Cultural influences on developmental processes and outcomes: Implications for the study of development and psychopathology

CYNTHIA GARCÍA COLL,[a] ANNA AKERMAN,[a] AND DANTE CICCHETTI[b]
[a]*Education and Psychology Departments and Center for the Study of Human Development,
Brown University; and* [b]*Mt. Hope Family Center, University of Rochester*

Abstract
The purpose of this paper is to trace the role of culture as an explanatory construct in developmental processes and outcomes, and its implications in the understanding of developmental psychopathology. Literature reviews were conducted by historical period: 1930–1939, 1960–1969, and 1990–1999. The percentage of the total articles and chapters pertaining to cultural issues increased as a function of time. Both conceptual and methodological continuities and discontinuities were observed among the three periods. The preponderance of comparative studies using deficit models still remains, but more enlightened alternative conceptual models, within culture studies, and measures of cultural processes, are emerging. In contrast, although contextual influences are considered important in developmental psychopathology, the field lags in its empirical consideration of cultural influences. The need to seriously address these issues will increase as globalization and rapid cultural change become even more the norm than the exception.

If culture is reducible, in any realistic sense to extremely complicated, but quite specific, chains of socially transmitted patterns which dominate the feelings, thought and behavior of individuals in all human communities, then this factor must be analyzed and evaluated if the etiology and form of mental disorders are to be thoroughly understood. (Hallowell, 1934, p. 1)

We now recognize that in spite of shared values, there are a number of very real cultural differences between blacks and whites, and that these differences cannot be equated with inferiority as they have in the past. The major implications of such a framework are first, that direct comparative studies

become less significant and second that there will be an increased emphasis upon the study of the culture for its own sake and upon the adaptive aspects of black culture. Rather than focus on pathology in this latter emphasis, there will be a greater concern with success in the face of adversity. (Miller & Dreger, 1973, pp. 1–2)

Conceptualizations of "culture" and its role in human development, both normal and atypical, have changed significantly over the course of the twentieth century (Cole, 1996; Shweder, 1991). Ideological fluctuations dictating how culture should be perceived and understood are especially pertinent within the context of psychology and other "institutionalized" forms of understanding human development that have flourished over the past century (Gergen, Gulerce, Lock, & Misra, 1996). The ever-changing role of culture, in addition to its multitude of meanings both within and outside of academic circles, make it an especially challenging subject for study.

In this paper we trace the role of culture

as an explanatory construct in understanding developmental processes and outcomes. The study of different cultures can affirm, broaden, and challenge extant theories of normal and pathological development by elucidating what developmental sequences are logically necessary, discovering possible alternate pathways to adaptive and maladaptive outcomes, and providing evidence on which factors are most important for mental growth (e.g., biological, social, emotional, cognitive, linguistic, representational). Within the historical approach taken in this paper, the role of culture will be explicated through an examination of the psychological literature pertaining to children's development in the United States. The primary focus of this analysis is to document how culture has been used through the years to explain child and adolescent development in the United States. This endeavor will center on three distinct and highly critical historical periods of psychological thought and research: the 1930s, the 1960s, and our own fin-de-siècle, the 1990s. It should be emphasized that our ultimate goal in unraveling how culture has been invoked through the years in the field of normative child development in the United States is to gain insight into how best to study the role of cultural processes in the development of psychopathology, as well as in the promotion of adaptive functioning despite adversity (cf. Luthar, Cicchetti, & Becker, in press).

A closer look at the periods in history that we have selected explicates the specifics of why and how these particular 10-year intervals were chosen. Aside from their convenience (they are 30 years apart and can easily represent the beginning, middle, and end of the 20th century), each of the periods depicts a distinct and significant historical time in the field of child development.

Although the systematic study of children had existed since the end of the 19th century (see Parke, Ornstein, Reiser, & Zahn–Waxler, 1994), the emergence of a formalized profession of developmental psychology (or of child development) did not take place until the beginning of the 1930s (Cairns, 1983, 1998). At that time the Society for Research in Child Development was established and a number of new publications emerged, including *Child Development, Child Development Monographs, Child Study,* and (the more popular) *Parent's Magazine*. Several child research institutes also were founded throughout the United States, funded and supported by foundations and government–university agencies.

However, as Cairns has noted, "It seems ironic that the most notable development in child psychology during this period was brought about initially by social and economic forces instead of scientific advances" (1998, p. 83). The 1930s were filled with new challenges and ways of thinking that emerged as a result of specific developments in war, industry, and technology. In addition to their respective effects on the human life course, such changes served to profoundly influence the direction of psychological thought and research. Having established itself as a major world power during the First World War, the great depression of the 1930s grossly impacted the United States as a whole.

The systematic approach taken by the social and natural sciences countered the widespread unpredictability that seemed to characterize the essence of humanity at this point in time. Researchers and theoreticians alike felt a desire to systematize and create order out of the chaos surrounding the depression. This quest for classification and orderliness was manifested in the work of many developmental psychologists and anthropologists in search of universals, as well as of their exceptions. As such, cultural influences were studied in order to determine the specific hows and whys of developmental processes and outcomes and their relative universality.

In contrast, the 1960s were a time when many standards of behavior, values, and attitudes that dominated American society were reevaluated. Youth and other groups who felt oppressed or marginalized by the established norms, systems, and institutions began to question many of the given assumptions in our society. The civil rights movement, as well as the women's and the Black Nationalist movements, exemplified the profundity of the questioning of the social establishment with its prescribed social hierarchies and institutions. Through placing the locus of control on

systems and institutions, instead of solely on the individual, these movements provided support for highlighting cultural influences as the core in the etiology of pathology and social problems. The premise was that if only we could create a culture in the United States with the "right values and practices," then the incidence of developmental deviations would decrease. Social programs were devised, experimental programs were evaluated and social science research was conducted in order to examine how cultural deprivation could be invoked as a key explanation for many developmental deviations. The 1960s also have been characterized as an era of expansion and maturation for the field of child development (Cairns, 1998), yet as we will examine later, the use of deficit models did not reflect the progressive views that many of these social challenges espoused.

By the 1990s, beliefs in universals were called into question in what has been referred to as a "postmodern era." Individual rights replaced civil, women's, and other groups' rights. As such, cultures (as individual entities) are seen as legitimate contexts in which development operates. Maladaptation is increasingly viewed as a function of the fit between the culture (or subculture, although that language is now unacceptable) and the demands of the majority or dominant culture. The tensions between the systematic classificatory and descriptive approach to childhood psychopathology and the more contextualized, fluid, adaptive view of human development and psychopathology as a function of context is very evident (Boyce, Frank, Jensen, Kessler, Nelson, & Steinberg, 1998; Cicchetti & Aber, 1998). Another issue has stemmed from the prevalent outcries regarding the "lack of family values" and "declining morality" as explanations for increasingly alarming social problems such as unpredictable violence among youth, increases in the incidence of single parenting, and declining academic achievement as compared to other industrialized countries. Notions of high-risk children have replaced the construct of cultural deprivation, although many of the populations under study (e.g., poor people of color and English-language learners) are the same

and deficit models have been primarily employed in conceptualizing these children's psychological functioning.

Methodological Approaches Taken in this Paper

Within each of the historical periods selected (i.e., 1930–1939, 1960–1969, and 1990–1999), three methodologies were employed in order to obtain a representative perspective on the research and thinking of each decade. First, we undertook an analysis of the table of contents of all issues of *Child Development* (a premier journal in the field of developmental psychology that was published during all 3 decades). Any article that employed "culture" in its title, compared two or more cultural groups, or implicated sociocultural influences was included in our analysis. In addition, we further examined in greater depth randomly chosen articles published within each year of the 3 decades under examination. One potential drawback of this method is that the basis of identification was the use of the article title. However, it also was our estimation that when the word "culture" was used (or implicated) or the comparative nature of the study was indicated in its title, this reflected the relative importance ascribed by the author(s) to these constructs within the study or the theoretical position expressed.

The second methodology that we utilized involved conducting more broad-based literature searches using PsycLIT, in order to include the entire body of psychologically relevant literature from each of our chosen time periods. Key words used in the searches were "development," "culture," and "development and culture." Thus, any articles that included these words in their titles or text were identified through this method. As was the case for articles chosen through an examination of tables of contents, several randomly selected articles were analyzed, along with the abstracts of all of the articles identified. The main limitation of this method is that it reflects only those journals included in PsycLIT, and these are primarily drawn from United States–based research and theories. The advantage is that these journals are among those consid-

ered to be the more established publications in the field. Thus, they most likely reflect the dominant views on these topics extant in the United States.

The third methodological approach taken was a content analysis of how culture was invoked to explain developmental processes and outcomes in three different editions of the *Handbook* [*or Manual*] *of Child Psychology* that were published post-1930s (Carmichael, 1946), post-1960s (Mussen, 1970), and in the 1990s (Damon, 1998). These editions were conceived with the goal of bringing together experts in the field of child development to provide "a factual introduction to the understanding not only of child psychology, but also of the psychology of the normal adult human mind and even of the abnormal human mind" (Carmichael, 1946, p. v). The indexes of the three editions of the *Handbook of Child Psychology* were used to identify where the word "culture" was used. Additionally, a content analysis of the chapters in each edition was undertaken.

Several general trends were found as a function of these analyses. The percentage of the total articles and chapters pertaining to cultural issues increased as a function of time. For example, using as our criterion the number of published articles in the literature, the 1930s revealed a relatively smaller number of articles pertaining to culture (i.e., 3.4% of the papers in the *Child Development* table of contents) as compared with the 1960s (4.2%). Similarly, the 1990s contained more papers on culture (i.e., 11% of the articles in *Child Development*) than either the 1930s or 1960s. Similar findings were reflected when we conducted literature searches using PsycLIT: the number of articles increased as a function of time. (PsycLIT search numbers: 1930s, 124; 1960s, 320; 1990s, 960.) This might be a function of changes in lexicon, or alternatively, what we favor as an explanation, of an increased attention to cultural issues in the literature.

A different trend was observed in the three editions of the *Handbook* [*or Manual*] *of Child Psychology* that we surveyed and which reflect what is considered "really dominant and important" in the field. When the index

for the words "culture" and "cultural" was examined in the 1970 edition of the *Handbook,* the number of entries decreased from the 16 notations to culture that had been contained in the 1946 *Manual of Child Psychology*. An inspection of the 1998 edition of the *Handbook* revealed that references to culture grew exponentially in the 1990s. Thus, in the 1960s there was a decline in the number of entries that invoked cultural processes. In addition, the number of chapters that contained exclusively, or included a substantial section on, cultural issues reflect a similar trend: 2 chapters in 1946 out of 19 (5.3%), 1 chapter in 1970 out of 29 (3.5%), and 22 chapters in 1998 out of 71 (31%).

