Language, Culture, and Adaptation in Immigrant Children

Claudio O. Toppelberg, MD\textsuperscript{a,b,c,},*, Brian A. Collins, PhD\textsuperscript{d}

KEYWORDS
• Dual language • Minority • Immigrant • Bilingual
• Psychopathology • Development

OVERVIEW

In this article the authors first discuss why it is crucial, from a clinical and public health perspective, to better understand the development as well as risk and protection processes for the mental health of immigrant children. This article focuses on Latino immigrant children because they represent the majority of immigrant children in America and it is a way to illustrate the risks and circumstances that are potentially shared by other immigrant groups. The authors then shift focus to the main tenet of this article, namely, that specific aspects of the dual language development of immigrant children are highly relevant to their mental health and adaptation. This argument is illustrated with the case of Latino immigrant children. Finally, the authors differentiate dual language development and its mental health impact from the dual-culture (bicultural) development and circumstance of immigrant children.

BACKGROUND: LATINO CHILD IMMIGRATION TO THE UNITED STATES

Demographic Significance of Child Immigration

America is currently experiencing the largest wave of child immigration in its history. Children of immigrants constitute the largest minority and the fastest growing segment of the US child population.\textsuperscript{1,2} One out of 7 children was from an immigrant family in 1990, more than 1 out of 5 children has such a background in 2010, and it is estimated

This study was supported primarily by National Institute of Mental Health grant number K01 MH01947-01A2 and by an Early Investigator Grant from the American Academy of Child and Adolescent Psychiatry.

\textsuperscript{a} Child Language & Developmental Psychiatry Research Lab, Judge Baker Children’s Center, 53 Parker Hill Avenue, Boston, MA 02120-3225, USA
\textsuperscript{b} Manville School, Judge Baker Children’s Center, 53 Parker Hill Avenue, Boston, MA 02120-3225, USA
\textsuperscript{c} Harvard Medical School, 25 Shattuck Street, Boston, MA 02115, USA
\textsuperscript{d} Hunter College, 695 Park Avenue, W1023, New York, NY 10065, USA
\* Corresponding author. Child Language & Developmental Psychiatry Research Lab, Judge Baker Children’s Center, 53 Parker Hill Avenue, Boston, MA 02120-3225.

E-mail address: topi@hms.harvard.edu

doi:10.1016/j.chc.2010.07.003
childpsych.theclinics.com

1056-4993/10/$ – see front matter © 2010 Elsevier Inc. All rights reserved.
that these figures will rise to 1 out of 3 children by the year 2020.\(^3\) There is a significant 3-way overlap between Latino, dual language, and immigrant children in the United States. The majority of Latino children come from immigrant families, and most immigrant families and children in the United States are Latino.\(^4\) Most immigrant families speak a language other than English at home (most commonly Spanish) and a large proportion of children in America grow up using 2 languages. The past 3 decades have seen a rapid increase in Latinos in the United States with their numbers more than tripling from 1970 (10 million) to 2000 (35 million).\(^4\) Latino children are already the largest minority group in schools.\(^5\)

The majority of children from immigrant families are second-generation immigrants, that is, born in the United States to 1 or 2 foreign-born parents; most US Latino youth are young (median age 12.8) and from the second generation (52%).\(^6,7\) Despite their young age and growing numbers, empirical research addressing the development, wellbeing, and mental health of children of immigrants is lacking, with most of the work focused on adolescents and adults.\(^8\)

**Public Health Significance: Risk of Depression, Suicidality, and School Failure in Latino Children**

Many children of immigrants, including Latinos, live in families exposed to multiple risk factors, such as poverty; poor schools; neighborhood violence; discrimination; and disparities in access to health care, education, and jobs.\(^9–11\) All these factors are strongly associated with low performance at school and poor psychosocial adaptation, as well as negative economic and health outcomes.\(^3,12,13\) Most of these factors have been found to be associated with high prevalence of mental disorders. In several important areas, Latino youth are at a higher emotional, behavioral, and academic risk than European American and other minority youth.\(^14,15\)

**Depression, violence, and substance abuse risk indicators**

When compared with European Americans and African Americans, Latino youth (both boys and girls) present the highest prevalence of indicators of depression (36%)\(^14\) and suicidality, including having made a suicide plan (14.5%) or attempt (11%), with this risk being astonishingly high among Latino girls.\(^14,16\) Most indicators of violence (being threatened with a weapon or being in a physical fight while on school property, missing school because of safety concerns, carrying a gun or weapon) are higher in Latino than in white and black youth.\(^14\) Latino teenagers have the highest rates of illegal injection drug abuse, methamphetamine, ecstasy, and cocaine.\(^14\) US-born Latinos may have higher behavioral problem prevalence\(^17\) and, in large epidemiologic studies, higher lifetime prevalence of mental disorders (32% to 24%)\(^18\) than foreign-born Latinos (see the later discussion about the immigrant paradox). This prevalence has led 2 prominent Latino researchers to ask the question: “What is it about living in the US that may place Latinos at risk for psychological disorders and suicidal behaviors?”\(^19\)

