from the fifty-fourth to the sixth percentile. These extreme variations are not the rule, but they do show the danger of trying to predict the IQ, particularly in the early years.

The age at which an individual ceases to grow in intellectual ability may range from adolescence to the twenties. Increases in ability after the age of twenty appear to be horizontal-in other words, an extension of knowledge. Our study of mental growth curves indicates the necessity for a revised conception of intelligence by the schools and teachers. It seems reasonable to suggest that the research presented should shake the belief of those who tend to think that a single intelligence test will predict a mental growth pattern.

To speak of the constancy of the IQ without considering the many factors which affect this score at different age levels is to disadvantage a great percentage of the children. The use, in the elementary school, of IQ scores for the development of homogeneous groups becomes a particularly naive concept. Constancy of the IQ can now be disputed, and teachers, administrators, and psychologists would do well to consider problems involved both in the measurement of intelligence and the mental growth curves before attempting any early classification of individuals.

If there is adequate evidence that the IQ is not constant at certain stages of development, what does this imply for the use of IQ's in the school? How much does a first-grade intelligence test result tell the fifth-grade teacher? In Mr. Hurley's fifth-grade class Joan has an IQ of 115, Jack 117 Janet 115, and Bill 95. What does this information tell him about these children? What questions would you have about these scores?

SOCIAL DEVELOPMENT

Adolescents will begin to form many different types of relationships, and many of their relationships will become more deeply involved and more emotionally intimate. During children's younger years, their social sphere included their family, a few friends, a couple teachers, and perhaps a coach or other adult mentor. But during adolescence, teens' social networks greatly expand

to include many more people, and many different types of relationships. Therefore, adolescent social development involves a dramatic change in the quantity and quality of social relationships.

Younger children will often use the word "friend" to refer to any other child whom they happen to know. However, as children mature and become adolescents they begin to differentiate friends from acquaintances, indicating a more mature understanding of the qualitatively different ways to know another person. Likewise, youth develop the capacity to form closer, more intimate relationships with others. They also begin to form romantic attachments; and, as the desire for a romantic relationship increases, youth may begin to question their sexual orientation and gender identity.

Youth must also learn to balance multiple relationships that compete for their time, energy, and attention. Instead of just a single teacher and coach as in grade school, there are now several teachers and several coaches each with different requirements and priorities.

Higher education and gainful employment also require increasingly sophisticated social skills such as the ability to form cooperative relationships with classmates in order to complete group projects or assignments; learning to interact with their boss in an appropriately deferential and respectful manner; or working alongside a diverse set of co-workers in a team-like atmosphere.

New communication technologies enable youth to create and to maintain social bonds in completely different ways: *e.g.*, email, chat rooms, mobile phones with "texting," online social networks such as Facebook® and Twitter™, video communication such as Skype®, and online gaming. These technologies have dramatically expanded the size and complexity of social networks by: 1) changing the way youth relate to one another, 2) increasing the amount of time spent staying connected with one another and, 3) redefining what it mean to be a "friend." In fact, it is quite possible to have a "virtual" friendship without ever having direct face-to-face personal contact. Parents are often amazed and confused by these vastly different means of socializing and connecting with others.

Educators have defined social development in a number of ways. E.B. Hurlock thinks "Social development means the attaining of maturity in social relationships" H.E. Garret states "Socialization or social development is the process whereby the biological individual is converted into a human person" Thus social development refers to the process of development by which a child acquires the necessary attitudes, skills and values that makes him an acceptable member of the group to which he belongs.

Characteristics of social development during adolescence:

(i) Adolescence is marked with too much sex consciousness resulting in sexual social relationships.

(ii) During adolescence loyalty becomes very much pronounced and adolescence are in a mood to sacrifice their selfish interests for the greater cause of the group, society and nation.

(iii) Adolescence stage is often marked with increased friendly relationships.
(iv) Emotional behaviour of the adolescence dominates his social characteristics and qualities.
(v) There is too much diversity in the adolescents regarding their social interests.