In addition to our historical survey of culture in the field of normal child development, we also initiated an investigation of work conducted on cultural processes in atypical development. Because the field of developmental psychopathology has a shorter history than that of developmental psychology, we focused on a number of publications generally considered to be among the major historical landmarks of the newer discipline: (a) the special issue of *Child Development* devoted to developmental psychopathology (Cicchetti, 1984); (b) all papers published in *Development and Psychopathology* since its inception in 1989; (c) the Cicchetti and Cohen (1995) two-volume, first edition, *Developmental Psychopathology,* the closest work to the *Handbook of Child Psychology* in the field; (d) all chapters in the nine volumes covering the Rochester Symposium on Developmental Psychopathology (e.g., see Cicchetti, 1989); and (e) a review of PsycLIT for the 1930s, 1960s, and 1990s using the words "culture," "development," and "psychopathology" to generate the list of citations.

Out of the 25 papers published in the special issue on developmental psychopathology in *Child Development* (Cicchetti, 1984), none (0%) addressed the topic of culture. Similarly, in the 11 years of its existence, the journal *Development and Psychopathology* has published only 8 papers that specifically or tangentially address cultural processes. One of its special issues, although it had few papers that dealt explicitly with culture, emphasized the

importance of context in the consideration of adaptive and maladaptive developmental outcomes (Cicchetti & Aber, 1998).

The papers that have expressly examined cultural processes in *Development and Psychopathology* have addressed topics such as resilience, school adjustment of shy and aggressive children in China, pathways to educational achievement in African American and Puerto Rican adolescence, impoverishment and maltreatment, and substance use and abuse. The small number of papers published on cultural processes accounts for approximately 1% of the papers in *Development and Psychopathology.*

An examination of the chapters in the nine volumes of the *Rochester Symposium on Developmental Psychopathology,* published between 1989 and 1999, reveals that 9 of the 102 chapters addressed cultural processes in development and psychopathology. Thus, fewer than 10% of the chapters focused on cultural aspects of developmental psychopathology. Relatedly, the Cicchetti and Cohen (1995) volumes entitled *Developmental Psychopathology* published only 3 chapters out of 44 (6.8%) that addressed cultural processes.

Finally, in the only direct methodological comparison with the field of normal child development that we can make, between 1930 and 1939 two articles appeared on our search of the terms "culture," "development," and "psychopathology" in PsycLIT. Likewise, two papers were found in the 1960–1969 Psych Lit review. Finally, our examination of the decade 1990–1999 in PsycLIT uncovered 36 citations that represented an integration of all three terms entered into our computer search.

From these analyses, there is a clear sense of the increasing relevance of cultural processes in understanding normative child development in the last 20 years of this century. This is accompanied by an interest at the beginning of the century and a more mixed picture in the 1960s regarding the need for culturally based interventions. How can we explain these historical shifts, especially the decrease in the 1960s and the exponential increase in the 1990s? If we adopt the view that social, political, economical, and historical events shape science (Sears, 1975; Siegel &

White, 1982; White, 1996), then we should look there for answers to this question. Perhaps the civil rights and the Black Nationalist movements provided a sharp contrast to the Eurocentric view of the world that had dominated U.S. society and, as a consequence, its scientific enterprises. As cultural deficits were decried as explanations of developmental outcomes (e.g., critiques of the Moynihan report; Rainwater & Yancey, 1967), the 1960s witnessed a decrease in ascribing deviant outcomes to cultural processes. It took over 20 years to develop "new" theoretical models that would lead to more acceptable views of cultures within and outside the United States. This also was supported by the fact that contextual considerations in general have become more prevalent in developmental psychology, thus allowing for a more comprehensive and differentiated specification of processes (i.e., how do cultural influences as opposed to other contextual influences affect development?) and a critical examination of developmental outcomes and their measurement (i.e., as reflective of cultural biases). Other worldwide changes also may have contributed to the exponential growth in the attention to cultural processes. Demographic changes—resulting in the "colorization of America" and other "immigration" issues—have highlighted acculturation and other cultural accommodations such as bilingual education as explanations for differential outcomes across populations. In addition, increasing progress and growth in other cultures and competition with other countries has led the United States to question the unique supremacy of its culture. These social and demographic changes have contributed to our increasing awareness and need for reformulation in scholarship in order to address these issues satisfactorily.

Unfortunately, because of the recent ascendancy of the field of developmental psychopathology, we cannot make firm conclusions regarding the changes in the importance accorded to the role of culture in the study of development and psychopathology. Moreover, for similar reasons, we are not in a position to make 20th century decade by decade comparisons between the fields of developmental psychology and developmental psy-

chopathology. However, it is clear that, at the beginning of a new millennium, the role of cultural processes has yet to assume a major topic of inquiry in the field of developmental psychopathology.

The majority of theory and research in the field of developmental psychopathology has been generated from research conducted in Western cultures. Although useful, such research may fail to elucidate the diverse paths development may follow, the different factors that may contribute to dysfunction, or the varied definitions of abnormality that may be derived from different cultures (Cicchetti & Toth, 1998). Reliance on a monocultural database also might result in a blurring of the distinction between phenomena that are culture specific and those that are culture general (Canino & Guarnaccia, 1997; Kleinman, 1988; Weisz, 1989). Similarly, little work has been directed toward efforts to understand and apply culturally sensitive modes of intervention. To be optimally effective, interventions must incorporate knowledge of cultural, family, and individual codes and values (Sameroff & Fiese, 1990; Toth & Cicchetti, 1999). Moreover, an understanding of culturally specific value systems must be present in order for prevention scientists to develop and implement effective interventions.

Continuities and Discontinuities: Culture as an Explanatory Construct in the 20th Century

There are several commonalties or continuities across the three historical periods that we would like to point out before we enter, in greater depth, into the content of each period. These encompass both conceptual and methodological aspects that pertain to both research and theory.

Conceptual

Cultural influences have been seen as unique or solely responsible for the issues being examined. For example, when an author asserts that "The high suicide rate in Japan is considered to be a function of the culture's lack of more acceptable solutions for dealing with the

retrieval of lost honor" (Hirsh, 1966, pp. 337–339), this implies that cultural patterns of beliefs, emotional and behavioral expression, and regulations are solely responsible for the phenomenon under study. In contrast, culture can be seen as part of a series of contributors to the question being investigated. The following quote from an article written by Bronfenbrenner, published in *Child Development* in 1967, illustrates the latter approach:

A review of research indicates that the serious inadequacies experienced in school by disadvantaged children, especially Negro boys, have their origins primarily in prenatal damage, father absence, impoverished home environment, and dysfunctional patterns of child rearing. (p. 909)

In a more recent example, in an integrative theoretical model, García Coll et al. (1996) have placed cultural influences in children's development within the dominant stratification system of a society, thus viewing culture not as isolated but as intrinsically related to issues of class, gender, and race in any particular society.

Examples of these two approaches to the role of cultural influences on normal development and on psychopathology can be found in all the historical periods examined, although the preponderance of one approach versus the other might differ from one period to another. For example, we see in the 1990s the complexity of minority status and of cultural differences emphasized and delineated more clearly than beforehand (e.g., see Canino & Guarnaccia, 1997; García Coll et al., 1996; Hoagwood & Jensen, 1997; Ogbu, 1994; Serafica, 1997).

Another variant in the conceptualization of culture can be seen in the distinction between difference versus deficit approaches (García Coll et al., 1996; McLoyd, 1990; Spencer & Markstrom–Adams, 1990). Cultural differences can be seen as legitimate, appropriate, and even desirable variations in human behavior and development. A contrasting view conceptualizes these differences as deviation, maladaptation, or pathology, reflective of the deficits inherent to the cultural values, norms, and behaviors of a particular group. Again,

examples of both are seen in all historical periods, yet their relative distribution changes over time. For example, a major paradigm shift is seen in the higher frequency of conceptualizing African American behaviors (when they are different from White middle-class standards) as adaptive and sometimes as strengths in the 1990s (Boykin & Toms, 1990; Ogbu, 1981; Spencer, Cole, DuPree, Glymph, & Pierre, 1993; Spencer & Dupree, 1996) than in the 1960s when, as a norm, African American behavior was seen as a reflection of negative culturally transmitted values. There are, of course, exceptions in both historical periods (e.g., see Iscoe & Pierce–Jones, 1964, and Iscoe, Williams, & Harvey, 1964, for an exception to the 1960s dominant paradigm of cultural deprivation).

The final variant in conceptualization is that the investigator can be interested in cultural change rather than the particular culture per se, and in how an individual's behavior and attitudes are modified accordingly, or how coping strategies fail and psychopathology arises. Change can be brought about by contact between cultures or by migration of individuals. Issues of acculturation and acculturative stress and their relation to psychopathology are very salient within this conceptualization (see Canino & Guarnaccia, 1997; Mezzich, Kleinman, Fabrega, & Parron, 1996; Rogler, Cortes, & Malgady, 1991).

Methodological

There are also methodological continuities and discontinuities among the different historical periods that operate as a function of how culture is conceptualized and the question under investigation. Comparative studies have increased in scope and number (see McLoyd & Randolph, 1986), despite the sporadic examples of this type of article that are found in the 1930s. It is important to keep in mind that comparative studies can differ along several lines. Two or more cultures can be compared for the following reasons: (a) to test the universality of a phenomenon (i.e., insecure attachments as a function of maternal responsivity), (b) to examine the universal application of a theory (i.e., do children around the world display attachments to their primary caregivers?), or (c) to use differences in cultural practices or context as a natural experiment to test a particular theoretical prediction using cultural difference as a natural experiment (i.e., do infants raised by multiple caregivers in a kibbutz still attach to their mothers?). These studies can use an etic (culture-general) or an emic (culture-specific) approach, and again the historical periods differ in the preponderance of one versus the other.

Comparative studies also have been used to explain observed developmental deviations as a function of membership in a "subculture" as compared with that of a majority or dominant culture (i.e., delinquency behavior as a function of belonging to a youth culture that condones and promotes such behavior; see also Luthar & McMahon, 1996, and Richters & Cicchetti, 1993). Furthermore, within-culture analyses have been used in studies that are directed toward documenting how particular cultural practices, norms, or behaviors relate to developmental outcomes of interest. These studies also can be of an emic or etic approach, although the former tends to be more prevalent. A final dimension characteristic of the literature is that of descriptive versus explanatory studies. Initially, in the field, descriptive studies dominated, whereby developmental phenomena were documented in a particular culture or contrasted among cultures. As a rule, over time we have moved from these highly descriptive studies to more explanatory ones, paralleling the evolution of the field as a whole.

