1. Introduction to Human Development

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Life is a journey, not a destination. –Unknown origin

From little oaks do mighty acorns grow. –American folk saying

Developmental Science: Its Definition and Scope

The Field of Human Development

Visualize a third-grade classroom demonstration in natural science: tiny caterpillars are placed in a cardboard box with deliciously ripe and tender green leaves for them to feast upon. In time, as the children observe them, each insect larva spins itself into the form of a chrysalis. The children begin to anticipate the special event, when the butterflies will emerge. Then miraculously one day the beautiful butterflies struggle, then break free of their natural bonds, to the delight of these young children.

This illustration of the wonders of nature can be quite dramatic. Such a metamorphosis is part of nature’s grand design in the development of this organism’s lifespan. Apart from the mythological Cinderella, who is transformed by her fairy godmother into a lovely maiden – suddenly she’s “princess material” – transformations in the course of human development seem far less dramatic by comparison. Yet there are indeed fantastic transformations that occur to the developing child in the womb, which most of us never really see. First, the fertilized cell or zygote, multiplies itself into a blastocyst – nothing more than a tiny, round ball of undifferentiated cells – which proceeds to implant itself into the lining of the uterus. This small mass begins to take a different (somewhat reptilian) shape as an embryo after only three to four weeks. Indeed, for a brief time the embryo resembles a fish, then a tadpole, as though reviving its evolutionary origins as “ontogeny recapitulates phylogeny” (as students are taught
in basic biology courses). But then the shape begins to become more recognizably human, as tissues of the developing heart, brain, digestive tract, and bones begin to form.

At some point along the way – roughly nine to twelve weeks – the embryo becomes the fetus, which looks increasingly like a little human being. And so the physical development proceeds over a period of nine months. Finally, at the end of the third trimester, voila! The fully-formed child is born; the girl or boy is perfectly pre-configured as a little woman or man.

Well, not quite a perfect match just yet. The head, for instance, is much larger in proportion to the body than it is for older children and adults, and of course, there’s all of that baby fat. But the round face, big eyes, and tiny but well-formed features (ears, fingers, toes), makes the infant look cuddly, vulnerable, and irresistible to the wonder-struck parents. What lies ahead for our little Maria or William? The rest of her or his life, one may suppose, may it be a long and happy one!

Developmental science is the scientific study of human development: of the ways in which people grow and develop (change or remain constant) throughout the lifespan. The human lifespan ranges from conception through old age, and finally to that last stage of life, which is death itself. By growth is meant not simply the physical changes that people undergo throughout their years of life, but also the kinds of psychological changes that accompany the aging process.

When the author was a young college student, human development was largely centered on the study of childhood and adolescence. Whereas college students once commonly enrolled in courses with names like “Child Psychology” or “Child Development,” these courses are now much more likely to have titles like “Human Growth and Development” or simply “Lifespan Development.” Yes, there were also courses that focused on aging and gerontology, but by and large this left open the entire span of existence between young adulthood and old age.

Actually, it would be not be accurate to say that the entire lifespan was completely ignored in the past by psychologists. Erik Erikson’s theory of personality development, encompassing the span from birth to old age, was well received when his book *Childhood and Society*
was originally published in 1950 (Erikson, 1950/1985). But increasingly since that time, developmental scientists have come to see the importance of viewing people’s lives from the standpoint of their continuity as well as from the kinds of changes that take place in the course of a lifetime. The people that we become are the products of our heredity and our environments, and perhaps even more crucially, of the interactions between the two. An old proverb recognizes the intergenerational part of continuity in stating that “the child is the father of the man” (and by implication, “the mother of the woman,” as well).

The field of developmental science today is *multidisciplinary* and in many cases *interdisciplinary* as well (Lerner, 2006). People from many fields contribute to the study of human growth and development. These fields include (but are not necessarily limited to) biologists, health scientists, medical researchers, ethologists, linguists, anthropologists, sociologists, educators, family studies professionals, cognitive scientists, and psychologists. Although the present text views human development from a psychological perspective (or more accurately, from several psychological perspectives), it is a mistake to identify this field only with psychology. Many contributions to the psychological understanding of psychological development have originated from other fields. Of those theorists given places of prominence in this book, consider that Jean Piaget was not a psychologist by training but rather a biologist with an interest in logic and epistemology. Sigmund Freud and C. G. Jung were medical doctors when psychiatry was a new field; Freud’s own specialty was neurology. And the ethologists Konrad Lorenz and Niko Tinbergen were, respectively, a zoologist and a biologist by training.

