

1969 Eleanor Clarke Slagle Lecture

Facilitating Growth and Development: The Promise of Occupational Therapy

Lela A. Llorens, MA, OTR

Preamble

To be the recipient of the Eleanor Clarke Slagle Lectureship is indeed an awesome honor. Preparing for this moment has been an arduous task. Many of my colleagues and friends have checked periodically on my progress during the year and the answer most often given was, "We're living with it." We, including my family, have literally lived with the "Lecture" this year and the breakthrough that I was struggling for did not come until late summer during our trip to West Africa. When it did, it came in the form of ten premises which express a developmental theory of occupational therapy.

The theory which I am presenting has been an outgrowth of my experience and research in the field of psychiatry, both pediatrics and adult, and more recently in pediatric general medicine and community health. In order to do justice to the formulation, however, I have spent considerable time in consultation with my colleagues in physical medicine and rehabilitation and with their patients. These experiences as well as the fortunate opportunities I have had to participate in a number of seminars and workshops over the past several years have stimulated my desire to think through the function and purpose of occupational therapy as I have experienced it.

Introduction

In this paper, a conceptual model for understanding the knowledge that presently supports the practice of occupational therapy is presented with a discussion of how and where occupational therapy fits into the scheme of human development.

My thesis is simply this: that occupational therapy is a facilitation process which assists the individual in achieving mastery of life tasks and the ability to cope as efficiently as possible with the life expectations made of him through the mechanisms of selected input stimuli, and availability of practice in a suitable environment. The occupational therapist serves as the enculturation agent for the conditions of physical, social and psychological health in which the developmental level being experienced by the individual in any one of a number of parameters of development is unequal to the age-related demands made of that organism as a result of natural or traumatic incident.

Developmental Theory of Occupational Therapy

The theory is based on these premises:

- 1. That the human organism develops horizontally in the areas of neurophysiological, physical, psychosocial and psychodynamic growth and in the development of social language, daily living and sociocultural skills at specific periods of time;
- 2. That the human organism develops longitudinally in each of these areas in a continuous process as he ages;
- 3. That mastery of particular skills, abilities and relationships in each of the areas of neurophysiological, physical, psychosocial and psychodynamic development, social language, daily living and sociocultural skills, both horizontally and longitudinally, is necessary to the successful achievement of satisfactory coping behavior and adaptive relationships;
- 4. That such mastery is usually achieved naturally in the course of development;
- 5. That the fundamental endowment of the individual and the stimulation of experiences received within the environment of the family come together to interact in such a way as to promote positive early growth and development in both the horizontal and longitudinal planes;
- 6. That later the influences of extended family, community, social and civic groups assist in the growth process;
- 7. That physical or psychological trauma related to disease, injury, environmental insufficiencies or intrapersonal vulnerability can interrupt the growth and development process;
- 8. That such growth interruption will cause a gap in the developmental cycle resulting in a disparity between expected *coping behavior and adaptive facility* and the necessary skills and abilities to achieve same;
- 9. That occupational therapy through the skilled application of activities and relationships can provide growth and development links to assist in closing the gap between expectation and ability by increasing skills, abilities and relationships in the neurophysiological, physical, psychosocial, psychodynamic, social language, daily living and sociocultural spheres of development as indicated both horizontally and longitudinally.
- 10. That occupational therapy through the skilled application of activities and relationships can provide growth experiences to prevent the development of potential maladaptation related to insufficient nurturance in neurophysiological, physical, psychosocial, psychodynamic, social language, daily living and sociocultural spheres of development both horizontally and longitudinally.

This in my opinion is the promise of occupational therapy. In order to pursue this theory further, let us look at the various areas of knowledge which support the continuum of human development including behavior and ability expectation.

