



# Mental Health and Latino Kids: A Research Review

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## About this Research Review

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## Abstract

Latino youth are far more likely than their peers to have mental health issues, which often go unaddressed and untreated.

Latino youth have the highest rates of suicidal behavior and suicide attempts among minority groups, and higher rates of depressive symptoms than any minority group besides Native American youth—an especially alarming situation given that Latinos younger than 18 are the fastest-growing segment of the U.S. population.

Immigration, cultural identity, poverty, and discrimination create high levels of stress among Latino youth.

Interventions to reduce family and community stressors may have a positive effect on the mental health of this population.

This research review is an assessment of available research regarding the incidence of mental health issues and the receipt of mental health services among Latino youth, the factors that contribute to stress and mental health concerns, interventions that have been developed to address these problems, and emerging policy solutions.

## **Introduction**

Currently, over 56 million Latinos live in the United States, making up almost 18 percent of the total U.S. population.

By 2060, it's projected that there will be 119 million Latinos in the U.S.<sup>1</sup>

In addition to being the largest racial or ethnic minority group in the country, Latinos are also the youngest: 17.9 million Latinos, or roughly one third of the U.S. Latino population, are under the age of 18. Even more striking, almost half of U.S.-born Latinos are younger than 18.<sup>2</sup>

Latino youth are more likely to have mental health issues than their peers, a concern that should be taken even more seriously considering the growing population of young Latinos in the U.S. Twenty-two percent of Latino youth have depressive symptoms, a rate higher than any minority group besides Native American youth.<sup>3</sup> The U.S. Office of Minority Health has found that Latina adolescents have the highest rates of suicidal ideation and suicide attempt, and, while lower than Latinas, Latino adolescent males have higher rates of suicidal ideation and suicide attempt than their white peers.<sup>4</sup> According to data from the National Latino and Asian American Study (NLAAS), most suicide attempts by Latinos occurred prior to age 18, with Latino females twice as likely as males to attempt suicide.<sup>5</sup>

Despite the high rate of mental health issues faced by Latino children and adolescents, there are disparities in how they use and receive mental health services. This research review summarizes current evidence regarding the incidence of mental health problems among Latino children compared to their peers, the utilization of mental health services among Latino children and adolescents, contributors to mental health problems among Latino children and adolescents, and the efficacy of interventions aimed at addressing these issues.

## **Methodology**

This research review summarizes available peer-reviewed scientific literature regarding the incidence and causes of mental health problems among Latino children and adolescents, disparities in the receipt of mental health services in this population, and interventions created to address these disparities.

Keyword searches were conducted in PubMed and Google Scholar. Databases were searched with key terms such as: "mental health AND Latino children," "mental health AND Latino adolescents," "suicidal behavior AND Latino adolescents," "mental health AND intervention AND Latino children," "mental health AND intervention AND Latino adolescents," "mental health AND Latino infants," "physical activity AND mental health AND Latino children," "physical activity AND mental health AND Latino adolescents," "neighborhood safety AND mental health AND Latino children," "prevention AND mental health AND Latino children," "emotional well-being AND Latino children," and "schools AND mental health AND Latino children." Article titles and abstracts were examined; relevant articles were retrieved and reviewed, regardless of the study's conclusions regarding the mental health and emotional well-being of Latino children and

adolescents. Additional articles were identified through searches of the references of the initial set of articles found through keyword searches. The studies must have stated in the study abstract and/or methods that ethnicity was considered in the analysis or must have included a high proportion of Latinos in the study population. Search limits were confined to the English language.

## **Key Research Results**

- Latino children and adolescents suffer from higher rates of depression and suicidal behavior than their peers, and they are also less likely than their white peers to receive mental health treatment.
- The migration experience causes increased stress, anxiety, and depression in Latino children.
- Latino children are exposed to several familial stressors that impact their mental health, including acculturation, parent-child culture and language discordance, defined family roles, and parenting styles.
- Community or school stressors—discrimination, poverty, bullying, and violence—are associated with symptoms of depression, anxiety, and post-traumatic stress disorder among Latino youth.
- Family stressors, community stressors, and child mental health issues interact in complex ways that require careful consideration.
- Disparities in the use and receipt of mental health services by Latino youth are influenced by multiple factors, including cultural and structural barriers.
- Interventions aimed at improving mental health symptoms through regular exercise and sports participation have demonstrated efficacy among Latino children and adolescents.
- Though research is limited, community-based interventions have shown promise in improving access to mental health supports for Latino populations.
- There is a current lack of policy regarding the mental health of Latino children, though new recommendations and models have shown early promise.

## **Studies supporting key research results**

**Latino children and adolescents suffer from higher rates of depression and suicidal behavior compared to their peers, and they are also less likely than their white peers to receive mental health treatment.**

Latino females in grades 9-12 had the highest rate of suicidal ideation, at 25.6 percent, compared to 22.8 percent among their white peers, according to the U.S. Department of Health and Human Services Office of Minority Health's assessment of Latino mental health based on results from the CDC Youth Risk Behavior Surveillance Survey (YRBSS), a self-report survey of high school students. The rate for Latino males of the same age group was much lower (12%), but it was still higher than that of white peers (11.5%). Latino females also reported the highest rate of suicide attempt (15.1% versus 9.8%), and Latino males reported a higher rate than their white peers (7.6% versus 3.7%).<sup>4</sup>

Results from the 2011 YRBSS indicated that 32.6 percent of Latino students reported feelings of hopelessness and sadness that continued for more than two weeks and resulted in decreased participation in activities they had previously enjoyed, compared to 27.2 percent of white students and 24.7 percent of black students. Survey results also indicated that 16.7 percent of Latino students had seriously considered suicide, 14.3 percent had at one point created a

suicide plan, and 10.2 percent had attempted suicide. All of these rates were higher than those reported by white and black students.<sup>6</sup>

Garcia, et al., conducted a cross-sectional study of data from the Minnesota School Survey (MSS), a population-based survey given to students in the 6<sup>th</sup>, 9<sup>th</sup>, and 12<sup>th</sup> grades in Minnesota public schools. They focused on the 3,178 students who identified as Mexican American, Puerto Rican, mixed Latino, or other Latin American in the 2004 MSS, 70 percent of whom were in the 9<sup>th</sup> grade. Suicidal ideation was reported by 40 percent of 9<sup>th</sup> grade mixed Latinas and 29 percent of Latina-only students; for males, results ranged from 15 to 20 percent. In addition, 25 percent of mixed Latinas reported increased emotional distress in the previous 30 days.<sup>7</sup>

