Α.

Conceptual Framework

Abuse, neglect, and traumatic separation often have pervasive detrimental effects on children's development. The more obvious consequences include permanent physical injury, disability, illness, and even death. However, abuse, neglect, and traumatic separation can also insidiously alter the normal processes of development, often with serious, albeit less obvious, consequences.

Many maltreated and traumatized children continue to exhibit developmental delays and problems, even after abuse and neglect have essentially ceased, and their placements are stable. To effectively help maltreated children develop to their maximum potential, workers must recognize detrimental outcomes of maltreatment, and integrate developmental and remedial services into individual case plans.

Concepts of Development

Understanding the effects of maltreatment on development means first understanding the fundamental principles of developmental processes. There are many theories of development, and various disciplines approach the study of development from different perspectives. Yet, despite differing conceptions, there are many principles that are agreed upon by the majority of developmentalists.

Development is an Ongoing Process

Individual development begins with conception and does not end until death. In a broader sense, development is really not bounded by the existential limits of conception and death. Much of what we are was determined by our parents, and generations of parents before them; and, much of what we are will be perpetuated in and by our children. This view of development is called phylogenetic, and it recognizes the continuing evolution of life and human characteristics across generations. It can also help explain our concern for children's welfare, and our attempts to foster a caring future of which we will not always be a part.

However, in this chapter, our primary concern is the development of the individual, referred to as ontogenetic development. Ontogenetic development begins with fertilization, and ends with the death of the individual.

Early in its history, developmental psychology suggested that all important developmental milestones were achieved before adulthood. This is not so. Human development is an ongoing process, with important and necessary developmental stages and milestones occurring throughout the life span [Baltes & Reese 1984].

Development is a Dynamic Process

Human development is dynamic rather than static; it involves continuous change. This change is sometimes referred to as growth. While the rate and degree of change may vary at different times in the life cycle and among individuals, it is always a continuous process.

Development is Directional

Most developmental processes evolve in predictable and identifiable ways, and development is always directed toward some end. Individual human development can be defined as growth and change toward more adaptive capability. At different stages of life, different capabilities are needed to

successfully negotiate life's challenges and opportunities. Development is this ongoing and purposeful metamorphosis.

Development typically proceeds from the simple to the complex. We see the same basic pattern repeated in all developmental processes and domains. For example, we all begin as a single cell, and develop into a complex organism with many millions of cells that are highly differentiated in both structure and function. These cells are organized into more and more complex and integrated structures as development proceeds.

Another example of the directionality of development can be seen in the evolution of motor development. The rudimentary and uncoordinated motor movements of a newborn infant become increasingly complicated, integrated, and efficient as the child grows. Early uncoordinated and undirected movements evolve into complicated patterns of gross and fine motor skills and eye-hand coordination, allowing the individual to maneuver through the environment. Continued development finally culminates in a polyphony of integrated physical capacities, expressed in such activities as playing a piano or playing basketball.

Development May Involve Stages

At certain predictable times in the developmental process, new and different capabilities emerge. These developmental plateaus are often referred to as stages. Stages often represent a qualitative change in development, which results in the emergence of an ability or trait that has no obvious precursors from earlier developmental periods. An example is the emergence of stranger anxiety in an infant who was previously happy being held by anyone.

After the emergence of a new skill or behavior, there is usually a period of leveling off, when the new abilities are practiced, mastered, and integrated. For

example, after a toddler has taken his or her first steps, the child will spend several months perfecting walking to achieve balance, coordination, and stability. When perfected, the skill becomes habituated, or performed without conscious thought, and the child can attend to another developmental challenge, such as climbing.

Stages represent the emergence of more complex behavior patterns that often refine or replace earlier, less effective ones. A four year old, who has well-developed language and social skills, is less likely to respond in frustrating situations by having a tantrum than would a two year old in the same situation. The preschooler's ability to communicate the problem to a trusted adult is more effective in removing the source of frustration and negotiating a solution.

Stage development is an essential concept for many theories of child development, including those of Jean Piaget, Erik Erikson, Lawrence Kohlberg, and Sigmund Freud.

