





Reducing Teen Childbearing Among Latinos

an innovative anti-

poverty strategy



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#### **EXECUTIVE SUMMARY**

## Reducing Teen Childbearing among Latinos: An Innovative Anti-Poverty Strategy

Hispanics in the U.S. experience high rates of adolescent childbearing, high school dropout, and poverty. Research finds that these issues are linked. With the goal of decreasing poverty rates, this project has sought to identify promising approaches to reducing early childbearing among Latino adolescents. To inform this work, Child Trends researchers have synthesized evidence from research studies, trend data, and evaluations of intervention programs. We have also conducted qualitative interviews with parents, teens, and program designers and practitioners. The findings from each of these endeavors are described in the chapters of the report. Here we both highlight the pivotal conclusions arising from this multi-pronged research, and share the implications for developing a research-based intervention to reduce teen childbearing among Latinos.

First, we find that the assumptions underlying most interventions are outdated. Despite common perceptions that Latinos value early childbearing, our research finds that most Hispanic teens don't want to be parents in their teens. In fact, our discussions with Latino adolescents found that they cringe at the notion that teen parenthood is desired among Latinos. This perspective is strongly endorsed by their parents as well. The statistical data support these assertions. Most Latinos who become teen parents report that their pregnancy was unplanned.

We also find that Latino adolescents and parents highly value education and see it as a pathway to improving life chances. They understand that having a child early will interfere with their educational and life goals. Latinos are also mostly positive about contraception, in particular condoms, although they have some concerns about hormonal and long acting methods.

Further, we find that there are surprisingly few intervention programs for Latinos that are culturally relevant and provide the kind of programming that will reduce teen childbearing. Our review of the evaluations of programs serving Latinos or large Latino subgroups uncovered very little evidence of a particular approach that has large and/or consistent effects on behavior. In fact, none of the evaluations examined whether births occurred.

Also, both ineffective and effective programs appeared to include the same components, suggesting that the critical differences may lie in program implementation and in the presentation and relative emphasis of a program on particular program components.

Our review of research suggests that an effective program would have a strong emphasis on defining educational and life goals and would focus on aligning sexual and contraceptive behaviors with those goals. While Latino adolescents do not want to become parents, their sexual and contraceptive behavior often undermines reaching their goals, which helps explain the large numbers of unplanned pregnancies that occur. Given this, programs can spend less time emphasizing the risks and negative consequences of early sexual activity and pregnancy and more time developing strategies to help teens avoid births that they do not want and achieve the education that they very much do want.

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Based on our research, we suggest that an additional component of an effective program is helping adolescents build healthy relationships with their peers, families, and romantic partners that respect and support their goals. Adolescents understand the features that comprise healthy relationships, but many lack the skills to create and sustain such relationships. Given adolescents' developmental focus on friendship, starting a program with a focus on building and maintaining healthy relationships with peers can be an engaging starting point. This approach will expand to build healthy relationships and communication with romantic partners as teens get older.

While academic success and positive relationships represent an essential foundation for an intervention, becoming well-informed about sex and about the benefits of and use of contraception is also essential. Since few young adolescents are sexually active, they need supportive relationships and skills that help them delay sexual activity. When they do become sexually active, they need to have accurate information and self-confidence about how to prevent pregnancy and avoid sexually-transmitted infections.

Further, it is critical that program elements positively reflect Latino culture and values. Strategies should build on Latino values that support education, and delayed sexual activity and childbearing, by encouraging engagement and communication with parents about how to *attain* these goals. This communication can strengthen the consistency and specificity of the messages parents send, i.e., not just "If you date, you will have sex so don't date" but "to help you do well in school and reach your goals, it is best not to become sexually active."

Based on these understandings, Child Trends developed a theory of change and detailed logic models to inform future intervention efforts. The theory of change posits, "A program that facilitates positive peer, parent-child, and partner relationships and emphasizes reducing the risk of teen pregnancy in the context of high educational achievement and academic supports, will reduce exposure to unprotected sex, either by abstinence or improved contraceptive use, which will then reduce the experience of early pregnancy, thereby increasing educational attainment and lowering the risk of poverty."

The first logic model identifies an approach for younger adolescents (grades 7 and 8) 3that includes program components to build strong, positive relationships and clear, open communication with parents, peers, and partners. Communication components are needed that clarify values, goals, and expectations with parents, peers and partners, avoid mixed messages, and facilitate conversations that are mutually respectful of one another and the Latino culture in order to support adolescents' steps to achieve their goals.

Given the importance of perceived life chances, improving educational success is also a core component of efforts to reduce teen childbearing. This is a two-way street. Educational success gives adolescents the motivation to delay parenthood, and delaying family formation is critical to educational attainment.

Helping adolescents to achieve their educational and life goals requires that they be empowered to control their sexual and reproductive behavior. For younger teens, in middle school, this generally means being able to delay sex; but it also means being well-informed about sex, contraception, and sexually transmitted infections. A key goal will be to improve knowledge,

attitudes and norms about effective contraceptive methods, including hormonal methods and long-acting reversible contraceptives (LARCs). While few Latinos will be sexually active in middle school, it is important to set the stage so that they will be open to highly effective methods when they become sexually active. A second logic model for older adolescents (grades 9 and 10) focuses strongly on contraceptive *use*, including LARCs, as well as the other components noted for young adolescents.

As critical as the program components are, the quality and fidelity of implementation are equally important. Critical elements of the logic models include: developing an engaging curriculum that incorporates Latino values; observing and refining program operations; providing training and ongoing support to staff; and developing a performance management system to monitor success.

Our goals in this report have been two-fold. We have sought to tackle an important disparity in contemporary American life – elevated rates of poverty among Latinos – and address an important and malleable contributor to poverty — high rates of adolescent childbearing among Latinos. It is clear from our research that an effective approach will combine comprehensive sex education with a strong focus on educational success. As a result, we recommend that this teen pregnancy prevention program be implemented in the context of a high-quality educational program that provides an integrated array of student supports. We have created detailed logic models that identify key program elements for an intervention model that can be piloted and then refined based on further evaluation.

Our second goal has been to model an evidence-informed approach to program development. Too often, programs are based on hunches and on personal preferences and experiences, without sufficient knowledge of research. Alternatively, programs developed by academics are too often based on research alone, without adequate knowledge of what makes a program feasible. Our intention was to draw on *both* research and input from practitioners, youth, and parents to develop an intervention approach that can be effective.

It is our hope that this report provides both critical information for developing an effective intervention approach and serves as a model for efforts to address other important social issues.

# CHAPTER 1. REDUCING TEEN CHILDBEARING AMONG LATINOS: AN INNOVATIVE ANTI-POVERTY STRATEGY

## Poverty in the U.S.

While considerable progress has been made in reducing poverty among the elderly in the U.S., poverty among families with children has declined substantially less over time. Indeed, poverty rates for families with children have risen during the recession, and they are particularly high among Latinos, as well as other minority groups. Many factors can affect the risk of poverty, including the state of the economy, public policies, intergenerational assets, and structural and racial inequality, However, in addition to societal-level factors, individual, family, and community factors, such as education, skills, family obligations, knowledge, peer influences, community norms and motivation, can also contribute to the risk of poverty. The goal of this project is to explore individual, family and/or community factors that can elevate the risk of poverty for Hispanics. Our particular focus is adolescent childbearing as a factor that elevates the risk of subsequent poverty among Hispanic adolescents. Our specific goal is to collect and sift varied types of evidence, both quantitative and qualitative, to identify an approach likely to reduce early childbearing among Hispanics, as a strategy for the reduction of poverty.

In the next section, we provide background on the issues that this project is addressing. Following that, we provide an overview of our approach and the sections in this report.

#### Hispanics in the U.S.

Hispanics are the fastest growing minority population in the U.S., accounting for a larger fraction of the population, at 16%, than African Americans. <sup>2,3</sup> Since 2000, the Hispanic population in the U.S. has grown by 43%, accounting for more than half of the growth in the total population. <sup>2</sup> Notably, for the first time in decades, most of this growth is due to births as opposed to immigration. As a result, the growth in the Hispanic population has been particularly concentrated among youth; and by 2011, 35% of Hispanics were under the age of 18 compared with 21% of non-Hispanic whites. <sup>2, 3,4</sup> Conversely, the proportion who are foreign-born has declined somewhat, making up slightly more than one-third of Hispanics (36%) in 2011. <sup>5</sup>

It is important to remember, however, that Hispanics in the U.S. are very diverse, a reflection of the varying historical and geographic patterns of annexation and immigration to the U.S. over the past two centuries. Currently, nearly two-thirds of all Hispanics (63%) identify as Mexicanorigin, while 9% identify as Puerto Rican, 4% as Cuban, and 3% as Dominican. The remaining 15% hail from Central and South American countries and from Spain.<sup>2</sup> About four in ten Hispanics (41%) live in the West, slightly more than one-third (36%) in the South, 14% in the Northeast, and 9% in the Midwest. Although all regions of the U.S. experienced growth in the Hispanic population between 2000 and 2010, the South and Midwest experienced the greatest rates of growth at 57% and 49%, respectively.<sup>2</sup>

#### Socioeconomic Status

Hispanics in the U.S. are a disadvantaged group on average, with high levels of poverty. As of 2010, 27% of the Hispanic population lived at or below the poverty level, virtually the same proportion as the black population (28%). In fact, using the supplemental poverty measure

created by the Census -- an alternative poverty measure including factors such as medical expense, non-cash government benefits, tax credits, and geographical cost-of-living increases—Hispanics had the highest poverty rate at 28%, followed by African-Americans at 25%. Hispanics are also the least likely of all racial/ethnic groups to have health insurance. In 2008, 32% of Hispanics were uninsured, compared with 11% of whites and 19% of blacks. Among Hispanics, 20% of those born in the U.S. lacked insurance, compared with 50% of foreign-born Hispanics.

Education is central to socioeconomic success. However, despite impressive gains in both educational enrollment and completion over the past decade, Hispanics still have lower levels of high school and college graduation than do other groups. <sup>6</sup> For example, 64% of Hispanics aged 25 and older had finished high school compared with 85% of blacks and 92% of whites. <sup>8</sup> Nonetheless, important changes are occurring among youth. For example, in 2011, college enrollment among Hispanics aged 18-24 who had finished high school was at an all time high; almost half (46%) of all graduates were enrolled in two- or four-year colleges. <sup>9</sup>

#### Reproductive Health

It has been widely noted that Hispanics, as a group, exhibit similar or better health outcomes than whites on some indicators, such as infant mortality. <sup>10</sup> This is surprising given their disadvantaged socioeconomic profile. However, these health advantages do not extend to many other reproductive outcomes, particularly among adolescents. <sup>11,12</sup> For example, since the late 1990s, Hispanic females have had the highest teenage childbearing rate in United States. In fact, despite recent declines in teenage childbearing among all groups, estimates still suggest that 28% of Hispanic females will have a birth by age 20 compared with 11% of white females and 24% of black females. <sup>13</sup> Notably, the vast majority of these births are either unwanted or mistimed. <sup>14</sup>

Teen childbearing is a direct result of pregnancies carried to term. Historically, Hispanics did not have the highest teen pregnancy rates, but they did experience the lowest rates of decline. Between 1990 and 2000, the teen pregnancy rate declined by 37% for whites and 32% for blacks, compared with just 15% for Hispanics. Since 2000, however, Hispanics have seen greater declines. Between 2000 and 2008, the teen pregnancy rate declined by 21.1% for whites, 30.7% for blacks, and 28.6% for Hispanics. This decline appears to be continuing. Since 2007, the teen birth rate among Hispanics dropped by 34%, the largest decline among all racial/ethnic groups. This has been due in large part to declines in pregnancy, as the abortion rate for Hispanics has also been declining. According to preliminary birth data from the CDC, the teen birth rate in 2012 was 29.4%, an all-time low. For Hispanic teens, the birth rate was 46.3%, compared with 43.9% for non-Hispanic black teens and 20.5% for non-Hispanic white teens.