Latino children and other racial/ethnic minority youth are less likely to receive the necessary mental health care compared with their white peers.<sup>8,9</sup> A cross-sectional study of data from the National Survey of Child and Adolescent Well-being (NSCAW) addressed mental health issues among Latino children ages 2-14 who were living with at least one biological parent (31% were preschool aged 2-5 years, 45.9% were school-aged 6-10 years, and 23.3% were adolescent 11-14 years). Of the three groups, adolescents had the highest rate of clinical need for mental health services at 60.9 percent, followed by school-aged children (38.3%) and preschool children (37.2%). However, the rate of mental health service use was also highest among adolescents: 39.1 percent reported having received mental health services in the past year, compared to school-aged children (17.3%) and preschool children (10.8%). The authors found that preschool aged children had the highest unmet need for mental health services; of the preschool children who scored within the clinical range on the Child Behavior Checklist (CBCL), 77.3 percent had not received any mental health services in the past year, compared to 75.6 percent for school-aged children and 57.9 percent for adolescents. Interestingly, preschool aged children with parents born in the U.S. were significantly more likely to have unmet mental health needs compared to those with immigrant parents (95.2 percent versus 55.6 percent), but the reverse was true of adolescents, with 73.6 percent of those born to immigrant parents having unmet mental health needs, compared to 41 percent of those with U.S.-born parents.<sup>10</sup>

A cross sectional study of data from the 2006-2012 Medical Expenditure Panel Surveys (MEPS) found that Latino children had about half of the outpatient mental health visits that their white peers had. After controlling for demographics, mental health impairment, and insurance status, Latino children had lower hospitalization rates for mental illness compared to white children, and they had lower rates of substance abuse counseling.<sup>11</sup>

Fewer black (6%) and Hispanic (8%) children than white children (14%) reported that their child had ever used mental health care services. Fewer black and Hispanic children with recent symptoms of attention-deficit/hyperactivity disorder, oppositional defiant disorder, and conduct disorder had ever utilized services compared with white children.<sup>12</sup>

### **The migration experience causes increased stress, anxiety, and depression in Latino children.**

Ko and Perreira conducted a cross-sectional study of interview data from the Latino Adolescent, Migration, Health, and Adaptation (LAMHA) project to understand the impact of immigration on the mental health of Latino children. The study included 283 pairs of first-generation Latino immigrant youth ages 12-19 and their caregivers. Participants were subjected to a survey with questions about mental health and experiences related to migration and acculturation (the process by which recent immigrants adopt cultural norms of their new country). Of these participants, 20 Latino adolescents ages 14-18, most of whom had emigrated from Mexico with

their parents within the last 5 years, were selected to engage in a more in-depth interview to discuss the three stages of the migration process—pre-migration, migration, and post-migration—and their experiences with each.<sup>13</sup>

For many, the pre-migration period was defined by economic hardship and family separation; 38 percent of caregivers were separated from their child for up to one year, and 32 percent had been separated from their child for over one year. Child respondents reported having to stay with extended family during this time, noting that it was important to have strong bonds with extended family. Stressors during the migration period included difficult travel conditions, which was reported by most adolescent and caregiver respondents, and, for adolescents, the stress of leaving the extended family they had become close to during the pre-migration period; some adolescents also reported having to travel with strangers. Although 90 percent of respondents felt that the decision was the best one for their families, only 45 percent reported being happier after migration. Post-migration stressors included changes in social status, language barrier frustration, conflicting values and attempts at acculturation, isolation, discrimination, and feelings of uncertainty about the future regarding immigration status.<sup>13</sup>

In another cross-sectional study of data from LAMHA, Potochnick and Perreira identified 254 first-generation Latinos ages of 12-19 in North Carolina. The authors used participants' interview responses to identify associations between mental health, migration stressors, and migration supports. Mental health was assessed using the Children's Depression Inventory (CDI) and the Multidimensional Anxiety Scale for Children (MASC-10). In this population of first-generation Latino youth, almost 7 percent exhibited depressive symptoms, and 29 percent reported symptoms of anxiety. Latinas were slightly more likely than their male peers to suffer from depressive symptoms. The majority (75%) of respondents reported having been separated from their parent or primary caregiver during the migration process, and the average separation period was three years. Almost one quarter of participants considered their migration experience to be stressful, and, with 60.5 percent of adolescent participants and their primary caregivers being undocumented, many noted undocumented status as a significant stressor. In addition, almost half of the participants identified discrimination as a stressor.<sup>14</sup>

Before controlling for demographics and stressors, the authors identified several unadjusted associations between mental health and stressors, including increased anxiety (OR=1.51) and depression (OR=1.44) in adolescents who were dissatisfied with migration, increased anxiety (OR=2.43) in those who had a stressful migration experience, significantly increased depression (OR=7.88) and anxiety (OR=6.27) among undocumented children with documented parents, and significant anxiety (OR=4.19) among undocumented children with undocumented parents. Unadjusted associations between mental health and supports showed a reduction in depressive symptoms related to social supports such as familism (OR=.91) and teacher support (OR=.96), though these supports had no effect on anxiety, which was reduced only by years spent in the U.S. (OR=.91). Personal motivation was found to reduce the odds of both depression (OR=.20) and anxiety (OR=.60).<sup>14</sup>

After controlling for demographics and stressors, a significant increase in the odds of reporting symptoms of depression (55.09) and anxiety (11.18) was noted among undocumented children with documented parents. A significant increase in the reporting of depressive symptoms (7.89) associated with discrimination was also seen after controlling for other stressors. A significant decrease in the reporting of depressive symptoms (OR=.66) was associated with years spent in the U.S. after controlling for other stressors. When the authors combined stressor and support measures into a single model, they found that there was no longer an association between depressive symptoms and having experienced discrimination; they also found that there was a

decreased likelihood of anxiety (OR=.28) among adolescents who felt they were involved in their family's decision to migrate.<sup>14</sup>

Ramos et al. examined data from the Boricua Youth Study, a longitudinal study of Puerto Rican youth living in Puerto Rico (n=673) and in South Bronx, NY (n=598), to determine the effects of community and family stressors on youths' internalizing symptoms (loneliness, depression, withdrawal, and anxiety). The study was conducted in three waves between 2000 and 2004, with three annual interviews in either English or Spanish. Youth participants answered questions from several different mental health schedules from the National Institute of Mental Health Diagnostic Interview Schedule for Children Version IV, including generalized anxiety, PTSD, and major depression schedules. The interview also included questions regarding discrimination and exposure to violence. Higher levels of internalizing symptoms were noted among NY youth compared to PR youth. Youth in NY were also subject to higher levels of discrimination, which was indirectly related to the higher levels of internalization ( $p < .001$ ). Interestingly, a recovery in internalizing symptoms over time was seen in those who reported higher levels of discrimination exposure at wave 1, while those who reported lower levels of exposure to discrimination had stable internalizing symptoms over time or, in some cases, an increase in these symptoms. Exposure to violence was also higher among NY youth, which was related to higher levels of internalizing symptoms at wave 1 ( $p < .01$ ).<sup>15</sup>