“If a person sticks to the straight-and-narrow concerns of a single field or a field within a field, he will pose very different questions and come up with different answers from the person who roams about in various disciplines…” (Hustvedt, 2016, p. 332.)

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Seeing the Continuity in Your Life:
An Exercise in Imagination

Close your eyes for a moment. Imagine that you are taking a walk down a very long and winding country trail with lots of wonderful sights to see along the way. You’ve walked quite a ways so far, but there is still a much longer way to go, and lots more yet to be seen.

Now imagine you are watching yourself from afar. Become an outside observer in a hovercraft that is moving higher and higher above – and farther and farther away – until you can see yourself and the entire path from way up on high. Perceive yourself now more objectively as a lone walker – just a tiny speck somewhere on the way down this path.

This walk is an analogy for your life, and you are being asked to take a look at where you are right now from a distant point outside of yourself. From this exalted vantage point you can see where you’ve been, and also to some degree where you are headed.

How far can you remember back into the history of your “path of life”? Try to go there now. Perhaps you were a child in a crib, or more likely (most of us can’t remember back that far) you can visualize some significant event that happened as a very young child. Perhaps it was a birthday party, or time you were sick and bedridden, or you were on a trip away from home. Maybe it was a time of great joy, or of great sorrow. Or perhaps you simply have an image of yourself in a much more mundane setting – a home in which you lived with your family, a pet cat or dog, an older or younger brother or sister. Can you really remember yourself as you once were, and do you feel a connection or continuity between that point of memory and your present life?

Draw back from this reverie now and think about where you are going. If you are reading this book then you are probably a college student. But wherever you are, ask why are you exactly here, how did you get here, and where you will be going next? When you were that little girl or boy in your imaginative fantasy, did you ever believe that
you would be at *this* particular point on this particular trail of life? Where do you expect to be ten years from now, and what do you think you will have accomplished by then?

Often people get so caught up in life’s day to day routines that they fail to see the big picture – who they are, where they’ve been, and where they are going. As the introductory quote to this chapter says, life is a journey, not a destination. It’s very easy to forget that this is your life – if it were a motion picture, you and no one else would be the star! And in this sense, we are all “starring” in the adventure that is our own life. Does thinking about this adventure by putting yourself in this picture give you a new perspective? Does this give you a good feeling?

As you proceed through this book and course, try to maintain such an open perspective about yourself. What can you learn that is of personal value from each of the perspectives that you encounter? Can you apply these perspectives to your own life?

*Developmental Psychology and Developmental Science.* Developmental psychologists are psychologists who also happen to be developmental scientists. Once synonymous with the field of human development, the term *developmental psychology* may now seem a bit limiting, given the diverse nature of the field as discussed above (also see Lerner, 2006). However, the term is still useful in denoting a developmental scientist whose background and experience are more specifically tied to the field of psychology. (Most, though by no means all, of the theories and perspectives considered in this text originated from the field of psychology; hence the title *Psychological Perspectives.)*

*What Developmental Scientists Study.* Developmental scientists study human growth and development processes and the factors that influence them. These processes encompass the following lines in the study of development:

1. **Normative development:** Most developmental processes are thought to characterize all or at least most people. For example, all
infants exhibit reflexive sucking responses. All babies begin to smile at the sight of human faces, beginning at about one month of age. And some theories posit that most children develop their sexual identity (as boy or girl; female or male) through identification with their same-sex parent between the ages of three and six years.

(The concept of developmental stages is implicit in the notion of normative development, though not all developmental scientists accept the notion of clear-cut stages. Differing views on stages of development are considered at length in the next chapter.)

2. Abnormal development: Life doesn’t always unfold in the same manner for all people. Things can go wrong, sometimes drastically so, for the developing child or adult. For example, the emotional bond between mother (or mother surrogate) and child are considered very important by developmental theorists. When such bonding is absent or incomplete and the child’s basic nurturing and comfort needs are not met (as in some orphanage environments), the emotional damage caused by the neglect can negatively impact the child’s personality. This neglect can make the child aloof and unreceptive, resulting in later difficulties in social and emotional adjustment.