Current Knowledge of Human Development

The life span of the individual encompasses several phases of physical growth, neurophysiological, psychological, social and emotional development as well as a gradual decline in many of these life processes, particularly physical development, as the individual ages requiring continued growth in the adaptive abilities of the organism. Ayres has contributed greatly to our knowledge of neurophysiological development from infancy to adolescence.¹ Gesell has contributed specifically to our knowledge of the physical development of children through this same age span, as well as to our knowledge of the development of social language, sociocultural and daily living skills in this age group.² At the present time, however, such specific details of the physical development of adults is not easily available for either the young or the aging. Erikson has given us in his "Eight Ages of Man" some insight into the psychosocial development of the individual in terms of his behavior both at the time of initial emotional experience and at the time of reexperience of early development in adult life.³ He spans the life cycle from infancy to old age and emphasizes the continual growth conflicts which are inherent in living. He cautions against believing that any level of developmental achievement, once achieved, becomes a permanent part of the psychological makeup of the individual as the individual is a dynamic, changing, developing organism. Freud has provided us with an understanding of child development as it relates to personality in its organization and dynamics.4,5

In the process of development the human organism expects and is expected to achieve specific adaptive behaviors which equip him to cope with life. These specific behaviors assist him in the larger task of getting on in the world. In his *Developmental Tasks and Education,* Havighurst presents us with a concept of developmental tasks as being midway between an individual need and a societal demand.⁶ Meeting societal demands requires adaptive skills and mastery of self and the environment. The adaptive skills correlative to this formulation have been developed from the work of Pearce and Newton and the work of Mosey. Pearce and Newton give us some insight into how residuals of early patterns of development become a part of the personality structure as an adult as well as how early patterns of development contribute to adaptation, the ability for and style of coping with life demands.⁷ Mosey has defined for us specific adaptive skills required by the individual to adjust to his internal needs as well as to the external demands.⁸ These are the areas that constitute horizontal and longitudinal development.

At any point in time, the human organism experiences simultaneous growth (horizontally) in the areas of physical, neurophysiological, psychosocial, psychodynamic, sociocultural development, and in the skills of daily life and social language. As he matures, he experiences longitudinal growth in each of these areas. In order for the individual to achieve in the adaptive areas of functioning it is necessary for him to experience satisfaction and mastery both horizontally and longitudinally in the developmental spectrum.

For emotional growth to proceed in a natural and spontaneous way, it must be nurtured with affection, understanding, security and discipline, and be stimulated by achievement and social acceptance. It is necessary, too, that children gain satisfaction in their relationships with others so that they may develop the feeling that they are lovable, that their individuality is respected and that they can have confidence in their own strength and capability as a person. As the child develops he explores his environment, establishes relationships and acquires knowledge and skills which enable him to successfully adapt to his world.⁹

In adolescence the activities of the period expand into social, intellectual, literary and artistic interests. Intense relationships as with a chum are particularly important to this period. Physical changes occur which must be incorporated into the self-image. It is necessary for the adolescent to have the support and understanding of his family as he reaches for adulthood.

"The primary conditions for growth for the adult are crucially different from the conditions of growth of the developmental eras of pre-adulthood. These differences relate to the adults' responsibility to initiate and consolidate experience, and also to the new significance of sharing."

Middle age requires reorganization of several factors of one's life. Emotional responsibilities of parents become less demanding as children leave home and ongoing financial responsibility becomes finite and predictable. Physical and physiological changes occur which must figure in the adaptation of the individual.

Not enough information has been documented concerning physical growth and development in old age. Cultural cliches hold that growth does not take place in the aging years, that the quality of life in those years tends to be strongly determined by the nature of the outcome of the middle-aged crises.

Each stage of development in this longitudinal process is dependent upon the successful resolution of the developmental "crises" related to each growth stage. Physical or psychological trauma experienced in any one of the horizontal parameters at any particular time in the longitudinal process can interrupt the developmental cycle.

Facilitating growth and development during and following traumatic experiences is the task of occupational therapy. Understanding the needs of the individual as they relate to the determination of function and dysfunction and the choice of activities and relationships to ameliorate or modify dysfunction, to enhance remaining function and to facilitate continued growth consistent with the individual's developmental stage are the tasks of the occupational therapist.

There are sensorimotor activities, developmental play activities, symbolic activities and interpersonal relationships which are specifically significant to particular age ranges in the longitudinal process. There may be specific reason to emphasize one or another of this range of activities as well as relationships at any one given point in time depending on the horizontal area of development most affected by trauma. I wish to stress that although emphasis may be placed on the facilitation of growth in one particular parameter, simultaneous though perhaps less attention must be given to all of the other areas of growth as well in order for an integrating growth experience to take place.

