

Culture and Development in Children and Youth

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At the time of this writing, the United States is undergoing unprecedented growth in its racial, ethnic, and cultural diversity.¹ And over the past 10 years, it has become a reality that most parents in the United States are living in cultural milieus other than those in which they were raised.^{2,3} Thus, child and adolescent psychiatrists must approach all of their work under the presumption of multiculturalism, particularly if a broad definition of culture is chosen that is not limited to ethnic or racial makeup, but rather (as McDermott wrote in 1996) one that embraces the variable values, attitudes, beliefs, and behaviors shared by a people, and that is transmitted between generations. Multiculturalism is based on the assumption that no single “best” way exists to conceptualize human behavior or explain the realities and experiences of diverse cultural groups.² Rather, it is more useful, particularly for clinicians, to assume that everyone has a unique culture, and that cultural influences are woven into personality like a tapestry.⁴

From this perspective, three of the major tasks for clinicians include (1) developing a broad knowledge base about cross-cultural variations in child development and childrearing; (2) integrating this knowledge in a developmentally relevant way to make more informed clinical assessments and case formulations; and (3) developing a culturally sensitive attitude and therapeutic stance in all interactions with patients and families, including those of the same background as the clinician.⁵ Thus, standard assumptions about developmental trajectories may need to be reexamined when considering culture—both across and within cultures. Many contextual factors (including socioeconomic milieu, unique family history and narrative, whether from a rural or urban setting, or temperamental variations) may contribute to the expression

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of culture within a child or teen's emerging personality. When in the therapeutic engagement process, the culturally attuned clinician may benefit from adopting an ethnographic perspective. As Storck and Stoep⁶ described in a seminal paper from an earlier volume of the *Child and Adolescent Psychiatry Clinics*, the ethnographic approach in psychiatry has evolved from its anthropologic roots into a process of inquiry wherein the clinician adopts a sort of participant-observer status in the patient or family's life. This perspective is enhanced by learning the language, meanings, and community affiliations of children and their families.

With eyes and ears open, psychiatrists may engage in ethnographic fieldwork while attending family meetings, consulting at the bedside in an intensive care unit, or walking the high-school halls to consult with a treatment team. Families often must engage in the same type of ethnographic work to understand their children and to understand hospitals and clinics. As ethnographers, clinicians and parents are wondering, "What is it like for my patient/child to navigate this setting?"^{6(p138)}

HISTORICAL AND CONCEPTUAL BACKGROUND

Today there is wide recognition that cultural values and beliefs are transmitted primarily by the family to the developing child, and later reinforced by other social institutions (eg, school, church, other religious or community institutions). Historically, however, many developmental theories tended to emphasize the commonality and invariance of child development across societies and cultures. Freud⁷ hypothesized stages of psychological development that were marked by invariability in its timing and sign-posts (such as feeding, toilet training, expression of sexual and competitive urges, and achievement of intimacy), which primarily expressed themselves within dyadic and nuclear family relationships and determined the individual's psychological outcome, and which he believed were fairly constant in their expression across different cultural settings. He also characterized emotions as primarily irrational and, along with other mental functions, invariant across cultures, with cultures primarily providing symbolic means to assist the individual in recognizing and attenuating their impact. James⁸ posited the individual having a unique sense of self that was present from birth and evolved in its scope of consciousness as the individual developed psychologically and cognitively. He viewed emotions as more rational and manageable in the normal individual, and as important motivators for social change. However, he viewed certain cultural beliefs and expressions, such as religion, as symbolic of the conflicts between individually determined drives and their prohibitions.

Among others, five important developmental theorists who have placed individual development within the context of cultural and social influence include Vygotsky, Erikson, Montessori, Bandura, and Mead. The essence of L.S. Vygotsky's work was based on the assertion that all human mental functioning is socioculturally, historically, and institutionally based, and that various individual mental phenomena have their origins in social activity. He viewed development as a process of transformation of individual functioning, while various forms of social practice became internalized.

Four domains of development were important to Vygotsky's view of development: phylogenesis, sociocultural history, ontogenesis, and microgenesis. Phylogenetically, he viewed the use of tools provided by a culture and the social organization involved in labor as the qualitative changes that advanced humans beyond the developmental capacities of primates. Socioculturally, he believed that individual mental processes have their origin in social interaction, and that a child's cultural development proceeded on two parallel and interacting planes: interpersonal and intrapsychological, with internalization of the interpsychological process then reciprocally affecting

interpersonal processes. He believed that ontogeny recapitulates phylogeny, but that its recapitulation occurred in the context of culture as the body of accumulated human knowledge and beliefs. He formulated the concept of the zone of proximal development, which was the distance between actual development, self-generated through problem-solving, and potential development, a higher level determined through problem-solving under capable adult or peer guidance. He viewed identity formation as shaped by (and shaping) action involving a complex interplay among the use of cultural tools, the sociocultural and institutional context of the action, and the purposes embedded in the action. Identity is then not a static, inflexible structure of the self, but rather a dynamic dimension or moment in action that may change from activity to activity, depending on how the activity, its purpose, form, cultural tools, and contexts are coordinated.^{9,10}

Erik Erikson's¹¹ work on psychosocial development represented an additional breakthrough in the recognition of the significance of culture in psychosocial development, in terms of both differences and similarities. He believed in psychosocial stages of development that spanned the total lifecycle and which were both biologically and socioculturally determined. Each stage had common tasks, but had variations in how these were expressed and in the timing of their expression or evolution. His major focus was on adolescence, which was not a very well-understood stage nor found to be particularly significant at that time in history.

