

DEVELOPMENTAL PSYCHOLOGY: MAIN PROBLEMS AND MODERN TENDENCIES

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Keywords: Inner mental world, representational world, theories of psychological development, developmental continuities, developmental discontinuities, biopsychosocial scientific model, developmental phase, functions of the social environment, "Playdough" process, transactions, object relations-structural view, biological, social, and psychological stimuli, individualized perceptions, innate processing capacities, innate informational capacities, temperamental characteristics, innate needs, mentalizing function, child-parent process of adaptation, emotionally pleasurable attachment relationship, developmentally enhancing adaptations, goodness-of-fit process, developmentally enhancing belief, child risk factor, child protective factor, developmentally inhibiting adaptation, developmentally inhibiting belief, normal belief, pathogenic belief, stimulation range, empathy, prosocial behaviors, shared environment, nonshared environment, developmental psychopathology, developmental psychiatry

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Summary

In this article I emphasize that the inner mental or representational world that is constructed by children is complex, worthy of study, and relevant to understanding human psychological development in normally and abnormally functioning individuals. Also I will point out how the inner mental world that has been constructed by a symptomatic child or adult—that was formed in infancy and childhood and in part has been stored as long-term memories—is important data in developing reliable and valid theories of normal development and in developing similar theories of therapeutic intervention and action (see *Developmental Psychodynamics*). The main thrust of this article is that children's representational world, once it begins to be constructed, forever

influences or colors future adult perceptions and behavioral and mental responses to the social environment.

1. Introduction: Multiple Theories of Human Psychological Development

The process through which the human mind, or the inner mental world, develops has become an interest for scientific thinkers only in the twentieth century. Many theories of how the mind develops—a developmental psychology—arose in that century. Further, all theories of human psychological or mental developments were, and still are, constructed by the minds of developmental researchers, who are influenced by their own individual life experiences. These life experiences create specific biases about which aspects of psychological development are resurrected into positions of high influence and which are placed in positions of low influence in shaping the human personality.

As Chused states in commenting about different theories in the area of psychoanalytic theoretical models of psychological development:

Unfortunately, conflict among competing analytic theories continues today, often exaggerated by the personalities of the combatants, whose support of particular theories may have more to do with their own relationships . . . and their political and narcissistic goals than with the utility of the theories.

The multiplicity of theories of human development becomes quite apparent when one attempts to teach a course on psychological development to mental health professionals; for example, psychiatry residents or graduate students in clinical psychology. The teacher is left with a collection of partial theories that are then presented to students and the students are given the task of coming up with any degree of integration of human psychological development. The teacher often makes such comments as: “The developmental process is too complicated to be explained by one theory.” With this message, students quite often do not realize that the developmental process is organized. The mind is an organized biological system because in its normal development and functioning its structures and processes possess the qualities of regulation and order rather than the qualities of unregulation and chaos.

And, like no other biological system on earth, the human mind maintains *continuities* while being open to entirely unexpected new experiences that lead to developmental *discontinuities* throughout the developmental process.

2. One Possible Integrated Theoretical Model of Psychological Development

In my *Normal Child and Adolescent Development*, I attempt to bring many of the partial theories on normal psychological development into a reasonable integrated “quilt.” The biopsychosocial scientific model can be used to understand how the human mind undergoes normal maturation and developmental change. This model emphasizes that the human mind is a biological system, with the brain and mind as parts of the system. By using the biopsychosocial scientific model, I present each developmental phase from infancy through adolescence with the same organizational outline, which emphasizes

that each aspect of normal development has continuity while being influenced by discontinuities. The basic outline of each developmental phase is presented as follows:

- Major developmental tasks of the particular phase of development
- Functions of the social environment
- Maturation and development of innate needs
- Maturation and development of physical capabilities
- Maturation and development of cognitive abilities
- Maturation and development of temperamental characteristics
- Maturation and development of emotions
- Maturation and development of verbal language abilities
- Maturation and development of the preexisting representational world
- Development of self and object relationships
- Development of the superego
- Development of adaptive capabilities

In emphasizing that each of these topic areas operates continuously, I hope to point out that the representational inner world of mind of developing humans provides a continuous inner landscape. And in using this landscape as the inner referent, each individual perceives their social world by using increasingly complex perceptual and cognitive abilities and accessing an increasingly complex inner collection of memories. Also, the influence of discontinuities is addressed in a manner that demonstrates how new life events bring about relatively unexpected developmental changes in people's minds.

R. Tyson emphasized the role of discontinuities when he conceptualized psychological development as a "Playdough" process (Playdough is a pliable clay-like substance sold as a toy in the United States that can be molded into different shapes). In this process the emergence of new, discontinuous abilities and life events become a new piece of Playdough that is molded into the individual's overall developmental structure and thereby transforms and remodels the individual's psychological development.