Developmental Theory Illustrated

In an effort to illustrate this concept in graphic form Sections I and III of Figure 16.1 have been developed to show the areas of developmental growth as described by Ayres, Gesell, Erikson and Freud and the areas of expectation and adaptation as described by Havighurst, Mosey, Pearce and Newton. In order to demonstrate relevance to age, age ranges have been imposed. Caution must be observed in interpreting the age ranges as they are suggestive rather than absolute. The imposition of age ranges is particularly useful in correlating development horizontally as well as longitudinally but has its limitations in application which must be considered.

Section II of Figure 16.1 illustrates the tools of occupational therapy which are utilized in the process of facilitating growth and development. The age ranges are suggested by position also in a correlative fashion.

Let us look at the implications of Section I. During the first two years of life the human organism is developing sensory perception of the tactile, vestibular, visual, auditory, olfactory and gustatory functions; physical-motor behavior and body integration; is developing a balanced sense between "trust and mistrust" through these same functional areas which manifests itself in ease of feeding, depth of sleep and relaxation in elimination and is nurtured by consistency, continuity and sameness. At the same time that these areas are developing, the oral "stage" related to dynamic development as seen in dependency, initial aggression and oral erotic activity is evident. Sociocultural development at this age is centered first around the individual mothering relationship and later extends to the immediate family group. Social language is beginning first with small sounds, then coos, vocalization, listening, speaking words and responding to simple verbal directions. Activities of daily living, including early recognition of the source of food, beginning to hold feeding objects and, later, controlling elimination, are developing.

We see that there is overlap in these stages, that development does not occur in neat segments. As the infant learns to motor plan, which encompasses the first four years of life beginning with the discovery of the hands and feet, he progresses to all fours then to walking, climbing, balancing, developing hand preference and coordination of eyes and hands and eyes and feet. The development of the body scheme, knowledge of body parts, development of a sense of two integrated sides with a front and back can be seen. During this period a balance between "autonomy and shame and doubt" are being developed and manifested in conflictual behavior between emotionally "holding on" and "letting go." The anal "stage" is evident in independent, resistive, self-assertive, narcissistic and ambivalent behavior. Magical thinking and anal preoccupation are also characteristic of this stage. Sociocultural development during this period centers around parallel relationships in play, isolated play and the importance of extended family. Social language is expanding into the verbal identification of objects, asking "why" and putting words together in short sentences. Feeding himself, helping to undress, recognizing simple tunes and controlling night time wetting become important activities of everyday life.

Between the ages of three and seven the sensory functions are refined, coordination becomes more graceful, muscles become stronger, skills are developed. At the same time a balance is being developed between "initiative and guilt" manifest in aggressiveness, manipulation and coercion.

The genito-oedipal stage is evident in the interest the child shows in his own genitals and those of the opposite sex, his possessiveness of the opposite sex parent, antagonism to the same sex parent and in castration fears or disappointment. Sociocultural development during this period centers around the companionship of others, learning to make decisions, learning to play successfully with other children, learning to play alone, taking turns and sharing. Social language development sees the child combining talking and eating, using complete sentences, expressing his imagination and creativity. His activities of daily living include shoe lacing, cutting with scissors, toileting independently and helping with chores such as setting the table and making his bed.

Beginning at about three years of age, becoming more refined around five and six and continuing on throughout life, the functions of abstract thinking, conceptualization, reasoning, the development of complex relationships and the ability to read, write, count and figure numbers develop. Physically around six the child becomes more energetic and proficient in the mastery of skills through practice. The balance between "industry and inferiority" is developing and is manifest in attempts to win recognition through productivity and learning skills and tools. The "latency" stage is evident as the primitive struggles quiet, the interest in mastery of skills becomes predominant, toleration of competitiveness, identification and acceptance of reality become important and strong defenses develop. Sociocultural development during this period centers on group play and team activities, developing independence of adults and interest in "gang" activities. Activities of daily living include joy in dressing up, learning the value of money and developing responsibility for personal grooming.

Physically, rapid growth takes place between eleven and thirteen accompanied by poor posture and awkwardness. During the adult years some physical growth, though less rapid, continues. Around eleven the balance between "identity and role confusion" is developing, manifest in identification with social roles. The "stage" of adolescence in dynamic terms is evident in the emancipation from parental control, the making of occupational decisions, role experimentation, difficulty with compromise, intensification of feelings and the re-examination of societal values. The sociocultural development of this period is centered around organized team activities and interest in the opposite sex. Activities of daily living include interest in earning money.