He regarded identity formation as the central psychosocial task of adolescence and identified key aspects of optimal identity: (1) experiencing a subjective sense of comfort with the self; (2) having a sense of direction in life and a continuity of the self from the past, to the present, and to the anticipated future; and (3) expressing an identity that is affirmed by a community of important others. Erikson borrowed his basic definition of identity from James: "a subjective sense of an invigorating sameness and continuity."^{11(p19)} This sense of sameness is an inner sense of feeling active and alive, always in dynamic tension with no guarantee of permanent stability by either society (or ideology) or inner certainty.

Erikson's formulation of identity was the unity of two components: personal identity and cultural identity. This concept was in large part influenced by his observations and psychoanalytic interpretations of cultural practices, worldviews, and childrearing among Yurok and Sioux tribes. He was also influenced by Freud, whose only reference to identity was used to denote ethnicity and the impact of the subjugation of Jews in Western culture on his "clear consciousness of inner identity."^{11(p20)} Erikson described how a key problem for individuals in identity formation was the degree to which their own cultural identity is nurtured by members of their own culture and how it is validated by others in the community, in many ways foreseeing the dilemmas faced by youth from diverse cultural backgrounds living in host cultures. In this vein, he argued that the central problem for Native Americans (American Indians) was that the powerful psychological salience of their history could not be integrated with a future taught by non-Indian educators of Native American children.

Erikson was one of the first theorists who saw the importance of adolescence as the key stage for identity consolidation and the importance of racial/ethnic identity, including recognition of the value of maturational rituals in traditional cultures. At the same time, he had a negative view of non-Western adolescent achievement of personal identity formation because of the more collectivist orientation of their cultures and their de-emphasis on individualization, a psychoanalytic concept that is bound to and biased by Western culture.¹⁰

Maria Montessori considered culture an essential element in her three first planes of development. She viewed the first 3 years of life (the first part of the first phase) as

being outside morality, but as laying the groundwork for the internalization of positive religious and cultural values, empathic attitudes, and ethical behavioral patterns, with these being expanded on during ages 3 to 6 years (the second part of the first phase). Cognitively, creation of mind, the development of language, and the formation of consciousness and self-awareness are based on many basic cultural elements (as also proposed by Vygotsky) and are the precursors of identity.¹² During the second phase (ages 6–12 years), she viewed both social and cognitive development as oriented toward children learning how to live as members of their society and culture, with cultural lessons serving as an important part of learning exposure, and moral development being focused on children learning to serve self and others.¹³

The third phase (ages 12–18 years) features youth working on their social and occupational roles as not only serving the self but also society, morally working on larger ethical dilemmas and developing an orientation to serve humanity, and cognitively acquiring the skills to interact within a complex society consisting of diverse viewpoints, and also multiple technologies and sources of knowledge.¹⁴

Albert Bandura¹⁵ placed his theory of social cognitive development within the context of culture and its influence on the developing child. Unlike B.F. Skinner, Bandura believed that humans are distinguished from lower animals by cognitive abilities that enable them to shape their environment and not purely be shaped by it, with self-efficacy being the core belief that drives humans as effective agents. The concept of human agency is the construct that symbolizes the human's abilities to influence personal functioning and circumstances. His theory distinguishes three modes of agency: personal agency (which is oriented to self-regulation), proxy agency (through which people achieve desired outcomes by influencing others to act on their behalf), and collective agency, through which people work in concert to shape their environment and future. He addressed one of the key issues in cultural value orientation (individualism vs collectivism) through this concept, seeing the successful blend of these modes of agency as varying cross-culturally but not being polar opposites.

Cross-cultural variations in values systems, beliefs, roles, and behaviors, as viewed by Bandura, are variations in patterns of agency accumulated over time and reinforced by the culture and society. Developmentally, in reviewing various studies of cross-national and -cultural education, he found that children in collectivist cultures also had significant levels of perceived self-efficacy, whereas those taught within authoritarian educational systems had a lower sense of efficacy in pursuing independent learning. He also subscribes to an agentic theory of morality, in which moral reasoning is linked to moral conduct through self-regulatory mechanisms in the face of external inducements. In this view, individuals develop their own constructs of right and wrong that serve as guides for conduct, and refrain from violating these standards out of self-condemnation. However, Bandura also proposed that the individual can disengage from their standards through the use of cognitive rationalizations, including disavowal of personal agency in adverse outcomes, and that children of weak self-regulatory efficacy who easily disengage from their moral standards exhibit high levels of antisocial behaviors, regardless of whether they reside in individualistic or collectivist cultures.¹⁵

Supporting the views of these theorists, anthropologic studies of different cultures have shown significant differences in both childrearing patterns and the process of developmental progression. Despite these findings, there was a general lack of application of knowledge from anthropology to understanding culturally based developmental variations. Margaret Mead^{16,17} was a pioneer in this research, focusing mainly on male and female gender roles, child development, and temperament, and how these differed in varied cultural contexts. Her field work examining the adolescent transition of Samoan girls in the 1920s was fueled by curiosity about the problems that

American adolescents faced in their transition to adulthood. Mead concluded that adolescent rebellion and difficulties in adolescent transition are universal developmental givens but differ significantly between cultures. She concluded that Samoan teenagers transitioned smoothly into adulthood because of the values and maturational rituals of their culture. This theory led to much controversy in the United States and the West, because for the first time it placed “lesser-developed” cultures in equal or even advantageous positions in comparison. Mead’s approach was termed *culture and personality*, and sought to explain the relationship between childrearing customs and human behaviors. She saw the individual as a product of cultural values and beliefs, which shaped the person in unique ways. These cultural characteristics are learned by the individual from infancy and are reinterpreted and reinforced as the individual proceeds through subsequent developmental stages. She proposed that differences in norms and behaviors among people across different cultures are imparted from childhood, with the interaction between individuals and culture being a dynamic and complex process that results in individuals learning how to function within their society.