**Educational risk indicators**

Latinos as a group have extremely low high school graduation rates (53%),\(^20\) college graduation rates, and achievement and reading scores\(^21,22\) (at grade 11, they average grade 8 achievement levels), but the causes of such alarming educational outcomes are not fully understood. Latino children are 6 times more likely to be placed in special education services. They lag behind African Americans, European Americans, and Asian Americans in high school completion, high-technology education, and college admission. As a consequence, Latino children as a group are more likely to become or remain poor. Educational and socioeconomic status are linked to health in general and to mental health in particular.\(^9\) Although there is important overlap between
psychopathology and negative educational outcomes (for instance, depression, conduct, and antisocial disorders are associated with low educational achievement), the extent to which mental health factors contribute to high-school dropout rates and educational failure in Latino youth is unknown.

**Protective Processes and Resilience in Children of Immigrants: the Immigrant Paradox**

A multidimensional perspective on psychosocial strengths, rather than a narrow, exclusive focus on deficit and pathology, is fundamental in gaining a deeper understanding of the mental health and functioning of Latino children of immigrants. Although many immigrant families and their children face the multiple risk factors already discussed, they also bring with them several characteristics that may serve as protective factors, such as religion, community, optimism, dual frame of reference, and high valuing of education. Many children of immigrants have shown to be extremely resilient despite risk and adversity. Latino parents frequently share the goal to have their children develop instrumental competences and to preserve values related to intrapersonal (personalismo) and interpersonal (respeto) skills, family connections (familismo), the expression of affection (cariños), and the value of education (educación). These types of strengths are an important part of the traditions and values of Latinos and other immigrant groups and are widely cited in the literature.23

For a long time and based on a deficit model, it had been assumed that recent immigrants would have less favorable outcomes than their US-born immigrant and non-immigrant peers. However, recent empirical work strongly suggests exactly the opposite, namely, that recent immigrants fare better in many areas of health, a phenomenon that has come to be known as the immigrant paradox. Better physical and mental health as well as educational achievement are being documented in foreign-born Latino immigrants (first generation) compared with their US-born counterparts (second and later generations). The first generation has lower levels of depression, anxiety, and substance abuse, and higher positive adjustment than their US-born peers, in particular in those of Mexican and, to some extent, Cuban descent. As stated before, this raises the question of what it is about living in the United States that may place Latinos at higher risk.

The knowledge base on Latino and other dual language immigrant children is limited and needs to be significantly expanded. For important clinical, public health, and educational reasons, it is critical to understand risk and protective domains specific to the development of these children. Further research expanding evidence-based understanding, and leading to interventions and policy directed at young children of immigrants are critically needed. One specific area that is poorly understood is the impact of these children’s developing linguistic competence in 2 languages on their emotional/behavioral functioning and mental health.

**THE DEVELOPMENT OF DUAL LANGUAGE (BILINGUAL) COMPETENCE**

Most of the research on language development has centered on monolingual children. Although the study of children acquiring 2 or more languages is still in its early stages, significant progress made in the last 3 decades is reviewed in the section that follows.

**The Development of Dual Language Linguistic Competence**

**Domains of language development**

Language competence is composed of competences in specific domains of language development, such as phonology (the sound system), syntax and morphology (principles that govern word order and word formation), and lexicon/semantics (vocabulary,
meaning), all of which interface with language usage (pragmatics, discourse). Although first-language acquisition is a lifelong process, the majority takes place during early childhood. Language competence is not a stable construct but, rather, a fluctuating, dynamic, multidomain capacity.

The influence of the environments of the child on dual language development
Dual language development is dependent, among other factors, on the type and amount of exposure and the age at which children begin acquiring their second language. Sequential bilinguals acquire their first language (L1) during the period of rapid language acquisition before 3 years of age and a second language (L2) later. Simultaneous bilinguals acquire both languages as first languages (2 L1s). Because Latino children in the United States typically acquire Spanish as an L1 and English as an L2, most are sequential bilinguals. The term dual language children has become favored over bilingual more recently, because it does not presuppose full proficiency in both languages and it allows for the reality of individual differences in bilingual development, with wide variability of L1 and L2 competences.