Adult development as described by Erikson places the struggle for balance between "intimacy and isolation" in young adulthood. This period is characterized by the capacity to commit oneself to concrete affiliations and partnerships and to abide by such commitments. Ego and body mastery must predominate. Adulthood is characterized by the struggle to maintain balance between "generativity and stagnation" which is manifest in behavior directed toward guiding the next generation, one's own creativity and productivity. Maturity is characterized by the balance between "ego integrity and despair" and manifest by the acceptance of one's own life cycle as "something that had to be."

Figure 16.1. Schematic representation of facilitating growth and development.

SECTION I DEVELOPMENTAL EXPECTATIONS, BEHAVIORS & NEEDS (Selected for illustrative purposes)

(Selected for illustrative purposes)											
NEUROPHYSIOLOGICAL- SENSORIMOTOR	PHYSICAL-MOTOR Gesell	PSYCHOSOCIAL Erikson	PSYCHODYNAMIC Grant/Freud	SOCIO- CULTURAL Gesell Individual mothering person most important Immediate family group important							
O-2 Sensorimotor Tactile functions Vestib. functions Visual, Auditory, Olfactory, Gustatory	0-2 Head sags Fisting Gross motion Walking Climbing	Basic Trust vs. Mistrust/Oral Sensory Ease of feeding Depth of sleep Relax. of bowels	1-4 Oral Dependency Init. aggres. Oral erotic activity								
1-4 Integration of Body Sides Gross motor plan. Form & space perc. Equil. resp. Post. flex. Body sch. dev.	2-3 Runs Balances Hand pref. established Coordination	Autonomy vs. Shame & Doubt/ Muscular-Anal Conflict between holding on & letting go	1-4 Anal Independence Resistiveness Self-assertive- ness Narcissism Ambivalence	Parallel play Often alone Recognizes extended family							
3-7 <u>Discrimination</u> Refined tactile Kinesth., Visual, Auditory, Olfact., Gustatory funct.	3-6 Coordination more graceful Muscles devel. Skills develop	Initiative vs. Guilt/Locomotor- Genital Aggressiveness Manipulation Coercion	3-6 Genital-Oedipal Genital interest Poss. of opp. parent Antag. to same parent Castration fears	Seeks compan- ionship Makes decisions Plays with other children Takes turns							
3- Abstract Thinking Conceptualization Complex relat. Read, write, numbers	6-11 Energy development Skill practice to attain proficiency	Industry vs. In- feriority/Latency Wins recognition thru productivity Learns skills & tools	6-11 Latency Prim. struggles quiescent Init. in mastery of skills Strong defenses	Group play & team activities Independence of adults Gang interests							
	11-13 Rapid growth Poor posture Awkwardness	Identity vs. Role Confusion/Puberty & Adolescence Identification Social roles	11- Adolescence Emancip, from parents Occup, decisions Role experiment Re-exam, values	Team games Org. important Interest in opposite sex							
		Intimacy vs. Isolation/Young Adulthood Commitments Body & Ego mastery									
		Generativity vs. Stagnation/ Adulthood Guiding next generation Creat., pro- ductive									
		Ego Integrity vs. Despair/Maturity Acceptance of own life cycle									

(continued)

Figure 16.1. Schematic representation of facilitating growth and development (continued).