Role of the school in the social development and satisfaction of the social needs of the adolescence

The function of the school has considerably changed in the rapidly changing civilization. The traditional function of imparting the basic skills of the three R's is now no longer considered to be adequate to meet the present challenge. The present day school has also to perform some of the functions of the family. It may develop certain desirable social habits. It is through co-curricular and extra-curricular activities that the task of social development can be achieved more successfully. It is only the sympathetic understanding and sincere desire of the teacher to act positively in an unprejudicial manner that can help.

EMOTIONAL DEVELOPMENT

As is evident from the above discussion, cognitive development and emotional development are closely intertwined. Adolescent emotional development is often characterized by rapidly fluctuating emotions. In this chapter we will debunk the myth that fluctuating emotions are simply the result of adolescents' "overreaction" to stress. We will also discuss important aspects of emotional maturity, particularly an essential skill called emotional self-efficacy. Finally, we will review the process by which adolescents come to form their own unique identity.

Adolescent stress

For many parents, the adolescent period can seem like a whirlwind of rapidly changing emotions. In fact, some earlier theories about adolescent development proposed that "storm and stress" was to be expected, and suggested adolescents characteristically tended to over-react to everyday situations. However, more recent research refutes that outdated notion. Developmental experts have since learned that what may appear as "storm and stress" is actually the natural outcome of youth learning to cope with a much larger array of new and unfamiliar situations.

In addition to navigating new and uncharted territory, teens growing up in today's society are subjected to increased demands on their physical, mental, and emotional resources. Social relationships outside the family have exponentially increased with the advent of electronic social networking (*e.g.*, Facebook®, Twitter™, *etc.*).

Academic standards have become more stringent. Sports and other recreational pursuits are more competitive. While teens are learning to cope with these challenges it should be expected that they will have a diverse range of emotions, and may experience fluctuating emotions throughout the day or week.

Therefore, teens must learn how to respond to new and unfamiliar situations at the same time they are experiencing increased demands on their physical, mental, and emotional resources. Such a scenario can certainly increase stress; however, the ability to adaptively cope with stress is influenced by many factors. Certain genetic factors, such as temperament, make some people more sensitive to stress. On the other hand, certain environmental factors such as family and community can help to mitigate the effect of stress by enabling youth to become more resilient in the face of stress.

As mentioned, one factor that can influence our response to stress is temperament. Temperament refers to a genetically-determined tendency to behave in a particular way. We are each born with temperamental differences that are observable at birth. For instance, some babies are more sensitive and reactive to stress while other babies are not. These more sensitive babies react swiftly and sharply to a light shining in their eyes, or to a sudden loud noise. They will also take longer to calm down, and are more difficult to soothe and comfort. Other babies are more easygoing and less reactive to stress. They react to a bright light or loud noise by simply closing their eyes, or turning away. They calm down quickly and are easier to soothe and comfort. Thus, adolescents born with more sensitive temperaments may have a more difficult time coping with stressful situations, and may require greater assistance to learn effective techniques to manage their stress. More about temperamental differences can be found in the sensory-motor developmental article.

However, just because youth are born with a more sensitive temperament does not mean they are doomed to suffer. There are many protective factors that can help to mitigate the effects of stress, and serve to increase youths' resilience in the face of stress. Resilient youth will experience fewer negative reactions and negative behaviors in response to stress, and fewer adverse consequences as a result.

One such protective factor is the social support provided by family, peers, teachers, coaches, *etc*. Social support enables youth to practice handling stressful and challenging circumstances while simultaneously knowing that if they should need help someone is nearby and willing to assist them. Therefore, social support enables youth to gain experience managing stressful situations and to gain confidence while doing so. Perhaps an analogy can illustrate how social support functions. Suppose you want to learn how to swim. Swimming is a skill that must be practiced in the water, much like stress management is a skill that must practiced while in the midst of stress. Clearly you can't learn how to swim unless you actually get into the water. But it is much easier to get into the water if you know someone is nearby and ready to rescue you should you begin to drown. Social support works the same way as a lifeguard or buoy would. It's there if you need it, and its mere presence permits safe opportunities for developing and practicing new skills.