**Latino children are exposed to several familial stressors that impact their mental health, including acculturation, parent-child culture and language discordance, defined family roles, and parenting styles.**

Umaña-Taylor and Updegraff used data from a longitudinal study on Latino adolescents' ethnic identity to determine whether self-esteem, cultural orientation, and ethnic identity had a mediating or moderating effect on the relationship between discrimination and depression. The study included 273 Latino adolescents, 84 percent of whom identified as Mexican-American, and 72 percent of whom were born in the U.S. Participants completed a questionnaire that included questions related to self-esteem, depressive symptoms, cultural orientation, ethnic identity, and perceived discrimination. Acculturation, the process by which recent immigrants adopt cultural norms of their new country, moderated the relationship between self-esteem and discrimination for boys only. Among boys with high levels of acculturation, there was a negative relationship between self-esteem and discrimination ( $p < .01$ ). Girls on the other hand reported this negative relationship whether they had high ( $p < .01$ ) or low ( $p < .01$ ) levels of acculturation.<sup>16</sup>

In the cross-sectional study of MSS data by Garcia et al., all grade and gender groups reported greater communication with mothers than with fathers. High levels of family connectedness were least commonly reported among 9<sup>th</sup> grade mixed Latino females, who had the highest rates of suicidal ideation and emotional distress of all groups. Suicidal ideation and suicide attempts were significantly more likely to be reported by adolescents, boys and girls, whose parents were not around. In addition, significantly higher levels of emotional distress were reported by those adolescents who felt they were not able to talk to their parents. Across all groups, the odds of suicidal ideation ranged from 2.3-8 times higher for students who felt low levels of connectedness and communication within their families.<sup>7</sup>

Cordova et al. created 25 focus groups with 170 self-identified Hispanic or Latino adolescent participants ages 11-19; participants were recruited from middle schools (42%), high schools (35%) and area clinics (23%) in the Northeast and Southwest U.S. In focus groups discussions, the adolescents identified and discussed several family stressors. Participants described the stress of having to serve as family translator for non-English speaking parents, especially those

whose parents and extended family members had a general mistrust of the English language. Some participants felt that their parents were overprotective, especially compared to their non-Latino peers, and female participants felt that a focus on traditional gender roles was a stressor, as males in the household generally had more freedom and fewer family obligations. Discrepancies between adolescent and parental cultural values and levels of acculturation were also discussed as stressors for adolescents.<sup>17</sup>

Cespedes and Huey administered a questionnaire to 130 Latino students in grades 9-12 enrolled in a Los Angeles high school to evaluate the association between intrafamilial cultural discrepancy and depressive symptoms in the children of Latino immigrants. Most study participants were Mexican American or Central American, 70 percent were female, and all were ages 13-18. Latino youth completed the Acculturation Rating Scale for Mexican Americans-II from their own perspective, and then again from the perspective of a parent or caregiver; the participants also completed questions regarding gender role beliefs, cultural discrepancy, family functioning, and depression. Girls were significantly more likely than boys to think of themselves as different from their parents in their beliefs on gender roles (attitudes towards women and *machismo*, a cultural concept that presents the male as the strong, unemotional head of the house). Parent-child discrepancy regarding attitudes towards women and *machismo* were positively associated with family conflict, low family cohesion, and depressive symptoms. After forming depression and gender role composites, a significant association was noted between gender role discrepancy and depression ( $p < .05$ ); after controlling for gender role discrepancy, there was also a significant association between depression and family dysfunction ( $p < .001$ ).<sup>18</sup>

In Ramos et al.'s review of data from the Boricua Youth Study, parent-child conflict and parental monitoring were measured to determine whether these had any effect on internalizing symptoms. For both PR and NY youth, there was an association between parental monitoring and fewer internalizing symptoms. No association was noted between parent-child conflict and internalizing symptoms for either PR or NY youth.<sup>15</sup>

Manongdo et al. conducted a study at two time points to determine whether parenting behaviors could be predicted by youth mental health, and whether youth mental health could be predicted by parenting behaviors. Mexican-American adolescent participants were recruited through printed flyers and in-school announcements. There were 216 participants, ages 14-19, at Time 1 (T1), 88 of which also participated at Time 2 (T2). Youth internalizing and externalizing symptoms (anger, aggression, impulsivity) and parental behavior were evaluated using relevant inventories. Parenting behavior was classified as either supportive (defined by parental acceptance, involvement, and monitoring) or harsh (defined by firm control, harsh parenting, and inconsistent discipline). Internalizing symptoms at T1 were found to moderate the prediction of T1 harsh parental control on internalizing symptoms at T2 ( $p \leq .05$ ). Higher internalizing symptoms at T1 significantly predicted lower supportive parenting at T2, and higher externalizing symptoms at T1 significantly predicted greater harsh parental control at T2.<sup>19</sup>

Stacciarini, et al., conducted interviews with 31 pairs of Latino immigrant mothers and adolescents to determine the effect of family, community, and social environments on the mental well-being of the adolescents. The mothers ages 25 or older and spoke Spanish, and the adolescent children were ages 11-18. A *promotora*, or bilingual community health worker, interviewed the participants after receiving extensive training from the study coordinators. The *promotora* administered a questionnaire developed to assess the participants' sociodemographic and family characteristics, including family separation, and relationships between adolescents and parents. Both mother and adolescent participants thought of their migration to the U.S. as a sacrifice made by the family. Mothers expressed an expectation for

their children to become successful, as they felt the children were provided with opportunities not afforded to the parents. This expectation at times resulted in conflict, as the adolescents felt their mothers were too strict, while the mothers believed that the adolescents were not serious about fulfilling their responsibilities. In families where the parents were married, mothers and adolescents both reported positive paternal relationships, though adolescents reported that their fathers' long work hours resulted in limited communication. Negative or nonexistent paternal relationships were reported by mothers who were no longer married to the fathers. Mothers and adolescents shared feelings of pain and loneliness regarding periods of separation from family members during the migration process, especially children who emigrated at an older age, and both also feared being deported.<sup>1</sup>