It will be evident from this review and analysis of the literature that the invocation of cultural influences as a major explanation of adaptive and maladaptive developmental outcomes usually differs if the phenomena under study pertain to groups residing in the United States and its territories (e.g., immigrant groups, Native Americans, groups that are here as a product of conquest) as compared to groups living in other countries. The distinction between emic and etic approaches borrowed from anthropology is relevant here. In general, studies that are conducted within the United States tend to invoke an etic approach

(i.e., comparing one culture to another, holding one as the standard) in which the issues under study are seen as the products of cultural deficiencies expressed by the attitudes, beliefs, and behaviors of the "other" group. These deficiencies are found when an etic (rather than emic) approach is utilized. In other words, the lack of adoption of attitudes, values, and behaviors that conform to the dominant rules are seen as responsible for the phenomena under study. Moreover, the bulk of "normative" developmental research is within one particular cultural group (i.e., White, middle class, United States born) and for all other language and cultural minorities, the questions, study designs, and interpretations are made within deficit theoretical models (Spencer & Markstrom–Adams, 1990).

Now that continuities across historical periods have been identified, we turn our attention toward the specifics of each decade being examined.

Thirties: Defining the Parameters of Normality and Universal Aspects of Development

The majority of developmental research in this early period was conducted in order to define what could be considered "normal" and by consequence "abnormal" in many different areas of development such as motoric, perceptual, linguistic, and physical growth. Based on convenient samples and disregarding many sociodemographic characteristics, except for gender and race, investigators set out to define the parameters of normal and abnormal development and inferred universality in many cases from very limited data.

Despite the tremendous drive to systematize that dominated much of the 1930s, some theorists and researchers indicated a discomfort with the strict notions of "normal" based on notions of development that were established by the leading scholars of an earlier era (e.g., G. Stanley Hall, John Dewey, and James Mark Baldwin). Uncommon as they were, a number of articles published in different psychologically related journals of the period addressed this highly critical question of what it means to be "normal," along with the differ-

ent standards and nuances associated with this ill-defined term. Many researchers arrived at the conclusion that the notion of what constituted normality was entirely plastic and depended primarily on the cultural context in which it was being used (Benedict, 1934a; Mekeel, 1935). One theorist even claimed that only a scientist with a rich understanding of the cultural specifics at hand could possibly classify and distinguish between the normal and abnormal individuals of a particular society (Hallowell, 1934). Others argued that the expression and incidence of mental disorders is not a function of a racial trait but is to be found in the social situation (Faris, 1934).

A number of articles published within each year of *Child Development* addressed the impact of cultural differences on the process of human development. Comparative studies that contrasted the competence level of individuals in different racial, ethnic, or cultural groups graced the pages of many of the early journals dedicated to understanding children's development. Articles examining the difference between bimanual dexterity in Latin versus American children (Lamb, 1930) and the relative visual capacities of White and Negro children (Beasley, 1933) are but two examples of the articles that attempted to understand culture through this comparative angle. Others, such as a study that simply looked at five bilingual children from a single family, were more open ended (Smith, 1933). Another investigation utilized the spontaneous drawings of children in different cultures as a way of understanding how mental development might differ as a function of cultural background (Anastasi & Foley, 1936). These research projects represent just a few of the endeavors dedicated to understanding the effect of cultural differences on the process of human development.

Irrespective of the tremendous influence of the work of John B. Watson (1914), Arnold Gesell (1928), and other leading scientists, the 1930s were a decade that valued many of the interdisciplinary approaches that appear to be regaining prominence in mainstream psychological debate today. Regardless of the early scientific drive to empiricize, classify, and systematize human behavior, a significant

amount of research in the 1930s also ac-
knowledged the profound complexity of hu-
man development; it is the latter window that
provided a more fluid approach to the exami-
nation of cultural constructs. The role of cul-
ture, as viewed through the multidisciplinary
approach of the 1930s, can be divided along
several different lines, each with its own
dogma, theoretical background, and research
method.

Culture as negative influence

A large part of the drive to attain a cultural
understanding of human development in the
1930s came from an uneasiness within the
time period caused by events such as war and
increased industrialization. The goal of many
immigrants was to become assimilated into
the American culture rather than to maintain
the mores of their prior (abandoned) culture.
In his book entitled *Institutional Behavior,* F.
Allport (1933) discussed the tremendously
negative influence of these environmental oc-
currences on the healthy development of the
individual. Claiming that the "biological indi-
vidual has changed very slowly, if at all, since
the remote age in which the species first ap-
peared," Allport explained how the changes
of "cultural civilization" had proceeded at an
alarmingly rapid pace (p. 211). The "strains
and frictions" of the modern world that force
"primeval" humans to adjust to the social
world is antithetical to the natural state of man
and woman; Allport aligned "culture" with
"civilization," both of which he separates fun-
damentally from that which is "human na-
ture" (p. 508). Allport was not alone in his
claim that culture "could not have been
learned by us except as modification of those
biological tendencies with which we were
born" (p. 509).

Within this approach, culture and civiliza-
tion represent all that is in opposition to the
natural and biological state of humanity (i.e.,
the premodern, free-living human). Thus, cul-
ture was viewed as a modifier of the instinc-
tive tendencies with which men and women
are born.

Culture as natural experiment

The exploration of "primitive" peoples, as all
non-Western cultures were referred to, was a
common practice for anthropologists of this
period who sought to understand the lifestyles
and behaviors of societies different from our
own, most likely as a means of globalizing
the way in which humanity was previously
perceived. Books such as Margaret Mead's
Coming of Age in Samoa (1928) and Ruth
Benedict's *Patterns of Culture* (1934b) were
widely distributed texts that addressed devel-
opmental processes and outcomes. For anthro-
pologists such as Mead and Benedict, the in-
vestigation of developmental phenomena was
a tool by which to increase one's comprehen-
sion of and familiarity with cultures markedly
different from our own. This reversal in the
role of culture from a vehicle by which to un-
derstand child development to an end in and
of itself demonstrates the mutability and plas-
ticity of "cultural" studies, which took many
different forms during this period of time.

Mead elevated the importance of develop-
mental issues such as "family relations" and
"child training" in anthropological research.
In her article "More Comprehensive Field
Methods" (Mead, 1933), she criticizes re-
searchers who describe culture only in terms
of the "conspicuous, the conventional, and the
bizarre," thereby neglecting whole aspects of
the culture supposedly under study. Such
characteristic omissions lead one to doubt the
efficacy of ethnographic research as an appro-
priate method by which to measure and inter-
pret different cultures. Mead calls for a re-
evaluation of methods used by asserting the
significance and necessity of recording all of
the "inexplicit unformulated aspects of cul-
ture" (p. 9), most of which, she claims, relate
to child behavior (p. 8). According to Mead,
the varying degrees to which the formulations
of child life correspond with the adult culture
under study are fundamental to understanding
that society. By asserting that child behavior
is a cultural fact as opposed to relegating it to
a piece of interesting yet superfluous informa-
tion, Mead draws attention to and reasserts
the significance of child life as a reference for
scientific study. Mead's role in the push for

child study in anthropological ethnographic research was highly influential (see, e.g., Flannery's 1937 article "Child Behavior from the Standpoint of the Cultural Anthropologist"). Mead's influence in developmental psychology also was important. Her chapter "Research on Primitive Children" was the only article addressing cultural influences in the 1946 *Manual of Child Psychology*. Nonetheless, Mead's viewpoint did not go unchallenged by scholars of the day. For example, in Terman's chapter on "Psychological Sex Differences" in the same volume, he asserts "the work of Mead is interesting but unconvincing in view of the known difficulties inherent in the subjective estimation of sex differences from brief observation of primitive groups" (p. 982).

Culture as a dynamic influence

In hindsight, it is remarkable how progressive some of the cultural theorists of the 1930s were, leading us to wonder whether perhaps the only thing that has really changed since the 1930s is the number of researchers who are now interested in cultural forms as they relate to normal and atypical development. For example, Lerner, author of "New Techniques for Tracking Cultural Factors in Children's Personality Organization" (1937), complained adamantly about the rigidity of classification models that oversimplified the complexity of cultural and environmental effects on the development of human behavior. Attempting to avoid either the one-sided paradigm of cultural determinism or the "existing psychobiological simplification and dichotomies" that attempt to explain everything from personality characteristics of introversion–extraversion to those of inferiority–superiority, Lerner (1937) proffered a new model of social cultural formation based upon "fused rates of convergence between possible hereditary–temperamental and environmental cultural forces" as applied to "specific cultural milieus" (p. 481). The dynamic nature of Lerner's proposal for a new paradigm by which to conduct studies of children in order to provide "increasingly meaningful and dependable clues to specific cultural factors in specific

types of personality" (p. 486) is an exciting and particularly "modern" interpretation of developmental psychology. Thus, although Lerner's model may not have been widely adopted during its time, its very presence in the psychological literature of its era points to the existence of an alternative view advocating the significance of culture in human development.

Culture as a racial trait

This approach towards culture maintains that a child has a certain propensity to unleash a host of predetermined traits or, more extremely, pathologies. A particular "culture" (a term used then interchangeably with "race"), thus, is a contributory influence that can lead to the development of certain mental disorders; it is an all inclusive, defining trait and, as such, represents a vast oversimplification of the human condition. Within this realm, culture is either construed as a deterministic predisposing trait that indefinitely leads to a certain kind of behavior (and, eventually, clinically diagnosable symptoms), or is bypassed completely as unworthy of its own analyses within the larger picture of "human life." Mental disease was thought to be incited by a number of different catalysts, including problems with acculturation (Hallowell, 1934) and even adaptation to the modern, civilized world (Cooper, 1934).

Although many of the studies that attempted to explore culture utilized the comparative approach (e.g., investigations of the mental development of a particular cognitive domain between members of two different racial groups), some researchers began to realize that such overt reductionism was, perhaps, not the most fruitful approach. Faris (1934) and Benedict (1934a) started to probe the idea that perhaps mental disorders were not racially determined but, rather, socially defined. Therefore, issues such as what is considered to be normal or abnormal behavior, as well as explanations of the causes and consequences of mental disorder, are seen as varying according to the social constructions of personality and "accepted/tolerated" social behavior across cultures and within cultures (Meekel,

1935). Unfortunately, the vast majority of the research and theorizing published in developmental, psychological, and psychiatry publications gave more credence to the former more constrained view of the development of psychopathology than to the latter.

In sum, although Watson, Gesell, and their predecessors (such as Dewey and Hall) represent the most influential of the child developmental theorists during the inception and professionalization of the field of developmental psychology as an independent discipline, other researchers were beginning to struggle with the complicated nature of race and culture and their influence on development. Although the work of such individuals may have been marginalized in comparison to the canonized scholarship of the leading theorists of this era, the fact that researchers of the 1930s struggled with issues pertaining to cultural difference with the same interest and difficulty as contemporary ones is not only exciting, but also important for a comprehensive understanding of normal and atypical development. Thus, it appears that many of the "culture questions" that are addressed with such regularity and intensity at our present point in psychological discourse have existed for over 60 years. Despite the fact that the form, structure, and content of the inquiry may have changed, the fundamental challenge of attempting to understand the role of culture in human development and psychopathology remains the same: How does culture help in shaping the nature of children's growth, and to what extent does it influence the final outcome of development?