The major change that has occurred in recent years since the writings of Vygotsky, Erikson, Montessori, and Mead has been a greater awareness and depth of knowledge of the importance of culture in influencing patterns of human development, behavior, and identity formation and adaptation, and the adverse impact and cultural dissonance or conflict on the mental health of children and youth. This shift has been particularly true in adolescent development, in which the study of the formation of racial/ethnic identity and acculturation has shed light on their impact on mental health. See the article by Rothe and colleagues elsewhere in this issue and Pumariaga and Rothe¹⁸ review how racial/ethnic identity influences the mental health outcomes of youth and how the acculturation process has significant implications for individual and family adaptation.

CULTURE: DEVELOPMENTAL CONSIDERATIONS

Consistent with the ideas of these theorists, cultural influences are now widely recognized as having a major impact on psychological, emotional, and even cognitive development. This impact and the diversity of developmental patterns across cultures has been recognized by cultural anthropologists as having ultimate adaptive value for humans, allowing them to overcome challenges in more diverse environments and circumstances more rapidly than natural biologic evolution would have allowed. Alvard¹⁹ proposes that development is the mechanism through which humans, through observational learning of accumulated cultural knowledge, recapitulate the evolution of these adaptations.

From birth onward, cultures set out different expectations around parenting and childrearing, and different expectations of developmental progression for children at their different stages. For example, Pachter and Dworkin²⁰ found significant differences among parents from different American ethnic and immigrant groups (90 Puerto Rican, 59 African American, 69 European-American, and 37 West Indian-Caribbean) in responses for 9 of 25 developmental milestones. The differences were mainly seen among personal and social milestones, with Puerto Rican mothers expecting children to attain these milestones at a later age than other mothers, although no differences in responses were seen between Spanish- and English-speaking Puerto Rican mothers. European-American mothers expected children to take first steps and become toilet trained at a later age.

Hopkins and Westra²¹ studied 124 mothers from three cultural groups living in the same British city, asking them to give the ages at which they expected their

1-month-old infants to achieve three motor milestones. Jamaican mothers expected their infants to sit and walk much earlier than their English and Indian counterparts, whereas Indian mothers gave later estimates for crawling than those of the other two groups. The actual ages at which the abilities were attained closely reflected the cultural differences in expectations among the Jamaican, Indian, and English mothers.

Another aspect of early childhood psychological development that is highly culture-bound is that of attachment, including its degree of emotional intensity and its projection to a single primary parent versus multiple caretakers, which have been thought to be the underpinning of object relations theory.²² Outgrowths of Western concepts of attachment also include the development of transitional objects²³ and the process of psychological hatching, or separation-individuation, as critical to psychological health.²⁴ Significant evidence shows that all of these concepts in psychological development are variable across cultures and even somewhat culture-bound. For example, Bornstein and colleagues²⁵ examined and compared characteristics of maternal responsiveness to infant activity during home-based naturalistic observations of mother-infant dyads in New York City, Paris, and Tokyo. They found that differences in maternal responsiveness across these cultures occurred in response to infant looking (at the mother) rather than infant vocalization, and in mothers emphasizing interactions within the mother-infant dyad versus outside or beyond the dyad.

Choi,²⁶ based on multiple studies, found that American culture encourages autonomous and independent behaviors from infants, whereas in Korean culture mothers expect infants to be more passive and dependent. American mothering is individually fashioned and relies on the expertise of health care providers, whereas Korean culture is highly ritualistic, so mothering is molded more by societal rules and folklore than by individual or expert design. American mothers tend to rear their infants in a nuclear family setting, whereas Korean mothers rear their infants in an extended family or a highly social environment.

Choi and Hamilton²⁷ studied infant behavior, maternal attitudes toward childrearing, and maternal-infant interaction in 39 Korean and American mother-infant dyads at 2 to 3 days after delivery. They found significant differences in the Brazelton Neonatal Behavioral Assessment Scale, including more rapid habituation by Korean infants ($P \leq .01$) and better state regulation by American infants ($P \leq .01$). On the Cohler's maternal scale, Korean mothers were found to view their infants as more passive and dependent than American mothers did. They found no differences in maternal reciprocity on the Maternal-Infant Adaptation Scale or maternal sensitivity on the Maternal-Infant Play Interaction Scale.

Van Ijzendoorn and Kroonenberg²⁸ studied almost 2000 Strange Situation classifications obtained in eight different countries. Aggregation of samples per country and continent allowed for a firmer empirical basis for cross-cultural analysis. Substantial intracultural differences were found, with samples from one country often resembling those in other countries more than their own. The data also suggested a pattern of cross-cultural differences, in which A classifications (insecure-avoidant) emerged as relatively more prevalent in Western European countries, and C classifications (insecure-resistant) more prevalent in Israel and Japan.