In a related way, a sense of safety and security is another protective factor. Youth who feel secure and safe tend to cope with stress much better than youth

who feel unsupported, unsafe, or unprotected by their immediate environment (family, community, school). Rules, boundaries, and limitations serve to create a sense of safety and comfort. Youth feel more comfortable and relaxed when they know what is expected of them. For instance, youth who attend schools with a high degree of staff-to-student engagement, high academic standards, and clear and consistent behavioral expectations, tend to be more resilient because they have more opportunities to gain the knowledge and experience necessary to successfully overcome tough obstacles. Likewise, youth who have parents and caregivers who establish rules and healthy boundaries, along with opportunities to practice independent decision-making skills (while making some mistakes along the way), are far better equipped to cope with life's ups and downs. Thus, when social support is coupled with a balance of age-appropriate limitations and freedoms, it creates a sense of safety and security that can mitigate the effect of stress.

Besides temperament, social support, and security, culture also plays a key role in determining how people respond to stress. There is a great deal of cultural variation with regard to emotional expression: ranging from very high emotional expression, to very low emotional expression (emotional restriction). Since family and community members serve as role models, youth will adopt the culturally accepted methods of expressing emotions surrounding stress. When teens observe respected members of their community expressing their emotions in a responsible and respectful manner they are more likely to follow this pattern of emotional expression.

While environmental factors can certainly serve to protect against the negative effects of stress, the same environmental factors can serve to increase the negative effects of stress. To begin with, some youth grow up in chronically stressful environments. The additional demands of adolescence can become over-burdensome and puts these youth at greater risk for developing problems such as depression and anxiety, alcohol or other drug use, teen pregnancy, and violence.

Likewise, just as the presence of social support has a positive influence on stress management, the lack of social support has a negative effect. Youth who do not feel loved, wanted, or valued by their family, school, or community lack the necessary social support for the development of effective stress management skills, and fail to develop the confidence needed to tackle challenging situations or circumstances. The presence or absence of social support helps to explain why two youth from the same unsafe community, with similarly abusive family backgrounds, can turn out so differently. Inevitably, the successful one of the pair had strong social support from a church member, a community youth group leader, a coach, a teacher, a grandparent, or even a neighbour.

Similarly, youth who must question their security and personal safety are also less likely to successfully manage their stress because survival becomes their primary concern. Youth who regularly experience or witness violence (*e.g.*, domestic violence, abuse, bullying, gang violence) in their home, school, or

community do not feel safe and secure. When survival becomes the primary concern, short-term needs are the primary consideration and long-term consequences become irrelevant. Choices are made based on what is most likely to ensure survival in the short-term, not what is most likely to result in long-term benefits. Likewise, if youth have no guidelines or rules and do not know what is expected of them they are more likely to make poor choices and to experience negative consequences as a result. Other youth may know what is expected of them, but do not believe their success or failure matters to anyone. These youth tend to give-up easily when faced with tough situations. Therefore, they never gain the experience needed to successfully manage stress, and lack confidence in their ability to cope with challenging situations.

Culture can also negatively influence youths' ability to effectively cope with stress. If the prevailing culture promotes "Always look out for #1- ME," youth do not learn to rely on social support as a resource during difficult times. Similarly, if the prevailing method of handling negative emotions is through physical means such as fighting, or the response to stress is to use alcohol and other drugs, youth will usually learn to handle their own stress in the same way.

Emotional development is one of the major aspects of adolescent's growth and development. Not only adolescent physical growth and development is linked with his emotional make-up but his aesthetic, intellectual, moral and social development is also controlled by his emotional development. To keep one's emotions under control and be able to conceal them is considered a mark of strong and balanced personality. Therefore, adolescents must be trained to control their emotions and achieve a mental balance and stability which will lead to individual happiness and social efficiency.

SOCIAL CHANGES AND EMOTIONAL CHANGES

During adolescence, you'll notice changes in the way your child interacts with family, friends and peers. Every teen's social and emotional development is different. Your child's unique combination of genes, brain development, environment, experiences with family and friends, and community and culture shape development.

Social changes and emotional changes show that your child is forming an independent identity and learning to be an adult.