Normal psychological development is moving more to a view of development that recognizes ongoing transactions between the inner mental world of individuals and their social world. This view of psychological development I have conceptualized as an *object relations-structural view*. In this view, throughout the developmental process children's object relationships lead to a complexity of stored internal representational structures that becomes their unique representation of their living experiences. These structures, together with the ongoing influences of the social environment, will forever affect the current and future object relationships of infants and children. Simultaneously, as infants' representational worlds begin to form, it forever influences how they perceive the current social world and the kind of thoughts, feelings, and memories that are generated in response to these perceptions.

Ossofsky, in a 1999 review of the *object relations-structural view* of psychological development in the *Journal of the American Psychoanalytic Association*, states:

This model of development is different from the traditional “stages” notion, in that the child continually integrates past relationship experiences and the influence of the social environment with current maturation and object relationships. An object relations-structural view, while not traditional in psychoanalysis, is compelling . . . Gemelli clearly emphasizes that mental development is both continuous and discontinuous . . . (and) how social environment and psychological stimuli can interact and transact with biological stimuli to influence development.

In using the biopsychosocial scientific model to understand how the human mind undergoes normal maturation and developmental change, the human mind is viewed as a biological system, with the brain and mind being parts of the system where *the mind is derived from the brain*. Pally writes: “The idea that mental life is derived from biological events in neuronal circuits is the reigning doctrine of neuroscience . . . mental phenomena are derived from biological activity. There is no intention to equate the mental with the biological.” In reference to the biopsychosocial scientific model of the mind, the process of normal psychological or mental development is viewed as emanating from the mind’s processing of the *transactions* that take place between *biological, social, and psychological stimuli*.

Interpersonal transactions take place between infants and their parents in a circular process: the individualized perceptions and behaviors of one influence, and are influenced by, the individualized perceptions and behaviors of the other. These transactions produce varying degrees of psychological changes in both parties.

Schaffer emphasizes that the transactions between infants and their parents should be regarded as an ever-open system wherein parents and infant mutually and progressively modify each other’s behaviors.

In the biopsychosocial model, biological, social, and psychological stimuli are defined as follows:

- *Biological stimuli* emanate from the infant’s physical nature, both in health and in disease. For example, some biological stimuli emanate from inside the infant’s body such as the physiological stimuli that produce the sensation of thirst. Other biological stimuli are the sensory stimuli that emanate from the infant’s legs when they are positioned above its head.

- *Social stimuli* are all the sensory stimuli that emanate from sources that are external to the infant’s body, brain, and mind.

- *Psychological stimuli* emanate from 1) the infant’s innate and ever-maturing mental nature and 2) the infant’s ever-growing representational world of thoughts and feelings and long-term memories of developmental changes and associated learning experiences.

The newborn’s innate (and ever-maturing) mental nature endows infants with *innate processing capacities* (or cognitive capacities). These give infants the capacity to process biological (the sensation of cold) and social (the auditory sounds of a mother’s voice) sensory stimuli and to form perceptions and to store and retrieve these as memories. Later, when current sensations and perceptions stimulate these memories, they become psychological stimuli in the biopsychosocial model of developmental change.

Infants at birth are also endowed with *innate informational capacities*. These are:

- a group of *emotions* that are generated in response to specific sensory stimulation (e.g. the primary emotions of joy, fear, anger, sadness, disgust, and surprise),

- a group of *temperamental characteristics* that produce behaviors that define the infants' innate unique behavioral style. This style will fall within the following unique dimensions—infants will demonstrate different degrees and qualities of activity, reactivity, emotionality, and sociability; and
- a group of *innate needs* in lieu of drives. These innate needs are:
 - the need to gratify physiological requirements that maintain bodily regulation and physical survival (e.g. temperature and stimulus regulation, nutrition, sleep, equilibrium);
 - the need to explore assertively the social environment in seeking novel stimulation in order to learn to differentiate these stimuli and generate adaptive responses to the same;
 - the need to attach to at least one individual in interactions that are predominantly pleasurable;
 - the need for sensory and sexual stimulation and gratification that is predominantly pleasurable;
 - the need to signal distress when experiencing emotionally displeasurable experiences and the need to initiate fight-flight behavioral and mental responses.

These innate needs, as internal motivators, act as internal stimulators to propel newborns to engage in transactions with their parents. Parental responses interact with their infants' responses slowly to shape each of their infant's innate need and shape the parents' overall responses to the infants' needs. In this transactional process, infants progressively learn how better to adapt the gratification of each of their innate needs to the social taskings and rules of their parents and eventually to those taskings of teachers, etc.