The two most immediate behaviors that put teens at risk of a pregnancy are their sexual activity and their contraceptive use. Recent data suggest female adolescents are similarly likely to have ever had sex, regardless of race/ethnicity. And, although Hispanic males are less likely than black males to have ever had sex, they are more likely than white males. <sup>18</sup> However, there are other behaviors that place Hispanic youth, particularly females, at increased risk of pregnancy. For example, recent data show that about three quarters of Hispanic female teens reported they were "going steady" with their first sexual partner. Additionally, they were more likely to having just one (lifetime) sexual partner, compared with non-Hispanic white and black teen

girls.  $^{18}$  Females in serious, long-term relationships tend to have reduced consistent contraceptive use, and thus, an increased risk of pregnancy.  $^{19}$ 

It is contraceptive use where there are substantial race/ethnic differences in behavior. Specifically, Hispanic females are less likely than white females to report using a method of birth control the first time they had sex (74% and 82%, respectively) or the most recent time they had sex (80% and 89%, respectively). In addition, when they do use a method of birth control, they tend to use less effective methods. For example, Hispanic female youth are much less likely than white youth to report using the pill, either the first or most recent time they had sex. Additionally, they are less likely to use other hormonal methods—including injectables, emergency contraception, patch, ring, and implant—than are other groups. Hispanic teens are also the least likely to report consistent condom use. Among females, 43% reported using a condom every time they had sex in the past month, compared with 49% and 51% of non-Hispanic whites and blacks. Among males, 58% of Hispanics reported consistent condom use, compared with more than two-thirds of other youth. <sup>18</sup>

#### Variation in Reproductive Health

There is substantial variation in the reproductive health of Hispanics, reflecting the diversity of the population across country of origin and nativity or language status. For example, teens of Mexican and Puerto Rican origin have higher birth rates, compared with Cuban and non-Hispanic whites, and poorer birth outcomes. <sup>20,21</sup> It is also the case that foreign-born Hispanics are less likely to use contraception, compared with native-born Hispanics and whites. <sup>22</sup> They are also more likely to experience an unintended pregnancy. <sup>22</sup> This is because foreign-born teens are less likely than native-born teens to have sex prior to age 18 <sup>21,23</sup> and engage in fewer riskier sexual behaviors. <sup>24</sup> Despite these patterns, native-born Hispanics are more likely to have a teen birth, compared with their foreign-born counterparts. <sup>25,26</sup> Similar differences are seen by language use or acculturation. Spanish-speaking or less acculturated Hispanic teens have fewer pregnancies than English-speaking Hispanic teens<sup>27,28</sup>, and a lower risk of having sex. <sup>23,25,29</sup> However, sexually active Spanish-speaking teens also tend to have less consistent contraceptive use. <sup>23</sup>

#### Reducing Teen Childbearing among Latinos: An Innovative Anti-Poverty Strategy

Research examining the consequences of teen childbearing has documented the implications of early childbearing for later poverty. A 1993 study that examined the effects of teen childbearing among Latinos found that a one-year delay in age at first birth was associated with a substantial reduction in the risk of subsequent poverty, net of other factors. Several pathways were found to increase the risk of poverty, including lower education attainment, family size, higher earnings and higher family income, as well as through mother's work experience and marital status.

While numerous HIV/STD/Pregnancy prevention programs have been developed and dozens have been evaluated in the ensuing years, relatively few rigorously evaluated programs for Latinos have been identified. Indeed, Goesling et al. 30 identify this as one of the gaps in the adolescent childbearing field.

Many potential approaches exist, which range from, passing anti-immigration laws, conducting media campaigns to the general public, devising approaches to reach Hispanic adults, to

developing programs for Hispanic adolescents, and a combination of these approaches, or developing an entirely different strategy. Our goal is to integrate findings from varied types of research to develop an evidence-based approach.

Often, policies and programs are developed on the basis of good intentions, hunches, personal experience, or ideology. The purpose of the project is to employ a different strategy. Specifically, we have chosen to examine the etiology of early childbearing among Latinos from multiple perspectives and methods, and to draw on that knowledge to develop a research-based prevention approach. This report summarizes that work.

Chapter 2 provides an overview of the trends on adolescent sex, contraceptive use, and childbearing, including both attitudes and behaviors.

Chapter 3 presents a review of previous research studies on the predictors of adolescent childbearing, with a focus on those studies that have examined Latino populations.

Chapter 4 reports results from interviews and focus groups conducted with Hispanic parents and adolescents, to identify factors related to the elevated risk of teen parenthood among Latino adolescents and to obtain their perspectives on approaches that might mitigate these risks.

Chapter 5 summarizes findings from the evaluations of sexual risk reduction and reproductive health programs that have been conducted on programs for Latino adolescents or evaluations that have included a large number of Latinos in the population evaluated.

Chapter 6 synthesizes information obtained from evaluation studies and from interviews with program designers and practitioners to provide insights into effective and ineffective program designs.

Chapter 7 provides a brief summary of our findings and builds on the information discussed in Chapters 2 through 6 to create a theory of change. This model can inform development of a research-based intervention. This chapter also suggests next steps that might be considered to reduce teen childbearing among Latinos.

Each of these chapters is based on a very extensive review of information relevant to that topic. To keep the chapters as concise as possible, considerable information has been moved into appendices. We invite interested readers to explore these additional materials as well as the summaries provided in each chapter.

It is the hope of the team that has collaborated on this project that this research-based approach will yield an effective intervention to reduce teen childbearing among Latino adolescents. It is our further aspiration that this work can provide a concrete example of how research can assist with the development of evidence-based social programs and practices.

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# CHAPTER 2. THE SEXUAL AND REPRODUCTIVE BEHAVIOR OF HISPANIC ADOLESCENTS

#### Overview and summary

In this chapter, we examine the reproductive behaviors and outcomes of Hispanic <sup>1</sup> adolescent males and females, using data from the most recent cycle of an ongoing nationally representative survey. We also describe trends in adolescent reproductive health outcomes across cohorts of Hispanic men and women born in different time periods, as well as completed levels of teenage childbearing among Hispanic women currently in their early 20s.

The findings presented in this chapter update and support existing research about Hispanic adolescents. For example, consistent with other studies, <sup>1,2</sup> Hispanic female adolescents were found to be more likely to have a teen birth than other adolescent females. And, although levels were much lower than for Hispanic adolescent females, Hispanic adolescent males also had among the highest reported levels of fathering a child. This remained true even though teen birth rates have fallen dramatically over the past twenty years. <sup>1,2</sup> Notably, the vast majority of teen births—for males and females—occurred to older adolescents, those who were ages 18 or 19, reinforcing the need to begin pregnancy prevention efforts earlier in adolescence and continuing through the teen years and into young adulthood. These efforts need to be sustained because virtually all of the teen births, even among older adolescents, were unintended.

Our analyses additionally provide some insight into why we see these patterns of teenage childbearing among Hispanics, and suggest 'critical points' for intervention that pregnancy prevention programs can target.

**Relationship characteristics.** Despite similar levels of sexual activity relative to other adolescents, Hispanic females reported fewer sexual partners in their lifetime. This is consistent with some prior research suggesting that, when Hispanic female adolescents date, they tend to be more involved in serious long-term relationships than do other adolescents (even if not sexually active),<sup>3</sup> with partners who tend be older.<sup>4</sup> Both of these factors—serious relationships and older partners—are linked to less consistent contraceptive use, <sup>5,6</sup> and may also encourage Hispanic adolescents to start thinking about childbearing at an earlier age. Recognizing that healthy romantic relationships are an important part of adolescent development, *interventions need to help adolescents*, *particularly young females, negotiate their wants and needs within their romantic relationships, while helping them prioritize their life goals*.

**Contraceptive use.** Overall, Hispanic adolescents—males and females—reported lower levels of contraceptive use than white adolescents. Additionally, they use different methods. For example, Hispanic adolescent females were less likely than white adolescents to have ever used the pill (42% and 62%, respectively). However, they were

<sup>&</sup>lt;sup>1</sup> In this chapter, "Hispanic" is used in lieu of "Latino". Although these two terms represent the same population, we use Hispanic to be consistent with the reporting of ethnicity in large nationally representative data sets.

among the most likely of all female adolescents to have ever used the IUD (8%) and injectable (24%). While it is encouraging that some Hispanic female adolescents are relying on highly effective methods, such as the IUD and injectable, our analyses and other studies suggest that these adolescents may be starting these methods *after* they have had a birth. Among Hispanics, in particular, *interventions need to promote knowledge of, access to, and comfort with using a range of highly effective contraceptive methods. To be most effective, this needs to happen prior to sexual activity and childbearing.* 

**Parent communication.** Hispanic adolescents, particularly the foreign-born, were the least likely group to have talked about any reproductive health topic with a parent prior to their 18<sup>th</sup> birthday. Open and effective communication between adolescents and their parents can be central to the healthy development of adolescents across a range of outcomes. In fact, research suggests that strong family communication skills can get passed on to children, who then tend to have more effective communication skills within their own relationships—romantic or otherwise. Interestingly, the topics that are discussed differ for males and females. When they did talk with a parent, Hispanic females were most likely to discuss 'how to say no to sex', while Hispanic males were most likely to talk about sexually transmitted diseases ('STDs'). *Interventions need to help adolescents develop effective communication skills, while also providing information that might not be received at home. Effective interventions should ideally also incorporate a parent involvement component.* 

**Intentions.** Although most adolescents, including Hispanics, do not want to get pregnant, Hispanic adolescents—particularly foreign-born and older adolescents—were the most likely to report that they would be 'a little' or 'very pleased' if they got pregnant. This is notable given the high proportion of Hispanic adolescent mothers who identified their birth as unintended. These findings may reflect ambiguity around childbearing desires, particularly among older adolescents and the foreign-born. Prior research suggests that Hispanic women (and men) may be socialized to expect that women will fulfill the role of wife and mother more so than the role of student and breadwinner. As such, early childbearing may be seen as more acceptable, even if it is not actively sought out. Among Hispanics, interventions may need to help adolescents better understand how to set and achieve life goals beyond early motherhood. This may include promoting an understanding of the ways in which teenage childbearing is linked to later lifecourse events, including school completion and future earnings.

**Gender roles.** Hispanic adolescents—particularly the foreign-born—reported more traditional attitudes about gender roles and reported feeling more embarrassed to talk about condoms with sex partners than other adolescents. Prior research has found that couples that talk about contraception, including condoms, are more likely to use them. <sup>12,13</sup> However, this can be even more challenging to do when adolescents hold strong beliefs about what is and is not okay for men and women to do. *Interventions targeting pregnancy prevention among Hispanic adolescents will need to increase knowledge of and encourage effective communication about contraception, including condoms. However, they need to do so in ways that value and engage both males and female, while addressing existing gender beliefs.* 

As highlighted above (and below), there were often differences in reproductive health outcomes and behaviors *within* the Hispanic population by nativity, gender, and by age. For example, it was disproportionately the older female adolescents (aged 18-19) who had ever used an IUD. This highlights the fact that any successful intervention program *needs to be cognizant of the different social and cultural contexts that male and female*, *U.S.-born and foreign-born, and younger and older Hispanic adolescents face*.

#### **Data and Approach**

The analyses in this chapter used data from the 2006-2010 cycle of the National Survey of Family Growth (NSFG). We present descriptive information on the social and demographic characteristics of Hispanic adolescents as well as on their reproductive behavior. Across most outcomes, we compared Hispanic adolescents to black and white adolescents. Additionally, we examined variation among Hispanics by country of origin and by nativity. We also examined variation among Hispanic adolescents by age, because adolescents under age 18 are more likely to be enrolled in high school, to live at home, and to face different social and legal restrictions than are those ages 18 and older (see Appendix A for more information on data and methods).

In this chapter, we include select figures and tables that highlight important findings. (Complete results are provided in Tables A.1 and A.2.) We present results separately for males and females. Specifically, we did the following:

- Among a recent cohort of adolescents, we looked at levels of teenage pregnancy and childbearing, as well as at the behaviors that put adolescents at immediate risk of teenage childbearing—sexual activity and contraceptive use.
- We additionally examined the prevalence of communication about sex and contraception, both in a formal setting and with parents, as well as attitudes about sex, contraceptive use, and family roles in order to get a sense of factors that help shape the reproductive decision-making of adolescents.
- We used retrospective data to examine trends in several sexual and reproductive behaviors and outcomes over time, comparing the reproductive health experiences of adolescents born in different time periods.
- Finally, using retrospective data we assessed completed levels of teen childbearing, and the intention status of those births, for women currently ages 20-29, the most recent cohort for which these outcomes can be measured.

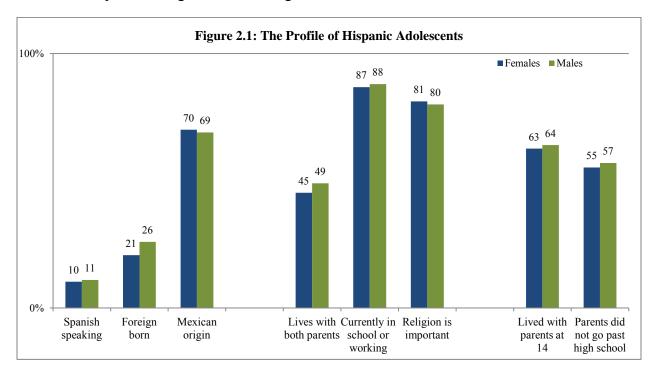
We begin by presenting an overview of the Hispanic population in the U.S.

#### **Results**

#### Sociodemographic Profile of Hispanic Adolescents

In this section, we provide an overview of the Hispanic adolescents in our sample across a range of background, socioeconomic, and demographic characteristics. This is important because it highlights variation within the Hispanic population, variation that is linked to a range of reproductive health outcomes in important ways. Additionally, it allows us to know what characteristics Hispanic youth bring with them as they navigate their adolescence.

**Hispanic adolescents are quite diverse**. Roughly one in ten Hispanic adolescents (males and females) reported speaking primarily Spanish in their household. A larger percentage of Hispanic adolescents -- 21% of females and 26% of males -- were born outside of the United States. These percentages are lower than those among Hispanics of all ages, in large part because many foreign-born Hispanics come to the U.S. as adults. Seven in ten Hispanic adolescents reported being of Mexican origin.