Sequential bilinguals have their language competences distributed across languages, with varying degrees of skills in each language, particularly in those domains highly dependent upon language exposure, such as semantics. In this way, it would be natural to find, in Spanish/English dual language children, that vocabulary related to the school context is stronger in English, whereas that related to the home context is stronger in Spanish. This situation presents unique complexities in the mental processing of their language systems, and how these relate to their adaptational functioning and their ability to tap into protective resources.

Although it is rare for anyone to be equally proficient across all linguistic contexts and domains, high competence in both languages is possible. Also common is for bilinguals to be dominant in 1 language, but the particular configuration of language dominance varies widely. The dominant language of an individual often fluctuates over time and across contexts, so that language dominance is not stable.

Because of the assimilative forces that propel children of immigrants to learn English quickly, language shift or loss starts occurring as soon as they begin school. Second-generation immigrants are more likely to lose their first language than to remain bilingual. Contrary to the popularized (but inaccurate) belief that immigrant children are not learning English, this process of L1 loss is occurring much sooner than in prior waves of immigration, when it was more typical for the second generation to remain bilingual, and only for the third generation to become English dominant. Outside of the home, children of immigrants often start using English exclusively, and in the home, as much as they can, even when they have only learned barely enough to muddle through communication. Considering the frequent discrimination and stigmas associated with speaking a language other than English in the United States, it is understandable that children will prefer to speak the dominant, community language. This result of societal and school pressures, combined with a devalued view of the minority language, is truly unfortunate, as there is wide consensus among dual language acquisition researchers that it is not necessary for children to have to abandon their home language to develop strong competences in the second, majority language and that proficient bilingualism, a normative developmental outcome, often results in academic, cognitive, and social benefits.

The development of both the L1 and L2 is to a good extent dependent upon the level of language support and language exposure. Subtractive bilingualism tends to occur when L2 acquisition comes at the cost of the loss of the L1, when children are submersed in a majority language with limited support and exposure to their home
language (subtractive bilingual settings). Additive bilingualism, in contrast, is common in settings where substantial support for the L1 is offered as the L2 is acquired, which leads to the well-documented benefits of proficiency in 2 languages. Research from 2 decades ago suggested that increased movement toward English-language use among children of immigrants occurs primarily during the adolescent years as youths spend more time in contexts outside of the home. However, more recent research is showing a similar shift much earlier, when children first begin schooling and develop proficiency and general preference for the English language. Language shift has been evidenced as early as preschool or kindergarten, and through the elementary grades. Wong-Fillmore found that early exposure to English leads to first-language loss. The younger children are when they learn English, the greater the effect; children attending L2 preschools were subsequently more likely to be unable to speak the home language than children who attended L1 preschools. For all children, there is an established relationship between the linguistic environment at home and children’s later language competence. Children in stimulating environments show more rapid language development and maternal language abilities contribute to large variation in children’s vocabulary growth. Children from lower socioeconomic status (SES) have lower language skills and smaller vocabularies than children from higher SES. For dual language children, the linguistic environment at home is closely associated with children’s language preference, dominance, competence, and usage. It is therefore clear that the environments at home and school are influential in language development and, more specifically, the maintenance and loss of first and second languages. Societal and school pressures to lose L1 raise serious ethical concerns. Ethical concerns arise because pressing children into losing their first language and the chance of proficiency in their 2 languages means, in an increasingly globalized economy and diverse society, “to deprive them of access to important job- and life-related skills.”

The development of children’s home language may associate with strengthening of family cohesion and intimacy, parental authority, and transmission of cultural norms, all of which can lead to healthy adjustment and a strong identification and internalization of the social values of the family. Developing L2 skills is crucial for academic success and long-term social and economic well-being because children’s ability to function within the school context influences school retention, graduation rates, and continuation into higher education.

For adolescents, the wide range of media increasingly available in immigrants’ L1s (radio, television, and the Internet) may help immigrants maintain a meaningful connection to their heritage, culture, and language, but also allows increased access to aspects of American society. Likewise, prior exposure to the destination language before migration contributes to better skills in the host language upon immigration.