3. Individual differences in developmental trajectories: Some children seem different in temperament almost from the time of birth. For example, some are relaxed and trusting, others anxious and irritable. Differences in personality traits also can be influenced by life’s circumstances. Parents, peers, and teachers can influence these circumstances, in either positive or negative ways. Developmental scientists are therefore quite interested in the ways in which different parenting and teaching styles affect children’s development, or more generally, in why some people develop differently from others.

4. Group differences in development: Developmental scientists are concerned with social and cultural variations that can influence development. For example, how are children raised in rural
Mexico different from those in urban Shanghai? And what are the factors that affect these differences in development? In what ways do girls and boys (or men and women) differ in their developmental paths? Or, how does the course of development differ for people from different social classes within the same culture?

**Diversity of the Individual in Context.** As seen from the above list there are clearly many facets to the study of human development. In the past many psychologists saw the field of psychology (including human development) as the study of the effects of the environment on behavior whereas the newer paradigm is much broader: the focus of developmental science is now on the **individual within context** (cf., the Overton, 2006, model). The field is much richer and much broader today. It encompasses the study of the developing individual (including his/her perceptions, attitudes, memories, inner states and the like) in relation to her/his life context, including the socio-cultural environment, the kinds of influential situations he/she is likely to be exposed to (e.g., peer group; significant life events), and stage of development (stage theories are discussed more fully in the next chapter). The relation of the individual to the context can be represented by the double arrow:

\[
\text{individual } \leftrightarrow \text{ context}
\]

(Lerner, 2006), which stresses the interactive (or bidirectional) relationship of the person with this contextual matrix and the mutual influence they have on one another. Thus today the person is given a lot more credit than in the past; she or he is no longer viewed as a passive agent to whom “development happens” in the course of time, but as an active participant in his/her own development.

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1-7
The Major Phases of Life:
Significance of the Divisions

Most developmental scientists agree that the human lifespan can be divided into distinct phases corresponding roughly to particular ages. The scheme usually looks something like this:

- Prenatal life (conception to birth)
- Infancy (approximately the first six months of life)
- Toddlerhood (about six months to 2 years)
- Early childhood (about 3 to 6 or 7 years)
- Middle childhood (about 6 or 7 to about 11 or 12)
- Adolescence (about 11 or 12 to about 20)
- Early adulthood (about 21 to 35 or 40)
- Middle adulthood, or middle age (about 35 - 40 to about 60 - 65)
- Late adulthood (about 60 or 65 until death)

Part of the reason for the lack of precision on the age ranges is that people develop and mature at different paces. This is especially true of the later stages: early through late adulthood. Different theorists who discuss stages of development use somewhat different age delineations.

Keep in mind that developmental science is a relatively new field. Indeed, the idea that children were in some ways quite different from adults itself appears to be relatively new. According to some accounts, in Europe during the middle ages children were regarded as merely “small adults” who were apprenticed or sent to work in the fields at around ages six or seven, and by about age twelve they assumed adult responsibilities (Ariés, 1960) – though this idea remains speculative and controversial (Orme, 2003). Still, the concept of identifiable stages or phases of development may be a fairly recent idea. But are such divisions arbitrary a classificatory convenience or can they be justified on scientific grounds?

One way to try to answer this question is to ask whether there are clear biological or psychological markers – neurological or behavioral landmarks, so to speak – that occur at about these times that are
universal (transcend all cultures). Developmental scientists have indeed found such markers, especially for the earlier periods. There are close correspondences in demarcating major periods of life up through adulthood that are found in both the cognitive perspective of Jean Piaget and in the psychodynamic perspective of Sigmund Freud, as will be seen in subsequent chapters. Erik Erikson further extended Freud’s developmental stages for personality development beyond adolescence, throughout the entire lifespan.

It is true, however, that in some agrarian cultures today, adulthood still begins at puberty. In these cultures boys assume adult working roles while in their teen years, and girls marry shortly after puberty. Life may be hard, and few people may actually live beyond their middle years – and even then, only the most fortunate survive.

Consider, too, that in the U. S. culture, better health care and lifestyle practices continues to extend youthfulness into later years. Many so-called baby boomers now object to defining late adulthood as beginning at “only” age sixty or sixty-five!

Perhaps the stages of life following puberty are therefore somewhat arbitrary. Nevertheless, it still makes sense to think of adulthood as having three phases in terms of psychological development, although pinning them down to particular age ranges is not an easy task. Try to think of someone you know who is still very young at age seventy-five, and then see if you can think of someone who seems prematurely old at around age thirty-five or forty!