				CILITATING	ION II ACTIVITIE IIPS (Select		SECTION III BEHAVIOR EXPECTATIONS & ADAPTIVE SKILLS	
SOCIAL- LANGUAGE Gesell	ACTIVITY OF DAILY LIVING Geseil		SENSORI- MOTOR ACT.	DEV. PLAY ACT.	SYMBOLIC ACT.	INTER- PERS. RELAT.	DEVELOPMENTAL TASKS Havighurst	EGO-ADAPTIVE SKILLS Mosey, Pearce & Newton
Small sounds Coos Vocalizes Listens Speaks	Recognizes bottle Holds spoon Holds glass Controls bowel	E	Tact. stim. Ident. body parts Sounds Objects	Dolls Animals Sand Water Excursions	Biting Chewing Eating Blowing Cuddling	Individual Interaction	Learning to Walk Talk Take solids Elimination Sex difference To form concepts of soc. & phys. reality To relate emotionally to others Right	Ability to respond to mothering Mastering of gross motor responses
Identifies objects verb. Asks "why?" Short sen- tences	Feeds self Helps undress Recog. simple tunes No longer wets at night		Phys. exer. Balancing Motor planning	Pull toys Play grnd. Clay Crayons Chalk	Throwing Dropping Messing Collect- ing Destroy- ing	Individual Interaction Parallel play		Ability to respond to routines of daily living Mastery of 3 dimen. space Sense of body image
Comb. talk- ing and eating Complete sent. Imaginative Dramatic	Laces shoes Cuts with scissors Toilets indep. Helps set table	L	Listening Learning Skilled tasks & games	Being read to Coloring Drawing Painting	Destroying Exhibiting	Individual Interaction Play small groups		Ability to Follow direction Tol. frustrations Sit still Del. gratification
	Enjoys dressing up Learns value of money Responsible for grooming	A	Reading Writing Numbers	Scooters Wagons Collec- tions Puppets Bldg.	Control- ing Mastery	Individual Interaction Groups Teams Clubs	Learn phys. skills Getting along Reading, writing Values Soc. attitudes	Ability to perceive sort, org. & uti- lize stimuli Work in groups Mas. of inanimate obj.
ea	Interest in earning money	T		Weaving Machinery tasks Carving Modeling		Individual Interaction Groups Teams	More mature rel. Social roles Sel. occupation Achieving emot. independence	Ability to accept & discharge resp. Capacity for love
		0 : N					Selecting a mate Starting family Marriage, home Congenial social group	Ability to function indep. Control drives Plan & execute Purposeful motion Obtain, org. & use knowledge Part. in primary group Part. in variety of relationships Exp. self as accept. Part. in mutually satis. heterosex. relations
				Arts Crafts Sports Club & in- terest groups Work		Individual Interaction Groups	Civic & social responsibility Econ. standard of living Dev. adult leisure act. Adj. to aging parents	
							Adj. to decr. phys. health, retire., death Age group affil. Meeting social obligations	

These developmental expectations, behaviors and needs characterize the cycle of human development. Successful growth and mastery in all of these areas is the basis on which the developmental tasks of life are achieved as found in Section III of Figure 16.1. The developmental tasks as described by Havighurst and ascribed to the first six years of life include learning to walk, talk, take solids, control elimination, understand sex differences, form adequate concepts of social and physical reality, relate to others at an emotional level, distinguish right from wrong and develop a conscience.

The ego-adaptive skills developing simultaneously during this period are the abilities to respond to mothering, to respond to routines of daily living, to follow directions, tolerate reasonable amounts of frustration, sit still, delay gratification, share and take turns. As with longitudinal development, there are also overlaps in the horizontal plane. In this discussion the developmental tasks and adaptive behavior delineations serve to summarize the human growth continuum.

Beginning at about six years of age, learning physical skills, building wholesome attitudes towards oneself, getting along with others, learning appropriate masculine and feminine social roles, achieving personal independence, reading, writing, developing values and acceptable social attitudes are important developmental tasks. The correlative adaptive skills include the ability to accurately perceive, sort, organize and utilize stimuli and the ability to work cooperatively in groups and individually.

Adolescent developmental tasks include achieving more mature relationships with others, developing appropriate social roles, selecting an occupation, achieving emotional independence of adults while the adaptive skill most predominant is the ability to accept and discharge a certain amount of responsibility.

Young adulthood developmental tasks may include selection of a mate, starting a family, learning to manage a home and developing a congenial social group. The tasks of adulthood include the expansion into accepting responsibility for civic and social conditions, developing and maintaining an economic standard of living, developing adult leisure activities and adjusting to the reality of aging parents. The developmental tasks of maturity require adjustment to decreasing physical health, retirement and death; developing appropriate age group affiliations and meeting appropriate social obligations.

The adaptive skills correlative with this period from young adulthood through maturity are the abilities to function independently; control drives and select appropriate objects; plan and execute purposeful motion; obtain, organize and use knowledge; participate in a primary group; participate in a variety of relationships; experience self as acceptable; and participate in mutually satisfying heterosexual relationships.