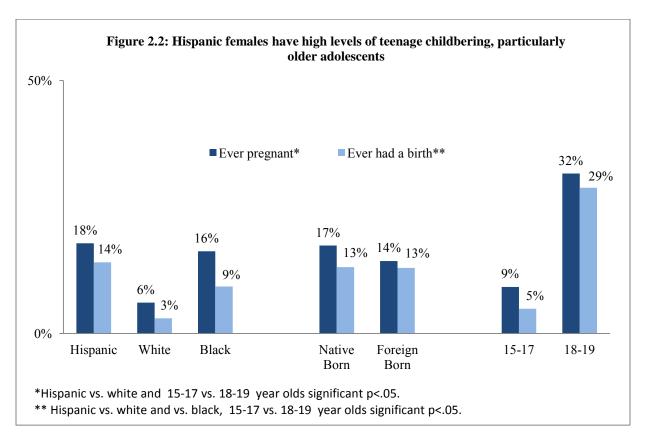


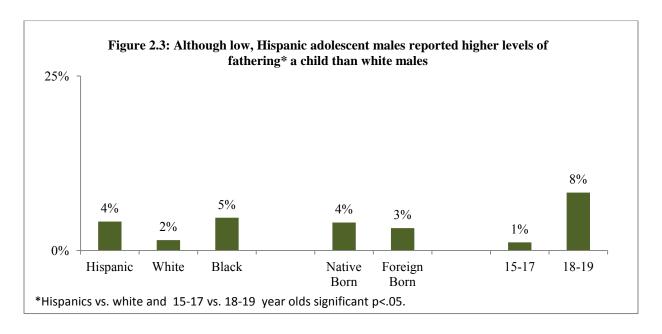
Hispanic adolescents have a mixed socioeconomic profile. Almost two-thirds of Hispanic adolescents lived with both parents at age 14; this is similar to levels among white youth (see Tables A.1 and A.2). Additionally, just under half of Hispanic adolescents reported that they currently live with both parents. However, parents of Hispanic adolescents had much lower levels of completed education than did parents of white adolescents, reflecting, in part, the lower levels of schooling in Mexico and other Latin American countries. Over half of Hispanic parents had a high school degree or less compared to just over one-quarter of white parents. Almost 90 percent of adolescents reported being either enrolled in school or working full or part-time at the time of the survey.

#### Teen Pregnancy and Childbearing

Hispanics, particularly females, have high teen pregnancy and birth rates. Among females, Hispanic adolescents (18%) were more likely than white adolescents (6%) to have ever been pregnant. Hispanic adolescents (14%) were also more likely than black (9%) and white adolescents (3%) to have had a teen birth. Virtually all of these births (96%) were unintended. Among males, Hispanic and black adolescents were more likely to report having fathered a child (4% and 5%, respectively) than were white adolescents (2%). Levels of births among adolescent males are lower than among females because men tend to have younger sex partners than themselves, 16,17 but also because they tend to under report fatherhood. 18

• Notably, pregnancy and childbirth/fathering were much more common among Hispanic adolescents aged 18-19 than they were among those aged 15-17. For example, 9 percent of Hispanic females aged 15-17 reported ever being pregnant compared to 32 percent of those aged 18-19.

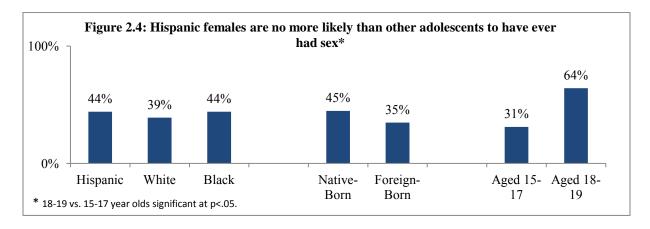


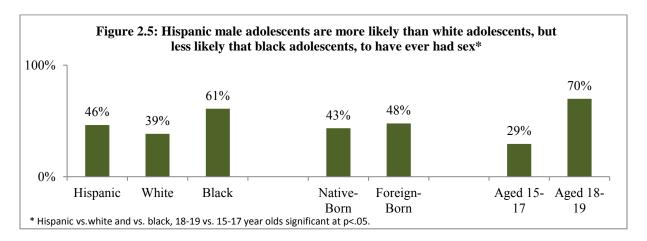


#### Sexual Activity

**Just under half of Hispanic adolescents have ever had sex.** Forty-four percent of Hispanic females aged 15-19 had ever had sexual intercourse, similar to levels among white and black youth. Similarly, 46 percent of Hispanic males aged 15-19 reported having had sex. However, unlike females, this percentage is higher than that for comparably aged white males (39%), yet lower than comparably aged black males (61%).

- There is little variation in sexual activity among Hispanics by country of origin or nativity. Not surprisingly, however, almost two-thirds of adolescents aged 18-19 had ever had sexual intercourse compared to just under one-third of adolescents aged 15-17.
- Among those who have had sexual intercourse, the average age at first sex was 15.3 for Hispanic females and 14.9 for Hispanic males.
- Despite similar ages at first sexual intercourse, Hispanic adolescent females had significantly fewer lifetime sexual partners on average (1.2) than black adolescents (1.8) more similar to the number among white adolescents (1.4).

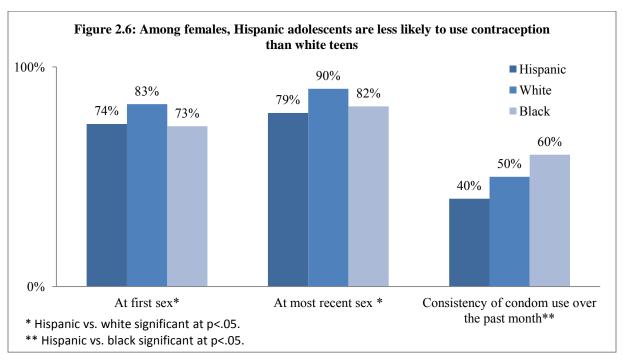


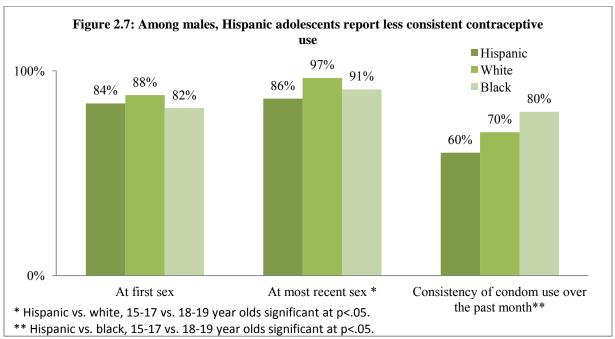


#### Contraceptive Use

Hispanics are often less likely than white adolescents to report using birth control, either the first time or the last time they had sex. Among females who ever had sexual intercourse, Hispanic

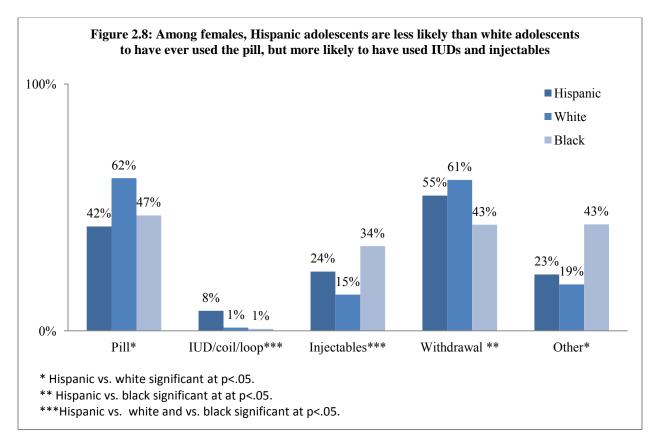
adolescents were less likely than white adolescents to have used any kind of contraceptive method—including hormonal methods and condoms—the first time they had sex (74% vs. 83%). They were also less likely to have used contraception the most recent time they had sex (79% for Hispanics vs. 90% for whites). Similarly, among male adolescents who ever had sex, Hispanics were less likely to report having used a method the last time they had sex (87%) than white adolescents (97%). Hispanic adolescents also reported less consistency in their use of condoms; Hispanic adolescent females reported using condoms 40 percent of time and males 60 percent of the time.





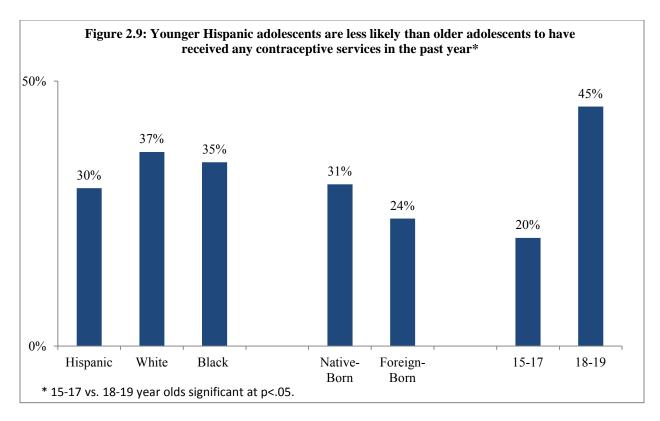
Hispanic females are less likely than white adolescents to have ever used the pill and more likely to have used the IUD or injectable. Only 42 percent of Hispanic adolescents reported having ever used the pill, compared to 62 percent of white adolescents. However, more than four times the proportion of Hispanics had ever used the IUD than white adolescents, and almost twice as many had ever used an injectable method of birth control.

 Notably, virtually all of the use of the IUD and injectable method use was among older Hispanics adolescents. For example, roughly 14 percent of teens aged 18-19 had used the IUD, compared to virtually none of the adolescents aged 15-17. Additionally, 31 percent of older Hispanic adolescents had ever used an injectable, compared to 15 percent of adolescents aged 15-17.



**Hispanic adolescents are less likely to use dual methods of contraception than white adolescents**. At most recent sexual intercourse, 15 percent of Hispanic females aged 15-19 reported using a condom in conjunction with the pill (or other hormonal method) compared to 24 percent of white adolescents. Thirty percent of Hispanic adolescents used the pill alone at most recent sex, 29 percent the condom alone, and 20 percent reported using no method of birth control at all (see Tables A.1 and A.2).

Among women who have ever had sex, 15 percent of Hispanic adolescents have ever used Emergency Contraception. This is similar to levels for white adolescents, and marginally higher than for black adolescents.



Thirty percent of Hispanic females aged 15-19 received any kind of contraceptive services in the past year. This includes a visit to a doctor, clinic or other health professional for birth control counseling, a birth control method, sterilization counseling or sterilization, and emergency contraception. This percentage is similar to that for black and white adolescents.

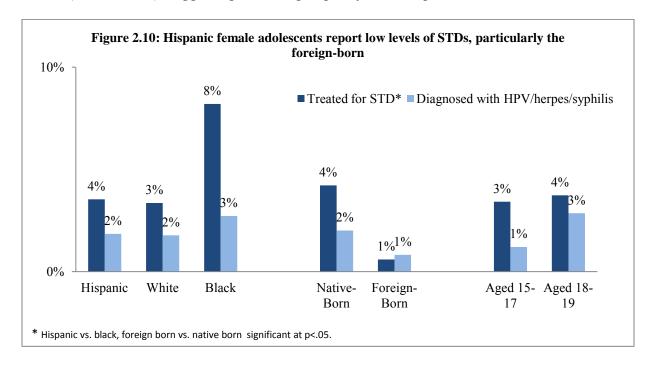
• Not surprisingly, older adolescents were more likely to have received any kind of contraceptive service in the past year than were adolescents under the age of 18. Almost half (45%) of all Hispanic females aged 18-19 received contraceptive services in the past year compared to 20 percent of adolescents aged 15-17, regardless of whether they had ever had sex or not.

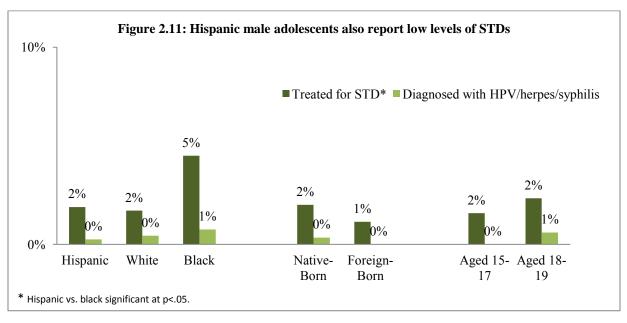
#### Sexually Transmitted Diseases (STDs)

**Hispanic adolescents report relatively low levels of STD diagnosis and treatment.** However, we know from other research that Hispanics, including adolescents, have higher levels of many common STDs, such as gonorrhea and Chlamydia, than do whites. <sup>19</sup> This suggests that, despite having high rates of STD infections, Hispanic adolescents may face barriers to diagnosis and treatment.