In a 2015 study, Schwartz et al. created a theoretical model of acculturation that included both Latino and U.S. practices (language, culinary and peer choices), values (prioritization of self, family, and community needs), and identification (attachment to heritage). The study included 302 recently migrated Latino adolescents ages 14-17 in L.A. and Miami, with most of the L.A. population of Mexican origin, and most of the Miami population of Cuban origin. The participants were assessed on each of the acculturation measures 5 times over 2.5 years. Additionally, mental health measures such as optimism, prosocial behavior, positive parenting, and depressive symptoms were assessed at each time point. For each of the three acculturation measures, participants were given a designation of either stable (S) or increasing (I) over time. Those who were increasing at all measures (III) and those increasing in practices and values and stable in identification (IIS) had similar mental health measures, except that positive parenting was higher in the III group, and depressive symptoms were lowest in the IIS group. In addition, the SSS group had the lowest scores of all groups in positive adjustment and family relationships; this group also scored highest in depressive symptoms and had an increase in depressive symptoms over time.<sup>20</sup>

A 2008 article by Goldston et al. discussed suicidal behaviors among minority adolescent groups in the U.S., including Latinos, within a cultural context, and noted many of the factors identified in the above studies. The Latino cultural emphasis on familism (the importance of collective family goals versus individual goals), *marianismo* (demure and nurturing behavior exhibited by mothers and daughters), and *machismo* may play a role in suicidal thoughts and behaviors among Latino adolescents, especially girls, who are twice as likely as boys to attempt suicide. This is especially likely to create conflict between Latinas and their parents as the Latina adolescents assert their individualism and independence.<sup>5</sup>

Parenting styles and family dynamics affect the mental health of adolescents, but it is important to understand how these factors affect young children as well. In a cross-sectional study of data from the Early Childhood Longitudinal Study-Birth Cohort (ECLS-B), a study designed to follow a nationally representative sample of children from birth until kindergarten, Cabrera et al. analyzed data from 1,711 Latino infants who were living with married and cohabiting parents. The study measures included maternal health, child health, and child development, assessment, and psychometrics. The authors found that having married parents ( $p=.006$ ) and having a father with at least a high school education ( $p=.005$ ) were associated with higher infant cognitive scores. There was a positive association between a father's happiness in his relationship and the time he spent engaged in literacy activities with his child ( $p<.001$ ); fathers were also more engaged in caregiving activities when they had a lower household income ( $p<.01$ ), when the mother worked outside the home ( $p<.001$ ), and when the father was younger ( $p<.05$ ). Maternal happiness was found to be negatively associated with mother-child interaction ( $p<.05$ ).<sup>21</sup>

Calzada et al. used data from two independent longitudinal studies, one that drew participants from head start centers and one that drew from public schools, to determine what effect the parenting styles of Mexican and Dominican immigrant mothers had on their children's cultural socialization, school readiness, and internalizing and externalizing symptoms. The study subjects included 442 4- and 5-year old children enrolled in pre-kindergarten and kindergarten programs in New York City. Parenting styles included authoritative, characterized by negotiation, exploration, and assertion; and authoritarian, emphasizing child obedience, deference, and decorum. Acculturation, cultural socialization, child behavior, and parenting practices were all self-reported. Higher authoritarian parenting was reported by Mexican-American mothers compared to Dominican-American mothers; both groups reported similar levels of internalizing and externalizing symptoms in their children, though teachers reported that Dominican-American children exhibited higher levels of both symptoms. Dominican-American children, however, displayed significantly higher school readiness compared to Mexican-American children. The authors found that authoritarian parenting was associated with children being socialized to *respeto* (a Latino cultural value of respect), and socialization to independence (a U.S. cultural value) was associated with authoritative parenting for both Mexican and Dominican Americans. Higher socialization to independence was associated with school readiness and higher teacher-reported externalizing symptoms for Mexican American children. Authoritarian parenting had an association with parent-reported internalizing and externalizing behaviors and was associated with higher parent-reported internalizing and externalizing behaviors in Dominican-American children.<sup>22</sup>

**Community stressors—such as discrimination, poverty, and violence— and school issues—such as teacher stress bullying—are associated with symptoms of depression, anxiety, and post-traumatic stress disorder among Latino youth.**

Garcia and Lindgren recruited 53 Latino adolescents and caretakers to participate in focus groups in which participants would discuss mental health stressors. There were two focus groups each for boys, girls, mothers, and fathers. The boys' groups generally focused their discussions on racism and discrimination, particularly racial profiling. One of the boys' groups consisted of adolescents recruited from a community center with a program for truants. They discussed stressors that were not identified in the non-truant group, including gang activity, violence, and substance abuse. In the girls' groups, discrimination and immigration were identified as stressors, as were issues related to family, school, and peers. In the parent groups, both mothers and fathers focused on their parental responsibilities and how they affect their families; interestingly, the mothers discussed how both their sons and daughters were affected by stress, while the fathers tended to discuss stress as it related to themselves and to their sons.<sup>23</sup>

**Discrimination.** A cross-sectional review of data from the Children of Immigrants Longitudinal Study (CILS) by Lopez et al. found that depressive symptoms in U.S.-born Latino high school students was significantly associated with discrimination from teachers ( $p < .05$ ) and students ( $p < .05$ ). The authors also found a significant association between depressive symptoms and discrimination from other Latinos, so-called co-ethnic discrimination.<sup>24</sup>

In the cross-sectional study by Umaña-Taylor and Updegraff<sup>16</sup> involving Latino adolescents, the exploration and resolution of ethnic identity positively predicted self-esteem, which in turn exhibited a partially mediating effect on the relationship between perceived discrimination and depression. For boys and girls, perceived discrimination was associated with symptoms of depression when controlling for self-esteem. Overall, sex and perceived discrimination were

significant predictors of depressive symptoms, with girls reporting higher levels of depressive symptoms.