**Contextualized interpersonal communication skills versus decontextualized academic language proficiency**

All children typically move between language environments throughout the day, as the characteristics of language spoken differs from the classroom to other environments, with a remarkable contrast in the quality of language competences required. Language at home and the playground tends to be contextualized (ie, it contains multiple references to shared physical, family, social, affective, and communicative contexts), relying on shared knowledge (long-term memory). It is individualized for the listener, who can ask for clarification. Contextualized language thus minimizes the linguistic and cognitive processing demands. In contrast, language in the classroom tends to be decontextualized; that is, it is abstract, relies heavily on linguistic
and cognitive processing, and is detached from a common outside reference. The
message is self-contained, to be decoded by any unknown listener without reference
or assistance. Cummins formally distinguished the 2 types of language competen-
tces as basic interpersonal communicative skills (BICS; the more context rich,
less cognitively complex areas of language use, common in the home and the play-
ground) and cognitive academic linguistic proficiency (CALP; the more content
specific, cognitively demanding areas of language, typical in the classroom). The
specific relevance of this to the dual language child is that acquiring CALP in a second
language, a prerequisite for academic achievement, generally takes an extended time
(5–7 years). BICS in a second language takes much less time to develop (2–3 years)
and this superficial communicative ability may mislead adults and teachers into
thinking that the child is ready for English-only classroom placement, when in fact
the child only has interpersonal fluency, but not enough academic proficiency in
English.

**Dual language profiles and low language competence**
The language profiles of dual language children can be characterized, at a given devel-
opmental point, based on whether they have age-appropriate competence in both
languages (balanced bilinguals), age-appropriate competence in one language and
low competence the other (typically, children who are L1 or L2 dominant), or low
competence in both (low L1/L2 competence). The low L1/L2 profile is
considered here a low language competence (low LC) group, while it is also hypothe-
sized that when children dominant in one language have low LC in the other
language, they may be at risk as well. Although these children’s low LC profiles may
represent, in many cases, a stepping stone toward established balanced bilingualism
or functional language dominance, in other cases they may arguably be an early risk
indicator for persistently low LC associated with adaptational and mental health prob-
lems. The low L1/L2 profile group likely includes children with true language impair-
ments and delays, which are certainly possible in bilingual (as they are in
monolingual) children.

**DUAL LANGUAGE (BILINGUAL) LINGUISTIC COMPETENCE AND THE MENTAL HEALTH
OF CHILDREN OF IMMIGRANTS**

**Association of Language Competence and Psychosocial Adaptation**
It has been well documented that language competence is a critical contributor to the
emotional and behavioral development of monolingual children. However, less is
known about how this contribution is represented for children who speak multiple
languages. The empirical research focusing on the association between dual language
linguistic competence and mental health and emotional/behavioral functioning is
limited. Thus, the authors will first review the related research in monolingual chil-
dren and then extend the discussion to dual language children. Language compe-
tence is related to mental health in children. On the one hand, low language
competence accompanies poor adaptation and psychopathology. On the other,
good language skills are the substrate of many protective factors, such as IQ, and
communicative, social, and school competences. Low language competence has
been conventionally and operationally defined in research in monolinguals as
language delays and disorders. Empirical studies in monolinguals published in the
last decade have shown the high true comorbidity of childhood language disorders
and psychiatric disorders. Longitudinal studies show that the presence of
a language disorder predicts greater severity or prevalence of (1) attention-deficit/
hyperactivity disorder (ADHD) and externalizing disorders, (2) learning disorders,
and (3) internalizing disorders (anxiety and depression). A systematic review indicates that language deficits forecast both externalizing and internalizing problems, but that the risk for externalizing problems is significantly higher. Moreover, receptive deficits are considered to be the most potent risk factors and specifically associated with diminished social competence, and aggressive and disruptive behavior outcomes. To be sure, nonpathologic psychosocial outcomes are of importance in understanding the impact of language in children. Language competence predicts social competence, literacy skills, and school achievement.

Some pathways from language competence to adaptation and maladaptation
Child language competence has internal and interpersonal functions relevant for adaptation. In the internal sphere, language competence is a major tool for emotional, behavioral and cognitive self-regulation. For instance, private speech, the subvocalized transition from external speech to internal speech, proposed by Vygotsky as helpful to promote task-related behavior, seems to play an ample role in cognitive, behavioral, and emotional self-regulation. Semantic competence in labeling of emotions plays an important role in the regulation of emotional and affective states, as well as in practical tasks and schoolwork. Basic language processes underlie literacy and math, and subsequent school achievement. Narrative competences participate in self-image regulation and in the organization of a personal history as continuous and meaningful. A solid inner narrative can be used as a template to forecast and lend cohesion to one’s future states and reactions. Specific aspects of language, such as the development of a theory of the mind (as indicated by the emergence of narratives containing evaluative references to others), help the child to predict others’ reactions and to anticipate consequences. Similarly, certain language domain competences (for instance, grammatical development of verb tenses, lexical acquisition of categories or superordinates, narrative development of temporal anchoring and sequence chaining, and conversational skills that initiate and maintain topics) help move beyond the here and now, aiding with gratification and impulse delay.