In the course of human development, should the individual experience physical or psychological trauma related to disease, injury, environmental insufficiencies or manifest intrapersonal vulnerability which interrupts the natural process, a gap thereby develops resulting in a disparity between expected coping behavior and adaptive facility as illustrated in Section III of Figure 16.1 and the necessary basic skills in growth and development as illustrated in Section I. Occupational therapy through the skilled application of activities and relationships can provide the necessary links to assist in closing the gap by facilitating basic growth and

development, increasing skills, abilities and relationships in the neurophysiological, physical, psychosocial, psychodynamic, social language, daily living and sociocultural areas of development both horizontally and longitudinally.

Let us now look at Section II of Figure 16.1 which illustrates selected activities and relationships which are the tools of occupational therapy utilized in facilitating the growth process. Evaluation is the first step in the process of intervention, the process by which a determination is made relative to the need for as well as the primary objectives for occupational therapy intervention. Evaluation including testing, interviewing, record review, and systematic clinical observation should take into account the areas of basic growth and development represented in Section I and the expected behaviors and adaptive skills represented in Section III.

The activities and relationships available to the occupational therapist have been categorized as sensorimotor activities; developmental "play" activities, symbolic activities and interpersonal relationships and have been assigned an age relationship correlative to the basic developmental functions and adaptive behaviors by position. These positions, however, as with development, cannot be considered absolute.

During the first two years of life, activities which facilitate development of sensorimotor functions include touching; being touched, cuddled, hugged; moving, exploring, looking, hearing, tasting, smelling, identifying, sounds and objects. Developmental play media which incorporate these stimuli include blankets, dolls, animals, sand, water, books, blocks, food, and trips of various kinds. Symbolic activities of this age require biting, chewing, eating, blowing and cuddling. All of these "activities" must be practiced in an individual "mothering" relationship, the relationship of choice, to be maximally useful to the individual.

Beginning in the first year and extending through the third, the sensorimotor activities include physical exercise, balancing and motor planning; the developmental play materials include gross movement toys, pull toys, "play ground" type equipment, clay, crayons and chalk; symbolic activities of the period include throwing, dropping, messing, collecting, and destroying; and the interpersonal relationships of choice are individual interaction and parallel "play."

Between the three- and six-year span, the sensorimotor activities include listening, learning, practicing skilled tasks and games; the developmental play activities include being read to, coloring, drawing and painting; symbolic activities include destroying and exhibiting; and the interpersonal relationships of choice are individual interaction and parallel "play" in small groups. During the six to eleven year span; sensorimotor activities include the high level cognitive tasks of reading, writing and numbers; developmental play activities include scooters, wagons, collections, puppets, and building tasks; symbolic activities of the age are characterized by control and mastery and the interpersonal relationships of choice include individual interaction, groups, teams and clubs. Adolescent developmental "play" activities include weaving and other home crafts, machinery tasks, carving and modeling and the interpersonal relationships of choice are individual interaction, group and team relationships.

Practice and continued development of competence in sensorimotor functions are assumed to take place until the organism begins to decline in neurophysiological function, the exact time of which will vary from individual to individual. The activities engaged in in leisure as well as in work from adulthood through maturity facilitate this continued development. Affective growth continues with the availability and responsiveness of the individual to interpersonal relationships as well as his ability to receive gratification through symbolic processes which continue to reactivate as the organism grows and develops.

Implications for Practice

This theory states that physical or psychological trauma related to disease, injury, environmental insufficiencies or intrapersonal vulnerability can interrupt the natural process of growth and development and that such growth interruption will cause a gap in the developmental cycle resulting in a disparity between the development of expected coping behavior and adaptive skills and the necessary basic skills and abilities to achieve such growth. It implies that the incongruence in developmental functioning evident in illness and disability is similar to conditions experienced by the individual at an earlier level of developmental functioning which requires relearning of skills, working through of emotional conflicts and re-development of many functions which may have been previously mastered. Further that it is the task of the occupational therapist to determine at what level the individual is functioning in the various aspects along the developmental continuum and to program for facilitating growth and development in each of these areas in accordance with the needs of the individual and the demands of his age. The use of selected relevant activities and relationships appropriate to his level of functioning would be indicated.