- Among females, almost 4 percent of Hispanic adolescents were treated for an STD in the past 12 months. This is less than the 8 percent of black adolescents treated, although similar to levels among whites.
- Among males, only 2 percent of Hispanic adolescents were treated for an STD in the past year, similar to levels among white adolescents.

• Diagnosis and treatment for STDs were particularly low among foreign-born Hispanics (less than 1%), suggesting that this group may face unique barriers to services.



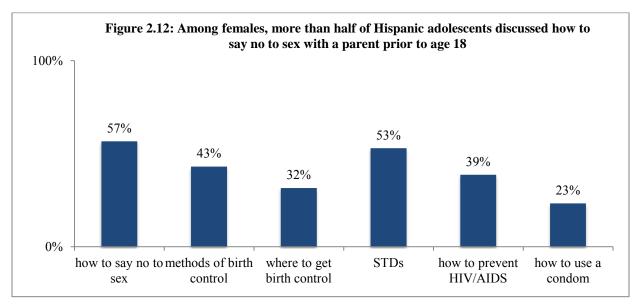


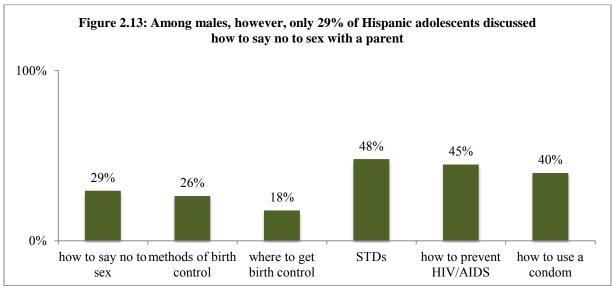
#### Sex Education and Communication

Hispanic adolescents—females and males—are less likely than other adolescents to discuss reproductive health with a parent prior to age 18. Looking at specific reproductive health topics, we see that Hispanic adolescents were less likely than white and black adolescents to have discussed 'how to say no to sex' with a parent prior to age 18. They were also less likely than

white adolescents to have discussed birth control, while they were less likely than black adolescents to discuss how to use a condom.

- Among Hispanic females, adolescents were most likely to have discussed STDs (53%) and how to say no to sex (57%) and least likely to have discussed how to use condoms (23%).
- Among males we see a slightly different pattern. Hispanic males were most likely to have discussed STDs (48%) and how to prevent HIV/AIDS (45%) and least likely to have discussed where to get birth control (18%) with a parent.
  - o Foreign-born Hispanic males are even less likely (61%) than those born in the United States (74%) to discuss reproductive health topics with their parents.





Virtually all adolescents across all racial and ethnic groups report having received some type of formal sex education program prior to age 18. However, the content of the programs

they receive varies somewhat. Notably, among males and females, Hispanic adolescents reported that they were less likely than white adolescents to have received any formal sex education on 'how to say no to sex'.

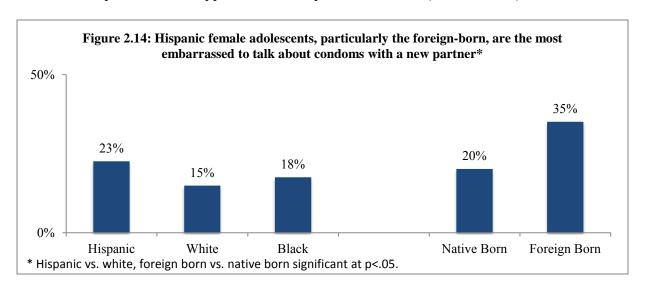
• Seventy-seven percent of Hispanic males reported any education about 'how to say no to sex' compared to 85 percent of white adolescents. Similarly, among females, 83 percent of Hispanic adolescents reported any education on how to say no to sex compared to 91 percent of white adolescents.

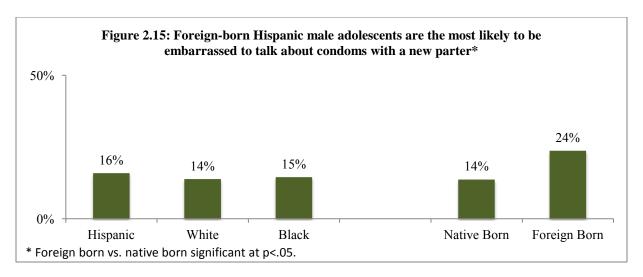
#### Attitudes and Beliefs

Many of the attitudes and beliefs about sexual activity are similar regardless of race/ethnicity. For example, roughly one-quarter of all females aged 15-19 agreed that it is okay for unmarried 16 year-olds to have sex if they are close, while six out of ten agreed it is okay for unmarried 18 year-olds to have sex. A similar pattern was seen among men of all race/ethnic groups, although the percentages agreeing were somewhat higher; roughly four in ten teen males agreed that it is okay for 16 year-olds to have sex if they are close, while eight in ten agreed it is okay for 18 year-olds.

**However, there are some notable differences in attitudes about condoms.** Among adolescent females, Hispanics were more likely to report that it would be embarrassing to talk about condoms with a new partner than white adolescents, and that they would be less likely to appreciate a new partner using a condom. Consistent with female responses, fewer Hispanic adolescent males reported that a new partner would be pleased if they used a condom.

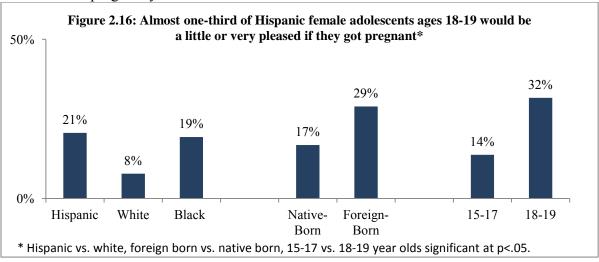
- Foreign-born Hispanics report more embarrassment talking about condoms. Among female adolescents, 35 percent of foreign-born Hispanics reported being embarrassed to talk about condoms with a new partner compared to 20 percent of those born in the United States. Similarly, among males, 24 percent of foreign-born Hispanics reported embarrassment talking about condoms compared to 14 percent of U.S.-born Hispanics.
- Foreign-born Hispanic males are also less likely than U.S.-born Hispanics to believe that a new partner would appreciate it if they used a condom (67% vs. 77%).

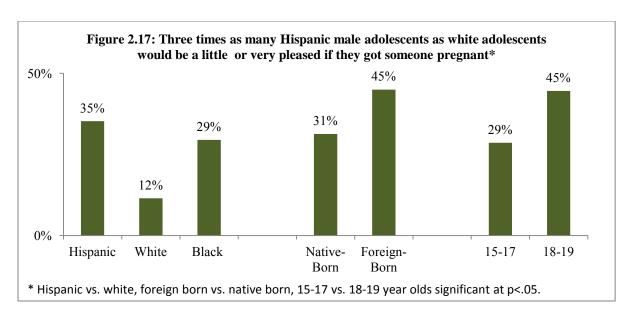




Hispanic adolescents—females and males—are more likely to report that they would be a little or very pleased if they got pregnant than are white adolescents. The majority of Hispanic adolescents reported that they would *not* be pleased if they got pregnant right now. However, about one in five Hispanic females and one in three Hispanic males said they would be a little or very pleased if they got (a female) pregnant. Although comparable to those for black adolescents, these percentages were higher than for white adolescents (8% of females and 12% of males).

- Foreign-born Hispanics were more likely to report that they would be pleased with a pregnancy than were the U.S.-born Hispanics. Among males, 45 percent of foreign-born Hispanics reported they would be a little or very pleased if they got a female pregnant now, compared to 31 percent of native-born Hispanics. Similarly, among females, 29 percent of foreign-born Hispanics reported they would be very pleased with a pregnancy compared to 17 percent of U.S.-born Hispanics.
- Hispanic adolescents aged 18-19 were more likely than younger adolescents to report that they would be pleased with a pregnancy. Forty-five percent of Hispanic males and 32 percent of Hispanic females aged 18-19 reported they would be a little or very pleased with a pregnancy.





There are also some notable race/ethnic differences in attitudes about family life and gender roles. For example, Hispanic adolescents—males and females—were more likely than white adolescents to agree with the statement "it is better if the man earns the main living while the woman takes care of the home and family." Forty-seven percent of Hispanic male adolescents agree or strongly agree compared to just over one-third of other male adolescents. Similarly, 29 percent of Hispanic female adolescents agree with this statement compared to 21 percent of white adolescents.

• There are large differences in gender attitudes by nativity. For example, 74 percent of foreign-born Hispanic male adolescents agree with this statement, while only 37 percent of U.S.-born Hispanics do.

# Trends in Reproductive Health Outcomes Across Cohorts

The reproductive health of Hispanic adolescents has changed substantially over time. To illustrate this, Tables 2.1 and 2.2 compare the reproductive health outcomes of individuals born in 1965-1969, 1970-1974, 1975-1979, and 1980-1984. Using retrospective reports from men and women interviewed in 2006-2010, we present select outcomes that occurred prior to age 19 for each birth cohort. <sup>2</sup>

The age at first sex declined across several cohorts, before stabilizing. The average age at first sex for Hispanic adolescents born in the late 1960s was 18.3 years for females and 17.5 years for males. For Hispanic adolescents born in the early 1980s it was roughly one year younger, 17.0 years for females and 16.7 years for males. Interestingly, this pattern may be reversing, as data suggest a slight increase in the age at first sex among the most recent cohorts.<sup>1</sup>

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<sup>&</sup>lt;sup>2</sup> Individuals born between 1985 and 1989, and even more recently, would not have reached age 19 by the date of the survey. Therefore, they are excluded from this part of the analyses.

• Across all cohorts, black adolescents have the youngest average age at first sex, while white and Hispanic adolescents tend to be fairly comparable to one another.

**Table 2.1: Trends in Reproductive Health Outcomes among Females** 

				Type of birth control used at first sex <sup>1</sup>					
	n	Mean age at first sex	Birth control used at first sex <sup>1</sup>	Hormonal/LARC	Condom	Dual	Other	None	Ever had a teen birth
1965-1969	1,512								
1903-1909	1,312								
Hispanic	318	18.3	32%	9%	13%	2%	8%	68%	84%
White	897	17.9	68%	19%	33%	6%	10%	32%	44%
Black	297	17.2	56%	21%	22%	9%	3%	44%	68%
1970-1974	1,697								
Hispanic	431	18.5	40%	12%	23%	1%	3%	60%	78%
White	921	17.3	75%	16%	42%	11%	5%	25%	43%
Black	345	16.6	63%	14%	32%	12%	5%	37%	64%
1975-1979	2,024								
Hispanic	528	17.9	54%	12%	30%	5%	7%	46%	63%
White	1,066	17.3	80%	11%	53%	12%	4%	20%	32%
Black	430	16.1	64%	8%	38%	14%	4%	36%	59%
1980-1984	2,140								
Hispanic	519	17.0	58%	10%	41%	4%	3%	42%	49%
White	1,134	17.2	83%	15%	45%	19%	3%	17%	20%
Black	487	16.2	67%	9%	45%	11%	2%	33%	51%

Among those who ever had sex with a man.

**Table 2.2: Trends in Reproductive Health Outcomes among Males** 

n		Mean age at first sex	Condom used at first sex <sup>1</sup>	Ever had a teen birth	
1965-1969	1,301				
Hispanic	249	17.5	34%	40%	
White	777	17.8	41%	17%	
Black	275	16.5	42%	49%	
1970-1974	1,351				
Hispanic	373	17.5	35%	41%	
White	745	17.7	54%	7%	
Black	233	16.6	47%	43%	
1975-1979	1,487				
Hispanic	424	16.9	43%	25%	
White	828	17.3	64%	8%	
Black	235	15.6	58%	33%	
1980-1984	1,635				
Hispanic	421	16.7	54%	20%	
White	945	17.1	62%	8%	
Black	269	15.5	71%	17%	

<sup>&</sup>lt;sup>1</sup> Among those who ever had sex with a woman.

The proportion of adolescents using birth control the first time they had sexual intercourse has increased substantially. Between 34 and 42 percent of all males born in the late 1960s reported using a condom the first time they had sex. For males born in the early 1980s, between 54 and 71 percent did. The proportion of females reporting the use of any birth control at first sex also increased for all race-ethnic groups. However, birth control use tends to be lower for Hispanic adolescents than for other adolescents across most cohorts.

• One-third of Hispanic females born in the early 1960s used any type of birth control

- method at first sex, compared to 68 percent of white adolescents. For those born twenty years later, in the early 1980s, six in ten Hispanic females (58%) used some kind of method compared to eight in ten (83%) white females.
- Virtually all of the increase across female cohorts has been in the use of condoms, either alone or in conjunction with another effective method (dual method use). There has been very little change across female cohorts in the use of hormonal methods or LARC at first sex, with the exception of black adolescents who have actually seen a decline in use.
- Roughly one in ten Hispanic adolescent females reported using a hormonal method or LARC at first sex, across all cohorts.