Applegate²⁹ reviewed the literature on the presence and nature of transitional objects across cultures, and found a wide normative sociocultural variation in transitional object attachments, as opposed to British psychoanalyst and pediatrician D.W. Winnicott's assertion of the universality of transitional object formation.²³ Rothbaum and colleagues³⁰ reviewed cross-cultural research on separation-individuation and family dynamic theory and concluded that the dynamics described in both theories

partly reflect Western ways of thinking and Western patterns of relatedness. They cite, for example, evidence from Japan that extremely close ties between mother and child are perceived as adaptive and more common, and that children experience fewer adverse effects from these relationships than do children in the West. They also found that Japan puts less emphasis on the importance of the exclusive spousal relationship and has less need for mothers and fathers to find time alone to rekindle romantic, intimate feelings and openly communicate differences to resolve conflict. They concluded that the pattern frequently cited by Western theorists as maladaptive (that consisting of an extremely close mother–child relationship, an unromantic conflictual marriage characterized by little communication, and a peripheral, distant father) may function very differently in other cultures.

During the preschool and latency periods, the teaching of primary social norms, beliefs, values, and imperatives parallels the child's continued work on emotional regulation, increased engagement in the world of peers and the educational system, and the acquisition of the beginnings of a more analytic cognitive style.¹³ Strong evidence shows that cultural context again plays significant roles in all of these processes.

For example, Farver and colleagues³¹ studied 48 Korean and 48 Anglo-American children in preschool settings to examine the role of culture in organizing children's activities and shaping their pretend-play behavior. Observers recorded the presence or absence of preselected social behaviors and levels of play complexity. Although parents completed a questionnaire about play in the home, teachers rated children's social competence and children were given the Peabody Picture Vocabulary Test-Revised (PPVT-R) and a sociometric interview. Korean parents also completed an acculturation questionnaire. The researchers found significant cultural differences in children's social interaction, play complexity, adult–child interaction and home versus preschool play, adult beliefs about play, scores on the PPVT-R, and children's social functioning with peers. The results suggest that children's social interaction and pretend play behavior are influenced by culture-specific socialization practices that serve adaptive functions.

Cole and colleagues³² studied cultural influences on children's emotional reactions by examining beliefs about revealing emotion in 223 second-, fourth-, and fifth-grade children from three cultures: Brahman (Indian), Tamang (Nepali), and the United States. Interviewers asked descriptions of how children would feel, whether they would want others to know their feelings, why they would or would not, and what they would do in difficult interpersonal situations. They found three distinct cultural patterns. Tamang youth were more likely to appraise difficult situations in terms of shame than were Brahman and United States children, who endorsed anger. Brahman children, however, were more likely to not communicate negative emotion than were Tamang and United States children. The responses of United States children seemed to be more problem-focused and action-oriented than those of Brahman and Tamang children. Age influenced the degree to which children used emotion-focused coping, and also affected decisions about communicating anger in Tamang and United States children.

Lin and Fu³³ studied the mothers and fathers of 138 children enrolled in kindergarten, first grade, and second grade in Taiwan and the United States to investigate differences and similarities in childrearing practices among second-generation Chinese, immigrant Chinese, and Caucasian-American parents. They focused on parental control, encouragement of independence, expression of affection, and emphasis on achievement. Using multiple analyses of variants (MANOVA's) for group differences, they found that both second-generation and immigrant Chinese parents

tended to rate higher on parental control, encouragement of independence, and emphasis on achievement than Caucasian-American parents.

In adolescence, learning and preparing for social/occupational roles and the development of a stable identity are key developmental tasks. The processes through which youth learn and internalize these roles and skills are increasingly complex, and may occasionally result in an ill-defined adolescent stage and transition process. Traditional cultures have clearer prescribed maturational rituals for youth that, even now, have been shown to be beneficial to their adaptation and mental health.³⁴ Ethnic/racial/cultural identity is one aspect of adolescent development that is highly influenced by not only the youth's culture of origin but also their multicultural milieu. Rothe and colleagues elsewhere in this issue review the roots of ethnic identity development in earlier child development. Phinney³⁵ reviewed conceptual models and research on ethnic identity in both adolescents and adults. She proposes that ethnic identity is dynamic and changing over time and context, but also recognizes that several of the definitions of ethnic identity include its achievement through an active process of decision-making and self-evaluation. Although recognizing that there have been racially and ethnically specific models of identity development and achievement, she found commonalities across these models and proposed a three-stage progression from an unexamined ethnic identity, through a period of ethnic exploration, to an achieved or committed ethnic identity. The initial stage is characterized for minorities by a preference for the dominant culture, although they may also not have been interested in ethnicity and had given it little thought (with a diffuse ethnic identity). Alternatively, they may have absorbed positive ethnic attitudes from parents or other adults, but not have thought through the issues for themselves. The second stage is often triggered by a significant experience of self-awareness of one's ethnicity, often a discrimination experience. It involves more intense immersion in one's own culture through activities such as reading, discussions, and attending or participating in ethnic-specific cultural events, and may also involve rejecting dominant group values. The end result of this process is often that the individual develops a deeper understanding and internalization of their ethnicity. This culmination requires coming to terms with two fundamental problems for ethnic minorities: (1) cultural differences between their own group and the dominant group and (2) the lower or disparaged status of their group in society.

If the dominant group in a society holds an ethnic group and its characteristics in low esteem, then ethnic group members are potentially faced with a negative social identity and ethnic self-hate. This experience can be the result of racism and xenophobia, both of which have been recognized as having adverse mental health consequences at an individual and public health level.^{36,37} Individuals may seek to avoid identification with their ethnic group by "passing" as members of the dominant group, but this solution may have negative psychological consequences and is not available to individuals who are racially distinct. Alternative solutions are to develop a sense of ethnic pride, to reinterpret characteristics deemed inferior as strengths, and to stress distinctiveness aspects of one's ethnicity.³⁵ Added challenges exist for youth who develop at the interface between their ethnic group of origin and its traditional cultural values (with social mirroring of cultural values from their family in the home environment) and the host dominant culture (with mirroring from peers and mainstream social institutions).¹⁸ Theorists have postulated that the development of a bicultural identity is the most adaptive resolution for ethnic identity, wherein individuals are rooted in their own culture but can selectively adopt traits of both traditional and host culture¹⁸ (see the article by Rothe and colleagues elsewhere in this issue for further exploration of this topic). Studies have supported that the development of a strong ethnic identity by

minority youth within a host culture³⁸ and by immigrant groups in various nations³⁹ that has bicultural elements, including ethnic and national identifications, is associated with positive adaptation.