Sixties: From Universals to Explaining Cultural Differences, Cultural Deprivation, and the Impact of Cultural Change

In the 1960s, several major paradigm shifts occurred. Instead of descriptive studies emphasizing either differences or similarities between cultural groups within the United States or between the United States and other countries, the field moved to a more explanatory phase. Up until the 1960s, speculations on the origins of similarities and differences between cultural groups would occupy a sentence or two at the end of the article. Although there were exceptions found in the literature (see, e.g., Allport & Schank's, 1935, work discerning the relative contributions of culture and biological influences on attitudes), the majority of the work in the 1930s was descriptive in nature. The 1960s witnessed a greater focus on explanation and the consequent potential to create or induce change. Perhaps as a reflection of the need for social change demanded by women, Blacks, and college students, the idea of understanding and thus modifying cultural influences had come of age. As Bruner, Oliver, and Greenfield (1966) asserted, "a child does not perform a certain act at a certain age *because* the culture he lives in exhibits that pattern. . . . What is needed for a psychological explanation is a psychological theory. *How* does a culture in which a child lives affect his way of looking at the world" (pp. 2–3; emphases in original work).

In the decade of the 1960s, mere comparisons between cultural, racial, or ethnic groups were not viewed as sufficient to provide, in and of themselves, evidence to explain particular outcomes. As Robert LeVine stated in his chapter "Cross Cultural Study in Child Psychology" in the 1970s *Manual of Child Psychology,*

In attempting such an explanation, we would be confronted with the fact that the populations . . . differ from one another in numerous ways, each one of which could account for the differences. This confounding of possible determinants leaves open several divergent lines of explanation. (p. 560)

. . . malnutrition affects brain function and retards or arrests a variety of developmental processes. (p. 560)

There is a genetic basis for the differences. . . . If the populations differ in some obviously inherited characters (visible morphological characteristics), they may differ in others that determine . . . development and performance). (p. 560)

The differences are attributable to differences in early stimulation [and the children's subsequent experiences with caretakers, peers, and the school setting]. (p. 560)

The measured differences have their basis in the social motives the children have acquired through the socialization process . . . (p. 561)

Broad differences in cultural milieu, not reducible to specific child-training or early stimulation practices, . . . the child's early and pervasive exposure to his culture's beliefs and values [is what] determines his mode . . . of functioning and . . . performance. (pp. 560–561)

LeVine (1970) went on to advocate further for the "cross-cultural research strategy" in search for explanations for the causes of individual development and behavior: "How should we decide which of these many plausible explanations to accept or reject, or what is the relative contribution of their alleged determinants to the observed variance in performance? Most generally, by investigations of such variance in which each of the hypothesized causes varies while the others are held constant through comparative, quasi-experimental, and experimental studies" (p. 561). Unlike in the 1930s, investigators of the 1960s had to provide evidence that a single cultural practice was empirically related in statistical terms to a certain developmental outcome or process. Cultural variation cannot be used to attribute causality with no statistical, quantifiable data to support it.

However, LeVine's advocacy was not unanimously adopted by cross-cultural researchers of this period. For example, in the 1970 *Manual of Child Psychology,* cultural differences are invoked to explain individual differences in the development and manifestation of aggressive behavior in children (Feshbach, 1970), the importance of the peer group as a source of authority, and the age at which children would join gangs (Hartup, 1970). Most of the studies cited throughout the *Manual of Child Psychology* in 1970 utilized cultural differences to infer causes (as described in the last three displayed quotations above), with no consideration of any of the possible confounds to which LeVine alluded. It has been relatively recently (i.e., in the 1990s) that these alternative explanations have been pointed out and that the extant literature has been critically analyzed for failing to take these competing influences into account (see,

e.g., García Coll et al., 1996; McLoyd & Randolph, 1986; Rowe, 1997; Spencer & Markstrom–Adams, 1990).

LeVine (1970) identified a number of topic areas within which a series of investigations (as opposed to an isolated article) had accumulated by the end of the 1960s. From these studies he concluded that there was enough data to substantiate cross-cultural differences in child-rearing environments, including the amount of mother–infant contact, nutrition and feeding practices, sleeping arrangements, caretaking patterns, number of caretakers, early disciplines, verbal stimulation, contact with the father, use of punishment, teaching methods, and emphases on separation. For example, in two studies comparing the child-rearing attitudes and practices of Germany and the United States, German parents were found to be more controlling than were parents in the United States (Karr & Wesley, 1966; Rapp, 1961). These differences are clearly attributed to legitimate cultural differences: "in this respect the uniqueness of culture does not allow judgmental interpretation" (Rapp, 1961, p. 675).

In many instances in the literature, cultural differences were used systematically to relate to specific aspects of the caregiving environment and ultimately to developmental processes and outcomes (an approach made possible and acceptable by the work of John and Beatrice Whiting, 1975). However, at this point in time it was not clear what causal impact the variations on cultural prescripts and childrearing practices had on the child. As Levine (1970) explicated, "The review of antecedent–consequent studies uncovered few relationships that have been strongly substantiated through cross-cultural research so far" (p. 603).

For other investigators, the search for universal processes and outcomes that reigned supreme in the 1930s was guiding their research in the 1960s. This was clearly exemplified by Mary Ainsworth's (1967) study of attachment in Ugandan infants. Influenced by John Bowlby's (1969) ethological–evolutionary perspective on attachment, Ainsworth employed anthropological and observational methods in an effort not only to ascertain in-

dividual differences but also to discern similarities in developmental processes and outcomes in mother–infant attachment as a function of the unique environmental input from the Uganda culture. She concluded that "a number of patterns of behavior have been identified as attachment behavior and emerge in orderly sequence over time; separation anxiety and stranger anxiety also undergo a developmental sequence, [but] neither seems to be an adequate sole criterion for attachment; attachment to familiar figures other than the mother can merge very soon after attachment to the mother (if not simultaneously), and this is particularly noteworthy in a society in which there is an especially close and intimate infant mother relationship" (Ainsworth, 1967, pp. 384–385).

Subsequent replications and refinements of this study in the United States and in other countries have served as the bases for recognizing both the universal (i.e., etic; e.g., attachment between infants and main caregiver occurs and can be classified similarly in all societies studied) and more culture specific (i.e., emic) aspects of this phenomena (e.g., distribution of attachment classifications differs by culture; see García Coll & Magnuson, 1999a, and van Ijzendoorn & Sagi, 1999, for reviews of the cross-cultural evidence).

Ethnic and racial variations within the United States

Thus, cross-cultural variations in childrearing practices and developmental processes and outcomes were almost universally seen as appropriate adaptations to ecological and historical circumstances. A very different view of cultural differences was espoused in the 1960s when this construct was used to examine racial and ethnic differences in the United States. Although in the cross-cultural studies described above many different ways of conceptualizing and studying culture were used, cultural influences became a major explanatory variable for "deficits" found in processes and outcomes among groups in the United States. For example, a series of comparative studies (e.g., Negro and White) found that father-absence boys are less masculine than fa-

ther-present boys, especially in Negro families (Biller, 1968; Hetherington, 1966). A popular interpretation of the time was anchored in a deficit view of the Negro family:

These writers have emphasized that it was not only the father absence per se which contributes to difficulty in masculine development, but also the typical matriarchal role structure of Negro families. Fathers even when present, in the majority of lower class Negro families, are reportedly passive and ineffectual in family interactions. (Biller, 1968, p. 1003)

A major indication of the shift to viewing cultural influences for the "deficits" found in "high-risk" groups was the popularization of the phrase "cultural deprivation." The phrase started to appear in the literature around 1965 (see Gray & Klaus, 1965; Staats & Butterfield, 1965). Zigler and Butterfield (1968) provide an operational definition of this phenomenon:

Culturally deprived children, although more wary of adults, are more motivated toward securing attention and praise, are less motivated to be correct for the sake of correctness alone, and are willing to settle for lower levels of achievement success than are middle class children. (p. 2–3)

Where does cultural deprivation originate? The consensus held that the learning environments provided primarily in the home and compounded by other important environments (e.g., schools, peer groups) were to blame (Staats & Butterfield, 1965). Throughout the literature, cultural factors such as predominant family structures (i.e., father-absence), impoverished home environments, and dysfunctional patterns of child rearing were invoked to explain everything from low self-concept and dysfunctional sex-role orientations, to failed academic achievement, cultural–familial forms of mental retardation, and juvenile delinquency (Barclay & Cusumano, 1967; Biller, 1968; Carpenter & Busse, 1969; Sarason & Doris, 1969; Zigler, 1969). For example, Bronfenbrenner (1967) asserts, "A growing body of research evidence points out the debilitating effect on personality development on Negro children, particularly males, resulting from

the high frequency of father absence in Negro families" (p. 914). Furthermore, Bronfenbrenner (1967) stated that "an additional factor contributing to the inadequacies and problems of the Negro child is the alternately repressive and indulgent pattern of upbringing" (p. 917).

Finally, Bronfenbrenner (1967) viewed these patterns of family structure and child rearing as the legacy of slavery, poverty, and discrimination:

[I]t is noteworthy how many of the characteristics of the Negro family of today which are dysfunctional for modern society were functional for, or at least adaptive to the conditions of bondage. With the father constantly at risk of being sold to another owner, a matriarchal family structure became almost inevitable. But since the mother too had to work, it was necessary to keep her child from interfering by his activity, question or misbehavior. (p. 917)

Thus, even if cultural groups had evolved adaptive family structures and patterns of child rearing, these were deemed as in need of intervention for their posited outcomes (i.e., school failure, delinquency, early childbearing) and were not seen as adaptive to modern society. Accordingly, intervention programs from preschool to adolescence were implemented and evaluated in changing those developmental deviations (Gray & Klaus, 1965; Staats & Butterfield, 1965; Zigler & Butterfield, 1968).

Acculturation and psychopathology

A final trend in the 1960s found in investigations of cultural influences on developmental processes is represented by those studies that are interested in mapping out the psychosocial costs of cultural change. Change, as the product of modernization or contact with another culture, was seen as a possible source of stress and subsequent maladaptation. From expressions of guilt, to conflict between less acculturated parents and more acculturated offspring, to pure acculturative stress as a result of contact with Western culture, change was conceived as disruptive and potentially harmful (Ausubel, 1960; Kurokawa, 1969; McMichael & Grinder, 1966).