Adolescents born in the early 1980s were substantially less likely than those born twenty years earlier to have a teen birth. This is true across all race/ethnic groups. For example:

- More than eight in ten (84%) Hispanic females born in the early 1960s had a teen birth compared to just under half (49%) of those born in the early 1980s. Similarly, 40 percent of Hispanic males born in the early 1960s reported fathering a baby as an adolescent compared to 20 percent of those born in the early 1980s.
- However, even among those born in the early 1980s, the proportion of youth who had a teen birth was more than twice as high among Hispanic females (49%) and males (20%) than among white females (20%) and males (8%).

## Completed Teen Fertility and Birth Intentions Among Women Aged 20-29

In Table 2.3, we report the completed teen fertility of women who were currently aged 20-29 at the time they participated in the National Survey of Family Growth. We count the total number of teen births each woman had, as well as identify how many of these births were reported to be unintended (unwanted or mistimed).

Twice as many Hispanic and black women had a teen birth than did white women. Thirty percent of Hispanic women and 32 percent of black women currently aged 20-29 reported having at least one teen birth, compared to 14 percent of white women.

- Among Hispanics, 35 percent of foreign-born women had at least one teen birth compared to 26 percent of U.S.-born women.
- Of Hispanic women who had a teen birth, 78 percent had only one, 18 percent had two, and 4 percent had three or more births prior to their 20<sup>th</sup> birthday.

**However, fewer teen births to Hispanic women were identified as unintended.** Two-thirds (66%) of Hispanic women with a teen birth reported that at least one of these births was unintended, compared to the more than three-quarters (77%) of white and black women who reported any unintended teen births.

- Of the Hispanic women who had at least one teen birth, 30 percent reported that no birth was unintended, roughly half reported that they had one unintended birth, and 15 percent reported having two or more unintended births.
- Foreign-born Hispanics were much less likely to report that any of their teen births were unintended than were U.S.-born Hispanics (53% and 81%, respectively).

Table 2.3: Completed Teenage Fertility Among Women Aged 20-29, By Important Subpopulations

	Hispanics (reference)	Whites	Blacks		Native- Born Hispanic	Foreign- Born Hispanic	Other Hispanic	Mexican origin
Unweighted N	973	2163	952		544	429	347	623
Among all wo	omen aged 20-2	29						
Had a teen birth	30.1%	14.2%***	32.3%		25.5%	35.4%*	24.3%	32.4%
Among those	with at least or	ne teen birth						
Number of births before age 20								
1	77.8%	80.4%	78.0%		77.1%	78.4%	87.7%	73.5%
2	17.8%	18.4%	20.6%		15.9%	19.3%	9.0%	21.5%
3+	4.4%	1.2%	1.4%		7.0%	2.3%	3.3%	5.0%
	l	1	1	1		1	1	1
At least one unintended teen birth	65.8%	76.5%*	83.2%***		80.9%	53.3%***	68.7%	66.3%
	1	1	1			1	1	1
Total Number of unintended teen births								
0	31.2%	20.4%	14.7%		17.7%	42.4%	31.0%	29.7%
1	54.3%	68.4%	68.6%		63.8%	46.4%	60.7%	53.1%
2	11.3%	11.0%	15.8%		13.9%	9.1%	5.4%	13.8%
3+	3.2%	0.2%	1.0%		4.7%	2.1%	3.0%	3.4%

<sup>\*</sup>p<.05; \*\*p<.01; \*\*\*p<.001

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# CHAPTER 3. REVIEW OF RESEARCH ON RISK, PROTECTIVE, AND PROMOTIVE FACTORS ASSOCIATED WITH LATINO TEEN PREGNANCY

### Overview and summary

In order to develop an effective intervention designed to reduce teenage pregnancy among Latinos, it is critical to identify key risk, protective, and promotive factors that influence Latino's sexual and fertility behaviors and that can be effectively targeted by an intervention. A large and high-quality body of research exists that identifies a number of important factors associated with adolescent childbearing in general. However, a more limited set of studies focus specifically on the determinants of *Latino* adolescent childbearing or its most proximate causes, including sexual intercourse, contraceptive use, and pregnancy (for exceptions, see Driscoll et al., 2001 and Frost and Driscoll, 2006 for previous literature reviews on adolescent Latino reproductive health). In this context, we conducted a review of research on Latino adolescent pregnancy and childbearing. Below, we detail our findings, organized around a series of contextual domains.

See the Methods Box for a detailed summary of the methods used to conduct the literature review. Additionally, we review some important implications for programs and providers as well as highlight areas where more research is needed.

### The context of Latino adolescent childbearing

An overarching theme of the literature on adolescent reproductive health behavior is the importance of context when considering the effects of specific risk, protective, and promotive factors. Five domains of context emerged as particularly important:

- the individual,
- family and parents,
- partners,
- peers, and
- the school/education

Focusing on families, peers, and partners highlights the important role that relationships (of all types) play in shaping Latino adolescent decision-making and behaviors, while factors at the school level emphasize the interrelated processes of early childbearing, educational achievement, and early and subsequent economic disadvantage.

It is important to note that although all contexts are important, certain relationships may matter more or less for particular outcomes, or at certain ages or developmental periods. For example, literature reviewing parental and peer level factors together suggests that these contexts influence Latino adolescents in different ways<sup>3-8</sup>, with parents more consistently influencing delay of sexual debut <sup>4,5,9</sup> and peers influencing birth control use,<sup>10</sup> number of sexual behaviors,<sup>3</sup> and engagement in risky sexual behaviors.<sup>3,8,10</sup>

It is also the case that the role of factors within each of these domains is often highly dependent on other factors or domains. For example, it is important to consider a family's attitudes and

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beliefs toward childbearing and motherhood when examining the effect of parent-child communication on Latino reproductive health outcomes. Parent-child communication about the timing of first sex or about delaying childbearing is only effective when parents are open, skilled, and comfortable discussing these topics, and when they present clear messages about the importance of delaying childbearing. <sup>11-13</sup>

Finally, two other contexts - cultural and socioeconomic - also play a big role in shaping Latino reproductive health intentions and behaviors. The role of these two, in particular, means that many factors that have been identified as important for broader groups of adolescents may operate in different or unique ways for Latinos. How these and other contextual factors influence Latino childbearing decisions need to be better understood and incorporated into future interventions aimed at preventing Latino teen pregnancy.

### Implications for programming

To support future intervention efforts, the following recommendations have been developed:

- For the large percentage of Latino adolescents who do not intend to get pregnant, programs should help teens better align their sexual and contraceptive behaviors with their childbearing intentions.
- > To alter pregnancy intentions among the minority of Latino adolescents who want to get pregnant/get a partner pregnant as a teen, or at least feel ambivalent about pregnancy, it will be important to identify and address the benefits that these adolescents perceive to be associated with a pregnancy. This may include an expected change in their position within their families, their peer groups, or their intimate partner relationships.
- Communication is important. Parent-adolescent communication strategies should help Latino parents and adolescents become more comfortable speaking with each other about relationships, sex, contraception, and pregnancy prevention. Communication strategies that have been found to be effective for parents could also be incorporated into messaging strategies used in the intervention itself. For Latino families specifically, encouraging open and direct communication about reproductive health, sexual intercourse, and contraception may be helpful.
- Consider peer approaches to teen pregnancy prevention (such as through a school-based intervention or peer mentoring), keeping in mind that both positive and negative peer characteristics exert considerable influence on adolescent intentions and behaviors. In addition, adolescent perceptions of their peers' sexual behaviors are important, regardless of their peers' actual behaviors.
- Pregnancy prevention program should address relationship or couple-level factors such as:
  - o improving communication between partners.
  - o potential role playing about how to make decisions within the context of unequal power dynamics,
  - o including both males and females, separately and together as couples, in intervention efforts, and
  - breaking myths around potential gender stereotypes and attitudes such as machismo and marianismo

- Efforts to increase adolescents' educational aspirations may not be as effective in helping Latino adolescents avoid pregnancy as approaches to increase academic performance. Thus, interventions may be more successful if they provide tutors or mentors that support improvements in academic achievement.
- ➤ Multi-pronged approaches in both educational and clinical settings that target not only Latino adolescents, but also their parents and partners may be needed.

### **Methods**

Child Trends conducted a review of published peer review research using a number of search engines to identify articles that met our criteria, including PUBMED, Scopus, PsycINFO, Web of Science and Google Scholar. The following inclusion criteria for the literature review were established a priori:

Longitudinal and cross-sectional multivariate research papers Qualitative studies in order to help identify insights for working with Latinos and factors critical to their decisions about reproductive health

A focus on Latino populations

US based research

Published in 2000 or later/Uses data from 2000 or later

Published in 1995 or later for studies focusing specifically on Latinos

All searches included the search terms "teen," "adolescent," "Latino," and "Hispanic," as well as at least one of three outcomes (early childbearing, early births, early pregnancy) or at least one of nine proximate causes (contraceptive use, condoms, birth control pill, hormonal birth control, LARC, contraceptive consistency, age at first sex, sexual initiation, sexual activity and sexual debut). A working list of search terms relating to each of the five domains of influence (individual, family, peers, partners, school) was also developed, and each search included at least one specific search term, such as "educational attainment" or "parent-child relationship quality." As the search was conducted, abstracts and article text were reviewed to ensure that our full set of inclusion criteria was met.

This search process yielded 135 articles. Many studies addressed two or more factors, and they were considered for all relevant domains. Within each domain, articles were further divided into groups based on the outcome (sexual activity, contraception, pregnancy and childbearing). From there, studies were categorized as qualitative, large-scale quantitative (500 or more Hispanics), or small-scale quantitative (less than 500 Hispanics). To further narrow the review, we limited the final set of articles to those that focused exclusively on Hispanic adolescents or that included adolescents from multiple racial/ethnic groups, but included interactions or separate analyses for each racial/ethnic group so that the effects of each factor could be determined specifically for Latino adolescents. In total, 56 Latino-focused articles were selected for the literature review. Each of these articles was first reviewed and summarized in an excel spreadsheet to facilitate the synthesis of findings across all studies.

### **Findings**

Table 3.1 provides a summary of the key risk, protective and promotive factors identified within each of the contextual domains examined, and specifies what types of outcomes were associated with each factor.

Table 3.1. Summary of Risk, Protective and Promotive Factors Associated with Latino Adolescent

Childbearing	Decreased sexual		
	risk behaviors	control use	childbearing
Individual			
Positive attitudes and norms around delaying sexual intercourse <sup>14,15</sup>	+*		
(Delayed) Pregnancy intentions <sup>16</sup>			+
High self-esteem/self-efficacy <sup>3,17,18</sup>	+	+	
Substance use 3,4,17,19,20	-		-
Family and Parents			
Frequent parent-adolescent communication <sup>3</sup> 3,8,24-26	+	+	
Perceived parental approval of adolescents' sexual activity 3,26-29	-		
(More) Parental supervision <sup>3,4,22,30</sup>	+	+	
Better parent-adolescent relationship quality <sup>4</sup>	+		
Peers			
Positive peer characteristics <sup>3,31</sup>	+		
Negative peer characteristics <sup>5,32</sup>	-		
Positive peer norms <sup>3,10,18,33</sup>	+	+	
Negative peer norms 8,28	-	-	
Partners			
Positive partner characteristics <sup>23,34</sup>		+	+
Negative partner characteristics <sup>15,34,35</sup>	-	-	-
Relationship dynamics 18,28		+	+
Education			
High academic performance <sup>20,31,36-40</sup>	+		+
High educational aspirations <sup>4</sup> 18,26,28,37,41,42	+	+	+

<sup>\* (+)</sup> indicates a protective or promotive factor and (-) indicates a risk factor

<sup>&</sup>lt;sup>3</sup> Some studies found no association between parent-adolescent communication and age of sexual debut or consistency of condom use. <sup>21</sup> 8,22,23,34

 $<sup>^4</sup>$  High educational aspirations not consistently linked with condom or birth controls use, age of first sex, or frequency of sex.  $^{3,20}$   $^{3,16}$ 

### The role of individual attitudes and behaviors

A range of individual factors are linked to the risk of pregnancy as well as the most proximate factors that put adolescents at risk of pregnancy, sex and contraceptive use. These include: individual attitudes and norms about sexual behavior, pregnancy intentions, self-esteem and self-efficacy, and substance use and abuse.