CULTURE AND DEVELOPMENT: EMPIRIC FINDINGS

In addition to the extensive psychosocial developmental research cited, significant cross-cultural research is emerging in the areas of theory of mind, neural mapping, object representation, and emotional reactivity. *Theory of mind* is the mental representation of concepts and activities that enable humans to posit the mental states of others. One paradigm that has been used for cross-cultural research on theory of mind is the false belief paradigm (which tests whether a child can understand that another person holds a false belief once the circumstances around it have changed; for example, understanding that a child still believes that a toy is still hidden in his room even after his mother moved it).

Wellman and colleagues⁴⁰ conducted a meta-analysis of 178 separate studies examining false belief understanding, and found cross-cultural consistency in the developmental trajectory of the acquisition of false beliefs concepts. However, differences exist in timing, with some cultures being more mentalistic (ie, projecting others' mental states from their actions) in their content and expression. Vinden⁴¹ in another cross-cultural study, found that most children from various cultures eventually develop an understanding of belief as it affects behavior. Children from all cultures studied were also able to make correct desire-based judgments about emotion. However, the children from Western cultures came to understand belief-based emotion shortly after they came to understand false belief, whereas almost all children from non-Western cultures had difficulty predicting an emotion based on a false belief about the world.

Based on this research, Lillard⁴² proposes a culturally based theory of mind, in which universal attributes exist, but also cultural differences, such as behavioral attribution (or how people explain action), with many cultures invoking more situational and contextual perspectives. She proposes a model of theory of mind construction that incorporates culture, introspection, analogy, and ontogeny.

Markus and Kitayama⁴³ reported that cultural variations in self-representations (more individualistic in Westerners vs collectivist in Asian cultures) were found to affect emotional and cognitive processes. The new tools of neuroimaging are now facilitating research in cultural neuroscience to examine these differences.

Ambady and Bharucha⁴⁴ suggest a framework for this research with two objectives: cultural mapping (mapping brain function from pattern characteristics of cultures to their neural processing) and source analysis (attempts to determine the sources of observed commonalities and differences). Cultural mapping can show how the same environmental stimuli are processed differently by individuals from different cultures. Source analysis examines the source or causes of brain mappings, such as genetic heritage, impact of learning on the brain, or similarity in cultural environments.

Examples of culture mapping include differences in cognitive processes, such as different activation of numerical and nonnumerical tasks for native English speakers (perisylvian cortical areas associated with language processing) and Chinese speakers (visual premotor association area),⁴⁵ and the recruitment and activation of different brain regions for complex figure recognition (East Asian-Americans in object processing areas in the ventral visual cortex, whereas non-Asians in left occipital and fusiform areas, classically associated with figure-ground relations).⁴⁶ They also include differences in social functions, which have implications for individualistic or

collectivist object representations. Caucasians tend to have more self-referential cognitive processing of adjectives mapped solely in the medial prefrontal cortex, classically associated with self-representation, whereas Chinese individuals also map onto this area when they are processing adjectives that refer to relatives, including their mothers.⁴⁷

Chiao and colleagues⁴⁸ examined whether priming cultural values of individualism and collectivism in bicultural individuals affect neural activity in cortical midline structures underlying self-relevant processes using functional MRI (fMRI). Biculturals primed with individualistic values showed increased activation within medial prefrontal cortex (MPFC) and posterior cingulate cortex (PCC) during general self-judgments, whereas biculturals primed with collectivistic values showed increased response within MPFC and PCC during contextual self-judgments. Degree of cultural priming was positively correlated with degree of MPFC and PCC activity during culturally congruent self-judgments. These findings illustrate the dynamic influence of culture on neural representations underlying the self and, more broadly, suggest a neurobiological basis through which people acculturate, and that bicultural adaptation is cognitively based and neurally represented.

Source analysis investigations include studies on variations in cultural learning or environment, and include examining neural processing in bilinguals versus learners of a second language. For example, Pallier and colleagues⁴⁹ found that adult Koreans adopted as young children by French families (who do not recall their native language) and children who were French natives had similar patterns of activation to sentences spoken in French, Korean, or other foreign languages. However, Kovelman and colleagues⁵⁰ found that bilinguals had distinct patterns of neural activation compared with monolinguals, with both activating Broca's area, but bilinguals also activating the left inferior frontal cortex.

Some source studies have involved neural responses to fear recognition, with greater amygdalar activation⁵¹ and greater bilateral posterior superior temporal sulci recruitment⁵² when using pictures of same-culture members with both Japanese and Caucasian Americans. However, Moriguchi and colleagues⁵³ found activation to Japanese fear expressions in emotion-related areas of the brain in Caucasians who had lived in Japan for more than a year, suggesting that cultural exposure can affect neural processes for emotional expressions, and concurs with traditional tests for theory of mind that involve the inference of intentions and emotions from pictures of eyes.⁵⁴

Kobayashi and colleagues⁵⁵ studied 12 American monolingual children and 12 Japanese bilingual children with second-order false-belief story and cartoon tasks using fMRI. Although some brain regions, such as the ventromedial prefrontal cortex and precuneus, were recruited by both cultural/linguistic groups, several brain areas, including the inferior frontal gyrus and temporoparietal junction, were used in a culture/language-dependent manner during the theory of mind tasks, suggesting that the neural correlates of theory of mind may vary according to cultural/linguistic background from early in life.