Some efforts were made in the understanding of other developmental consequences of such change or contact, such as ethnic or racial preferences, attitudes, and stereotypes. In general, racial identities are developed from the preschool years and are rather well established by adolescence (Abel & Sahinkaya, 1962; Hess & Torney, 1962; Stabler, Johnson, Berke, & Baker, 1969; Wilson, 1963). Although the amount of systematic research in these areas conducted during the 1960s was actually small relative to others, this trend opened a whole new area of research that blossomed in the next decades and beyond.

In sum, the 1960s renewed interest in culture was primarily evidenced in the search for explanations of individual and population differences in developmental processes and outcomes. Cross-cultural studies were employed to investigate the range of normative child rearing environments and the contextual differences that bring those about. In accord with the approach of Mead and Benedict in the 1930s, in the 1960s conducting research in other cultures also was seen as an opportunity to assess universal and context-specific aspects of human development. However, within the United States the emphases on cultural differences can be understood as a function of an increased concern for the differential outcomes of subpopulations within the United States. Unlike the normative emphases of the 1930s or the cross-cultural approaches of the 1960s, culture was invoked to explain maladaptation and psychopathology within subgroups of the population in the United States. Moreover, contact among cultures, a side effect of increased communication and world economic and political interdependence, and differential histories and racial backgrounds within our own country, were seen as contributing to new developmental challenges, and thereby a possible cause of developmental deviations and maladaptive outcomes.

Nineties: Cultural Differences as Adaptive and Cultures, Cultural Contact, and Change as Legitimate Objects of Study

Perhaps because of our increasing global contact and communication or our genuinely re-

newed theoretical and empirical interest, the literature in this decade more than doubles the frequency of journal articles and books dedicated to the role of culture in developmental outcome and processes in the prior eras examined. As Shweder, Goodnow, Hatano, LeVine, Markus, and Miller (1998) assert, "cultural psychology [of development] is not new. What is new, and is news, is that the discipline has experienced a major revival in the 1980s and 1990s" (p. 866).

Several new trends have emerged in the conceptualization, as well as the methodologies used to study cultural differences and continuities in development. Shweder et al. (1998) make a useful distinction between two approaches to study cultural influences on development: one is exemplified by the terms "cross-cultural psychology," the other by "cultural psychology" (see also Cole, 1996). This distinction is a refinement of the emic and etic conceptual and methodological dichotomy, with some innovative and important changes. Cross-cultural psychology usually presupposes that categories and models derived from experimental, social, cognitive, and personality psychology are universal and, therefore, can be transported to other cultural contexts to test the generalizability of the findings of the influences of context in their expression, timing, and so on. In most cases, the direction of influence is conceived as unidirectional (from culture to individual psychology). Cultural psychology, in contrast, derives procedures for each culture from the typical behavior and modes of communication of that culture; it looks for both similarities and differences in developmental processes, and it assumes that culture and psychology are mutually constitutive phenomena which cannot be reduced to each other. Although Shweder et al. (1998) point to the increase over time of studies representative of cultural psychology (vs. cross-cultural psychology), a closer analysis of the literature in the 1990s as captured in the pages of *Child Development, The Handbook of Child Psychology,* and PsycLIT reveal that the majority of investigations are more in the cross-cultural than in the cultural psychology tradition. However, there are some important exceptions to this

state of affairs that might be signaling an important shift in how the role of culture is being investigated.

Perhaps as a reaction to the preponderance of deficit models of development for minority children in the United States, and the social pressures of the 1960s to move away from these as bases of public policy, alternative cultural difference and diversity models have appeared in the literature. These more recent models (see, e.g., Boykin & Toms, 1990; García Coll et al., 1996; Ogbu, 1981) propose that cultures, lifestyles, and even developmental outcomes that are different from the White middle-class mainstream are neither a product of pathology nor deviant or deficient relative to mainstream standards; rather, they are legitimate adaptations to contextual demands or are valuable in their own right. In these models, cultural differences are embedded in systems of oppression derived from their status as minorities in the United States. This institutionalized racism is even expressed in the preponderance of conceptual deficit models that have dominated "scientific" study in this country. The argument, for example, has been raised to elucidate cultural differences in family functioning (Kelley, Power & Winbush, 1992; Slaughter–Defoe, Nakagawa, Takanishi, & Johnson, 1990) and learning styles (Boykin, Allen, Davis & Senior, 1997), among others, as legitimate and functional adaptations within their respective ecological niche.

The alternative cultural difference paradigm also has been used to elucidate theoretical controversies in many different areas of development. For example, comparisons between Mandarin- and English-speaking toddlers were examined to discern whether there is a universal "noun bias" when learning a first language (Tardif, Gelman, & Xu, 1999). Investigations such as that of Tardif et al. (1999) are reminiscent of the 1930s approach of using culture as a natural experiment to address theoretical issues in developmental psychology. However, what is really new in the more contemporary cultural difference paradigm is the systematic and careful assessment of the cultural context along side the developmental phenomena under study. Whereas earlier studies would simply compare the devel-

opmental outcome in the two cultures and infer the process out of which these differences would arise, without a measure of the cultural process per se, in contrast, in the Tardif et al. (1999) study, a careful analysis of the linguistic input of the mothers to their children is presented and used to explain the differences obtained in the rate of language acquisition. Unpacking culture becomes a challenge to be contended with in the 1990s (see Cooper, Jackson, Azmitia & Lopez, 1998). The pleas of Mead (1946) and LeVine (1970) have finally materialized in a substantial number of investigations.

Aside from a more sophisticated measurement and specification of cultural influences in the 1990s, other methodological trends can be observed. One is the increasing use of single-culture studies, in contrast to comparative studies. This approach can be found not only in single-culture studies conducted outside the United States (i.e., Arnett & Balle–Jensen, 1993; Vinden, 1996), but also in studying minority groups within the United States (i.e., Black students' perceptions toward education; see, e.g., Ford & Harris, 1996). Although some studies are conducted to test the generalizibility of findings obtained in the United States (e.g., behavioral inhibition in a Swedish sample [Kerr, Lambert, Stattin, & Klackenberg–Larsson,1994], relationships of maternal behavior with toddler adaptive behaviors in Egyptian toddlers [Wachs, Bishry, Sobhy, McCabe, Galal, & Shaheen, 1993], or the negative effects of teenage pregnancy on Puerto Rican offspring [García Coll & Vázquez García, 1996], others are designed to answer specific questions that are relevant to that particular culture and not others (e.g., developmental outcomes of only children in China [Falbo & Poston, 1993]).

Moreover, if comparative studies are found, then many of them employ emic (or cultural psychology) approaches rather than etic (or cross-cultural approaches), discussing their findings as adaptations in their own right instead of as deficits in a particular group (e.g., consequences of retaliatory aggression in urban minority children [Herzberger & Hall, 1993], maternal perceptions of attachment behaviors [Harwood, 1992], parent reports of behavioral and emotional problems [Weisz, Sigman, Weiss, & Mosk, 1993], or preschoolers social interaction and play behavior [Farver, Kim, & Lee, 1995]). The deficit approach found in the 1930s that still remained prevalent in the 1960s is being slowly replaced by a comparative emic approach, very much in tune with anthropological approaches espoused by Mead and Benedict in the 1930s and LeVine in the 1970s.

However, this slow change is not taking place without resistance. As García Coll and Magnuson (1999a) have expressed this state of affairs, the serious consideration of culture in developmental research represents a paradigm shift:

A paradigm shift will be necessary in order to place cultural processes at the core and not at the periphery of our conceptualizations and investigations of developmental processes. . . . [It] will also start with the individual child, but will conceptualize most of the environmental influences on the child as a primary reflection of cultural processes and as a major medium for developmental change. Cultural context has to be conceptualized as more than the background against which development unfolds and instead, as a major source of influence on these processes. Moreover, cultural context will be as much a part of the analyses of developmental processes of children in other cultures as for own culture. (p. 2)

Another new trend parallels the development of the field of child development from a more descriptive to a more explanatory field of knowledge (Cairns, 1983). As such, many of the studies conducted abroad from either a comparative or single-culture approach test the relations among variables with the goal of providing possible explanations for the developmental phenomena under study. Thus, for example, psychological maladjustment is assessed as a function of high academic achievement among Japanese, Chinese, and American high schools students. Not only were there differences in the level of these variables as a function of group membership, but also the association among the variables were different between groups: High academic achievement was generally not associated with more feelings of stress, except for

the American sample (Crystal, Chen, Fuligni, Stevenson, Hsu, Ko, Kitamura, & Kimura, 1994). The trend from descriptive to explanatory studies that started in the 1960s has become the norm in the 1990s.

A final trend observed in the 1990s is the derivation of public policy implications from comparative or single-culture studies conducted within the United States. The appeal to influence public policy is not new, as is clearly exemplified by the 1960s demonstration of the effects of particular interventions in reversing or preventing the impact of "cultural deprivation"; however, the more current studies are not necessarily originating from a deficit model and researchers advocate for a clear link between their conceptualization and public policy (García Coll & Magnuson, 1999b, in press). For example, Winsler, Diaz, Espinosa, and Rodriguez (1999) assert in their study of groups of Mexican American children who either did or did not attend a bilingual preschool,

Contrary to fears that have been expressed by some that early exposure to English would lead to children's native language loss, the results of both studies offered no evidence of Spanish proficiency loss for children attending bilingual preschools. . . . [M]ore systematic research [needs] to be conducted in this area to inform public policy and practice in the early education and development of language minority children. (p. 349)

Another example of the close link between cultural research and public policy is illustrated by the study of intergroup attitudes among ethnic minority adolescents conducted by Phinney, Ferguson, and Tate (1997):

These findings have clear implications, because many educational programs in the United States are based on multiculturalism . . . Although this idea is widespread, there has been relatively little empirical research in school settings to support or refute this view. The present results suggest that even though adolescents view their group more positively than others, there appears to be little reason to fear that encouraging positive attitudes towards ones own group will lead to negative views of other groups. (p. 966)

In sum, as we move forward into the 21st century, a substantial increase in the number of articles that involve some consideration of culture in their analyses of developmental processes and outcomes has occurred. However, the changes observed in the decade of the 1990s do not only reflect a change in the relative and absolute number of publications in the area of cultural research, but also reveal many significant qualitative changes as well. The growth of the theoretical and methodological sophistication of the field of developmental psychology observed in this century (Cairns, 1983, 1998) is also reflected in this area. New theoretical approaches are seen that bridge disciplinary boundaries (e.g., anthropology and developmental psychology). Cultural processes are measured and not inferred, and might even become the subject of study per se. Although investigations couched in the framework of comparative–deficit models and cross-cultural studies with an etic orientation still predominate in the field, especially in reference to minority groups in the United States, a growing body of literature decries comparative studies using deficits models and urges for single-culture studies (García Coll et al., 1996; McLoyd, 1990; Spencer & Markstrom–Adams, 1990; Spencer et al., 1993). Finally, connections between empirical findings and current practices and public policy have grown in the literature. Increasingly, links between research and practice have come to be expected in publications addressing cultural processes. We fully expect these research and policy integrations to become the norm in this new century.