Development is Cumulative

Early developmental tasks provide critical skills or traits that form the foundation for the development of later, more complicated tasks. For example, the ability to engage in reciprocal and intimate relationships is based upon the development of trust, a critical milestone of the first year of life. A child who fails to master early tasks will have more difficulty mastering the demands of later stages, and without remedial intervention, the child's development becomes more delayed, or shows increasingly abnormal patterns over time. This is a critical concept in understanding the importance of early recognition and intervention when children are developmentally delayed.

The negative effects of early developmental deficits increase as the child grows and as environmental demands become more complex. A circumscribed deficit,

such as the inability to recognize letters of the alphabet, does not critically affect the life of a six year old. However, an adult who cannot read faces serious difficulties in social and economic functioning.

Factors that Determine Developmental Outcomes

The factors that affect development are generally divided into two major categories: hereditary contributors and environmental contributors.

While there has historically been considerable debate regarding the relative importance of these two factors, most developmentalists agree that development is shaped by the extremely complex interaction of the individual's genetic predisposition with the environments in which the individual lives and grows.

The Influence of Heredity

All human beings have a common genetic structure that determines the course of much of development. This common heredity accounts for the basic similarities in the structure and functions of our bodies, as well as the differences between humans and other species. Many traits are inherited, including eye color, hair color, body type, height, and skin color. The expression of these traits is genetically determined.

When development occurs as a direct result of the expression of genetic potential, it is called maturation. Maturational developmental milestones generally occur in predictable patterns, even in varying environments or cultures. Early motor abilities are one example of maturational development. Grasping, sitting, crawling, standing, and walking occur in a predictable sequence and time frame, and increase in complexity in direct proportion to the

degree of physical maturation. A child cannot walk until the bones, muscles, and other physical structures have developed sufficiently to support upright body posture and to bear weight.

Infants in all cultures are biologically ready to walk somewhere between nine and 15 months. However, environment may influence when a child actually begins to walk. A child who is carried on his mother's back for the first three years of life will not walk at a year. Were that same child to be allowed to roam freely on the ground, he would likely walk within the typical time frame for all infants.

Abilities that result from maturation do not have to be taught in the same way we teach a child to hold a paintbrush or ride a bicycle. The child will have to practice a maturational skill to be proficient; however, the emergence of the skill is not dependent upon environmental factors.

Physical maturation is the easiest type of maturational development to observe. There are many other traits, however, in which maturation is thought to play a primary role. One is the emergence of cognitive skills.

Piaget identified four predictable stages in cognitive development, each of which is exemplified by the emergence of distinctly different abilities. They are: 1) sensorimotor cognition in infants; 2) symbolic thought in the toddler; 3) concrete operations in the early school years; and, 4) formal operations in adolescence. Piaget believed these stages were maturational in origin. As an example, infants are not capable of symbolic thought and, therefore, lack the ability to learn complex language until well into the second year of life. As a result of maturation, the structure and organization of a two-year-old's brain are qualitatively different from that of the infant, making it possible for the two year old to conceptualize symbols. The ability to learn a language is, therefore, genetically determined, even though the particular language a child learns

depends on his culture and environment. When an entirely new ability emerges without obvious learned precursors, it is believed to represent a strong maturational influence.

Erik Erikson's stages of psychosocial development (trust, autonomy, initiative, industry, identity, etc.) are also believed to be maturational. Again, environment will affect the ways these traits are expressed; however, the emergence of the trait is not dependent upon the child's contact with the environment.

Despite genetic similarities of all humans, the information carried by our genes varies between individuals. This can account for differences between people in the rates of maturational development. However, maturational traits are generally confined within a well-defined range.

The Influence of Environment

Environment can be defined as the total complex of external (nongenetic) influences that affect the survival and development of the child.