In order to assist the individual in his movement toward the development of a comfortable adaptive relationship to life it is necessary to meet his needs at his developmental level as a beginning. Through careful monitoring of the treatment process and careful attention to clues that signify movement to a higher level and therefore readiness for change in programming needs of the patient, we can move toward providing an integrating treatment experience. My experience suggests that to provide activity and relationship processes for a level higher than the individual's ability to cope is to heap stress on an already overwhelmed system and to do relatively more harm than service. The permissive school of treatment within occupational therapy practice has had on its side the natural instincts of the individual to seek his level of need and therefore lead the therapist into appropriate interaction at a point of toleration for the patient provided this level could also be tolerated by the therapist. The symptom-oriented school of thought has also had some success in that symptomatology often points to needs which may indicate a level of development at which the individual is functioning provided the leads are accurate and the therapist is "listening." The disabilityoriented school of treatment has had some measure of success in restoring function, however, may fail in having the restored function integrated for use if careful attention is not paid to other related levels of development.

The implications of this theory for the preservation of health and the prevention of potential maladaptation related to insufficient nurturance in the various aspects of growth and development are related to the belief that intervention at a stage that can be identified before trauma becomes overwhelming will allow the individual to continue his growth process with a minimum of interruption and continue toward the achievement of ego-adaptive skills. In cases of permanent residual or chronic physical or psychological disability, achievement of developmental tasks and ego-adaptive skills must be guided within the individual's limitations and geared to a realistically attainable level.

This formulation does not provide a recipe for practicing occupational therapy. It simply orders some of the factors relevant to a developmental theory for practice that must be validated. It provides a framework in which to understand the contribution of the various testing, systematic observation and other evaluation tools that are available to us in relationship to occupational therapy intervention, a framework in which to understand our selective use of activities and relationships and a system which speaks both to horizontal and longitudinal growth.

Within the practice of our profession, there are predictable aspects relative to cause and effect in the use of activities and the application of relationships which must be identified, applied repeatedly in a systematic manner, analyzed and documented in order to establish their validity. There are also measurable phenomena related to change relative to occupational therapy intervention which must be studied and documented as well.

Looking at our profession from a developmental point of view, one might say that we have mastered the sensorimotor levels of development and have achieved body integration, learned to walk and talk, have worked through our needs for dependency, although there may be remaining conflicts between holding on and letting go. We recognize the need for reading and writing and are developing our skills accordingly. We appear to be on the threshold of abstraction and conceptualization and working toward mastery of the understanding of the essence of our profession. This is my impression by observation; more careful evaluation would be necessary to determine the truth of these observations as well as to elicit others. In order to move us toward mastery, selected relevant activities and relationships will be needed to nurture our continued growth and development.

In closing, I would like to share with you a rather startling discovery that I made some time ago. It was, that "they," whoever "they" were, that I felt should be doing something to objectify our knowledge and raise the level of our practice included "me." I, herewith, challenge each of you to join me in that task so that "we" can move toward facilitating growth and development and fulfilling the promise of occupational therapy.

This study was made possible under Children and Youth Health Service Grant #640, Children's Bureau, Department of Health, Education and Welfare.

References

1. Ayres, A. Jean. "Perceptual-Motor Training for Children." Lecture given during 1962 WFOT Study Course VI—*Approaches to Treatment of Patients with Neuromuscular Dysfunction*.

A PROFESSIONAL LEGACY

- 2. Gesell, Arnold, and Armatruda, Catherine. *Developmental Diagnosis*. New York: Harper and Row, Inc., 1967.
- 3. Erikson, Eric. Childhood and Society. New York: W. W. Norton and Co., 1963.
- 4. Hall, Calvin S. A Primer of Freudian Psychology. New York: The New American Library, 1964.
- 5. Grant, Quentin R. Unpublished lecture notes.
- 6. Havighurst, Robert J. *Developmental Tasks and Education*. New York: David McKay Co., Inc., 1967.
- 7. Pearce, J., and Newton, S. Conditions of Human Growth. New York: Citadel Press, 1963.
- 8. Mosey, Anne C. *Occupational Therapy: Theory and Practice*. Medford, Mass.: Pothier Brothers, 1968
- 9. Llorens, Lela A., and Rubin, Eli Z. *Developing Ego Functions in Disturbed Children*. Wayne State University Press, 1967.
- 10. Pearce, J., and Newton, S., op. cit., p. 119.