Major Areas of Study for Developmental Science

Developmental scientists have different ideas about how to define and organize major areas of study, but often textbooks are divided into sections with titles pertaining to (a) physical (or biosocial) development, (b) cognitive development, and (c) social-emotional (or personality) development. These divisions tend to be somewhat arbitrary and overlapping. All of these aspects of development include some degree of social and emotional development, for example, and development of children’s moral understanding can be included with either cognition – because level of moral understanding depends so much on stages of cognitive development – or it can just as readily fit
with social-emotional development.

Per its title, the present text is concerned mainly with psychological (as opposed to physical) development. Thus, this book is not so much concerned with topics such as when the infant gets her first baby teeth, or with development of reproductive organs at puberty. Such physical facets of development, where they are encountered, are more an incidental feature of this book than a central one; however, development of the brain and nervous system are especially important for psychological development, and these are considered to some degree within the context of other topics.

For conceptual purposes, the author has chosen to divide this book into eight major parts. Within each of these major sections, one or more chapters are devoted to more specific aspects of development. The following, then, is a preview of these topics.

**Preview of the Remaining Chapters**

**Part I: Foundations**

The three foundations chapters (including the present one) provide an introduction to the field of human development: its definition and scope; the scientific approach to development and controversial issues; and philosophical concepts which implicitly or explicitly underlie the various perspectives on development.

*Chapter 2: Scientific and Theoretical Perspectives on Human Development.* This chapter discusses the science of human development. It includes a brief overview of research methods which are useful in developmental science and discusses the importance of theory in science. Classic issues (false dichotomies) within the field, such as nature/nurture and continuous versus discrete developmental processes are also introduced.

*Chapter 3: The Nature of Human Nature: Philosophical Perspectives on Human Development.* In order to critically examine the assumptions underlying the various perspectives encountered in this book, some important philosophical concepts are introduced, ranging historically from Plato to the existentialists. These encompass the realms of epistemology, metaphysics, and ethics. Of primary
concern for evaluating later theories and theorists are philosophical conceptions of morality and of the “nature of human nature.”

**Part II: Development of Cognition and Morality**

Cognition refers to thought and reasoning processes. Two broad traditions are considered: first cognitive development, beginning with Piaget and Vygotsky, both of whom looked the ways in which children learn to think and solve problems at different stages of development. Piaget studied children’s learning through observation and questioning. Vygosky was especially concerned with sociocultural influences on cognitive development. In contrast, studies of the development of intelligence evolved within the psychometric tradition, which focused more on measurement of intellectual abilities and intelligence testing – though later theorists such as Gardner and Sternberg contributed contrasting perspectives.

The development of morality is also included in this section as children’s conceptions of morality are quite closely tied to cognitive development.

**Chapter 4 – Piaget and Cognition Development.** Cognitive development is the study of the ways in which children learn to think and reason, per the pioneering work of Jean Piaget and others who followed in Piaget’s footsteps. Piaget’s theories were derived from his extensive observations of children solving problems as they interacted with their environments and in play.

**Chapter 5 – Vygotsky: Societal and Familial Influences on Cognitive Development.** Lev Vygotsky was particularly concerned with sociocultural factors in cognitive development, though like Piaget, he was also interested in children’s natural learning. He considered as well the important participatory roles of parents, peers, and teachers in fostering children’s learning and development.

**Chapter 6 – Development of Human Intelligence.** Many psychologists have contributed to the understanding of the measurement and development of intelligence, beginning with Alfred Binet and Theodore Simon’s development of the first intelligence test. Controversies over the definition and meaning of intelligence
continue to the present day; but later theorists such as Sternberg and Gardner rejected the (mainly) statistical approaches favored by the earlier theorists. Cultural, biological, and other environmental influences on the development of intelligence are examined.

Chapter 7 -- Piaget, Kohlberg, and Others on Moral Development. Psychologists study the ways in which moral understanding and moral behavior develop; first in young children, then in teens and adults. But one cannot understand moral development apart from an understanding of the dynamics of cognitive development, as Jean Piaget demonstrated early on in his work on the subject. Piaget’s work on moral understanding was extended by Lawrence Kohlberg and others. Although the development of moral understanding and moral actions may have some universal elements, it is equally important to see where and how these may differ from one culture to another, or to classes and groups within a given culture.