In interviews conducted with Latino immigrant mothers and their adolescent children, Stacciarini et al. also examined community and social factors affecting the mental health of Latino children. Adolescents (those raised in the U.S. and those who emigrated) reported feeling like outsiders in their schools, and reported having experienced overt racism and discrimination. Many of the adolescents stated that the only place in their community where they felt truly safe and welcomed was church. Undocumented status was cited by both adolescents and mothers as a constant source of fear and anxiety; mothers worried that their children's well-being would be negatively affected by their undocumented status. For adolescents, other stressors included not being able to participate in extracurricular activities due to a lack of transportation, lack of friends, family conflict, and language difficulties.<sup>25</sup>

**Violence.** Andrews et al. conducted a cross sectional study of data from the National Survey of Adolescents-Replication (NSA-R) 2005, a computer-assisted telephone interview of 3,614 youth ages 12-17, 409 of whom identified as Latino, to determine whether there were any differences in trauma-related mental health problems based on ethnicity. The authors were also interested in whether polyvictimization (having experienced multiple types or incidences of trauma, including physical and sexual assault and/or abuse and witnessed violence) and household income had any mediating effects on participants' mental health. Latino youth reported significantly greater symptoms of depression and post-traumatic stress disorder (PTSD) than their white peers ( $p < .001$ ), even after controlling for polyvictimization ( $p = .39$ ). Low-income youth in general had a greater relationship between mental health symptoms and polyvictimization.<sup>26</sup>

**Teacher stress.** School is an important factor in children's mental health and development as well. In an issue brief regarding teacher stress, Greenberg et al. observed that 46 percent of teachers reported high daily stress, which has several negative consequences, including poor teacher performance and poor student outcomes. High levels of stress among teachers is also linked to a high turnover rate, which disproportionately impacts schools in low-income neighborhoods, leading to destabilization of these schools. The disruptions to parent-teacher, student-teacher, and teacher-community relationships results in increased education inequity.<sup>27</sup>

**Bullying.** Bullying also can affect physical and emotional health and increase risk of mental health problems, headaches, problems adjusting to school or academic problems, depression, substance use, and long-term damage to self-esteem.<sup>28-30</sup> About 24.7% of African-American students, 17.2% of Hispanic students, and 9% of Asian students report being bullied at school, according to the National Center for Educational Statistics.<sup>31</sup> Race-related bullying is significantly associated with negative emotional and physical health effects.<sup>32</sup> In a study of more than 7,000 predominantly black and Latino middle- and high-school students, Peskin and colleagues found that victims of bullying reported frequent worries, sadness, nervousness, and fearfulness.<sup>33</sup> Latino parents also listed bullying as their No. 1 children's health concern, and they reported more concern than white parents about their children's stress (57% to 42%), depression (53% to 36%), and drug abuse (61% to 47%), according to a 2016 University of Michigan Health System poll.<sup>34</sup> Relatedly, school-based bullying prevention programs can decrease bullying by up to 25%, according to a Congressional Research Service report.<sup>35</sup>

**Poverty.** The proportion of black (36%) and Latino (31%) children and adolescents living in poverty was more than double that of non-Latino whites (12%) and Asians (13%) in 2016.<sup>36</sup> In a 2008 report, Hanks discussed the effects that living in an impoverished neighborhood had on Latino children. The author volunteered as a home visitor, nurse practitioner, and nursery

parent-group leader in a mixed-race (54% Latino) neighborhood in the Southwest from 1997-2004 and conducted focus groups during that time. Both adults and children reported witnessing or being the target of discrimination and harassment. Focus group participants reported frequent episodes of police harassment and being ignored by political representatives and police and transportation officials when requesting help. Parents also felt that school staff were not concerned about their children and lacked warmth.<sup>37</sup>

In a cross-sectional analysis of data from the Colorado Project on Economic Strain (CoPES), Wadsworth et al. identified a sample of 164 children ages 6-18 and their primary caregivers, 38.3 percent of whom identified as Latino. Participants in the initial CoPES study were recruited from health clinics and Head Start centers in and around Denver, Colo. To be included in the study, participant families had to have an annual income below 150 percent of the poverty line, a high debt-to-asset ratio, or to have been receiving public assistance. Questionnaire packets were mailed to families to be completed prior to a lab or home visit. The questionnaire was designed to measure family socioeconomic status (SES), poverty-related stress, symptoms of a psychological disorder, physical health, deviancy, and academic performance. Latino participants were found to experience more detrimental effects due to poverty-related stress than were African Americans, and they also reported more doctor and emergency room visits in the month prior than did whites.<sup>38</sup>

Lara-Cinisomo, et al., used data from the Project on Human Development in Chicago Neighborhoods (PHDCN) to investigate the effects of neighborhood characteristics and immigrant status on the mental health of Latino youth. Data on 1,040 Latino immigrant youth ages 9-17 were collected in two waves, from 1994-1995 and from 1997-1999. These youths were identified as first-, second-, or third-generation immigrants and lived in Chicago neighborhoods with similar immigrant concentrations, concentrated disadvantage, and residential stability. The CBCL was used to assess internalizing behaviors. At Wave 1, internalizing behavior scores were higher in first- and second-generation Latino youth compared to third-generation youth, and first-generation youth had higher levels of internalizing behaviors than the other generations due to language barrier issues and the pressures of acculturation. For this generation, significantly fewer internalizing behaviors were seen in those living in stable neighborhoods ( $p < .05$ ). Second-generation youth living in neighborhoods with residential stability had fewer internalizing behaviors, though this was not seen in first- or third-generation youth living in similar neighborhoods.<sup>39</sup>

### **Family stressors, community stressors, and child mental health issues interact in complex ways that require careful consideration.**

Interactions may also be seen between neighborhood and economic factors, parenting, and children's mental health. In a 2011 study, Gonzales, et al., analyzed data from 750 Mexican-American mothers and 467 Mexican-American fathers with children in the fifth grade who participated in a longitudinal study of Mexican-American families in the Southwest. Most of the parents were born in Mexico, while most of the children were born in the U.S. Both mothers and fathers reported perceived economic hardship and perceived neighborhood danger. Parenting behavior was reported using the Children's Report of Parental Behavior Inventory, and both mothers and children used the Diagnostic Interview Schedule for Children to report internalizing and externalizing symptoms. A negative association was seen between maternal warmth and externalizing symptoms, while maternal harsh parenting and externalizing symptoms were positively related. When mothers perceived their neighborhoods to be high in danger, a positive relationship was seen between neighborhood disadvantage and maternal warmth ( $p < .01$ ), though there was no relationship when neighborhoods were perceived to be average or low in

danger. A negative association was seen between father-reported economic hardship and paternal warmth, and economic hardship was marginally positively related to paternal harsh parenting; paternal harsh parenting was positively related to externalizing symptoms. Both maternal warmth ( $p < .05$ ) and maternal harsh parenting ( $p < .05$ ) mediated a significant positive effect of economic hardship on externalizing symptoms.<sup>40</sup>