While children are born with different potentials, the capacity for each child to achieve the highest levels of potential is dependent upon a nurturing and supportive environment. Even the most basic genetic expressions of development are essentially interwoven with environmental factors. It is easy to understand why this should be so. The evolution of genetic traits is a factor of environmental pressures. We have evolved certain traits because they work to help us function and survive in our environment. Genetic evolution and expression are the effects of environmental intercession. It is because we understand the fundamental importance of environmental factors in genetic expression that social work intervention becomes so important in our work with abused and neglected children and their families. By working to change a harmful or even benign environment into a supportive and empowering one, we

facilitate the expression of the highest developmental potential of children in our care.

In reality, there are multiple environments that influence the course of development. The prenatal environment includes the chemical balance of the mother's body, and the presence of conditions or substances that can alter developmental processes, either positively or negatively. Examples are a nutritious diet and vitamins, or conversely, the mother's use of drugs or alcohol during pregnancy.

Other environmental influences are the physical environment in which the child grows, including the quality of the air the child breathes, the nutritional value of food the child eats, or exposure to conditions that can lead to disease, accident, or injury, including child abuse and neglect. The child's social and cultural environment consists of the norms, values, belief systems, morals, and, in general, standards of behavior that regulate life in the cultural group in which the child is raised. The learning environment consists of the degree and type of stimulation available in the child's immediate environment. There is considerable data to suggest that sensory input stimulates and shapes cognitive development. Cognitive stimulation, in adequate quantity and intensity, promotes establishment of, and "shapes," neural pathways in the brain. Finally, the emotional environment includes the nature of the child's interpersonal relationships, and the degree of psychological nurturance available to the child. The emotional environment shapes personality, and affects the development of self-esteem, identity, trust, social responsibility, the ability to enter into intimate relationships, and personal resilience.

Maturation is an underlying variable in all development. It creates a biological readiness for the child's encounters with the environment. The continuous interactions of the maturing child with the environment determine the final outcomes of development. These interactions between human potential and

environment determine the person. It is the child welfare field's responsibility to attempt to make the environmental side of this equation as safe, supportive, nurturing, and enabling as possible.

What is "Normal?"

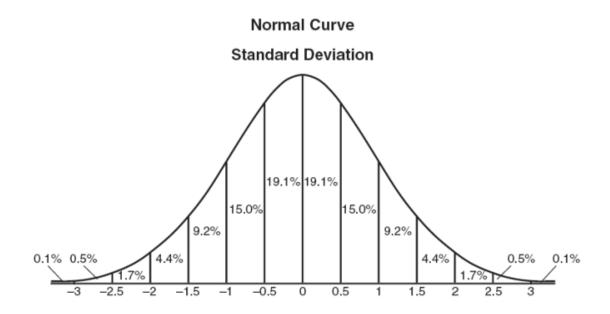
We must know what constitutes "normal" development to establish an accurate baseline from which to evaluate and understand delayed or "abnormal" development.

Normal is a statistical concept

"Normal" represents what is typical, or expected, for the majority of members of a group. We determine what is "normal" child development by observing a representative group of children, by identifying the traits and processes displayed by most children, and by determining the time frames for the emergence of each trait or process.

For example, if we wanted to determine the normal age range for walking, we would observe and record the ages at which a group of children first walked. Our study group should be representative; that is, randomly chosen and proportionately the same in composition as the entire population we are studying. If our study group is truly representative, we can properly assume that what we learn about the children in our sample is most likely true for all children in the population our sample represents.

Once we have collected our data, we can record the information on a graph, such as the one illustrated below.



This graph, known as the "normal distribution curve," is used to depict the distribution of many typical traits in a population. The horizontal axis records children's ages from birth to two years. The vertical axis records numbers of children.

The top of the curve represents the greatest number of children. The highest point in a normal distribution is usually the mean, which represents what is average for the population. For example, the mean, or average age at which children walk is 12 months. In a normal distribution, the middle of the curve is also the median; this means that approximately 50% of children walk before, and 50% walk after 12 months of age.