In the interpersonal sphere, language competence is a major tool for social communication, crucial for the social navigation of the outside world, school, friendships, and family life. Pragmatic language skills allow for better gauging and fine tuning of the exchange with the environment. Verbal humor and verbal aggression are a constant of child language used to negotiate hierarchies and other roles with peers. The ability to narrate is a basic substrate of many other social skills, such as the ability to make new friends. Communicative competence is also necessary for self-agency within the family system, to negotiate with the parent and within the sibling subsystems. Communicative competence is also essential to elicit emotional responses, praise and useful feedback, to defend one’s viewpoint, and to help in processing stressful and pathogenic events. In summary, theoretical and empirical consideration point to ways specific aspects of language may underlie enhanced attentional, emotional, cognitive, affective, and behavioral functioning.

Low language competence: mechanisms and pathways to psychopathology and adaptation in bilingual children
Some intrapsychic and interpersonal implications of language for adaptation are specific to dual language children. Proficiency in 2 languages can be a promoter of cognitive and other development. Balanced bilingualism (defined as age-appropriate competences of 2 languages) and successful L2 acquisition are associated with, and may be determinants of, growth in a host of verbal and nonverbal cognitive skills, such
as metalinguistic awareness, concept formation, creativity, and cognitive flexibility (intrapsychic aspects).\textsuperscript{105,106} Balanced bilingualism is also associated with sociocultural (interpersonal) and linguistic advantages.\textsuperscript{107} The cognitive and other advantages may, in turn, result in increased adaptation and low risk for psychopathology. L1 competence plays an important role in internal labeling of emotions, regulation of inner states, and family functioning. According to a rich case study literature, each language has a differential emotional valence, and the first language (mother’s tongue) encodes and labels the first emotions and regulates early mental states.\textsuperscript{108} In this way, poor L1 may lead to emotional dysregulation (internal sphere). At home, intact interpersonal communication modulates behavior and emotions\textsuperscript{109}; hence, poor L1 may result in difficulties in family communication and loss of its protective functions,\textsuperscript{100} which in turn may add to maladaptation. As Wong Fillmore states “When parents are unable to talk to their children, they cannot easily convey to them their values, beliefs, understandings, or wisdom about how to cope with their experiences.”\textsuperscript{62}

Language competence is also a predictor of social competence and school achievement. Interpersonally, poor language skills often predict poor social skills in monolinguals as well as in bilinguals. Social competence and communicative competence are correlated.\textsuperscript{110} Language-delayed children are often poorly socialized,\textsuperscript{111} shy, aloof, or less outgoing.\textsuperscript{112} Their peer interactions are shorter and they infrequently initiate them.\textsuperscript{113} Their peers do not accept them well.\textsuperscript{114} Longitudinal studies confirm these same links.\textsuperscript{115} Communicative competence and social competence are also correlated in L2-learning children; children with poor L2 mastery are treated as babies, not spoken to and often ignored by their peers.\textsuperscript{113,116} In turn, social incompetence may lead to behavioral, mood, and anxiety problems. Moreover, L2 competence supports the child’s intrapsychic emotional/behavioral regulation and access to interpersonal resources (eg, praise by teachers and understanding rules, schoolwork, and expectations). Communication rendered ineffectual by low second-language skills may lead to the unmasking or emergence of psychopathology. The authors argue that good language skills predict growth in social adaptation and low risk of psychopathology. In addition, poor L2 skills interfere with academic performance and predict poor educational outcomes, which, in turn, feed into a cycle of maladjustment and poor behavioral/emotional outcomes. In a clinical study of psychiatrically referred Latino bilingual children, levels of academic language proficiency were extremely low, with classroom language demands considered to be extremely difficult to impossible for 40% of the children in at least 1 language, and for 19% in either language.\textsuperscript{117}

\textit{Empirical evidence for an association between low dual language competence and psychopathology}