White et al. examined data from the same study and created an integrated model to investigate the effects of neighborhood, family, and culture on the mental health of Mexican-American youth. Study measures included perceived neighborhood risk, objective neighborhood risk, cultural values, parent and family functioning, and youth mental health. There was no evidence of the mediating effects of neighborhood risk on youth mental health outcomes—the authors' first hypothesis. A second hypothesis, the contextual relevance model, suggests that the effectiveness of parenting and family functioning on youth mental health is qualified by actual, or objective, neighborhood risk rather than perceived risk. Significant effects were seen under this model; using mother-reported information, objective risk moderated the effect of maternal warmth on externalizing symptoms ( $p < .05$ ). There was no association between parental warmth and externalizing symptoms among those living in high risk neighborhoods, but among those living in good neighborhoods, there was a significant association between parental warmth and decreased externalizing symptoms ( $p < .001$ ). Living in a high-risk neighborhood was also associated with decreased externalizing ( $p < .01$ ) and internalizing ( $p < .001$ ) symptoms associated with family cohesion. A similar association between, family cohesion, internalizing symptoms, and living in a high-risk neighborhood was seen in the youth report model ( $p < .001$ ).<sup>41</sup>

A study of 90 low-income Latino middle schoolers and their primary caregivers examined the relationship between poverty-related stress (characterized by exposure to violence, economic stress, discrimination, and deteriorating family relationships), family coping, immigrant status, familism, and family ethnic socialization on the mental health of Latino adolescents. Approximately half of the study participants identified as first-generation Latinos, and 32 percent identified as immigrants; all were on a free or reduced school lunch program. Child reporting of internalizing ( $p = .03$ ) and externalizing ( $p = .04$ ) symptoms were associated with income to poverty ratio; these symptoms became somewhat limited when moderated by high levels of familism.<sup>42</sup>

### **Disparities in the use and receipt of mental health services by Latino youth are influenced by multiple factors, including cultural and structural barriers.**

Le Cook, et al., conducted a secondary analysis of data from a study of mental health-related communication skills training for medical assistants (MAs). The study took place at a federally qualified health center (FQHC) in Washington, D.C. that served a majority Latino population. The MA training consisted of three one-hour sessions, where the MAs learned to greet and orient patients, obtain relevant information from the patients, respond to the patients' concerns, and identify the reason for the patients' visits. All MAs spoke Spanish; the pediatricians at the FQHC were not native Spanish speakers, though most did speak Spanish with their patients.<sup>43</sup>

The secondary analysis included Latino parents and youth (18 months to 16 years) seeking pediatric care who were recruited and consented at the health center when they arrived for their visit. The parents were asked whether they had spoken to an MA or a doctor about their child's behaviors, feelings, academic performance, peer relationships, and family problems, and answers to the questions were tallied based on a 6-point scale. Study measures included acculturation, mental health, and income barriers. Before adjusting for sociodemographics, parents who had been in the U.S. for 10 years or more were more likely than those who had

been in the U.S. for 0-5 years to discuss their own stress issues with an MA, and parents in the U.S. from 6-10 years and greater than 10 years were also more likely to discuss how their child was performing in school. One-third of parents in the study sample reported discussing mental health problems with an MA, while two-thirds discussed these problems with a doctor. After adjusting for sociodemographic variables, a significant positive correlation was noted between the amount of time parents had lived in the U.S. and the willingness of the parents to communicate child and parent stress issues with an MA. In addition, parent-child language discordance negatively predicted discussion of these problems with an MA.<sup>43</sup>

In an article on cultural considerations in minority youth with psychosomatic problems, Goldston et al. identified several factors that influence help-seeking among Latino youth, noting that newly immigrated Latinos are much less likely to seek help due to fear of deportation. English-speaking, U.S.-born Latino youth, however, are more likely than their recently immigrated peers to attempt suicide; the authors suggest that this group may have a more difficult time receiving proper help if their non-English-speaking parents are not able to effectively communicate with non-Spanish-speaking healthcare professionals. Despite the higher rates of suicide attempts among Latino youth, these children are less likely to be identified as suicidal and are thus also less likely to receive crisis intervention services than are other minorities.<sup>5</sup> In their cross-sectional review of data from the 2006-2012 MEPS, Marrast et al. observed that, compared to non-Latino white (NLW) children, minority children (including Latinos) with behavioral or psychiatric problems are more likely to receive in-school punishment and incarceration rather than mental health care. NLW youth were also more likely to receive substance abuse counseling, with 24/1000 visits, while Latino youth accounted for only 8.5/1000 visits.<sup>11</sup> Both Goldston et al. and Marrast et al. noted structural barriers, including the lack of child psychologists practicing in low-income areas.<sup>5,11</sup>

Umpierre et al. conducted focus groups for 36 Latino caretakers of children who had been identified as having conduct difficulties in school. During these focus groups, the study authors identified five themes: caretakers considered school a source of tension; caretakers felt as though school staff was blaming them for their children's conduct issues; mental health referrals for their children were a source of tension; caretakers felt uncomfortable discussing personal family issues in a clinic setting; and they felt a sense of shame in having a child with conduct problems. The authors also noted that, when describing children's mental health problems, the caretakers often used the terms *loca* and *locura* (crazy), which started a discussion about the differences in how mental health issues are discussed in the U.S. versus the caretakers' countries of origin.<sup>44</sup>

### **Interventions aimed at improving mental health symptoms through regular exercise and sports participation have demonstrated efficacy among Latino children and adolescents.**

Several studies have demonstrated a positive relationship between physical activity and mental health among Latino children. The converse is also true. Jernigan, et al., in a study of preadolescents (46.8% Latino), found that greater negative emotional symptoms at the baseline interview predicted a significantly increased BMI at a 2-year follow-up for Latino students ( $p=.03$ ).<sup>45</sup>

In a cross-sectional review of data from the Healthy Youth/Healthy Adults study, which included 1,870 Latino and non-Latino white adolescents (77% were Latino) ages 14-18 from Nueces County, Tex., Brosnahan et al. investigated whether there was a relationship between physical activity and mental health among Latino high schoolers. Participants completed a survey that included questions about the frequency and type of physical activity they engaged in, including

sports teams and physical education classes, and questions related to experiencing feelings of sadness or suicidal thoughts. Latino girls were found to be much less likely than their white peers to engage in moderate physical activity ( $p < .001$ ), and they were also less likely to participate in team sports ( $p < .01$ ); they were more likely, however, to report depressive symptoms ( $p = .08$ ). Overall, students who reported participating in physical education classes three-to-five days a week were less likely to report feeling sad or hopeless than were those who participated two or fewer days per week, and those who reported participating in at least six sessions of physical activity a week were significantly less likely to report having suicidal thoughts.<sup>46</sup>