A statistical measure called a standard deviation designates a fixed distance from the mean. One standard deviation from the mean includes approximately 34% of

From Rycus, Judith S, & Hughes, Ronald C. Field Guide to Child Welfare, 1998. All Rights Reserved.

the population. When applied to the age at which children walk, one standard deviation is approximately two months. Therefore, 68% of children walk between the ages of 10 and 14 months. This is generally referred to as the average or normal range. Statistically, as shown above, approximately 96% of the population is included within two standard deviations either side of the mean. Two standard deviations is still broadly within normal limits, but it represents the extreme ends of normal. Walking before 10 months or after 14 months is statistically uncommon.

Few would disagree that children who walk between 10 and 14 months are within normal limits. It is difficult, however, to say with certainty just when "abnormality" begins. A child who is not walking at 18 months is definitely delayed. What about a child who walks at 16 months? 15 months? 14 months, eight days? Where does abnormality begin?

It is not possible to draw strict delineations of normal and abnormal, because, as the normal curve demonstrates, development occurs in a population on a continuum. We must consider development a process, not an event occurring at a fixed point in time. To label a child delayed or abnormal simply on the basis of a statistical delay in performance is of little use. However, statistically-determined delays should be considered an indicator of potential developmental problems, and should serve as an inducement to further explore the problems and their origins.

The rate of a child's development may also vary between traits. A child may develop physical skills earlier and language skills later than average, but still be within normal limits. Earlier development may, at times, be genetically determined; or, it may be promoted in traits or skill areas that are favored and reinforced by the child's culture and environment. Therefore, the term "normal" most appropriately refers to a trait, not to the child; and, the rate and progress of

a child's development must be evaluated separately for each developmental trait or domain.

Understanding Developmental Domains

To facilitate the study of development, developmental tasks are typically divided into four primary categories, referred to as domains. The four primary developmental domains are *physical*, *cognitive*, *social*, *and emotional*.

Physical development consists of the development of the body structures, including muscles, bones, and organ systems. Physical development is generally comprised of sensory development, dealing with the organ systems underlying the senses and perception; motor development, dealing with the actions of the muscles; and the nervous system's coordination of both sensation and movement.

Motor activity depends upon both muscle strength and coordination. Gross motor activities, such as standing, sitting, walking, and running, involve the large muscles of the body. Fine motor activities, which involve the small muscles of the body, include speech, vision, and the use of hands and fingers. Both large and small muscle activities are controlled and coordinated by the central nervous system.

Sensory development includes the development of vision, hearing, taste, touch, and smell, and the coordination and integration of perceptual input from these systems by the central nervous system. Vision has both motor and sensory components. Muscles regulate the physical structures of the eye to permit focusing; neurological pathways then transmit visual input to the brain.

For the first year of life, children's development is most pronounced in the sensory and motor domains. For this reason, Piaget has named this early stage of development "sensorimotor."

Cognitive development is sometimes referred to as "intellectual" or "mental" development. Cognitive is the more appropriate term. Cognitive activities include thinking, memory, reasoning, language, concept development, problemsolving ability, and abstract thinking. Language, with its requirements of symbolization and memory, is one of the most important and complicated cognitive activities.

Language and speech are not synonymous. Understanding and formulating language is a complex cognitive activity, while speaking is a motor activity. Language and speech are controlled by different portions of the brain.

Social development includes the child's interactions with other people as well as involvement in social groups. The earliest social task is the development of attachment to consistent primary caregivers. Other social tasks include the development of relationships with adults and peers, the assumption of social roles, the development of an integrated system of morals and values, the adoption of group norms and standards, and eventually assuming a productive role in society.

Emotional development includes the development of personal traits and characteristics including a personal identity, self-esteem, the ability to enter into reciprocal emotional relationships, and mood and affect (feelings and emotions) that are appropriate for a person's age and for the situation.