Social Changes

You might notice that your teen is:

- *Searching for identity:* Young people are busy working out who they are and where they fit in the world. This search can be influenced by gender, peer group, cultural background, media, school and family expectations
- *Seeking more independence:* This is likely to influence the decisions your child makes and the relationships your child has with family and friends

- Seeking more responsibility, both at home and at school
- *Looking for new experiences:* The nature of teenage brain development means that teenagers are likely to seek out new experiences and engage in more risk-taking behaviour. But they're still developing control over their impulses
- *Thinking more about "right" and "wrong":* Your child will start developing a stronger individual set of values and morals. Teenagers also learn that they're responsible for their own actions, decisions and consequences. They question more things. Your words and actions shape your child's sense of ''right'' and "wrong"
- Influenced more by friends, especially when it comes to behaviour, sense of self and self-esteem
- *Starting to develop and explore a sexual identity:* Your child might start to have romantic relationships or go on "dates". These are not necessarily intimate relationships. For some young people, intimate or sexual relationships don't occur until later on in life
- *Communicating in different ways:* The internet, cell phones and social media can significantly influence how your child communicates with friends and learns about the world.

Emotional Changes

You might notice that your teen:

- *Shows strong feelings and intense emotions at different times:* Moods might seem unpredictable. These emotional ups and downs can lead to increased conflict. Your child's brain is still learning how to control and express emotions in a grown-up way
- *Is more sensitive to your emotions:* Young people get better at reading and processing other people's emotions as they get older. While they're developing these skills, they can sometimes misread facial expressions or body language
- *Is more self-conscious, especially about physical appearance and changes:* Teenage self-esteem is often affected by appearance - or by how teenagers think they look. As they develop, teens might compare their bodies with those of friends and peers
- *Goes through a "invincible" stage of thinking and acting as if nothing bad could happen to him:* Your child's decision-making skills are still developing, and your child is still learning about the consequences of actions.

Changes in Relationships

You might notice that your teen:

- Wants to spend less time with family and more time with friends
- *Has more arguments with you:* Some conflict between parents and children during the teenage years is normal as teens seek more independence. It actually shows that your child is maturing. Conflict

tends to peak in early adolescence. If you feel like you're arguing with your child all the time, it might help to know that this isn't likely to affect your long term relationship with your child

- *Sees things differently from you:* This isn't because your child wants to upset you. It's because your child is beginning to think more abstractly and to question different points of view. At the same time, some teens find it hard to understand the effects of their behaviour and comments on other people. These skills will develop with time.

Supporting Social and Emotional Development

Here are some ideas to help you support your teen's social and emotional development.

- Be a role model for forming and maintaining positive relationships with your friends, children, partner and colleagues. Your child will learn from observing relationships where there is respect, empathy and positive ways of resolving conflict.
- Get to know your child's friends, and make them welcome in your home. This will help you keep in touch with your child's social relationships. It also shows that you recognize how important your child's friends are to your child's sense of self.
- Listen to your child's feelings. If your child wants to talk, stop and give your child your full attention. If you're in the middle of something, make a specific time when you can listen.
- Be explicit and open about your feelings. In particular, tell your child how you feel when your child behaves in different ways. Be a role model for positive ways of dealing with difficult emotions and moods.
- Talk with your child about relationships, sex and sexuality. Look for "teachable moments" - those everyday times when you can easily bring up these issues. Focus on the non-physical. Teenagers are often self-conscious and anxious about their bodies and appearance. So reinforce the positive aspects of your child's social and emotional development.

Staying connected with your teen can be an important part of supporting your child's social and emotional development.

Children with Special needs

It's normal for parents to worry that their child with disability won't make friends easily or be accepted into a peer group. It helps to remember that the rate of social and emotional development varies widely for young people.

Teens who miss a lot of school because of a physical or mental illness, or who have a visible physical disability, might find it harder to make and keep friendships. This doesn't mean that friendships won't happen. There might be other ways for your child to form friendships, such as joining community groups and online networks. Give your child lots of love and support at home. Boost confidence and self-esteem by focusing on your child's strengths and interests.