Using semi-structured interviews and physical activity checklists, Grieser et al. identified attitudes toward physical activity as reported by Latino girls ages 11-13 from six middle schools in the U.S. Over half of the participants stated a primary reason for participating in physical activity was to “stay in shape,” and 43 percent of participants also included socialization and being a part of a team as benefits to participation. Latino girls were more likely than white and African American girls to participate in playing catch and walking for exercise; 31 percent of Latino girls stated that swimming was their favorite way to engage in physical activity, and many also reported enjoying dance, rollerblading, and soccer. When asked what factors would prevent them from participating in physical activity, the participants identified fear of injury, sweating, and physical discomfort as reasons for abstaining.<sup>47</sup>

Melnyk, et al., conducted a pilot study of 19 Latino adolescents who were enrolled in one of two health classes at a predominantly Latino high school in the Southwestern U.S. The pilot intervention, Creating Opportunities for Personal Empowerment (COPE) Healthy Lifestyles TEEN (Thinking, Emotions, Exercise, and Nutrition), used Cognitive Behavioral Therapy (CBT) throughout the 15 sessions, and was designed to present educational information about living a healthy lifestyle while engaging in practice and role playing to set goals, solve problems, and effectively regulate emotion and behavior. Questionnaires regarding nutrition, healthy lifestyle choices, and emotional and behavioral symptoms were administered at the outset of the intervention and following its conclusion. Post-intervention, 40 percent of the participants felt that they learned to better cope with feelings of stress and anger, and were better able to relax and manage their problems constructively.<sup>48</sup>

A study of 66 Latino 4<sup>th</sup> graders (33 male and 33 female) from low-income school districts found that, compared to a control group, those who participated in three 20-minute sessions of aerobic activity per week reported greater self-esteem, and they also reported reduced levels of depression after the intervention ( $p < .05$ ). The aerobic exercise group engaged in stationary cycling, track running, or jumping on a mini-trampoline to achieve a mean training heart rate of 160 bpm for the duration of the activity, while the control group engaged in walking or foursquare to maintain a mean heart rate of 134 bpm.<sup>49</sup>

### **Though research is limited, community-based interventions have shown promise in improving mental health access for Latino populations.**

In a 2003 study, Kataoka et al., created a small-group CBT-based pilot intervention for 198 Latino immigrant students in grades 3-9 with PTSD or trauma-related depression. The intervention consisted of eight sessions led by bilingual school social workers with didactic presentations, cartoons, games, and individual worksheets for 152 participants (with 46 placed on a waitlist). Almost all participants had clinical PTSD, one-third had PTSD with depressive symptoms, and 10 percent had depressive symptoms only. Sixty-nine percent of the students reported having been exposed to knife and/or gun violence. In the intervention group,

depressive symptoms were significantly decreased ( $p < .001$ ); there was no change in the mean depressive symptom score in the waitlist group ( $p > .05$ ). A similarly significant decrease in PTSD symptoms was seen in the intervention group ( $p < .001$ ) than among the waitlist group ( $p > .05$ ).<sup>50</sup>

Dumka et al. created the Puentes program, a culturally responsive, family-based training program to help prevent school disengagement and mental health problems in Mexican-American 7<sup>th</sup> graders. The study included 516 Mexican-American families and spanned three academic school years. The program included two home visits and nine weekly sessions, which included parent and teen, family interaction, and school liaison components. A single evening discussion group of parents and teens served as the control group. A school advisory board was created to include a school administrator or teacher, a parent representative from the school, a Puentes program co-investigator, and the Puentes project director. School liaisons were appointed to facilitate parent-school communication.<sup>51</sup> A follow-up study examined the effects of the Puentes program on school engagement 2 years after the intervention, when students were in the 9<sup>th</sup> grade, and examined the mediating effects of the intervention 5 years later, when students were in the 12<sup>th</sup> grade. Follow-up study measures included school engagement, internalizing and externalizing behaviors, substance abuse, GPA, and high school dropout. Higher levels of school engagement were found in the intervention group, which led to lower rates of high school dropout, internalizing symptoms, and substance abuse.<sup>52</sup>

The Early Detection, Intervention, and Prevention of Psychosis Program (EDIPPP) is a research initiative that included a national multisite treatment study. The study evaluated an intervention for young people with a high risk of psychosis or those in the first 30 days of their first psychotic episode. The EDIPPP based the intervention on a community education and referral module that was initially created by the Portland Identification and Early Response (PIER) program. The intervention involved the creation of a network of mental health professionals and community members who were educated to recognize the early signs of psychosis, including paranoid thoughts and suspiciousness, social withdrawal, and cognitive changes; intervention outreach included formal presentations, health fairs, and conferences. The goal of the intervention was to generate rapid referrals of children at high risk of developing psychosis. Six sites were included in the EDIPPP test intervention: Portland, Maine; Salem, Ore.; Ypsilanti, Mich.; Queens, N.Y.; Sacramento, Calif.; and Albuquerque, N.M. The study required that the child and one parent be proficient in English, and this was found to be a challenge at sites with large Latino populations. However, overall, 14 percent of the referrals generated were for Latino youth, which was representative of the Latino population at most sites.<sup>53</sup>

A mental health intervention specific to preschool-aged Latino children has been developed and is currently in the pilot testing phase. Ginossar and Nelson developed this e-health intervention to address the mental health needs of Latino preschool children living in low-income communities in a border state. The authors recruited six Mexican immigrant women from a computer training class at a community-based pediatric health clinic and trained them to be *promotoras* (Latino community members trained to provide basic health information). The *promotoras* developed a website with an interactive component using their prior knowledge from the computer training class. The website educational modules included information regarding the importance of addressing mental health problems at a young age, the identification of symptoms indicative of mental health problems, common mental health problems among children, treatment for different mental health problems, and local mental health services and resources. After developing the intervention, the authors aimed to recruit 100 participants through flyers distributed in the community; those recruited will participate in five training sessions led by *promotoras*.<sup>54</sup>

**There is a current lack of policy regarding the mental health of Latino children, though new recommendations and models have shown early promise.**

In addition to the evaluation of programs and interventions dedicated to the improvement of mental health among Latino youth, there is a need for Latino-specific mental health policies at the local, state, and federal levels.