Individual attitudes and norms. Research has consistently found that attitudes and norms shape adolescents sexual behaviors, for all youth as well as Latinos. For example, a cross-sectional study of predominantly Spanish speaking adolescents suggests that adolescents who would feel proud of themselves for not having sexual intercourse are less likely to actually go on to have sex. However, the importance of these attitudes is often dependent on other individual characteristics such as generation or acculturation. For example, a large scale, cross-sectional study using nationally representative data, found that Latino adolescents with more traditional attitudes on sexuality are less likely to have had sexual intercourse compared with Latino adolescents who are less traditional. Adolescents' perception of others' attitudes and expectations also matter. In fact, a study using a local cross-sectional sample of Mexican American and Central American adolescent females found that perceptions of others' social norms (for example, how their family members would feel if they the adolescents had sex in the next month) may be more important than individual attitudes, although additional research is needed. Is

**Pregnancy intentions.** Adolescents' intentions to have a birth are also important. For example, one cross-sectional study found that more negative intentions, as measured by responses to questions about how likely respondents were to have children at different time points, were linked to reduced risk of teen pregnancy for Latinos who participated in a pregnancy prevention program. <sup>16</sup>Notably, the vast majority of Latina adolescents do not want to get pregnant. <sup>16,43,44</sup> At the same time, however, there is some indication that Hispanics may be more likely than other youth to intend an early birth, or at least be more ambivalent about one. For example, one cross-sectional study based on a nationally representative sample found that Latino males and females report slightly higher intentions to have a teen birth, and expect greater happiness if they got pregnant than do whites and African Americans. <sup>33</sup> Interestingly, a recent longitudinal study using a small local sample of Latina adolescents found that the majority of pregnancies occurred among females who reported they "definitely did not want to get pregnant," <sup>44</sup> which highlights the disconnect between intentions to delay pregnancy and sexual and contraceptive use behaviors.

**Self-esteem and self-efficacy.** Positive self-esteem and self-efficacy are central to adolescents' ability to execute their intentions. In this vein, research finds that Latino adolescents' positive self-esteem and sense of control are also associated with reduced risk of teen pregnancy, as well as of the factors that promote teen childbearing. For example, one study found that greater self-esteem (using Rosenberg's 10-item measure, e.g. "I feel like I have a number of good qualities," "I feel I do not have much to be proud of") in early adolescence decreases the odds of a teen pregnancy for black and Hispanic adolescents, although this was not the case for whites and American Indians. <sup>17</sup>Another study based on local cross-sectional data found that higher self-esteem was also associated with more consistent condom use among younger, racial/ethnic minority adolescents. <sup>3</sup>And a qualitative study with Mexican American female adolescents found

that a greater sense of personal control over behaviors was strongly linked with a delay in sexual debut. <sup>18</sup>

**Substance use.** Finally, substance use and abuse, as well as other delinquent behavior, has been consistently linked to increased sexual risk behaviors. Recent findings from the Youth Risk Behavior Surveillance Survey finds that more than one in five sexually active Hispanic high school students (22%) drank alcohol or used drugs before last sex. Research focusing specifically on Latinos found that substance use and delinquency among Latino adolescents are associated with adolescent pregnancy, as well as with early age at first sex and more frequent sexual activity, although the specific types of substances that matter tend to vary by study. For example, one longitudinal study found that cigarette and marijuana use among Latina adolescents was associated with an increased likelihood of experiencing a teen pregnancy, while another found that engaging in delinquent behaviors increased the likelihood that Hispanic adolescents had sex before age 15. Other research using cross-sectional data found that alcohol and drug use and peer deviance were associated with a greater number of sexual behaviors (e.g., kissing, making out with clothes on or off, oral sex, vaginal sex, and anal sex), a younger age at first sex, and more frequent sexual intercourse. Adolescent females with greater gang activity also engaged in more sexual behaviors.

### The role of family and parents

A substantial number of reviewed studies found family and parent-level factors to be predictors of behaviors linked to Latino adolescent childbearing. Specific aspects of the family that play an important role in shaping these behaviors include: parent-child communication; parental approval of adolescent sexual activity; parental supervision; and parent-adolescent relationship quality. Importantly, these aspects of parental context may depend on other factors that adolescents are exposed to, particularly their peers.

**Parent-child communication.** Several studies found that more frequent parent-child communication is associated with a range of Latino childbearing behaviors, including delayed sexual debut, <sup>8</sup>lower frequency of sexual intercourse and fewer sexual partners. <sup>3</sup>Maternal communication and support were also associated with (fewer) risky sexual behaviors among Hispanic adolescents over time. <sup>24</sup>In some studies, frequent parent-child communication was associated with more consistent contraceptive or condom use. <sup>25,26</sup> In fact, some studies found that adolescent females prefer mothers and other family members as a source of knowledge on contraception over clinics. <sup>6,21,27,45</sup>

Other studies, however, provided mixed results regarding the role of parent-adolescent communication about sexual intercourse. For example, although mother-adolescent communication was a significant predictor of intention to delay sexual intercourse in one study, it was not a significant predictor of whether adolescents were sexually active, age at first intercourse, or contraceptive use. <sup>21</sup> Similarly, other research found that parental communication about sexual intercourse had no association with whether Latino seventh graders had ever had sex, <sup>22</sup> or increased contraceptive use. <sup>8,23</sup> Some of this ambiguity may be due to other factors that are not always accounted for, such as acculturation. For example, one small-scale, cross sectional study found that maternal acceptance of the adolescent, as rated by the adolescent (e.g. responses to statements like "My mother speaks to me in a warm and friendly voice"), was associated

with fewer sexual intentions, but only for less acculturated males. Conversely, males who were more closely tied to Mexican culture and were very close with their mothers reported greater intentions to have sex.<sup>32</sup>

Some qualitative research suggests that the content of parent-child communication may be particularly important. For example, communication that includes more self-disclosure is related to a better perceived relationship with mothers and more conservative sexual intentions among adolescents. Additionally, discussions about sexual behaviors can also help improve teens' knowledge about sex and contraception. For example, mothers and daughters who engage in more discussions about the normalcy of sexual behaviors also spend a longer period of time discussing contraceptive use practices. As more explicit statements about sex are used in conversation, adolescents are more knowledgeable of accurate sexual terminology and the details and accuracy of how condoms work. However, there is evidence that Latino parents may be more reluctant to talk about sexuality and reproductive health with their children than other parents. For example, one study found that Latino families do not discuss sex explicitly, except among Latinas with a planned pregnancy. Additionally, when Latino families do discuss sexual activity, the majority of communication between family members focuses on avoidance of sexual involvement, with little discussion about why this is important, and little discussion about other important issues such as dating, sexuality, or physical development.

Parental approval of adolescent sexual activity. Some studies have linked parental attitudes and expectations toward sex, childbearing, and use of contraception to Latino adolescents' behavior. <sup>27,28</sup> For example, Latino adolescents who perceive their parents to be permissive toward their engagement in sexual activity are more likely to engage in risky sexual behaviors than other adolescents. Similarly, some studies suggest that clear disapproving parental attitudes toward sexual intercourse are associated with reduced rates of pregnancy<sup>26</sup> and with fewer sexual partners. However, a few studies found no association between parental attitudes and early sexual behavior or contraceptive use<sup>47</sup>. Again, the ability of this factor to shape behavior may be dependent on other characteristics. For example, in one study perceived negative parental reactions to sexual intercourse in conjunction with high levels of personal motivation to avoid sex(examined together) were associated with decreased odds of early sexual behavior. And other cross-sectional data suggest that family members' expectations influence teens' intentions to have sex, but not necessarily their motivation to comply.

**Parental supervision.** Parental supervision is associated with risk factors that may result in a teen pregnancy. For example, several studies have found that parental supervision is associated with less intention to have sex, <sup>30</sup> a reduced number of sexual partners, <sup>3,30</sup> and delaying sexual initiation among Latino youth <sup>4,22,30</sup> One study, however, found no association. <sup>40</sup>Further, in a study of predominantly Mexican adolescents, participants with lower parental monitoring were more likely to score higher on positive perceived benefits of teen childbearing; these adolescents were at increased risk of ever having had sex, reported not using contraception the last time they had sex, reported that they had ever had sex without contraception, and were more likely to report positive intentions to keep a baby if they found out today they were pregnant. <sup>49</sup>

Although there is mixed quantitative evidence linking parental supervision directly to adolescent childbearing, <sup>26,44</sup> one qualitative study reported that Latinas believe that parental supervision is associated with delayed childbearing. <sup>29</sup>Many of the quantitative studies that examined parental

supervision were based on cross-sectional data with small samples of Latinos, which may have limited the findings.

**Parent-adolescent relationship quality.** Relatively few studies examined the quality of Latino adolescent relationships with their parents. However, findings from these studies suggest that higher quality parent-adolescent relationships among Latinos are associated with delayed timing of first sex, <sup>4</sup> but not with condom use. <sup>50</sup> Further, research suggests that more conflict in a family is associated with greater sexual experience, measured on a scale in which adolescents selected their most extreme sexual experience, from none to vaginal or anal intercourse. <sup>51</sup>

**Parent and peers.** A number of studies have simultaneously examined the roles of parents and peers among Latino adolescents; findings suggest that relationships with parents and peers mutually influence their lives. For example, in one study, adolescents whose relationships with parents were characterized by disclosure to mothers, using adolescent report on a scale that included items such as "do you tell your mother how your day was without being asked?" and paternal acceptance of the adolescent, were less likely to be involved with deviant peers. This reduced intent to have sex, since having deviant peer relationships was positively associated with intent. Another small-scale study found that perceived peer sexual activity had a negative effect on adolescent sexual delay but that responsive parent-adolescent discussions about sexual intercourse buffered these effects.

### The role of peers

Increasingly, research has documented that the characteristics of friends as well as the perceived norms of friends can shape sexual health behaviors and attitudes of youth, including Latino adolescents.

**Peer characteristics.** A number of friend characteristics, including academic performance and deviance, have been linked to sexual risk behaviors, although these associations often were dependent on other characteristics. For example, a large scale, longitudinal nationally representative study of adolescent girls found that being part of a high-achieving friendship group was associated with a reduced probability of sexual debut for all Latina adolescents, but not for white or African American adolescents.<sup>31</sup>. Additionally, one study found that lower peer deviance was associated with decreased frequency of sexual intercourse.<sup>3</sup>However, another study found that deviant peer affiliations were positively associated with sexual intentions, but only for U.S.-born Mexican adolescents (and not the foreign-born).<sup>32</sup>Additional findings from a longitudinal study using nationally representative data suggest that peer delinquency increased the odds of initiating sexual activity before the age of 14.<sup>5</sup>

**Peer norms.** Many studies also found that adolescents who perceived their peers to have strong norms about safe sex were more likely to engage in safer sexual behaviors themselves. For example, one cross-sectional study found that perceived peer norms encouraging safer sex were associated with more consistent condom use. This study also found perceived peer norms encouraging safer sex were negatively associated with multiple sex partners. <sup>10</sup> Another study using local data, found that less perceived risk taking among peers was associated with more consistent condom use. <sup>3</sup> And other cross-sectional, but nationally representative data suggest that believing that friends think birth control is important was positively associated with believing

that it is important to avoid pregnancy.<sup>33</sup> Some qualitative research finds other norms matter as well. For example, one study on Latino adolescents suggests that adolescents who believed that they would be popular if they had sex reported greater intentions to have sexual intercourse,<sup>28</sup> while another found that resistance to peer influence was associated with delay of sexual debut.

Unfortunately, perceived peer norms can have a negative association with adolescent risk behaviors, as well. In a small scale, cross-sectional quantitative study with black and Hispanic adolescents, adolescents who thought their friends had sex at earlier ages were more likely to have had sex, and having a greater percentage of sexually active friends was also associated with a greater likelihood of having had sex. <sup>8</sup>This study also found that the belief that peers do not use condoms or dislike using them was related to lower condom use. <sup>8</sup>

### The role of partners

Sexual activity and the use of contraception, the factors that put female adolescents at risk of pregnancy, occur within the context of romantic or sexual relationships. Recently research has begun to emphasize how male partners' attitudes about contraception, pregnancy, and parenthood, as well as how characteristics of adolescents' romantic relationship influence many factors associated with Latino teen pregnancy and childbearing. Although most studies rely on female reports to measure male or relationship level characteristics, some studies do collect information from males as well. In our review, we specify whether data come from Latino male, female, or both partners.

**Partner characteristics.** Qualitative research with Latinas revealed that partners played a significant role in Latinas use of contraception, timing and desire for pregnancy, and post-pregnancy plans for education, work and childrearing. Men's older age, concerns about contraceptive use and fertility, reluctance to use condoms, and readiness for parenthood put their partners at increased risk for pregnancy.<sup>35</sup> In a cross-sectional study using a small local sample of female Latina adolescents, dating was positively associated with intention to have sex in a group surveyed in person, but not for a phone survey group.<sup>15</sup> In a large scale, longitudinal study using nationally representative data, male and female Latino adolescents had lower odds of ever having used a condom if their partner was more than two years older than them, their relationship was short in duration, or their relationship was romantic (versus non-romantic).<sup>34</sup> Additionally, male and female adolescents who perceived that their partners had a positive attitude toward condom use were more likely to report using condoms compared to those whose partners did not have a positive attitude.<sup>23</sup> This ties closely to the importance of the dynamics within the relationship.