MORAL DEVELOPMENT

By morality we mean conformity to the moral code of the social group. The term comes from the Latin word "mores" meaning manners, customs or folkways. To act in a moral way means to act in conformity to group standards of conduct. Morality also includes a sense of right or wrong behaviour which has to do with the conscience of the individual. Moral behaviour is learnt. Moral standards vary from group to group depending upon what has been accepted by the group as a socially approved behaviour. True morality comes from within the individual. It is internal in nature and not imposed by external authority.

Adolescent Moral Development

Morality refers to the way people choose to live their lives according to a set of guidelines or principles that govern their decisions about right versus wrong, and good versus evil. As youths' cognitive, emotional, social development continue to mature, their understanding of morality expands and their behaviour becomes more closely aligned with their values and beliefs. Therefore, moral development describes the evolution of these guiding principles and is demonstrated by ability to apply these guidelines in daily life.

Teens must make moral judgments on a daily basis. When children are younger, their family, culture, and religion greatly influence their moral decision-making. However, during the early adolescent period, peers have a much greater influence. Peer pressure can exert a powerful influence because friends play a more significant role in teens' lives. Furthermore, the new ability to think abstractly enables youth to recognize that rules are simply created by other people. As a result, teens begin to question the absolute authority of parents, schools, government, and other traditional institutions.

By late adolescence most teens are less rebellious as they have begun to establish their own identity, their own belief system, and their own place in the world. Some youth who have reached the highest levels of moral development may feel passionate about their moral code; as such, they may choose to participate in activities that demonstrate their moral convictions. For example, some college students may organize and participate in demonstrations and protests while other students may volunteer their time for projects that advance the ethical principles they hold important.

Unfortunately some youth have life experiences that may interfere with their moral development. Perhaps they survived some traumatic experience such as physical, emotional, or sexual abuse; the death of a family member or close friend; or were witness to senseless violence. These types of experiences can cause them to view the world as unjust and unfair. Or perhaps they observed the adults in their life making immoral decisions that disregarded the rights and welfare of others, leading these youth to develop beliefs and values that are contrary to the rest of society. Lacking a moral compass, these youth may never reach their full potential and may find it difficult to form meaningful and

rewarding relationships with others. Thus, while parents may find this process of moral development difficult or challenging, it is important to remember that this developmental step is essential to their children's well-being and ultimate success in life.

KOHLBERG'S THEORY OF MORAL DEVELOPMENT

Lawrence Kohlberg was a developmental theorist of the mid-twentieth century who is best known for his specific and detailed theory of children's moral development. His work continues to be influential today and contemporary research has generally supported his theory.

Kohlberg developed a six stage theory of moral development, and he grouped these six stages into three, higher-order levels of development: 1) the Pre-Conventional Level, 2) the Conventional Level, and 3) the Post-Conventional or Principled Level. Each level is then further sub-divided into two stages to make a total of six stages. The Pre-Conventional Level includes: a) stage one, the punishment and obedience orientation, and b) stage two, the instrumental purpose orientation. The Conventional Level includes: a) stage three, the morality of interpersonal cooperation, and b) stage four, the social-order-maintaining orientation. The Post-Conventional Level includes a) stage five, the social-contract orientation, and b) stage six, the universal ethical principle orientation. This chapter focuses on the particular stages of moral development associated with adolescent development. Therefore, the discussion begins with stage three, the morality of interpersonal cooperation, within the Conventional Level of moral reasoning. For more information about Kohlberg's theory in general, or for a description of the developmental stages prior to stage three, see the Middle Childhood Developmental Article.

According to Kohlberg's theory, moral development proceeds in a linear, step-wise fashion; *i.e.*, moral development proceeds gradually from one stage to the next, in a predictable, ordered sequence. Although Kohlberg recognized each child progressed through these stages at different rates, and acknowledged that some youth may never reach the highest stages, his theory does not account for regression back to former, previously mastered stages as do some other developmental theorists (such as Marcia's identity development theory).