Also, in the process of psychological development, each child develops a hierarchy of five innate needs, so that the gratification of some innate needs become more important than other innate needs.

3. New Concepts about the Functions of the Social Environment

It is important to note that psychological sensory stimuli emanate from within the developing infant and child's mind—that is, they are generated from within the infant and child's developing conscious, preconscious, and unconscious mental domains. In contrast, biological and social stimuli are generated from the infant's body, brain, and social environment.

In the process of psychological development—as the articles in this section describe—children learn to differentiate biological and social stimuli from psychological stimuli.

For example, up until about the age of 18 months, infants can not separate a perceptual sensation (something that is occurring in the present) from a memory (something that occurred in the past). Memory and perception are identical for infants. Then at about 18 months they achieve objective self-awareness and begin to have an awareness that they possess a mind that contains feelings, thoughts, and memories.

During the first years of life, infants learn much about where their bodies end and where their external or social worlds begin. In the socialization process, each individual child

slowly learns the physical and social skills, and the moral and ethical values that will equip it to function in a good enough manner in its individual society. So equipped, the child can fulfill the roles of child, adolescent, and future adult in society. Also, the socialization process is necessary in order for each child to attain her optimal psychological development (i.e. to become a person that has a capacity to understand herself in an ever-expanding integrated autobiography of her life story). So, for example, a 16-year-old boy can remember and clearly describe how at the age of eight he had become depressed. At this time, his father was not promoted in his position in his law firm, and the boy experienced his father's becoming depressed—in response to not receiving a promotion—as a loss of his close relationship with his father. This self-awareness capacity has been defined by Fonagy as the *mentalizing function*, which is the capacity to understand one's mind and the mind of others as being complex, with different emotions, beliefs, conflicts, etc. (see ***Developmental Psychodynamics***).

Although societies differ in the particular goals they define for their children, I have defined certain *universal social functions* that adults provide in the process of socializing and “mentalizing” their children. These *five universal functions of the social environment* involve providing the following in a predictably reliable manner:

- (a) Truthful information about the child’s body and the external world of people and things in which the child is being raised.
- (b) Stimulus modulation and protection for the child from experiencing too many over-stimulating or under-stimulating life events.
- (c) Encouragement, support, and admiration for the child in response to the child’s innate capabilities, maturational advances, and developmental accomplishments.
- (d) Truthful information about how the child can begin to achieve gratification of innate needs while concurrently adapting to the needs and developmental taskings of parents and society.
- (e) Adaptive solutions for children to cope with emotionally displeasurable life events, and special help, when needed, for children to deal with and eventually master traumatic life events.

In reference to (d) above, *developmental tasks* can be defined for each phase of the life cycle from infancy through adulthood. These tasks determine:

- the knowledge and behaviors the infant, child, adolescent, and future adult will be expected to acquire and master in order to become a productive member of society, and
- the manner in which each child must adapt innate and maturationally emerging individual needs, emotions, temperamental characteristics, and cognitive capabilities to society’s rules and guidelines concerning their proper verbal and behavioral expression.

For example, the major developmental tasks of infancy (birth to 18 months of age) are for infants to begin to develop the awareness of being separate from and of being valued and loved by their parents. The process of achieving this awareness involves infants acquiring new knowledge through developmental changes, storing these changes in their long-term memories, and then consolidating this knowledge through learning experiences with their parents. In these experiences, the parents view and treat their infants as separate individuals with their own needs, feelings, and actions. And in this process of “seeing” their infants as individuals, a dynamic interchange begins wherein the infants begin to find themselves in the minds of the parents. This slowly developing reflection of self in the minds of another—the parent—is a crucial requirement in the

development of the mentalizing function in infants. This beginning infant self-awareness of being a separate person with a separate mind is only subjective self-awareness. Infants, in the first 18 months of life, do not have the capacity to be objectively self-reflective (i.e. being aware of having a separate mind and body in a world of *other* separate minds and bodies). In this earliest phase of life, infants experience their actions, sensations, and perceptions only subjectively. The sense of an objective self is not developed until about the age of 18 months.

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Biographical Sketch

Ralph Gemelli, M.D., is board certified in child, adolescent, and adult psychiatry and board certified in child, adolescent, and adult psychoanalysis. He graduated from the United States Naval Academy in Annapolis, Maryland, and received his doctor of medicine degree from Cornell University Medical College. He is an adjunct professor of psychiatry at the Uniformed Services University of the Health Sciences in Bethesda, Maryland, and an associate clinical professor of psychiatry at George Washington University School of Medicine in Washington, D.C. He is also a teaching psychoanalyst at the Washington Psychoanalytic Institute in Washington, D.C.