A basic question is whether language disorders are associated with psychopathology in bilingual children as they are in monolingual children. In a study of Latino dual-language children consecutively referred to a child psychiatry clinic, estimated prevalence of language deficits (48%) and disorders (41%) was high, with most cases being of the mixed receptive-expressive type.\textsuperscript{94} These prevalences were found to be comparable to prior studies in monolingual children.\textsuperscript{98} A second question is whether levels of dual language competence are associated with psychiatric symptom severity. Several analyses of the same sample addressed this question. In a subgroup of children with clinically significant emotional/behavioral problems, the correlations between a composite of dual language competences and psychiatric scores explained 45% of the variance in total, delinquency, and social problems, and approximately 20% to 33% in externalizing, aggression, thought, and attention problems, with most associations remaining significant after controlling for the most relevant
confounds. In a different set of analyses, levels of language competence in both languages correlated to psychiatric symptom severity, explaining an average of 38% (range 28%–46%) of the variance in total, social, thought, attentional, delinquency, and aggression problems, with no significant decrease when adjusted for relevant control variables. A third set of related questions is (1) whether the language competences in each language act as a unit or independently when it comes to their associations with psychopathology and (2) whether one language is more important than the other when it comes to the relation of language competence and psychopathology. In the previous clinical study, the associations between psychopathology and language competence in each language were independent from each other, so that each language explained, overall, as much variance in psychopathology as the other, but the variances explained did not overlap, suggesting that each language plays an important role, but that the roles are differentiable, and that low competence in one language only (eg, English dominance) would be associated with psychiatric severity in this clinical sample.

To avoid the impact of selection bias in a clinically referred sample, these relations were studied in a community-based study of young Latino, dual language children recruited from urban public schools (n = 228; mean age: 6 years). Unpublished preliminary analyses of this cohort suggest the same findings of independent and robust negative associations of language competences in each language with levels of psychiatric symptoms; associations remained significant after relevant controls.

In this same community cohort, Spanish and English language competences also accounted for moderate to large portions of variance in multiple dimensions of emotional and behavioral wellbeing.

In terms of other linguistic communities, adjusting to a new culture and developing English language skills is significantly and substantially associated to immigrants’ home country of origin, even after controlling for factors related to SES. One potential reason is the linguistic distance between immigrants’ first language and English, affecting the time it takes to learn the new language as a function of the distance between the language structure of L1 and L2. One could speculate that higher demands are present for languages that are more distant, in turn affecting adaptation, although no empirical studies have, to the authors’ knowledge, explored this question.

DIFFERENCES BETWEEN DUAL-CULTURE ACQUISITION AND DUAL LANGUAGE ACQUISITION

Second culture contact may result in challenging or overwhelming demands, known as acculturative stress. Second culture contact and second language contact often co-occur, so that acculturative demands overlap with language demands. However, each one sets in motion different specialized responses. Acculturative demands are met by the immigrant’s varying degrees of bicultural competence, resulting in bicultural or monocultural adaptation (or maladaptation) with their mental health implications. Monocultural adaptation results from the immigrant’s exclusive adoption of the second, mainstream culture (assimilation) or of the ethnic, home culture (ethnic monocultural affiliation). Of the various proposed models of second culture acquisition, bicultural adaptation is considered, by the literature on minority children and adults, the healthiest and most successful overall outcome, resulting from the ability to develop and maintain competence in both cultures. In contrast, language demand is met by the child’s current dual language competence, his capacity to acquire languages, and specific protective resources supporting the child (linguistically and emotionally) in the process of second-language acquisition.
Cross-cultural research on immigrants documents large contributions of language competence to variance in acculturation\textsuperscript{123} and low language competence as a determinant of acculturative stress\textsuperscript{122} and poor social and educational outcomes.\textsuperscript{30} Acculturative stress appears to be associated with psychopathology in Latino youth,\textsuperscript{19} and language conflict may explain a good portion of the impact of acculturative stress.\textsuperscript{125} Bicultural competence of the child and family may have a protective effect, favoring bicultural adaptation. In the discussion that follows, the authors justify their particular focus on dual language competence by viewing it as closely connected to but differentiable from other components of bicultural competence.

**Cultural Competence in Bicultural Individuals**

Bicultural competence is considered the optimal outcome of the acculturation/dual culture acquisition process and is conceptualized as a multidimensional, heterogeneous construct.\textsuperscript{124} The following component dimensions of bicultural competence have been proposed: (1) language competence, (2) knowledge of cultural beliefs and values, (3) positive attitudes toward both majority and minority groups, (4) bicultural efficacy, (5) role repertoire, and (6) a sense of being grounded (ie, having support networks in both cultures).\textsuperscript{124} Thus, language competence is considered a major building block of bicultural competence; when L2 acquisition is accompanied by support of L1 maintenance, as shown by the research on bilingual programs, bicultural competence is promoted. Other research suggests that language competence explains most of the variance in acculturation,\textsuperscript{123} and views its deficits as strong determinant of acculturative stress\textsuperscript{122} and as a risk factor.\textsuperscript{30} In the authors' conceptualization, being able to communicate in the language of both worlds maximizes the child's capacity to draw upon available protective resources, while at the same time it enables an adaptive response to the language demand. Conversely, nonlinguistic aspects of bicultural competence in the child, family, and extended social environment have an important protective role in Latino children of immigrants, supporting language and cultural acquisition and minimizing distress.