Even the underlying biologic evolutionary factors in these adverse cultural processes such as discrimination and xenophobia have been studied objectively, with some developmental consequences. Animal models using multiple separations can produce social discrimination and xenophobia, such as in baby chicks^{56,57} and monkeys.^{58,59} Research has shown that negative prejudice is damaging and disruptive to social interactions and social justice.^{60,61} Prejudice has been shown to be common across cultures, time, languages, and national boundaries.⁶⁰ Some research has supported the hypothesis that prejudice is an affective state and therefore has a motivational force, usually to discharge tension or anxiety.⁶²

Prejudice is associated with stereotypes, which are beliefs and categories that are readily available and established in children's minds in early childhood before they are taught to critically evaluate perceptions.⁶³ However, some recent research also suggests that children are prone to categorization bias, with same-race facial preference being shown by infants as early as 3 months.⁶⁴ This early developmental propensity makes children highly susceptible to implicit stereotypical prejudices and rejection of the "other," especially because most racism and discrimination is now subtle rather than overt.⁶⁵

SPECIAL TOPICS/CURRENT CONTROVERSIES

Biculturalism

As Northrup and Bean⁶⁶ wrote in a seminal paper on bicultural identity formation, adolescence may be experienced as a stressful time for many youth in Western cultures, because it involves establishing a unique identity while also navigating peer group norms and societal expectations. Multiracial adolescents may face a more difficult challenge than their monoracial peers in that they must develop this new identity and decide how, or even if, they can reflect positive aspects of all heritages while simultaneously rejecting certain societal expectations and stereotypes.^{67,68} A multiracial or multiethnic heritage can further complicate this process.

By adolescence, most multiracial children have been made aware of any racial/ethnic differences between classmates and themselves. Often they are reminded of these differences as they attend school and are asked isolating questions such as "what are you?" from classmates puzzled or threatened by their racially or ethnically mixed appearance. These alienating questions often contribute to the feeling that no one understands them, not even their monoracial parents.⁶⁹ Concerns about not "fitting in" are magnified if multiracial adolescents discover that they are no longer welcome in certain peer groups because of racial issues (eg, family objections to interracial relationships^{69,70}). Additionally, some peers, and even their own parents, may pressure the adolescent to identify with only one ethnic background,⁷¹ prompting feelings of guilt or disloyalty.⁶⁸

The authors find it useful to adopt a stance, first described by Root⁶⁹ and modified by Northrup and Bean,⁶⁶ that acknowledges that biracial youth can either adopt the label that society gives them; choose to identify with both racial groups or only one of those groups; or choose to be known as multiethnic (or perhaps choose another racial group altogether). The therapist should stress that the decision is the youth's alone and that parents should be consulted but cannot make this decision for the child. Clinicians should also explain that the decision need not be made immediately and that it is acceptable to change one's mind later. The therapist should also emphasize that this decision is not to be made quickly, but rather must be thought through. They should also address parents' fears and concerns sensitively, but stress that it is essential for the child's optimal development that they be accepting and patient toward their child regardless of their choice. This process can be complicated, given the high likelihood that both parents will tightly adhere to the values (cultural or otherwise) that have helped them develop as individuals.⁶⁶

LaFromboise and colleagues⁷² described some important psychological features of biculturalism. They cite Rashid,⁷³ who was among the first to define biculturalism more formally, who encouraged all Americans to strive for this attribute, "because it creates a sense of efficacy within the institutional structure of society along with a sense of pride and identification with one's ethnic roots."⁷³ LaFromboise and colleagues⁷² also proposed the idea that bicultural efficacy (the belief that one can develop and

maintain effective interpersonal relationships in two cultures) is directly related to one's ability to develop bicultural competence.

The authors believe it may also have much to do with parental modeling of this construct, and can be directly related to how well the parent has either accommodated the new culture (adopted certain aspects of the new culture, while still retaining important features of the root culture, or culture of origin) or assimilated the new culture (adopted most or all of the new culture, while having cast off the previous cultural values and belief system). A related term to accommodation, *acculturation*, is used to describe the specific changes that may occur among people of different cultures after contact with one another.⁷⁴ Bornstein and Cote⁷⁴ provide a fuller discussion of these issues related to their societal contexts.

LaFromboise and colleagues⁷² further show that those who achieve this bicultural efficacy can live effectively and satisfactorily within two groups without compromising their sense of cultural identity, and furthermore, that they can also create and maintain support groups and connections to both minority and majority cultures. This bicultural efficacy may also allow the individuals to persist through periods when they may experience rejection from one or both cultures.⁷⁵ (According to the common vernacular for immigrant children and their families in the United States, *first-generation* refers to the immigrants themselves who arrived in the United States in their adulthood, *second-generation* to their children who were born and are being raised in the United States, and *generation 1.5* to the children who were born in the country of origin, usually parental, and are now being raised in the United States).

Culture and the Educational System

Another topic that has received attention in the literature is that of the culture of special education, a topic especially relevant to chronic mental health issues or behavioral problems of childhood. In a thought-provoking book on the topic, Kalyanpur and Harry⁷⁶ highlight the potential impact of unrecognized (or underrecognized) cultural assumptions that may influence family–professional staff interactions.