Kohlberg believed that by early adolescence most youth have reached the mid-level of moral reasoning called the Conventional Level. At this level, morality is determined by social norms; *i.e.*, morality is determined by the rules and social conventions that are explicitly or implicitly agreed upon by a group of people. These rules and customs function to serve to the best interests of the group's majority, while simultaneously providing a structure that maintains social order and limits discord among group members.

The Conventional Level is further subdivided into stage three and stage four. Stage three is called the morality of interpersonal cooperation. At stage three, moral decisions are made by anticipating how a moral decision would be judged by other influential group members. Because youth at this stage wish to be

considered a good person and judged in a favourable light, their moral decisions will be based on whether or not their decisions would win the approval of those people whose opinions matter to them.

For example, Anthony is hanging out with some new friends when one of his new friends offers him a cigarette. If Anthony has reached stage three, the morality of interpersonal cooperation, he might be thinking the following: "What if I try this cigarette and Grandpa finds out? He'll think of me as a smoker. He already told me that he doesn't respect smokers because they damage their health. My grandma would be disappointed in me, too. She told me that smokers are weak people who need a crutch. This thought process will likely dissuade Anthony from accepting a cigarette from his friend.

The next stage within the Conventional Level is stage four, and is called the social-order-maintaining orientation. At this stage, morality is determined by what is best for the majority of people. Furthermore, moral decisions reflect an understanding that the majority of people benefit from a social order that fosters harmonious relationships among group members. At this stage, youth understand that laws are intended to serve everyone's best interest, and believe that societies function best when everyone strictly adheres to the law. These youth will begin to compare their daily decisions, and the consequences of those decisions, to the larger society's moral standards.

For instance, if Anthony from the previous example had reached stage four, the social-order-maintaining orientation, and was offered a cigarette by his new friends, he may now consider that it is illegal for youth to smoke. He may choose not to smoke because he believes that if he smokes, he should be punished for breaking the law. He understands the intent of the law is for his own benefit and protection, but he also understands the law serves to benefit the larger society because when young people become addicted to nicotine it poses a cost and a health risk to others.

While the Conventional Level of morality is concerned with social norms, the third and highest level of moral reasoning moves beyond mere convention. Kohlberg called this final level of moral development the Post-Conventional or Principled Level. It's called the Principled Level because people make moral decisions based on a basic set of principles that represent their most important values and beliefs. At this level, people think more abstractly about their values and beliefs. Therefore, morality is determined by a complex evaluation of these ideological values rather than a blind adherence to an existing set of rules. At this level of development, people apply these ideological values when making a determination of right from wrong, and when evaluating conflict between groups of people with opposing values such as different religious groups, different cultural groups, or different governmental bodies.

Like the previous Conventional Level, the Principled Level is subdivided into two stages. Stage five is called the social-contract orientation. At this stage, people understand rules and laws are mere tools intended to create social justice and designed to promote the well-being of all people. Thus, the ideological

values of social justice and humanitarian concern are considered to be important, not the rule or law itself. At stage five, people recognize that rules and laws may require some degree of interpretation and flexibility, and these rules and laws may need to be re-evaluated from time-to-time to ensure the intended purpose is still being met.

Furthermore, people at this stage understand that governing bodies, such as the United States Congress or the school administration, are morally obligated to design and enforce rules and laws in a manner that balances individual freedom, with the needs of the larger group, in order to protect the safety and welfare of all. The leaders who create the rules and laws, and the group members who must adhere to them, implicitly or explicitly agree that this balance between individual freedom and the needs of the group must be maintained. Group members accept that it may become necessary to give up some personal freedom in order to enjoy a safe and orderly society.

For example, a group of college students at stage five (the social-contract-orientation of moral reasoning) may request a meeting with their college administrators to discuss a campus rule that limits condom distribution to the campus health clinic, and requires students to first meet with a nurse before receiving condoms. The intended purpose of this rule is to provide health education regarding the proper and safe use of a condom. On the surface, this rule seems sensible from a health education perspective.

However, the students believe the rule has the unintended effect of deterring students from using condoms. They believe that in order to reduce the spread of diseases, and to limit unwanted pregnancies, condoms should be available at convenient locations that ensure comfort and privacy, such as dormitory restrooms. These students believe the intended principle behind the rule (to protect the health, safety, and welfare of the student body) is not being met and this principle trumps the need to document health education regarding condom use. This group of students firmly believes their college administrators have an obligation to change the rule for the greater good of the student body.