The Future

After a century of utilizing the scientific method to investigate the role of cultural processes, it is safe to state that we have made many strides in our understanding of how culture permeates and contributes to adaptive and maladaptive outcomes. Testing the universality or cross-cultural validity of many developmental phenomena has given us insight into what aspects of these phenomena are or are not subject to cultural influences. For example, although we know that infants do show similar patterns of attachment across many different caregiving and cultural contexts, the

intensity of the manifestation of attachment behaviors and the percentage of insecure and secure attachment classifications differ across cultural contexts (García Coll & Magnuson, 1999a). We also know that some developmental phenomena are highly culturally determined (e.g., language spoken; definition of the self), whereas others are highly canalized and not susceptible to many environmental influences unless they create substantial deficits in the organism (e.g., the acquisition of some linguistic capability). The dance between nature and nurture is a complex one that differs in its balance as a function of the developmental domain or outcome under study (e.g., cognitive, socioemotional, motoric, or linguistic development) and the stage of development under scrutiny.

We also have made methodological advances. The transportation of paradigms, measures and constructs across cultures is no longer viewed as a simple function of good linguistic translation. Indeed, we concur with Spencer and Markstrom–Adams's (1990) assertion that, in order to investigate the developmental adaptation of children from diverse cultures, we need to go beyond solely utilizing the traditional paradigms employed by researchers studying mainstream, White middle-class society. Research has shown that constructs can be deeply influenced by culture (e.g., what constitutes for a parent a well-behaved child and per that definition a behavioral problem), and thus a good translation of a "standard" scale (developed and normed in a particular culture and context) is not necessarily equivalent (Canino & Guarnaccia, 1997; Erkut, García Coll, Tropp, & Vázquez García, 1999; Fantuzzo, McDermott, Manz, Hamptom, & Burdick, 1996). Mixed methodologies—qualitative and quantitative—are more frequently used to elucidate both emic and etic definitions of development and create a richer understanding of cultural influences on normal and atypical development (Canino & Guarnaccia, 1997; Sullivan, 1998).

Nonetheless, our understanding of how culture and cultural change influence developmental processes is really in its infancy. For the most part we do not understand how or why these cultural influences occur. Most of our explanations are speculative or post hoc interpretations, which are not well substantiated by data. For instance, why is the timing of the onset and cessation of stranger anxiety, in addition to its magnitude, affected by cultural context, while its occurrence remains constant across cultures? What aspects of a culture determine these parameters, (e.g., number of caregivers, prior experiences with strangers, closeness in the relationship between the mother and the child)? Clearly, the list could be endless. In other words, we know more about the similarities and differences in the outcome between cultures, but very little about the processes that operate and eventuate in these outcomes.

For example, we know that formal operations are not as universal as other Piagetian stages; however, it is unclear why this is the case. What aspects of the cultural context (e.g., particular kinds of schooling, other information processing demands) determine these outcomes? Can changes in some but not other aspects of cultural context bring about formal operations? We do not need more cross-cultural research: we need more research into the cultural processes that affect development, both normative and atypical. We must go beyond comparisons of groups with a posteriori interpretation to theory driven hypothesis testing, combined with emic qualitative approaches, to evaluate the construct and content validity of our models.

The dominance of Eurocentric theory and research that pervaded developmental psychology in the 20th century is being challenged not only by empirical findings but also by world economic and political changes. The authority and domination of the United States over the bulk of published knowledge in this area is being questioned as other countries start devoting resources to these questions. It is now more customary for scientists from different countries and disciplines to be collaborating than ever before. As other societies reach higher stages of development, the need for answers to particular social problems will steadily increase. As health and other basic human needs are addressed more effectively, the fulfillment of psychological needs becomes more of a global priority for many na-

tions and for the world as a whole (see e.g., the WHO position statement referring to depression as a costly worldwide phenomena [Brundtland, 2000]).

New outlets for dissemination also are disputing the predominance of the United States in this academic area. Not only is there a proliferation of journals around the world, but also electronic communication might make the process of publication (as we now know it) obsolete. We are presently capable of instantly accessing findings produced in Tibet and of engaging in an ongoing conversation with colleagues from around the world. Current research projects using the Internet are receiving answers from all over the world that break with rules of sampling, generalizability, and other standard research procedures. The possibilities are infinite and we, as a product of the 20th century's endeavors, are probably blind to their range.

As the amount and speed of cultural change accelerates in the new millennium, the scientific potentials are innumerable. The global experiment, which benefits from such recent increases in communication as well as economic, political, and ecological interdependence, provides many opportunities to study cultural influences on development. First and foremost is the fact that new ranges of caregiving environments, socialization, and schooling patterns are challenging the Western view of "normal" and atypical development. These challenges will result in increasing our understanding of the universal aspects and cultural definitions of developmental processes and outcomes. It also will allow us to delve even deeper into the influences of cultural change at a scale much larger than that previously used. One of the revolutions of the 20th century has been the reality that rapid cultural change is the norm rather than the exception. This provides certain opportunities to provide answers to questions such as: How are individuals, families, and other institutions coping and developing in these rapidly evolving contexts? As traditions and customs continue to erode, how is the process of socialization shaped in response? Why do some individuals and institutions survive while others succumb? The profoundness of these

questions and their eventual answers will shape our understanding of who we are as human beings and the nature of the conditions that can promote human development and prevent psychopathology.

As our knowledge of the influences of cultural processes on normal development increases, so too must our understanding of the cultural mediators and moderators of atypical development. Within the discipline of developmental psychopathology, it often is the case that knowledge of psychopathology lags until gains in the understanding of normal developmental processes occur. We are hopeful that the gains in the comprehension of the impact of cultural processes on normal and atypical development that were witnessed in the decade of the 1990s will sustain and flourish in this new millennium.

Within the United States, the burgeoning multiculturalism poses both opportunities and challenges for the field of developmental psychopathology to augment its knowledge base on the impact of cultural processes on the etiology and course of psychopathology (cf. Basic Behavioral Science Task Force of the National Advisory Mental Health Council, 1998; see also Greenfield & Suzuki, 1998). In order to be successful in achieving these laudable goals, a number of methodological improvements must be implemented. These include employing both quantitative and ethnographic methods (Sullivan, 1998); investigating a range of biological and psychological developmental domains and processes (Cicchetti & Lynch, 1993); utilizing culturally appropriate and sensitive measures, and collecting information from multiple informants in multiple contexts (Canino & Guarnaccia, 1997); disentangling culture from disadvantaged socioeconomic status; and examining not only differences but also similarities in the risk and protective factors and mechanisms across cultures (Canino & Guarnaccia, 1997; see also Cicchetti, 1993, and Cicchetti & Pogge–Hesse, 1982, for discussions of the importance of investigating similarities and differences in the field of developmental psychopathology).

As Harkness (1992) noted, the majority of cross-cultural research publications do not provide systematic information on relevant

aspects of the cultural setting in which the research took place. Accordingly, as Harkness (1992) stated, the paucity of information on culturally specific meaning systems makes it extremely difficult to interpret, and to have confidence in, the results of much cross-cultural research. The inclusion of ethnographic information can enhance the understanding of the role that the cultural context plays in the development of maladaptation and psychopathology (Canino & Guarnaccia, 1997; Lopez & Guarnaccia, 2000; Sullivan, 1998). For example, there is variation in concepts of normality across cultures and this variability likely impacts the definition, identification, and explanation of a diverse array of mental disorders of childhood and adulthood.

As noted, the field of developmental psychopathology can best be described at present as a monocultural science. Much of the extant work on culture and psychopathology lacks an explicit developmental focus; however, there are signs of an integration occurring among cultural influences, development, and psychopathology (see, e.g., Jensen & Hoagwood, 1997; Manson, Bechtold, Novins, & Beals, 1997; Serafica, 1997).

One area ready for the incorporation of culture into a developmental psychopathology perspective is that of resilience, a dynamic construct that is defined as successful adaptation despite the experience of significant adversity (Luthar et al., in press). In contrast to much of the work in developmental psychopathology that investigates pathways to maladaptation and psychopathology, researchers in the area of resilience examine the pathways to adaptation despite the presence of adverse

circumstances. As research has revealed, there are multiple pathways (i.e., equifinality) to psychopathology; moreover, not all individuals with the same condition are effected in exactly the same way (i.e., multifinality; see von Bertalanffy, 1968; Cicchetti & Rogosch, 1996). Similarly, there are multiple pathways to resilient outcomes and aspects of cultural influences can contribute to some high-risk individuals doing well despite their adverse situations. We believe that the time is ripe for investigating the contribution that cultural contexts can make to the ontogenesis and perpetuation of resilient outcomes.

Finally, we wish to underscore that it is essential for research on normal and pathological developmental processes and outcomes to utilize some of the more recent alternative developmental models in the planning and implementation of their studies. We witnessed that it took decades before LeVine's (1970) pleas for increased explanatory studies in cross-cultural research reached fruition. We hope that a similar amount of time does not pass before major social position variables such as prejudice, discrimination, oppression, and segregation are routinely included in studies of normal and atypical development, both within the United States and other cultures throughout the world.

In conclusion, as we proceed ahead in the new millennium, our hopes for the future are many and can be encapsulated into the following statement: We must strive to reach the point where every individual and society can promote their own development as well as that of those around them. There is no doubt that we will have the knowledge base and the resources to do so. But will we have the will?

References

Abel, H., & Sahinkaya, R. (1962). Emergence of sex and race friendship preferences. *Child Development, 33,* 939–943.

Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore: Johns Hopkins University Press.

Allport, F. H. (1933). *Institutional behavior: Essays toward a re-interpreting of contemporary social organization*. Chapel Hill, NC: University of North Carolina Press.

Allport, G. W., & Schanck, R. L. (1935). Are attitudes

biological or cultural in origin? *Character and Personality, 4,* 195–205.

Anastasi, A., & Foley, J. P. (1936). An analysis of spontaneous drawings by children in different cultures. *Journal of Applied Psychology, 4,* 689–726.

Arnett, J., & Balle–Jensen, L. (1993). Cultural bases of risk-behavior: Danish adolescents. *Child Development, 64,* 1842–1855.

Ausubel, D. (1960). Acculturative stress in modern Maori adolescence. *Child Development, 31,* 617–631.

Barclay, A., & Cusumano, D. R. (1967). Father absence,

cross-sex identity, and field dependent behavior in male adolescents. *Child Development, 38,* 243–250.