The pernicious effect of these assumptions becomes apparent when considering that the recognition of the cultural basis of one's actions, although a difficult process for service providers, is doubly so for parents who may be struggling with the maze of special education procedures, terminologies, and programs. Parent–professional discourse in special education requires a level of articulation and awareness that even middle-income parents, whose “language” may be similar to those of the professionals, find difficult to acquire⁷⁷; families that do not share the same understandings are at a further disadvantage.^{78(p83)}

That adolescents would choose to affiliate or identify with specific peer groupings is not surprising. What is curious is to see how frequently some teenagers will change peer groups during the course of a junior high or high-school career. Frequently, when racially mixed schools are examined for the degree of integration that actually occurs, it may be surprising to learn that self-segregation with racially and ethnically similar teens is more the rule than the exception.⁷⁹ Self-segregation in schools has been a topic that has caught the attention of the popular media, and has been studied formally and described recently by Rodkin and colleagues.⁸⁰

In a study of approximately 750 mostly third and fourth graders in nine elementary schools in Illinois, African American children who self-segregated were more popular than African Americans who had Caucasian friends. For white children, in contrast, self-segregating seemed to hurt their popularity. The authors commented that 20 or 30 years ago, “no black kids would have been seen as popular by white kids—and

few black kids would have had social influence. Black kids would not have been setting the social standard, schoolwide. [In this study] it appears that they are."⁷⁹

Resilience

In an influential paper examining the cultural aspects of resilience, Cameron and colleagues⁸¹ describe the "scaffolding" that characterizes successful adaptation to adversity across cultures, which includes familial, environmental, cultural, social, psychological, and physiologic processes. Using an attachment paradigm, the authors cite international data^{82,83} supporting the idea that "children [and youth] seen by their communities as resilient demonstrate complexity in how they negotiate relational resources to protect themselves against personal and environmental stressors."⁸¹(p296) The authors identified seven "tensions" requiring resolution to achieve healthy psychosocial development by the end of adolescence⁸¹(pp296-7):

1. Access to material resources: The availability of structural provisions, including financial assistance and education, and the provision of basic instrumental needs (eg, food, shelter, clothing, access to medical care, and employment) is a function of the security of family, peer, and community relationships. Although primary caregivers are key to ensuring availability, they are not able to provide everything engaged adolescents requires as their needs become more complex.
2. Relationships: Study participants used the matrix of their relationships to negotiate access to the resources necessary to cope with their surroundings. These relationships included networks of family members, peers, adults in their communities, teachers, mentors, role models, intimate partners, and even enemies who could be manipulated to achieve status-related goals, such as being perceived as powerful or empathetic.
3. Identity: A sense of individuality has to be negotiated through relationships with others. Assertions such as "I am," "I believe," and "I feel" are ways youth reify a bounded sense of self. The process of this identity formation, however, was described as one of co-construction through mutual discursive spaces.
4. Cohesion: In contrast to the theme of individuality, participants identified the need to balance one's sense of responsibility to self and duty to one's broader community as critical to healthy development. This construct of cohesion borrows theoretically from the social capital theory. The complexity of adolescent attachments that result from ecologic diversity demands attention to the needs of others in a reflexive process that nurtures the self.
5. Power and control: Attachments at multiple ecologic levels bring with them the basis for shared and agentic experiences of power to make decisions, and the control to enact them. These experiences, like those of the 2-year-old child who negotiates roots and wings, must be found through interactions in shared relational spaces.
6. Cultural adherence: Adherence, or standing in opposition to cultural norms, demands complex negotiations with caregivers and communities. Culture clashes between localized family and cultural norms and global culture (often synonymous with popular culture) is a function of the relationships experienced by the youth.
7. Social justice: In the expanding topography of children's relationships, they develop the capacity to individually and collectively assert their rights. Experiences of prejudice and dynamics of sociopolitical disenfranchisement that often come with exposure to risk (such as poverty, disability, or racial prejudice) can be catalysts for conscientization and resistance.

Other Influences on Development

According to a recent qualitative research review by Houskamp and colleagues,⁸⁴ most children in the United States consider themselves spiritual beings, and therefore clinicians should ask about a child's spiritual or religious life. Furthermore, families may benefit greatly when clinicians use spiritual or religious resources as adjuncts in treatment if these are perceived as helpful for the family or child in coping better with the current situation.

In a useful article on worldview in psychiatric practice,⁸⁵ Josephson and Wiesner⁸⁶ offer thoughtful and researched-based recommendations regarding the clinician's role. They highlight a brief screen to help structure questions better, with the acronym FICA—*F* represents the question, "is religious *faith* an important part of your day-to-day or weekly life?" This question could be followed by other questions about formal religious affiliation and level of spirituality. *I* represents the question, "How has faith *influenced* your life, past and present?" This question may uncover important spiritual experiences. *C* represents the question, "Are you currently (or is your family) a part of a religious or spiritual *community*?" This question can help clarify the role a spiritual community might play in treatment interventions. Finally, *A* represents the question, "What are the spiritual needs that you would like me to *address*?" This question allows the clinician to identify spiritual areas that may become part of a treatment plan.

Another approach involves the use of two screening questions developed by Matthews⁸⁷: "Is religion or spirituality important to you (your child/teen)?" and "What can I do to support your faith or religious commitment?"