According to Kohlberg, the sixth and final stage of moral development is the universal ethical principle orientation. At this stage, universal and abstract values such as dignity, respect, justice, and equality are the guiding force behind the development of a personally meaningful set of ethical principles. Individuals at this level of development believe these ethical principles should guide their actions above all else, including previously established rules, laws, and social contracts.

Dramatic social change has often been brought about by people operating from a universal ethical principle orientation. These social changes were precipitated by people whose actions were guided by this level of moral reasoning, even though their ethical convictions proved to be inconvenient, difficult, or even dangerous to implement. For example, young African-American adults during the 1960's chose to seat themselves at segregated lunch counters even though they knew that this action was against the law, contrary to the local

culture, and was personally risky. However, these courageous men and women believed it was their basic human right to be seated alongside whites. More importantly, this simple act of defiance was intended to draw attention to an important principle: that a fair and just society does not impose segregation. They maintained a commitment to ethical principles by using non-violent civil disobedience, while risking their own personal safety. Their actions became a vital piece of the larger civil rights movement that brought about changes in American laws and American culture. As a result, we have a more just and more equal society today.

Research has tended to support Kohlberg's theory. However, any discussion of morality and moral development must acknowledge the cultural biases that are inextricably embedded in definitions of what is moral, and what is not. Woven throughout Kohlberg's theory is an inherent assumption that morality is defined by the principles of fairness and justice. Of course, it is quite sensible that fairness and justice are highly valued in the individualistic and competitive cultures common to many Western societies. However, other less competitive cultures may more highly value a different set of principles such as compassion and group integrity, over that of fairness and justice.

In a related way, it has been argued that even within competitive Western societies men and women have their own unique sub-cultures with differing sets of moral imperatives. Kohlberg's original research, and much of the subsequent research, has been limited to the study of adolescent males. This body of research has indeed demonstrated that by late adolescence, most adolescent males have reached stage three (the morality of interpersonal cooperation) or stage four (the social-order-maintaining orientation). The limited research with female adolescents suggests they reach the same levels of moral reasoning as their male counterparts. Nonetheless, there is a general consensus that more research is needed that compares and contrasts male and female moral development, as well as the need for cross-cultural studies.

In summary, the process of moral development can be very frustrating for parents and caregivers to endure as youth question the rules and challenge authority. However, parents may find comfort knowing that this process is essential for youth to develop a set of values and beliefs that will guide them for the rest of their lives. While some rebellion is to be expected, it remains important for parents to offer love, support, and guidance. This includes appropriate discipline when necessary and allowing youth to experience the consequences of their moral choices.

HEALTH EDUCATION CHILD DEVELOPMENT

"Health Education Child Development" is a comprehensive guide that explores the intersection of health education and child development, providing valuable insights for educators, healthcare professionals, parents, and policymakers. This essential text examines the crucial role of health education in promoting the physical, mental, and social well-being of children, laying the foundation for healthy behaviors and positive development throughout the lifespan. The book begins by exploring key concepts in health education, including disease prevention, nutrition, hygiene, and reproductive health. It then delves into the unique developmental stages of childhood, from infancy through adolescence, examining how health education interventions can support optimal growth and development during each phase. Through a combination of theoretical frameworks, evidence-based practices, and practical strategies, "Health Education Child Development" offers readers a comprehensive understanding of the factors influencing child health and development. It addresses the importance of early intervention, parental involvement, and community-based initiatives in promoting healthy lifestyles and preventing health disparities among children. With its interdisciplinary approach, the book explores the role of schools, healthcare providers, and community organizations in delivering effective health education programs. It also examines emerging trends and challenges in child health and development, including the impact of technology, social media, and environmental factors on children's well-being. Whether used as a textbook in health education courses or as a reference guide for practitioners, "Health Education Child Development" provides valuable insights into the interconnectedness of health and development in childhood, empowering individuals and communities to promote the health and well-being of future generations.

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