While each of these four developmental domains can be examined individually, it is misleading to suggest that development occurs separately in each of the four domains. Development in any domain affects, and is affected by, development

in all of the other domains. This can be illustrated by considering the effects of a developmental disability in one domain on development in other domains:

- How does a visually impaired child learn the concepts of "near," "far,"
 "round," and "hazy?" All these concepts (cognitive development) are normally learned through primarily visual (sensory) input. The absence of visual stimuli may thereby affect cognitive development.
- How will a child with a cognitive deficit, such as mental retardation, learn
 and understand the complicated social cues, rules, and roles that guide
 interpersonal relationships? The cognitive deficit can affect the child's
 acquisition of social skills.
- A child with emotional problems, such as poor self-esteem and lack of confidence, is likely to be fearful and anxious when confronted with difficult physical tasks, and may avoid these activities. The child's physical coordination, mastery of his or her own body, and motor skills will be affected as a result.

As a rule, children should show some degree of consistency in their developmental rates in the four domains. However, most normally developing children will be more advanced in some areas than they are in others, and yet they will be within normal limits in all domains. More rapid development in a developmental domain may be a precursor of a strength in that area. For example, many children who learn to talk very early continue to display exceptional verbal ability as they grow; and, a child who shows early physical skill and mastery will often continue to be well coordinated and agile.

The greater the disparity in the rates of development between the four domains, the more difficult the developmental process becomes for the child. Significant delays in all domains may indicate the presence of a disability, such as mental retardation. A significant delay in one developmental domain might indicate a circumscribed developmental problem, such as a speech problem, learning disability, or emotional problems.

Application

Many of the job responsibilities of child welfare caseworkers require a thorough knowledge of both normal child development and the potential detrimental effects of maltreatment on the developmental process. Knowledge of normal, or statistically typical development permits early recognition of developmental delay and disability, and can help the worker design intervention plans for children and their families that stimulate and reinforce growth and mastery of new skills.

Child welfare workers will utilize information about typical and atypical child development in several ways.

The caseworker must be able to recognize the negative effects of abuse and neglect on a child's development.

Children who have been abused or neglected are often delayed in their development, and they may display abnormal patterns of development. The caseworker should be able to recognize developmental delay in all domains, identify the nature of the child's developmental problems, refer the child for further assessment and diagnosis, and include developmental and remedial services in the family case plan. Early recognition of delays or unusual developmental patterns, and proper intervention by the caseworker, can greatly

minimize the potential negative effects of maltreatment on the child's development. (See related discussion in Chapter VI, "Child Welfare Services for Children with Developmental Disabilities.")

The caseworker should know age-appropriate behavioral expectations, and should be able to educate and counsel parents and other caregivers regarding proper child care practices and discipline strategies.

A common contributing factor for both child abuse and neglect is parents' unrealistic expectations for their children's behavior. For this reason, identifying and correcting parents' misconceptions about their children's development can help to prevent future maltreatment.

A poor understanding of age-related developmental capabilities also contributes to the development of unreasonable expectations for behavior. A parent who believes her five year old to be capable of babysitting for the six month old while she goes to the store does not understand the realistic capabilities of a five year old. Other examples would be a parent who expects a two year old to fully and correctly dress himself, an eight year old to find her own way home on a bus from downtown, and a nine month old to keep quiet while the parent is watching television.

Parents of abused and neglected children may also use discipline strategies that are not appropriate for their children's level of development. Behavior management strategies that are not age appropriate might include: 1) the use of "reasoning" with a one year old, who can understand neither complex language nor logic; 2) the excessive use of force with a two year old, who is developing autonomous behavior, which may promote overreaction by parents and battles for control; and, 3) the use of physical discipline with an infant, who lacks the cognitive ability to understand, and therefore, experiences the discipline as a painful and disorienting intrusion, with no effect on modifying behavior.

A lack of knowledge about development can also contribute to a parent's misinterpretation of children's actions. For example, a two-year-old child, who exercises normal autonomy by using the potty only when he wants to, may be perceived by his parent as "plotting ways to get back at me." It is not uncommon for two- and three-year-old children to be stubborn; the child's attempt to control his own body functions is an expression of developing autonomy. A child this age is not capable of plotting in the manner the parent attributes to him.