Carol Gilligan’s contribution to the psychology of caring and justice is also considered in this chapter, as are psychoanalytic and social-cognitive perspectives on moral development, per the work of Sigmund Freud and Albert Bandura, respectively. (However, the latter two are treated more extensively in Chapters 8 and 11, respectively.)

Part III: Development of Personality: Psychodynamic Perspective

The psychodynamic approach to personality, which includes stages of personality development, originated with Sigmund Freud. Freud and other early theorists are considered in Chapter 8. Erikson’s extensions to Freud’s work, as well as his unique contributions, are discussed in Chapter 9.

Chapter 8 – Freud and the Psychodynamic Approach. Personality development includes both the study of normative and abnormal processes, per the stages of development proposed by Sigmund Freud in the psychodynamic tradition. Freud considered both, but stressed the kinds of abnormalities that can occur when certain basic needs are not met. His theory is a psychosexual one, as he believed that each stage of human development involved erotic
components and conflicts (though his definition of sex was quite broad). Freud is known as the originator of psychoanalysis, which refers both to theory and a method of psychotherapy.

**Chapter 9 – Erikson’s Psychosocial Developmental Stages.** Erikson, while working in the Freudian psychodynamic tradition, stressed social factors to a much greater extent than did Freud, and he extended the stages of development through the entire lifespan. He also brought a cross-cultural perspective to the study of personality development.

**Part IV: Development of Personality: Learning and Cognitive-Social Perspectives**

How children develop – both socially and cognitively – depends to a great extent on how they learn. Much of the early research on learning – as well as psychology in general – stressed the role of classical and operant conditioning. But later theorists, Albert Bandura and others, viewed the traditional learning paradigm as too narrow in focusing only on observable behavior. They broadened the ideas on learning by including socialization and cognitive (thinking) processes as important factors in learning and in development.

**Chapter 10 – Classical Learning Theory: Pavlov, Thorndike, Watson, and Skinner.** The field of psychology as we know it today would not exist without the enormous contribution from the study of human behavior by classical learning theorists (including researchers like Ivan Pavlov, Edward L. Thorndike, John B. Watson, and B. F. Skinner). Watson and later Skinner applied principles of classical and operant conditioning, developed by Pavlov and Thorndike, respectively, in attempting to explain all of human behavior, including human development. This chapter also includes a brief, selective history of trends in psychological thought in order to place the behaviorist movement in perspective.

**Chapter 11 – Social Cognitive Learning Theory: Bandura and Others.** It was only by tradition in American psychology that the studies of behavioral aspects of development were made separate from social and cognitive aspects. Albert Bandura was (and is) a
pioneering figure in the transition from the more limited study of “pure” behavior to the wider field of study known variously as “social learning theory”, or “cognitive/behavioral psychology”, or “cognitive/social/behavioral psychology.” These equivalent terms reflect current realities within the field. Although cognitive, social, and behavioral psychology seem like conceptually distinct areas, they are today enjoined to such a degree that separating them becomes a rather artificial exercise.

Part V: Development of Personality: Ethology, Sociobiology, Evolutionary and Attachment Theory Perspectives

Not all animal psychology involves laboratory experiments. The ethologists demonstrated that the study of different species in their natural environments would yield a new richness of understanding of both development and behavior, with evolutionary implications for humans as well as for animals. Combining the insights of the ethologists with those of classic psychoanalysis led later theorists to their research on the importance of the attachment bonds between infants and their mothers.

Chapter 12 – Ethology, Sociobiology, and Evolutionary Psychology. In studying species specific behaviors and critical periods of development, the ethologists’ (most notably Konrad Lorenz and Niko Tinbergen) observations of chicks, ducks, and various species of fish and mammals, gave new impetus to biological foundations of behavioral development. Their studies of imprinting and critical periods for learning in animal and bird species, based in evolutionary concepts, also spurred thinking about human development.

Ethology, sociobiology, and evolutionary psychology each have a critical common element, which is the influence of Charles Darwin on understanding the adaptive nature of behavior. These approaches emphasize the “nature” side of development to a marked, though not exclusive, degree.

Chapter 13 – Attachment Theory: Bowlby and Ainsworth. John Bowlby and Margaret Ainsworth emphasized the crucial role of infant-parent bonding, especially with the mother, and combined
important insights from psychodynamic theory with those of the ethologists. Both studied the importance of separation anxiety in the infant on development and the importance of attachment in the mother-child bond on later development.