Basic Behavioral Science Task Force of the National Advisory Mental Health Council (1998). Basic behavioral science research for mental health: Sociocultural and environmental processes. In P. Organista, K. Chun, & G. Marin (Eds.), *Readings in ethnic psychology* (pp. 43–58). New York: Routledge.

Beasley, W. C. (1933). Visual pursuit in 109 White and 142 Negro newborn infants. *Child Development, 4,* 106–121.

Benedict, R. (1934a). Anthropology and the abnormal. *Journal of General Psychology, 10,* 59–80.

Benedict, R. (1934b). *Patterns of culture.* Cambridge, MA: Riverside Press.

Biller, H. (1968). A note on father absence and masculine development in lower-class Negro and White boys. *Child Development, 39,* 1003–1006.

Bowlby, J. (1969) *Attachment and loss* (Vol. 1). New York: Basic.

Boyce, W. T., Frank, E., Jensen, P. S., Kessler, R. C., Nelson, C. A., & Steinberg, L. (1998). Social context in developmental psychopathology: Recommendations for future research from the MacArthur Network on Psychopathology and Development. *Development and Psychopathology, 10,* 143–164.

Boykin, A. W., Allen, B., Davis, L., & Senior, A. M. (1997). Task performance of Black and White children across levels of presentation variability. *Journal of Psychology, 131,* 427–437.

Boykin, A. W., & Thomas, F. D. (1985) Black child socialization: A conceptual framework. In H. P. McAdoo & J. H. McAdoo (Eds.), *Black children: Social, educational, and parental environments* (pp. 33–51). Newbury Park, CA: Sage.

Bronfenbrenner, U. (1967). The psychological costs of quality and equality in education. *Child Development, 38,* 909–925.

Brundtland, G. H. (2000). Towards a strategic agenda for the World Health Organization secretariat. At http//:www.who.int/director-general/speeches/english/20000124_eb.html.

Bruner, J., Oliver, R., & Greenfield, P. (1966). *Studies in cognitive growth.* New York: Wiley.

Cairns, R. B. (1983). The emergence of developmental psychology. In W. Kessen (Vol. Ed.) & P. Mussen (Series Ed.), *Handbook of child psychology: Vol. 1. History, theory, methods* (4th ed., pp. 41–102). Wiley.

Cairns, R. B. (1992). The makings of a developmental science: The contributions and intellectual heritage of James Mark Baldwin. *Developmental Psychology, 28,* 17–24.

Cairns, R. B. (1998). The making of developmental psychology. In W. Damon (Ed.), *Handbook of child psychology* (Vol. 1, 5th ed., pp. 25–105). New York: Wiley.

Canino, G., & Guarnaccia, P. (1997). Methodological challenges in the assessment of Hispanic children and adolescents. *Applied Developmental Science, 1,* 124–134.

Carmichael, L. (Ed.). (1946). *Manual of child psychology.* New York: Wiley.

Carpenter, T., & Busse, T. (1969). Development of self-concept in Negro and White welfare children. *Child Development, 40,* 935–939.

Cicchetti, D. (Ed.). (1984). Developmental psychopathology [Special issue]. *Child Development, 55,* pp. 1–314.

Cicchetti, D. (Ed.). (1989). *Rochester Symposium on Developmental Psychopathology: Vol. 1. The emergence of a discipline.* Hillsdale, NJ: Erlbaum.

Cicchetti, D. (1993). Developmental psychopathology: Reactions, reflections, projections. *Developmental Review, 13,* 471–502.

Cicchetti, D., & Aber, J. L. (Eds.). (1998). Contextualism and developmental psychopathology [Special issue]. *Development and Psychopathology, 10,* 137–426.

Cicchetti, D., & Cohen, D. J. (Eds.). (1995). *Developmental psychopathology: Vol. 1. Theory and methods.* New York: Wiley.

Cicchetti, D., & Cohen, D. J. (Eds.). (1995). *Developmental psychopatholgy: Vol. 2. Risk, disorder, and adaptation.* New York: Wiley.

Cicchetti, D., & Lynch, M. (1993). Towards an ecological/transactional model of community violence and child maltreatment. *Psychiatry, 56,* 96–118.

Cicchetti, D., & Pogge–Hesse, P. (1982). Possible contributions of the study of organically retarded persons to developmental theory. In E. Zigler & D. Balla (Eds.), *Mental retardation: The developmental-difference controversy* (pp. 277–318). Hillsdale, NJ: Erlbaum.

Cicchetti, D., & Rogosch, F. A. (1996). Equifinality and multifinality in developmental psychopathology. *Development and Psychopathology, 8,* 597–600.

Cicchetti, D., & Toth, S. L. (1998). Perspectives on research and practice in developmental psychopathology. In W. Damon (Series Ed.), *Handbook of child psychology* (5th ed., pp. 479–583). New York: Wiley.

Cole, R. (1996). *Cultural psychology.* Cambridge, MA: Harvard University Press.

Cooper, C. R., Jackson, J. F., Azmitia, M., & Lopez, E. M. (1998). Multiple selves, multiple worlds: Three useful strategies for research with ethnic minority youth on identity, relationships, and opportunity structures. In V. C. McLoyd & L. Steinberg (Eds.), *Studying minority adolescents conceptual, methodological, and theoretical issues* (pp. 111–125). Hillsdale, NJ: Erlbaum.

Cooper, J. M. (1934). Mental disease situations in certain cultures—A new field for research. *Journal of Abnormal and Social Psychology, 29,* 10–17.

Crystal, D. S., Chen, C., Fuligni, A. J., Stevenson, H. W., Hsu, C., Ko, H., Kitamura, S., & Kimura, S. (1994). Psychological maladjustments and academic achievement: A cross-cultural study of Japanese, Chinese, and American high school students. *Child Development, 65,* 738–753.

Damon, W. (Ed.). (1998). *Handbook of child psychology* (5th ed.). New York: Wiley.

Erkut, S., García Coll, C. T., Tropp, L. R., & Vázquez García, H. A. (1999). The dual-focus approach to creating bilingual measures. *Journal of Cross-Cultural Psychology, 30,* 206–218.

Falbo, T., & Poston, D. L. (1993). The academic, personality, and physical outcomes of only children in China. *Child Development, 64,* 18–35.

Fantuzzo, J., McDermott, P., Manz, P., Hamptom, V., & Burdick, N. (1996). The pictorial scale of perceived competence for young children: Does it work with low-income urban children? *Child Development, 67,* 1071–1084.

Faris, R. E. (1934). Some observations on the incidence of schizophrenia in primitive societies. *Journal of Abnormal and Social Psychology, 29,* 30–31.

Farver, J. M., Kim, Y. K., & Lee, Y. (1995). Cultural differences in Korean- and Anglo-American preschoolers' social interaction and play behaviors. *Child Development, 66,* 1088–1099.

Feshbach, S. (1970). Aggression. In P. H. Mussen (Ed.), *Carmichael's Manual of Child Psychology* (Vol. 2, 3rd ed., pp. 159–259). New York: Wiley.

Flannery, R. (1937). Child behavior from the standpoint of the cultural anthropologists. *Journal of Educational Sociology, 10,* 479–486.

Ford, D. Y., & Harris, J. J. (1996). Perceptions and attitudes of Black students towards school, achievement, and other educational variables. *Child Development, 67,* 1141–1152.

García Coll, C. T., Lamberty, G., Jenkins, R., McAdoo, H. P., Crnic, K., Wasik, B. H., & Vázquez García, H. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67,* 1891–1914.

García Coll, C. T., & Magnuson, K. (1999a). Cultural influences on child development: Are we ready for a paradigm shift? In C. Nelson & A. Masten (Eds.), *Minnesota Symposium on Child Psychology* (Vol. 29, pp. 1–24). Mahwah, NJ: Erlbaum.

García Coll, C. T., & Magnuson, K. (1999b). Theory and research with children of color: Implications for social policy. In H. Fitzgerald (Ed.), *Children of color: research, health, and policy issues* (pp. 283–308). New York: Garland.

García Coll, C. T., & Magnuson, K. (in press). Cultural differences as sources of developmental vulnerabilities and resources: A view from developmental research. In S. J. Meisels & J. P. Shonkoff (Eds.), *Handbook of early childhood intervention.* New York: Cambridge University Press.

García Coll, C. T., & Vazquez García, H. A. (1996). Definitions of competence during adolescence: Lessons from Puerto Rican adolescent mothers. In D. Cicchetti & S. L. Toth (Eds.), *Rochester Symposium on Developmental Psychopathology: Vol. 7: Adolescence: Opportunities and challenges* (pp. 283–308). Rochester, NY: University of Rochester Press.

Gergen, K., Culerce, A., Lock, A., & Misra, G. (1996). Psychological science in cultural context. *American Psychologist, 51,* 496–503.

Gesell, A. L. (1928). *Infancy and human growth.* New York: Macmillan.

Gray, S., & Klaus, R. (1965). An experimental preschool program for culturally deprived children. *Child Development, 36,* 887–898.

Greenfield, P. M., & Suzuki, L. K. (1998). Culture and human development: Implications for parenting, education, pediatrics, and mental health. In W. Damon (Ed.), *Handbook of child psychology* (5th ed., pp. 1059–1109). New York: Wiley.

Hallowell, A. I. (1934). Culture and mental disorder. *The Journal of Abnormal and Social Psychology, 29,* 1–9.

Harkness, S. (1992). Cross-cultural research in child development: A sample of the state of the art. *Developmental Psychology, 28,* 622–625.

Hartup, W. W. (1970). Peer interaction and social organization. In P. H. Mussen (Ed.), *Carmichael's Manual of Child Psychology* (3rd ed., Vol. 2, pp. 361–456). New York: Wiley.

Harwood, R. L. (1992). The influence of culturally derived values on Anglo and Puerto Rican mothers' perceptions of attachment behavior. *Child Development, 63,* 822–839.

Herzberger, S. D., & Hall, J. A. (1993). Consequences of retaliatory aggression against siblings and peers: Urban minority children's expectations. *Child Development, 64,* 1773–1785.

Hess, R., & Torney, J. (1962). Religion, age, and sex in children's perceptions of family authority. *Child Development, 33,* 781–789.

Hetherington, E. M. (1966). Effects of paternal absence on sex-typed behaviors in Negro and White preadolescent males. *Journal of Personality and Social Psychology, 4,* 87–91.

Hirsh, J. (1966). Cultural determinants of suicide: The perspective of the Japanese. *Mental-Hygiene, 50,* 337–339.

Hoagwood, K., & Jensen, P. S. (1997). Developmental psychopathology and the notion of culture: Introduction to the special section on "The fusion of cultural horizons: Cultural influences on the assessment of psychopathology in children and adolescents." *Applied Developmental Science, 1,* 108–112.

Iscoe, I., & Pierce–Jones, J. (1964). Divergent thinking, age, and intelligence in White and Negro children. *Child Development, 35,* 785.