Dual language competence can and should be explicitly differentiated from other nonlinguistic components of cultural competence, since it has a unique and central role within the broader construct, and its own constraints, qualities, and complexities that set it apart from other dimensions in the bicultural competence construct. Dual-language competence is differentiable from other elements of bicultural competence in at least the following 5 ways. First, the linguistic systems mobilized in L2 and bilingual acquisition are independent and involve specific strategies. Second, acculturative stress is fully conceivable and observed even in the absence of language barriers, such as in the case of nonimmigrant minorities. Third, although bicultural adaptation may ideally tend to compromise as a way of resolving cultural conflict, the conflicts between discrepant linguistic systems (eg, Spanish allows flexibility in subject-verb-object order, whereas English is rather rigid) are ideally resolved by fully differentiating the 2 languages. In bilingual acquisition, solutions of compromise are only transient, intermediate steps. In other words, bicultural adaptation tends toward synthesis and compromise as an end result, while bilingual acquisition progresses toward language-system independence, albeit often incomplete. Fourth, immigrants can gain knowledge of target cultural beliefs and values or a positive attitude more easily and quickly than they can gain the experiences that support L2 acquisition and L1 maintenance. Because of globalization and penetration of American mainstream culture in Latin America, many nonimmigrant Latin Americans develop knowledge of American cultural beliefs without ever setting foot on American soil. Fifth, although positive attitudes toward American culture are part of the motivation behind
voluntary immigration to the United States, few adult and adolescent first-generation immigrants (including highly motivated ones) become nativelike speakers of English. Group analyses show associations among various component bicultural dimensions, but stratification will likely show individual differences, such as a strong monocultural identity with high bilingual competence, or strong bicultural knowledge of cultural beliefs without accompanying bilingual competence.

CLINICAL AND POLICY IMPLICATIONS

Dual language children often enter school with a wide variability of competences in their L1 and L2, and a large proportion of these children have low competences in 1 or both languages. However, many are able to meet developmental expectations during the first 2 years of school. Latino children of immigrants often grow up in linguistic isolation, enter school at a disadvantage, and experience increasing academic achievement gaps and mental health disparities over time. From a developmental perspective, the authors can suggest that supporting the development of both L1 and L2, especially during the transition from home to school, is developmentally beneficial.

It is imperative that clinicians and specialists understand the importance of recognizing the wide range of language competences young children of immigrants have in their L1 and L2. By better understanding normal and abnormal dual language development, we can develop intervention strategies to target language delays as soon as possible while also supporting the development of both languages.

Maintaining (or not) the Two Languages in Children with Language and Other Deficits

Maintaining the first language is important for guaranteeing access to family and community supports and protective factors. There has been a poorly substantiated but unfortunately common practice of recommending to parents that they discontinue exposure to one of the languages (typically the home language) when a child is facing cognitive, language, or learning delays, without consideration of the social and family consequences of this recommendation. This practice has little or no empirical support, and some research suggests that children with language impairment can be healthily exposed to and learn 2 languages, even with benign manifestations of language impairment in both languages. It may be true, nonetheless, that for individual children with language deficits or disorders, the additional cognitive and linguistic demands of dual language learning may become overwhelming. A clinical recommendation to discontinue exposure to one of the languages in children who are struggling with language learning or learning in general, or who express distress or overload on exposure to a language may then be necessary, but it is nonetheless a serious decision that, because of its lasting consequences, should not be made lightly. Such decisions should ideally involve a speech/language pathologist with expertise in assessing dual language children, consultation with the parents and others who know the child well, and an informed decision process by the parents with consideration to the family’s plans for the future. For instance, it may be crucial to maintain Spanish, for a child whose immigrant family maintains firm ties with the home country or older members of the family, or as a way to prevent family distancing caused by poor communication. When recommendations are made about abandoning one of the languages, the linguistic ability of the parents and family should be considered. It is important to maintain the richness of the linguistic environments of the child.
Instructing parents to switch to English at home, when they do not master this language, is ill advised and possibly counterproductive in most situations.