This attunement to worldview can be particularly important in the case of cross-cultural or international adoption, wherein the parents may be trying to raise a child with as much cultural adaptation as possible, but for whom familiarity with a child's ethnocultural origins may be limited. Recent investigation and policy statements in this area, although not without controversy, have kept the discussion of cultural attunement and sensitivity in cross-cultural parenting and adoption very active.^{88–90}

From Vonk's comprehensive review,⁹¹ three main principles that can lead to the most culturally effective parenting include:

1. Multicultural or racial awareness: Knowledge of how the variables of race, ethnicity, culture, language, and related power status operate in one's own and other's lives,⁹² including an understanding of the dynamics of racism, oppression, and other forms of discrimination.⁹³
2. Multicultural planning: Active pursuit of opportunities for transracially adopted children to learn about and participate in their culture of birth. Although socialization in the culture of one's racial group is generally congruent with the racial makeup of the family, this is not the case in families formed through transracial adoption. Furthermore, if the family is involved in other groups, such as neighborhoods, schools, and churches that are exclusively or primarily made up of European Americans, the child has no access to others of his or her birth culture. This dynamic seems to make it difficult for some adoptees to identify with and develop pride in their race, ethnicity, or culture of birth.⁹¹
3. Survival skills: The recognition of the need for parents to prepare their children to cope successfully with racism. This skill is as important for transracial adoptees as for children with same-race parents, but may be more difficult to learn from European American parents who have had little experience of racism directed toward them. Minimizing or ignoring racial incidents is insufficient for children who may find themselves at the receiving end of racially based prejudice or discrimination. These children need help to develop a strong self-images despite racism.⁹¹

RECOMMENDATIONS FOR PRACTICE

This article attempted to highlight some of the most important research in culture and child development. The recognition of diverse normative patterns of development and parenting in any clinical evaluation is a crucial finding in much cross-cultural work. Other areas in which the child and adolescent clinician can be especially useful include providing support for traditional patterns of parenting while informing parents when certain behaviors cross legal or moral boundaries established by the mainstream society, and engaging child-serving agencies (schools, youth organizations, child welfare, juvenile justice) around normative developmental differences to help these agencies' staffs serve youth in a more culturally attuned manner. Storck and Stoep,⁶ in their paper on ecologic perspectives in child and adolescent psychiatry, sum up these clinicians' roles as advocates, pediatric ethnographers, and culturally curious clinicians:

"The child psychiatrist's aim is to help a child successfully navigate his or her world. To accomplish this aim, we must ensure that our intervention strategies work effectively not only within the confines of our offices or hospital, but also in the child's real world zones [emphasis added]. In vivo observation of the adaptive repertoires of a young person in day-to-day realms broadens the provider's understanding of the variables (ecologic forces) that influence the patient's thoughts, emotions and behaviors. Observations made in family, treatment, and community settings can be the nutrients and fuel for clinicians as they build a professional repertoire of generalizable understandings, behavioral skills, and shareable vignettes that may be useful for decades to come. Helping patients to develop their own ethnographic skills also can improve their life navigation abilities."^{6(p139)}

(*Ethnopediatrics* as a field represents the contribution of mental health clinicians and researchers, anthropologists, and pediatricians who engage in the comparative study of parents and infants across cultures to explore the way different caretaking styles affect the health, well-being, and survival of infants and children. Small provides a more detailed discussion of this topic in *Our Babies, Ourselves: How Biology and Culture Shape the Way We Parent*.⁹⁴)

FUTURE CONSIDERATIONS/AREAS FOR FURTHER RESEARCH

The developmental theories and constructs proposed by Vygotsky, Erikson, Montessori, Bandura, and Mead have stood the test of science particularly well, not only through field observational research with normal children but also more recently through research using neuroimaging and neuropsychological tools. However, a significant need still exists to integrate the perspectives of these theorists and to support or modify research findings into a unified theory of child and human development that truly integrates neurobiological, cultural, psychological, and social aspects and their interrelationships. Such a unifying theory would greatly facilitate cross-cultural and -national research on child development and also inform developmental aspects of psychopathology across different cultures and societies, while also helping to guide preventive and clinical interventions.

In addition to providing a more integrative conceptual foundation, a great need also exists for continued research on brain development and neural encoding of cultural patterns. Areas of important research include the role of critical periods in the development of language and cultural awareness, the role of culture and language in shaping cognitive and emotional constructs and functions, and the impact of

a more heterogeneous cultural environment on development and the makeup of ethnic/racial identity and on cognitive development and its mapping. Research on the interface between culture and development has significant clinical applications in addressing the adverse consequences of cultural transition, geographic dislocation, trauma, and acculturation stress on the developing child. However, it has equally important value in helping develop the basis of effective preventive interventions to strengthen ethnic identity in diverse cultural groups of children and adolescents (thus enhancing their psychosocial resilience), and in preventing stereotypical patterns of thought that contribute to racism and xenophobia. These preventive approaches addressing the normal child's comfort with multicultural environments and diverse peers may need to be core elements of bully-prevention programs, as recent incidents involving the victimization of immigrant children (including white immigrants) and gay/lesbian children have illustrated.⁹⁵

An added area of research is posed by the findings of the positive neurodevelopmental impact of bilingualism and multilingualism, suggesting that bilinguals have greater cognitive and neural flexibility.⁴⁸ This exploration has major implications for the United States, which is one of the few nations that emphasizes the learning of a single language in its educational system, and continually experiences public battles over the use of a single language in business transactions and day-to-day life. If the United States were to remain one of the few monolingual nations in a planet of polyglots, this may pose serious adverse consequences to the nation's intellectual and economic health, internal social harmony, international relations, and mental health. This possibility suggests the potential adaptive and preventive value of universal multilingual education in increasing multicultural effectiveness, including preventing prejudice, reducing the mental health risks associated with acculturation, and even enhancing the cognitive capabilities of the nation's children and youth in general.

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