Current healthcare policy has been focused primarily on reorganization of the healthcare system and payment reform without much consideration of the factors outside of medicine that affect health. Latino mental and physical health are influenced by many factors, including neighborhood characteristics, employment, social policies, culture, and beliefs about health; the implementation of health impact assessments that evaluate the health consequences of policies, such as minimum wage laws, for example, is vital to understanding how to eliminate these disparities.<sup>55</sup>

In the meantime, recommendations from the Institute of Medicine's (IOM) unequal treatment report, including broader availability of interpreter services and economic incentives for providers for the improvement of provider-patient communication, can be adapted to mental health care. Federal policy mandating greater diversity of the mental health workforce and culturally appropriate education for providers is also necessary for the reduction of disparities in mental health.<sup>56</sup> The American Academy of Pediatrics (AAP) Task Force on Mental Health recommends that primary care providers ask patients two to three questions about behavior and functioning during every visit to identify children with behavioral health problems, allowing for preventative and interventional therapies to address these issues. While this recommendation is not specific to the Latino population, culturally-appropriate interventions and therapies can certainly be developed and implemented.<sup>57</sup>

In 2013, the ASCD and the CDC assembled an expert panel to develop a new model for a school public health framework, combining elements from the existing coordinated school health (CSH) framework, which employs a systems-based approach, and the Whole Child approach, which is focused on the student. As a result of this series of meetings, the Whole School, Whole Community, Whole Child (WSCC) framework was developed. This model combines the student-as-focal-point tenet of the Whole Child initiative with the CSH's emphasis on the school as a vital part of the community. The components of the WSCC framework include structured, formal health education; a nutritional environment that meets the federal nutrition standards of the National School Lunch, Breakfast, and Smart Snacks in School Programs; employee wellness programs; a positive social and emotional school climate; a safe physical school environment; counseling, psychological, and social services; greater community involvement; family engagement; and a comprehensive school physical activity program (CSPAP).<sup>58</sup>

This framework requires the collaborative development of policies and processes so that it can be put into action, including higher education programs that prepare school staff for the effective implementation of the WSCC model; the development and implementation of community engagement initiatives by local, state and federal philanthropic organizations; and the establishment of accountability measures by state and federal education and health departments. The model also emphasizes and fosters the connection between families and schools, which is extremely important to the success of the student, both academically and behaviorally.<sup>58</sup>

## **Conclusions**

- Latino children and adolescents are disproportionately affected by mental health problems compared to their peers, especially Latinas, who have the highest rates of suicidal ideation and suicide attempt of any group.
- The factors affecting the mental health of Latino youth are complex and include the immigration process, acculturation, poverty-related stress, bullying, and discrimination.
- Latino children are less likely to receive help for mental health problems, and their parents are less likely to recognize and seek help for their children's mental health issues.
- The barriers to the receipt and use of mental health services among Latino children include cultural differences in the perception of mental health between Latinos and U.S. Americans, language barriers, and Latino parents' mistrust of school and medical professionals.
- Interventions aimed at increasing participation in physical activity have had a positive effect on the mental health of Latino youth.
- Several interventions have demonstrated success in improving mental health and access to mental health services, especially those using community-based, culturally-informed models.

## Policy and Practice Implications

- Program leaders, school leaders, healthcare providers should ensure that mental health interventions for Latino immigrant children are sensitive to issues specific to this group, including bullying, acculturation, discrimination, and other immigration-related factors.
- Program leaders and healthcare providers should include parental mental health education and involvement for successful mental health interventions.
- Program leaders and healthcare providers should consider that some parents and children may be more comfortable interacting with a Spanish-speaking or bilingual mental health professional or a *promotora*.
- Community centers and nonprofit organizations that are easily accessible to immigrant families should consider incorporating culturally-relevant mental health programs into other programs, especially those that include physical activity and wellness.
- Schools should utilize the Whole School, Whole Community, Whole Child approach to incorporate community engagement, school staff education, and the family-school connection to address multiple factors influencing the mental health of Latino children.

## Future Research Needs

Though Latino youth suffer disproportionately from mental health issues compared to their peers, there is a relative lack of research dedicated to interventions aimed at addressing the diagnosis and treatment of mental health problems in this population.

Immigration, acculturation, discrimination, and poverty-related stress have all been identified as issues that affect Latino youth, and these often overlap and interact in complicated ways. While physical activity-based interventions have been shown to have a positive effect on mental health among Latino children, family and community-based interventions are also necessary to confront the issues that contribute most to the development of mental health and behavioral problems.

In 2016, Ashoka and the Robert Wood Johnson Foundation announced a partnership called the Children's Wellbeing Initiative, which was created to provide support for and increase the exposure of projects dedicated to fostering positive identity and stable relationships for children, especially minority children.<sup>59</sup> Several of the projects in the Children's Wellbeing Initiative address problems specific to the mental health and well-being of Latino children, and, though the impact of these programs has yet to be evaluated, they are promising. The César Chávez Futbol Academy, in Salinas, CA, was created to increase the confidence and academic performance of Latino children through engagement with soccer. Participants in the program are required to maintain a 3.0 grade point average and complete community service projects in exchange for free registration, equipment, jerseys, instructional clinics, travel, and tutoring.<sup>60</sup> Another sports-based project is Chalk Talk, a culturally competent mental health intervention based in Boston that combines group therapy with sports participation. The intervention includes 28 therapy sessions with 7 weeks each of basketball, soccer, flag football, and indoor rowing.<sup>61</sup>

Research addressing the mental health of young Latino children ages 0-5 is particularly important, as exposure to toxic stress places children at high risk for several negative health outcomes in adulthood, including depression.<sup>62</sup> Extreme poverty is a risk factor for toxic stress, and has been identified as a contributor to mental health and behavioral problems in Latino children.

Two of the projects highlighted in the Children's Wellbeing Initiative address early childhood mental health. The Pediatric Social Work and Home Visiting initiative in Omaha, NE was created to target the early identification of behavioral and developmental problems in children ages 0-5 while also increasing access to treatment and support for children and families. The project is a partnership with pediatric clinics in low-income areas, where children are screened for behavioral and developmental risk factors. Those at high risk receive home visits from social workers.<sup>63</sup>

The Early Childhood Well Being project in San Antonio, TX is a mental health referral program for children ages 0-6. Children are most often referred by teachers based on behaviors exhibited in the classroom. The program includes parent-child and teacher-child interaction strategies and social skills training. A partnership has also been created between the Early Childhood Well Being project and a local Federally Qualified Health Center, where children who require additional psychosocial interventions may be referred.<sup>64</sup> Another initiative dedicated to early childhood well-being is Baby's Space, a child-centered curriculum focused on nurturing the whole child by creating and supporting nurturing, consistent, and warm relationships between children, parents, caregivers, and other family members. Teachers receive training in the implementation of Creative Curriculum, a comprehensive curriculum that builds social, physical, cognitive, language, and emotional skills through play, discovery, and the formation and maintenance of relationships.<sup>65</sup> Evaluations of programs like these are needed.

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