**Suspecting and Diagnosing Language Disorders in Dual Language Children**

Of considerable concern with the large and growing dual language population is how to properly recognize normal and abnormal dual language development. Both the overdiagnosis as well as the underdiagnosis of language delays of English-language learners is a persistent problem.129–132 There is a pressing need for standard guidelines in understanding normal and abnormal dual language development when using the current tests and norms recommended for assessing oral-language competence.135 An ongoing problem with the diagnosis of language delays in dual language children is that children’s English competences are often the only ones assessed. This practice renders it impossible to differentiate children who have not yet had the opportunity or the time to learn English (eg, Spanish dominant) from those that are not making significant gains despite adequate exposure because of impairments in their language-acquisition ability. A language disorder should be suspected in a dual language child, when the child is reported to be significantly behind in the understanding of both languages, when there has been significant exposure to both languages, and when there are language-based learning problems. Although it has been clearly documented that bilingualism does not cause language delay or language disorder,128 language disorders are certainly possible in bilingual children and such possibility should not be easily dismissed, and apparent delays should not instead be misattributed to the child’s bilingual condition. Auditory-verbal working memory deficits associated with ADHD134 or a language disorder135 may slow down the acquisition of a second language.

**Dual Language Assessment**

Dual language assessment is a complex task and some important conceptual and empirical progress has occurred in the last years92,93,136 to distinguish between language delays and normal dual language developmental variability.136,137 The field of language pathology has made headway in the area of determining dual language competence.133,136,138 Although research on the normal dual language development has used normed standardized measures of language competence developed for monolinguals,139–141 there are no widely accepted, normed standardized assessments of dual language competence exclusively for bilingual children. Instead, parallel measures of language competence available in multiple languages have been used. Dual language children with a regular and rich exposure to both languages exhibit similar developmental patterns and milestones as monolinguals in terms of the order of acquisition of linguistic structures.58,142,143 The interpretation of normed standardized scores of language assessments with monolingual populations can be used cautiously as a reference point in the assessment of dual language children and as an indicator of reasonable approximation of age-appropriate language competence.153 Dual language children in the transitional process of language acquisition typically fall short of the monolingual normal48,144,145 because of the distributive nature of dual language acquisition (eg, vocabulary related to school is stronger in English, whereas that related to home is stronger in Spanish).46 Grammatical and other language errors made by a child learning a second language or a second English dialect (such as standard American English) should not be confused with the grammatical or lexical abnormalities of language disorders. Specialized early speech/language assessment in 2 languages is often necessary to differentiate normal dual language acquisition from language disorder.136,146
Silent Period and Selective Mutism

Children who are suddenly immersed in a second-language environment with no knowledge of the language, particularly young children, will normally go through a nonverbal period limited to the second language, which should not be confused with selective mutism. Although sudden immersion and its nonverbal period can be stressful depending on environmental support and the temperamental characteristics of the child, selective mutism typically lasts longer, appears in both languages and unfamiliar situations, and tends to be disproportionate in relation to the child’s language exposure and competence. The prevalence of selective mutism appears to be, however, higher among immigrant dual language children, and it is thus important that the clinician be familiar with features that differentiate selective mutism from the normal nonverbal period.

Educational Implications

It is important that educational approaches and policies recognize the increasing diversity in today’s schools and establish a connection between home and school by incorporating aspects of the home and community into the curriculum. For dual-language children of immigrants, adequately functioning in 2 languages at home and school may be associated with their wellbeing. Supporting the development of both L1 and L2 at school may prove to be beneficial to children’s linguistic, psychological, and academic development. Future policy decisions and educational practice should reflect the importance of the development of L1 and L2 competences in multiple domains of children’s wellbeing and academic progress.

SUMMARY

The study of dual language acquisition and how its developmental trajectories impacts the overall wellbeing and mental health of the immigrant child is in its early stages, requiring further major empirical and theoretical work. Nonetheless, several important implications can be derived from extant developmental and clinical research: (1) Decisions about discontinuing learning or exposure to one of the languages should not be made lightly and should consider the personal and family circumstances of the child; (2) Delays in language acquisition can be formally evaluated without prematurely dismissing them as normal in bilingual children. Assessments are available that allow for evaluation of bilingual children; (3) A complete language assessment will often require testing in both languages; (4) The brief, normal, nonverbal period in second-language acquisition can and should be differentiated from selective mutism; and (5) Educational, clinical, and family efforts to maintain and support the development of competence in the 2 languages of the dual language child may prove rewarding in terms of long-term wellbeing and mental health, and educational and cognitive benefits. These considerations are critical for clinicians and practitioners working with the most rapidly growing segment of the US child population, dual language children of immigrants.

ACKNOWLEDGMENTS

The first author expresses his special gratitude to his late mentor, Stuart Hauser, MD, PhD, who provided him with inspiration, insight, and support over many years of working together.
REFERENCES


86. Snow CE. The theoretical basis for relationships between language and literacy development. J Res Child Educ 1991;6(Fal).