**Part VI: Development of Personality: Trait and Temperament Perspective**

Some theorists approach personality from the study of human traits or individual differences in patterns of behavior. Most (though not all) trait researchers used personality inventories and statistical analysis to identify major aspects of personality that differentiate people. Temperament refers to personality characteristics that are present at birth, or shortly thereafter. A continuing controversy exists over the extent to which personality traits are inherited to at least some extent, versus being largely shaped by experience.

*Chapter 14 – Traits, Types, and Temperament in Personality Development.* The study of personality encompasses the study of individual differences in personality traits. Much of this chapter is devoted to psychometric and theoretical developments on the factors of personality, and some classical personality typologies are considered. Parental practices certainly influence development of personality traits, especially in the earliest years, but so do societal and cultural standards and practices. And it is now recognized that heredity as well can play a significant role.

**Part VII: Development of the Self: Analytic, Humanistic, and Existential Psychology**

The three basic approaches in this section have in common their concern with the development of the whole person or self. These focus somewhat more on development later in life than do most other approaches, though not to the exclusion of the earlier years.

*Chapter 15 – Jung’s Analytic Psychology.* In most textbooks a discussion of Jung’s system of analytic psychology is usually placed along with Freud, Erikson, and neo- and post-Freudians. Jung, like these others, stressed the dynamic role of the unconscious mind. His placement here, however, reflects the author’s view that Jung was
more than anything a self psychologist, but particularly within the context of psychological development. Jung’s major contributions to human development stressed self-development, but particularly from the middle years through old age.

**Chapter 16 – The Humanists: Maslow and Rogers.** The humanistic psychologists favor a phenomenological (experiential) perspective on development and the human need for self-actualization, or development of one’s fullest potential.

**Chapter 17 – Existential Psychology: May and Others.** As with the humanists, the existential psychologists took a phenomenological perspective on existence. The movement began more as a philosophical way of viewing the world than as a formalized system. The existentialists stressed being in the here and now and personal responsibility, and they applied this attitude or approach to psychotherapy. More recently the field of experimental existential psychology has evolved which brings a more scientific approach to this perspective, though these later existential psychologists are still concerned with how people cope with the basic problems of existence.

**Part VIII: Late Life and End of Life Issues in Human Development**

The final perspective consists of a single chapter on end of life issues.

**Chapter 18 – End of Life Issues.** The theoretical work of Elizabeth Kübler Ross is highlighted along with a discussion of practical ways that individuals and families can help to cope with this final stage of life. Though far from perfect as a stage theory, her ideas nevertheless provide useful guidelines for understanding certain emotions (denial, anger, and so forth), which are frequently encountered as coping mechanism in the final stages of life. The role of hospice and palliative care is also considered in this chapter.

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1-16
For Thought and Discussion

1. What is meant by the proverb that “the child is the father of the man.” Also consider what is meant when someone says that “The apple doesn’t fall far from the tree.” Do you agree with these sayings? Why or why not?

2. Class activity: Per the exercise on “Seeing the Continuity in Your Life” spend 15 – 20 minutes writing down some of your childhood memories. Try using one or more of these topics as a stimulus to share with the class:
   a. A special event, such as a birthday party, holiday, or trip.
   b. A traumatic event, such as an illness or hurt.
   c. An example of “sibling rivalry” between yourself and a brother or sister.
   d. Memories of a favorite pet.
   e. Trouble with Mom or Dad.
   f. Memories of someone you loved very much.
   g. A special place where you played by yourself or with other children.
   h. Any other interesting childhood experience you would like to share.

3. As noted, attempting to delineate stages of development is always somewhat arbitrary. This is partly because people develop and mature at different rates. How long does it take to really “grow up” in our society? Think of yourself or others you may know as concrete examples. How do you think maturation to adulthood within our culture compares with other cultures?

4. Do you think that developmental scientists should be advocates for children’s safety and protection? (Note that this can be seen as part of a broader question; namely, is science “values free”?)

5. Along similar lines, to what extent do you think that developmental scientists should promote “positive development,” or interventions that favor optimizing growth as they understand it? (Examples might include drug use prevention programs, better physical care for the elderly, and so forth.) Might ideas concerning the meaning of positive development differ from one culture to the next?
References