**Relationship dynamics.** Decision-making power dynamics in relationships also matter. Latina adolescents who acknowledged a strong role for partners in their sexual decision making were more likely to have had sex at a younger age whereas those who reported relying on their own personal goals and beliefs were more likely to have initiated sex at an older age. <sup>18</sup>Other findings suggest that Spanish language dominant male and female adolescents who had a positive attitude toward sexual intercourse, and who perceived greater partner approval for having sex were more likely to have had sex in the past three months. <sup>28</sup>

**Communication between partners is also important.** For example, one qualitative study found that greater communication between partners about contraceptive use was associated with more effective contraceptive use among Latina adolescents ages 13-20, but not young adults ages 21-25. <sup>47</sup> Cross-sectional quantitative analyses also found that female adolescents who reported communicating with male partners about condoms were more likely to use condoms compared to those who did not communicate with their partners. <sup>23</sup>

Finally, research suggests that both male and female intentions to get pregnant are a significant predictor of a Latino teen pregnancy. In a small scale, longitudinal study using evaluation data from a pregnancy prevention program, females who perceived their partner definitely wanted a pregnancy had higher odds of becoming pregnant than those who perceived their partner definitely did not want a pregnancy; there were no pregnancies to couples in which the girl wanted to become pregnant but her partner did not. <sup>43</sup> In another study using the same data, adolescents who expressed any degree of wanting pregnancy (in the next six months) had more than twice the odds of getting pregnant than teenagers who definitely did not want pregnancy. <sup>44</sup>

# The role of school and education factors

The final domain of influence we consider is that of education and schools, and we focus on the role of a range of factors including those that measure academic performance and engagement and those that measure aspirations. This domain is particularly important for two reasons. First, it is a domain that is easily amendable to intervention – most youth attend school. Second, Latinos tend to have lower levels of education and fewer educational aspirations than do other adolescents, particularly once they have a child. For example, less than half of Hispanic adolescent mothers finish high school by age 22,<sup>52</sup> and nearly 40 percent of Hispanic females report childbearing as the reason for dropping out of high school. This is higher than for white adolescents. More recent estimates present more promising education trends for Latinos: Hispanic adolescents are graduating high school at higher rates, and among those who graduate college, more are enrolling in college. Just 14 percent of Hispanic adolescents ages 16-24 were high school drop outs in 2011 (compared with 28 percent in 2008). <sup>53</sup>In 2012, 49 percent of Hispanic young adults were enrolled in college, compared with just 47 percent of their white counterparts. <sup>54</sup> although not all who enroll will complete college.

Educational attainment and its link with teen childbearing also have important implications for future financial well-being. For example, seventy-eight percent of children born to unmarried teen mothers with less than a high school education live in poverty. Unpublished microsimulation analyses currently being conducted by Child Trends (and supported by the JPB Foundation through the Brookings Institution) find that the biggest predictor of future earnings among children born to teen moms (even bigger than having a mother who was a teen mother) is that mother's high school completion. Other as yet unpublished Child Trends research using the National Educational Longitudinal Survey finds that the biggest predictor of not completing high school is expecting a baby by 10<sup>th</sup> grade. Second completion of the production of the product

**Academic performance and engagement.** In studies that do not differentiate by race/ethnicity, better school performance is directly associated with delayed sexual onset, <sup>36</sup> while school attachment and involvement are associated with less sexual risk-taking and lower pregnancy rates. <sup>37,38</sup> One study using national data found that among adolescents who dropped out of high

school, 40 percent experienced a teen pregnancy, compared with ten percent among those who did not drop out. These results were significant for Hispanic and non-Hispanic white adolescents.<sup>39</sup> Among Latinos specifically, less research has linked performance directly to childbearing, however, achieving good grades is associated with fewer risk factors related to adolescent childbearing. Specifically, longitudinal studies of Latina adolescent girls have found that achieving good grades is associated with a reduced risk of sexual intercourse and an older age at first sex.<sup>31,40</sup> These findings were supported in a small scale study as well.<sup>20</sup>

**Educational aspirations.** Among all adolescents aspirations for higher education have been linked to less sexual risk-taking and lower pregnancy rates<sup>37</sup> and increased contraceptive use,<sup>37,41</sup> although these relationships tend to be weaker among Hispanics. In fact, several studies of Latino adolescents found future educational aspirations were not associated with condom or birth controls use,<sup>3,16</sup> age of first sex, or frequency of sex.<sup>3,20</sup> Although one small-scale, cross-sectional study did find that Spanish language dominant adolescents were less likely to have reported having sex in the past three months if they believed having sex would interfere with their career goals.<sup>28</sup> For Latinos, it may bet that family expectations are particularly important. For example, two small-scale studies found that strong family educational expectations were associated with delayed age of sexual initiation <sup>18,42</sup> and reduced rates of pregnancy.<sup>26</sup>

### Improving service-delivery for Latino adolescents

This review highlights the many factors - across multiple domains - that can work to shape the sexual risk behavior of Latino adolescents. It is highly likely that interventions designed for Latino adolescents will be successful if they consider the numerous individual, family, partner, peer, and educational factors described above. While not every program can consider all factors simultaneously, this knowledge will allow program developers to tailor approaches to the contexts within which Latino adolescents make decisions about sexual intercourse and contraception. An example of being able to utilize this information is evident in a program designed to improve birth control use among adolescents. Jaccard (2012) found that the practice of emphasizing the risk of side effects for birth control was an effective way to prevent adolescents from prematurely discontinuing a method

For Latino youth, family context is particularly important. Most Latino youth (56%) have at least one foreign-born parent. Less acculturated parents are more likely to reinforce traditional family values<sup>1,57,58</sup> and many Latino parents do not discuss sexuality with their children. Some researchers argue that parents may have to work to understand mainstream norms that their teens are confronted with in school. To do this, Guilamos-Ramos (2006) suggests engaging parents in role play with feedback, or providing parents with recommendations generated by adolescents.

For Latino adolescents, research also suggests that in conjunction with program interventions, practitioners should encourage higher educational aspirations, foster self-esteem by offering personal support and commitment to time spent with adolescents, and lead adolescents through the college or job application process. <sup>58,60</sup> Some school programs designed to increase school attachment or reduce school dropout were shown to effectively delay first sex and also reduce odds of pregnancy. <sup>37,38,61</sup> And Latinos report lower future expectations (i.e., of graduating high school, going to college, and getting a good job) and greater intentions of having a teen birth or, for boys, becoming a teen father, that do other youth. <sup>16</sup>Although little research has yet to

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examine, or find support for, a clear link between educational aspirations and childbearing among Hispanics, educational opportunity is a critical pathway to later financial stability for adolescents. Additionally, it highlights what may be a critical point of intervention - that Latino adolescents need to connect education, the timing of parenthood, and future economic success. Given the important role that parents play in Latino adolescent lives, ensuring that parents' expectations for education and parenthood are consistent with their children's and are communicated effectively is also important.

Finally, service providers need to be aware of the special needs of adolescents. Research on service delivery for adolescents finds that health care and other program providers are most effective when they are able to tailor their services to the cultural needs of the adolescents. Specific facilitators to service delivery for adolescents include hiring "friendly" staff, prioritizing confidentiality, and addressing adolescents' fears about seeking services, 63,64, such as being judged by providers. In 2004, the Society for Adolescent Medicine (SAM) released a position paper documenting adolescents' resistance to non-confidential care. In a study of sexually active adolescent females, nearly half reported they would stop seeking reproductive health services if they had to notify their parents, but less than one percent reported they would stop having sex. To help mitigate privacy concerns, health care providers can explain their privacy policies to adolescents, including any situation when parents may be notified of services received. This can include any disclosures that may occur in the explanation of health insurance benefits.

# **Ongoing Gaps in Knowledge**

The program recommendations provided at the beginning of this chapter point to a number of important factors that influence Latino adolescent sexual and reproductive health across multiple levels of influence, including individual characteristics, parental and family relationships, partners, peers and school. Many of the findings that we identified from the research literature also emerged as important themes in the data analysis chapter (Chapter 2), in qualitative research presented in Chapter 4, and are often addressed in teen pregnancy prevention programs as potential pathways to preventing teen pregnancy and improving adolescent reproductive health (see Chapter 5 for a review of program evaluation findings). In addition to identifying implications for Latino teen pregnancy prevention programming, several additional recommendations for future research emerged from this literature review, described below.

### Future research directions - Improving data on Latino adolescents

Many of the studies included in this review were based on small samples of Latino adolescents. This was a limitation of not only the qualitative studies, but also many quantitative studies that were based on smaller, local samples of Latinos or national samples that still do not provide large enough sample sizes to analyze diverse groups of Latinos. More nationally representative data are needed that include large samples of Latinos, as well as other racial/ethnic groups for comparison, followed overtime. Data that include measures across all of the domains examined here would also be valuable to improve efforts to understand the relative influence of individual, family, peer, partner and school factors. Additional qualitative data collection and mixed-methods research would also be valuable in order to provide deeper insight into some of the themes that emerged in the literature review. Finally, up-to-date information is critical, as the

Hispanic population has been growing rapidly, becoming a steadily larger portion of the school population, and migrating into new locations. For example, the value of ongoing data collection in the National Survey of Family Growth is beginning to provide much richer data on this important population.

### Future research directions - LARCs

Almost none of the literature we reviewed focused on long-acting reversible contraceptives (LARCs). Although research is increasingly focusing on the use of LARCs among adolescents, studies have limited samples of Latina adolescents. <sup>68,69</sup> What research there is, however, finds that Latinas are more likely to use LARCs, and particularly IUDs, than their white counterparts. <sup>70,71</sup> An analysis of the St. Louis CHOICE study, a well-known clinic intervention to promote LARC use, found that the implant was largely preferred among younger adolescents ages 14-17, and the IUD was preferred among adolescents ages 17-20. <sup>68</sup> LARCs are effective at preventing rapid repeat pregnancy among adolescent mothers, <sup>72,73</sup> however very few adolescents rely on LARC (less than one in ten). <sup>74</sup> In addition to standard barriers to reproductive health services, <sup>75,76</sup> challenges to providing LARCs to adolescents include costs of LARC methods; <sup>77</sup> staff concerns about intrauterine device (IUD) use among adolescents; and limited staff training on inserting implants. <sup>76</sup> Additional research on the use of LARCs among Latinos and the role that interventions can play in increasing LARC use among this population would be beneficial.

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# CHAPTER 4. DEVELOPING A TEEN PREGNANCY PREVENTION PROGRAM FOR LATINOS: WHAT LATINO ADOLESCENTS AND PARENTS HAVE TO SAY

### Overview and summary

In order to develop a teen pregnancy prevention for program for Latinos, it is critical to talk with Latino adolescents and parents to learn directly from them what they think such a program should look like. Information from Latino adolescents and parents can also provide confirmation (or not) of what the quantitative data and literature review found, help us to further explore issues identified in the program reviews and interviews with providers, and assist us in better understanding cultural issues that require careful consideration in the development of the program. To that end, we conducted a series of focus groups with Latino adolescents, including males and females, and interviews with Latino parents of adolescents. Our discussions with adolescents and parents explored:

- Their beliefs and attitudes towards teen pregnancy, including the ideal age for entry into parenthood;
- The perceived need for a teen pregnancy prevention program for Latinos;
- The values and attitudes adolescents and parents hold regarding adolescent dating, sexual intercourse and contraception;
- Messages Latino adolescents hear regarding dating and sexual intercourse;
- How, and by whom values and messages are communicated to adolescents;
- The role that friends and romantic partners play in communicating information and influencing adolescents' behavior;
- What aspects of the Latino culture and/or experience should be considered when developing a program; and
- What a teen pregnancy prevention program should look like.

### A window into our study participants

While the stories and backgrounds of the over 60 Latino adolescents and parents (see also Methods) we spoke with differed, they shared several important similarities and experiences that are critical to understanding the perspectives that they shared with us.

"When I try to talk...
with my mom about,
like, girls things, she's
gonna be like 'I don't
want to talk about
that.' ... When I...
turned 12 and I started
on my period, my
mom was like 'Ahh,
don't talk to me about
that!'" (Adolescent
Female)

"Your parents ask you [about sex] and you tell them like half the story" (Adolescent Male)

"I tell them they don't want to become a parent before their time or they are going to be side tracked from what they want to do in life." (Father with an Adolescent Son and Daughter)

"I said [to my son]
'It's OK that you use birth control and take care of yourself, but I don't want you to have sex" (Mother with an Adolescent Son)

Not unlike many Latinos in the United States, immigration played a critical role in the lives of our study participants. The vast majority of parents immigrated to this country, as did a good number of the adolescents. Whether a first or second generation immigrant, the immigrant experience was a salient point shaping the experiences of both adolescents and parents. For most

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families, this meant navigating the rough waters of two cultures, particularly when their respective values and traditions collided. For many, this played out in a tug of war between appreciating and/or wanting the greater freedom that many perceived the United States afforded them, while also wanting to stay connected to and respectful of the values and beliefs of their home countries. For other families, the immigration experience meant reestablishing ties and roles as parents and children, because a number of parents arrived without their children to the United States in order to "establish" themselves in the United States before sending for their children—for some, this process took several years. Also, not unlike the experience of many American immigrants before them, hard and long work days were the rule and not the exception for the Latino parents we spoke with or learned about through adolescent children. Both adolescents and parents spoke about Latino parents working long hours, often in multiple jobs to make ends meet. At times this meant that parents and adolescents saw very little of one another. Indeed, parents' work schedules often made it very difficult for us to locate parents to obtain their consent to have their adolescent participate in our study or to recruit and schedule parents for interviews.