Similarly, a crying infant who cannot be comforted may be perceived as "ungrateful and unappreciative" of the parent's care, and a three year old, who is totally absorbed in Sesame Street and does not respond to a parental request, might be accused of "deliberately ignoring me." Infants cannot exhibit "appreciation" in the planful and reciprocating manner that is typical of adults. Many three year olds may not be able to fully attend to more than one stimulus at a time. This may also be a cognitive style of some children and adults, not representative of selfish or antagonistic behavior.

Discipline strategies that are not appropriate for a child's developmental level are typically ineffective in changing behavior. They can also create high levels of frustration for the parent, which increases emotional conflict between the parent and the child, and may promote additional disruptive behavior in the future.

In many families, parent education is an important component of casework intervention. However, parent education, by itself, is not usually enough to prevent maltreatment. The other personal and environmental factors that contribute to abuse or neglect must concurrently be addressed. (See Section II-B, "Dynamics of Child Maltreatment," for further discussion.) However, we can help parents set realistic expectations for their children and accurately interpret the meaning of their children's behaviors. We can help them learn not to interpret their children's actions as evidence of their own lack of competence and

worth, and we can help them manage their children in more pragmatic and effective ways.

Caseworkers should be able to assist parents and foster caregivers to access services and activities to meet children's special needs, and to enhance development.

Caseworkers should help caregivers identify and access social, recreational, psychological, and educational services and resources that can promote healthy development for a child, and help overcome developmental problems. These activities might include the provision of:

- Health care services to address physical problems from maltreatment;
- Special school programs to address academic delays;
- Recreation programs to teach social skills and interpersonal relationships;
- Physical education activities to develop motor coordination and skill;
- Participation in activities that are designed to help a child develop positive self-esteem; and
- Speech therapy, infant stimulation, psychological counseling, play therapy, and other types of treatment for developmental and emotional problems.

A thorough assessment of a child's development will enable the worker to recognize developmental needs, and link the child to the most appropriate resources to meet those needs.

Caseworkers should be able to identify early warning signs and symptoms of developmental disability, and begin early intervention services.

There is a high correlation between abuse or neglect of children, and subsequent developmental disabilities. Child welfare workers should be able to recognize the early warning signs of the primary developmental disabilities, including mental retardation, epilepsy, and cerebral palsy. A knowledgeable child welfare worker will not only recognize when children on their caseloads exhibit early warning signs of serious developmental problems, but can initiate the proper early intervention services. Early intervention is critical to reduce the long-range detrimental effects of a disabling condition on a child's development.

Children with serious developmental problems or disabilities may also be at a higher risk of maltreatment. By recognizing such delays and disabilities, workers can often provide supportive and counseling services to parents, thereby reducing stress in the family and potentially preventing maltreatment. (More detailed information on the relationship between maltreatment and developmental disabilities, and services to these children and their families, can be found in Chapter VI, Child Welfare Services for Children with Developmental Disabilities.)

Knowledge of child development is necessary to prevent crisis for the child during placement into substitute care.

Accurate knowledge of a child's cognitive and emotional capabilities can help caseworkers understand the child's experience during separation and placement into substitute care. The worker can plan and implement placement activities that minimize the child's stress, and that help the child cope with the placement experience. This can help prevent emotional crisis and subsequent negative effects on the child's development. (Refer to discussion in Section VII-C, "Placement Strategies to Prevent Trauma.")

In summary, to perform many essential child welfare activities, the worker should have the following knowledge and skill related to child development:

- Knowledge of the stages and processes of normal development in all domains for children ages birth through adolescence;
- The ability to observe and assess a child's development in the primary developmental domains;
- Knowledge of the early warning signs of developmental delay or disability, and the ability to recognize indicators of developmental problems in children;
- Knowledge of appropriate agency and community resources for developmental assessment and for remedial services, and how to properly access these resources;
- Knowledge of developmental opportunities for children available through community resources, including special service providers; and the ability to incorporate developmental services into case plans;
- Knowledge of the most appropriate and effective parenting and discipline strategies for children at different stages of development; and
- The ability to counsel and educate parents and caregivers regarding normal developmental expectations for their children.

Workers who adopt a developmental approach to child welfare services can have a pronounced impact on the long-term well being of the abused and neglected children in their care.