Iscoe, I., Williams, M., & Harvey, J. (1964). Age, intelligence, and sex as variables in the conformity behavior of Negro and White children. *Child Development, 35,* 451–460.

Jensen, P., & Hoagwood, K. (1997). The book of names: DSM-IV in context. *Development and Psychopathology, 9,* 231–249.

Karr, C., & Wesley, F. (1966). Comparison of German and U.S. child-rearing practices. *Child Development, 37,* 715–723.

Kelley, M. L., Power, T. G., & Wimbush, D. D. (1992). Determinants of disciplinary practices in low-income Black mothers. *Child Development, 63,* 573–582.

Kerr, M., Lambert, W. W., Stattin, H., & Klackenberg–Larsson, I. (1994). Stability of inhibition in a Swedish longitudinal sample. *Child Development, 65,* 138–146.

Kleinman, A. (1988). *Rethinking psychiatry: From cultural category to personal experience.* New York: Free Press.

Kurokawa, M. (1969). Acculturation and mental health of Mennonite children. *Child Development, 40,* 869–705.

Lamb, E. O. (1930). Racial differences in bi-manual dexterity of Latin-American children. *Child Development, 1,* 204–232.

Lerner, E. (1937). New techniques for tracing cultural factors in children's personality organization. *Journal of Educational Sociology, 10,* 479–486.

LeVine, R. A. (1970). Cross-cultural study in child psychology. In P. H. Mussen (Ed.), *Carmichael's Manual of Child Psychology* (3rd ed., Vol. 2, pp. 559–612). New York: Wiley.

Lopez, S. R., & Guarnaccia, P. J. (2000). Cultural psychopathology: Uncovering the social world of mental illness. *Annual Review of Psychology, 51,* 571–598.

Luthar, S. S., Cicchetti, D., & Becker, B. (in press). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development.*

Luthar, S., & McMahon, T. (1996). Peer reputation among inner city adolescents: Structure and correlates. *Journal of Research on Adolescence, 6,* 581–603.

Manson, S., Bechtold, D., Novins, D., & Beals, J. (1997). Assessing psychopathology in American Indian and

Alaska Native children and adolescents. *Applied Developmental Science, 1,* 135–144.

McLoyd, V. C. (1990). Minority children: Introduction to the special issue. *Child Development, 61,* 263.

McLoyd, V. C., & Randolph, S. M. (1986). Secular trends in the study of Afro-American children: A review of child development, 1936–1980. *Monographs of the Society for Research in Child Development, 50*(4–5, Serial No. 211), 78–92.

McMichael, R., & Grinder, R. (1966). Children's guilt after transgression: Combined effect of exposure to American culture and ethnic background. *Child Development, 37,* 425–431.

Mead, M. (1928). *Coming of age in Samoa.* New York: Morrow Quill.

Mead, M. (1933). More comprehensive field methods. *American Anthropologist, 35,* 1–15.

Mead, M. (1946). Research on primitive children. In L. Carmichael (Ed.), *Manual of child psychology* (pp. 667–706). New York: Wiley.

Mekeel, H. S. (1935). Clinic and culture. *Journal of Abnormal Psychology, 30,* 292–300.

Mezzich, J., Kleinman, A., Fabrega, H., & Parron, D. (Eds.). (1996). *Culture and psychiatric diagnosis: A DSM-IV perspective.* Washington, DC: American Psychiatric Press.

Miller, K., & Dreger, R. (Eds.). (1973). *Comparative studies of blacks and whites in the United States.* New York: Seminar Press.

Mussen, P. H. (Ed.). (1970). *Carmichael's Manual of Child Psychology* (3rd ed.). New York: Wiley.

Ogbu, J. U. (1981). Origins of human competence; A cultural-ecological perspective. *Child Development, 52,* 413–429.

Ogbu, J. U. (1994). From cultural differences to differences in cultural frame of reference. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 365–391). Hillsdale, NJ: Erlbaum.

Parke, R. D., Ornstein, P. A., Rieser, J. J., & Zahn–Waxler, C. (Eds.). (1994). *A century of developmental psychology.* Washington, DC: American Psychological Association.

Phinney, J. S., Ferguson, D. L., & Tate, J. D. (1997). Intergroup attitudes among ethnic minority adolescents: A causal model. *Child Development, 68,* 955–969.

Rainwater, L., & Yancey, W. L. (1967). *The Moynihan Report and the politics of controversy: A trans-action social science and public policy report.* Cambridge, MA: MIT Press.

Rapp, D. W. (1961). Child rearing attitudes of mothers in Germany and the United States. *Child Development, 32,* 669–678.

Richters, J. E., & Cicchetti, D. (1993). Mark Twain meets DSM-III-R: Conduct disorder, development, and the concept of harmful dysfunction. *Development and Psychopathology, 5,* 5–29.

Rogler, L. H., Cortes, D. E., & Malgady, R. G. (1991). Acculturation and mental health status among Hispanics. *American Psychologist, 46,* 585–597.

Rowe, D. C., & Rodgers, J. L. (1997). Poverty and behavior: Are environmental measures nature and nurture? *Developmental Review, 17,* 358–375.

Sameroff, A., & Fiese, B. (1990). Transactional regulation and early interaction. In S. Meisels & J. Shonkoff (Eds.), *Handbook of early intervention* (pp. 119–149). New York: Cambridge University Press.

Sarason, I., & Doris, J. (1969). *Psychological problems in mental deficiency.* New York: Harper & Row.

Sears, R. R. (1975). Your ancients revisited: A history of child development. In E. M. Hetherington (Ed.), *Review of child development research* (Vol. 5, pp. 1–73). Chicago: University of Chicago Press.

Serafica, F. C. (1997). Psychopathology and resilience in Asian American children and adolescents. *Applied Developmental Science, 1,* 145–155.

Shweder, R. A. (1991). *Thinking through cultures: Expeditions in cultural psychology.* Cambridge: Cambridge University Press.

Shweder, R. A., Goodnow, J., Hatano, G., LeVine, R. A., Markus, H., & Miller, P. (1998). The cultural psychology of development: One mind, many mentalities. In W. Damon (Series Ed.), *Handbook of child psychology* (5th ed., Vol. 4, pp. 865–937). New York: Wiley.

Siegel, A. W., & White, S. H. (1982). The child study movement: Early growth and development of the symbolized child. *Advances in Child Behavior and Development, 17,* 233–285.

Slaughter–Defoe, D. T., Nakagawa, K., Takanishi, R., & Johnson, D. J. (1990). Toward cultural/ecological perspectives on schooling and achievement in African- and Asian-American children. *Child Development, 61,* 363–383.

Smith, M. E. (1933). A study of language development in bilingual children in Hawaii. *Psychological Bulletin, 30,* 692–693.

Spencer, M. B., Cole, S. P., DuPree, D., Glymph, A., & Pierre, P. (1993). Self-efficacy among urban African American early adolescents: Exploring issues of risk, vulnerability, and resilience. *Development and Psychopathology, 5,* 719–739.

Spencer, M. B., & DuPree, D. (1996). African American youths' ecocultural challenges and psychosocial opportunities: An alternative analysis of problem behavior outcomes. In D. Cicchetti & S. L. Toth (Eds.), *Rochester Symposium on Developmental Psychopathology: Vol. 7. Adolescence: Opportunities and challenges* (pp. 259–282). Rochester, NY: University of Rochester Press.

Spencer, M. B., & Markstrom–Adams, C. (1990). Identity processes among racial and ethnic minority children in America. *Child Development, 61,* 290–310.

Staats, A., & Butterfield, W. (1965). Treatment of nonreading in a culturally deprived juvenile delinquent: An application of reinforcement principles. *Child Development, 36,* 925–942.

Stabler, J. R., Johnson, E., Berke, M., & Baker, R. (1969) The relationship between race and perception of racially related stimuli in preschool children. *Child Development, 40,* 1233–1239.

Sullivan, M. L. (1998). Integrating qualitative and quantitative methods in the study of developmental psychopathology in context. *Development and Psychopathology, 10,* 377–393.

Tardif, T., Gelman, S. A., & Xu, F. (1999). Putting the "noun bias" in context: A comparison of English and Mandarin. *Child Development, 70,* 620–635.

Terman, L. M. (1946). Psychological sex differences. In L. Carmichael (Ed.), *Manual of child psychology* (pp. 954–1000). New York: Wiley.

Toth, S. L., & Cicchetti, D. (1999). Developmental psychopathology and child psychotherapy. In S. Russ & T. Ollendick (Eds.), *Handbook of psychotherapies*

with children and families (pp. 15–44). New York: Plenum Press.

van Ijzendoorn, M., & Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment* (pp. 713–734). New York: Guilford.

Vinden, P. C. (1996). Junín Quechua Children's Understanding of Mind. *Child Development, 67,* 1707–1716.

von Bertalanffy, L. (1968). *General system theory.* New York: Braziller.

Wachs, T. D., Bishry, Z., Sobhy, A., McCabe, G., Galal, O., & Shaheen, F. (1993). Relation of rearing environment to adaptive behavior of Egyptian toddlers. *Child Development, 64,* 586–604.

Watson, J. B. (1914). *Behavior: An introduction to comparative psychology*. New York: Holt.

Weisz, J. (1989). Culture and the development of child psychopathology. In D. Cicchetti (Ed.), *Rochester Symposium on Development Psychopathology: Vol. 1. The emergence of a discipline* (pp. 89–117). Hillsdale, NJ: Erlbaum.

Weisz, J. R., Sigman, M., Weiss, B., & Mosk, J. (1993). Parent reports of behavioral and emotional problems among children in Kenya, Thailand, and the United States. *Child Development, 64,* 98–109.

White, S. H. (1996). The relationship of developmental psychology to social policy. In E. F. Zigler, S. L. Kagan, & N. W. Hall (Eds.), *Children, families, and governments: Preparing for the twenty-first century* (pp. 409–426). New York: Cambridge University Press.

Whiting, B. B., & Whiting, J. M. W. (1975). *Children of six cultures: A psycho-cultural analysis*. Cambridge, MA: Harvard University Press.

Wilson, C. (1963). Development of ethnic attitudes in adolescence. *Child Development, 34,* 247–256.

Winsler, A., Diaz, R. M., Espinosa, L., & Rodríguez, J. L. (1999). When learning a second language does not mean losing the first: Bilingual language development in low-income, Spanish-speaking children attending bilingual preschool. *Child Development, 70,* 349–362.

Zigler, E. (1969). Developmental versus difference theories of mental retardation and the problem of motivation. *American Journal of Mental Deficiency, 73,* 536–556.

Zigler, E., & Butterfield, E. (1968). Motivational aspects of changes in IQ test performance of culturally deprived nursery school children. *Child Development, 39,* 1–14.