**Table 4.1: Demographic Information of Study Participants** 

	PARTICIPANTS		
	Adolescents (n=44)	Parents (n=19)	
CHARACTERISTICS			
Sex			
Male	21	5	
Female	23	14	
Age			
15	15		
16	15		
17	14		
Nativity Status			
U.S.	31	2	
Foreign-born	13	17	
Parent Nativity Status			
U.S.	4		
Foreign-born	40		
Household Income			
Less than \$24,000		14	
More than \$24,000		5	
Language of Interview / Focus Group			
English	44	4	
Spanish	0	15	

Not surprising given the adolescent birth rate among Latinos in the United States, teen pregnancy was not a foreign concept to the parents or the adolescents in our study. Most did not have to go beyond their extended family or close circle of friends to find someone who was or had been an adolescent parent. Indeed, some parents in our study were adolescent parents themselves, and

several adolescents in our study similarly reported that their parents had begun parenthood at a young age.

Like most parents, the Latino parents we spoke with were intensely focused on a better life for the next generation. And, the Latino adolescents we spoke with also wanted a better life for themselves, and gave voice to the sacrifices their parents were making to provide them with opportunities to improve their lot. Both parents and adolescents viewed avoiding a teen pregnancy as an important step in ensuring a better life for the younger generation. Also critical was education, which adolescents and especially parents saw as a pathway to financial stability and way to achieve a better life.

### **Key Findings**

Our key findings include:

# ➤ Adolescents and parents both want to avoid teen pregnancy

- O Adolescents and parents see teen pregnancy as an obstacle to achieving goals, in particular educational goals, which, as noted above, are seen as helping to set the stage for life success.
- Neither parents nor adolescents see adolescents as being emotionally or financially ready for parenthood. Instead, most see the mid- to late twenties as the ideal age to start parenting. Waiting until one's 20s allows enough time to enjoy and explore life, finish schooling and become emotionally and financially ready to support a child.

# > Adolescents and parents are clear about the desired outcome but are less clear about how to get there.

- While adolescents know they need to use birth control consistently in order to avoid pregnancy, they struggle with how to put this into practice, in part because they lack knowledge and/or access, feel pressure from partners, or get caught up in the moment.
- o Many parents struggle with appearing that they are condoning premarital sex if they go beyond the message of "don't have sex," though most are simply not comfortable and don't know how to go about talking about these issues.

# > Parents and adolescents struggled to communicate directly about dating, sex and contraception

O Adolescents and parents recognize the importance of communication, and appear eager to talk with one another but do not know how to get past the tension between parents' more "traditional" values and ideals (e.g., the belief that teens shouldn't date casually or engage in premarital sex) and the realities of their children's experiences.

## ➤ Adolescents have a narrow scope of knowledge around birth control

- o While most adolescents know about the condom and the Pill their knowledge is much more limited is much more limited when it comes to other methods.
- o Perhaps equally important parents' knowledge is also (and perhaps even more) limited.
- > Adolescents' knowledge and behaviors are influenced by peers' expectations

- o Adolescents and parents reported that their knowledge and behavior are shaped by friends and partners, even if these are not the best sources of information.
- o Perhaps most troubling, adolescents agreed that there is an expectation that dating leads to sex.

### > Adolescents receive mixed messages

- o Parents do not want adolescents to have sexual intercourse, but wanted them to engage in safe sex if it did happen.
- o Males and females reported that females are expected to engage in sexual intercourse, but there was also a stigma associated with females who had sex.

# ➤ Adolescents and parents see value in teen pregnancy prevention programs

- o They are not sure if programs are needed specifically for Latinos
- o Programs should be holistic and cover a range of topics, including academic and career advancement for adolescents

In the following sections, we first describe the approach taken that led to these findings and then provide more detailed information on the findings summarized above. This discussion is organized around the themes that came out of the focus groups and interviews.

### Methods

The findings in this chapter are based on focus groups and interviews with Latino adolescents and parents conducted between September 2012 and March 2013 in the Washington DC metropolitan area. In total, six focus groups were conducted with 44 Latino adolescents ages 15-17. Focus groups are discussions with a small group of people (e.g., six to eight) selected because they share characteristics and backgrounds that are thought to be critical to understanding the issue at hand. To facilitate communication and exploration of concerns that may be unique to each gender, we conducted separate groups for males (n=3) and females (n=3). To get the perspectives of parents, we conducted a total of 19 semi-structured interviews with parents of Latino adolescents ages 15-17 in both English and Spanish. Semi-structured interviews allow researchers to explore through open-ended discussion and probing key topics and questions across study participants but are flexible enough to allow discussions to follow issues raised by participants that were unanticipated by the researcher, when appropriate.

Both the focus group discussion and interviews were conducted by experienced qualitative researchers who were matched for ethnicity and gender. Study participants were recruited through Craigslist, flyers posted in the community, and at community organizations that serve Latino adolescents and their parents as well as "on the ground" recruitment. The sample of parents and adolescents was recruited separately, and with the exception of 2-3 cases, did not include pairs of parent-adolescents. IRB review and approval was obtained for all study procedures.

### **Methods** (continued)

The adolescent sample was roughly evenly split between boys (n=21) and girls (n=23) and across the 3 ages (15 years, n=15; 16 years, n=15; 17 years, n=14). Roughly 70% (n=31) of the adolescents we spoke with were born in the U.S with almost all (n=40) having parents who were born outside of the United States. Of the 19 parent interviews we conducted (five with fathers and fourteen with mothers) of adolescents ages 15-17, the vast majority were conducted in Spanish (n=15). The vast majority of parents were foreign-born (n=17) and low-income reporting a family income of less than \$24,000 per year (n=14).

After each interview or focus group, a summary was drafted and the audio recording, if available, was transcribed (and, when necessary, translated into English). During the data collection process, study staff held debriefing sessions during which preliminary themes were identified. When data collection ended, staff engaged in a collective and individual process of open coding, an inductive approach to qualitative analyses that allows codes or themes that were unanticipated – but critical to our analysis – to emerge. When a finding emerged, we employed axial coding to analyze interconnections between study themes to help tell the "story." Finally, we employed selective coding to generate core concepts or ideas about the emergent themes. Data were coded and analyzed using NVIVO 9.

### **Adolescents and Parental Attitudes**

As noted above, we asked parents and adolescents about their views on adolescent parenthood including whether it was something that they wanted to avoid or aspired to, as well as their ideal age for entry into parenthood. There was overwhelming consensus among both the Latino adolescents and parents with whom we spoke that teen pregnancy and parenthood is something that should be avoided. While the reasons why a teen pregnancy should be avoided varied, they largely centered around the effects on the adolescents' life goals and the "readiness" of adolescents to parent.

### Don't Want (My Child) to be a Teen Parent

Most adolescents and all parents saw adolescent parenthood as derailing and, most likely, limiting the ability of adolescents to accomplish their life goals, in particular their educational goals. As one female adolescent summed it up, "I want to study...go traveling... I don't want to be...buying diapers, baby food." A number of adolescents, however, while recognizing that teen pregnancy presented an obstacle to accomplishing one's life goals, also noted that it did not have to mean giving up one one's goals or dropping out of school. Several adolescents provided examples from their social circles of peers who continued to study while raising a child. Parents, perhaps from experience, felt more strongly that a teen pregnancy would result in an uphill battle in which an adolescent's educational and life goals would likely need to be readjusted to respond to the financial and economic realities of raising a child.

In addition to limiting the goals of adolescents, adolescent parenthood was something that neither adolescents nor parents saw adolescents as being particularly "ready for." Expressing his belief that he was simply not ready to parent, one male adolescent put it as follows: "I look at

[becoming a father] as like, if I'm not financially well, how am I gonna take care of that child if I don't have a job and I'm only this age? Like certainly everybody here will have a kid eventually, in the future. But not now!" Similarly, a mother of a male adolescent stated she would like her son to postpone fatherhood until he is in his thirties: "So that he has time to...prepare himself economically and... so that he can be more mature; so that he knows what a responsibility [fatherhood] is, how patient he will need to be; so that he has more information about how he should be as a father."

As suggested by the quotes, the adolescents we spoke with valued parenthood, and most adolescents wanted to become parents at some point. Parents, too, wanted to become grandparents someday—they just wanted to do so at the "right time." Echoing the sentiments of many adolescents we spoke with, one female adolescent described the "right time" to become a parent as follows:

You have to be stable; you have to have your job, not just like a high school degree. [A high school diploma] doesn't even get you that far anymore. You have to at least go to college first and then become a parent because becoming a parent is a lot of stress. You have to pay your house bills, you gotta pay your phone bills, you gotta pay for the baby's food, diapers, all of that.

Given the many things both adolescents and their parents wanted them to accomplish, most adolescents and parents identified some time in the mid to late twenties as the ideal age to become a parent.

In short, both adolescents and parents strong believed that delaying parenthood is important to allow adolescents to reach their educational and other life goals, and that reaching these goals will in turn prepare them for parenthood.

### Attitudes about Dating and Sexual Intercourse

We also asked Latino adolescents and parents about how they viewed adolescent dating, and whether they viewed sexual intercourse as typical or expected in adolescent dating relationships. In general, both adolescents and parents believed that sexual intercourse is often associated with adolescent romantic relationships. While this perception seemed to lead many parents to disapprove, or at least be wary, of their adolescent dating, this expectation also appeared to encourage some adolescents to engage in sexual relationships.

**Dating = sex, so don't date.** While there was near consensus among parents that adolescent dating and sex go hand in hand, there was not agreement about whether adolescent should be allowed to date. One group of parents who agreed that adolescents should be allowed date and have romantic relationships saw adolescent dating as normative and age appropriate; another group of parents thought adolescents should not date at all. Parents who thought adolescents should not date were the majority in our parent sample, with many holding traditional attitudes and values regarding premarital sexual intercourse. These beliefs were summed up by the mother of a male adolescent who stated:

If someone is dating, they are going to have sex. If you start dating you will start touching, if you touch their hand and kiss them then you will feel things and want to have

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sex with that person. And that's not good because that's not going to be your wife. ...In my mind you are only with one person your whole life. And that's for your mind and your body. Having sex with different people gives you diseases. There are women who have two or three boyfriends; I don't know how they do it.

Parents who held traditional views towards dating did not seem to believe that platonic relationships were possible or likely, and because they were also strongly against premarital sexual intercourse they believed that adolescents should not date until they are ready to marry.

Those parents who were more accepting of adolescent dating also expressed a preference towards delaying sexual relationships. However, this group of parents recognized that the reality is that many adolescents who date also end up having sexual intercourse. Indeed, some parents appeared resigned to this possibility including one mother of a female adolescent who tells her daughter to get to know the mate before engaging in sexual relationships and that, "she [her daughter] needs to go too slowly, and not have sex right away." It is worth noting that, while these parents would rather have their adolescent not become sexually active, they also warned them that if do they have sexual intercourse, to practice safe sex (e.g., use a condom). For example, a mother of a male adolescent reported advising her son to use a condom in case he has sexual intercourse: "we're always telling him to be careful, if he's going to have sex with somebody, to use condoms and be very careful about whom you getting involved with." Similarly, a mother of a female adolescent reported offering to take her daughter to a gynecologist if she was having sexual intercourse with her boyfriend: "I have always told her that I would help her and take her to the doctor [to get contraception]".

It is important to note that, regardless of whether parents held traditional attitudes about sexual intercourse and dating, most, if not all, believed that dating distracts adolescents from obtaining their educational and other life goals. As one mother of a male adolescent put it, "I told him 'focus on school and getting a job, not a girlfriend. She will affect your school work; she will distract you from your schoolwork.'" The belief that dating is a 'distracter' also seemed to reinforce parents' preference to delay dating as long as possible.

**Dating=sex, more often than not.** As in the case with parents, the majority of adolescents thought that platonic relationships are rare and that there is an expectation that sexual intercourse will take place within adolescent romantic relationships. More specifically, both male and female adolescents in the focus groups agreed that romantic relationships among those their age quickly turned into sexual ones; in part, because male partners expect sexual intercourse, and females, in turn, feel they need to please and/or to live up to expectations. Several noted that, in the quest for a deeper commitment, females may agree to have sexual intercourse. One female adolescent articulated this conundrum as she described the link between sexual intercourse and dating: "If you [are] with your boyfriend...you think you're forever, you're probably going to give it up to him [have sex with him] if he asks, if he pressures you." Another female echoed the pressure many feel to have sexual intercourse in order to keep the relationship when she stated, "if you don't do sex with your boyfriend, some of them leave you." Male adolescents in the focus group discussions corroborated what the females reported, and discussed how males associate and expect sexual intercourse in a romantic relationship, as one male adolescent noted: "If you want to make your man happy, how else are you gonna make him happy? Sex is the number one [way] ...in a relationship."

### Attitudes about Contraception

We asked Latino adolescents and parents to talk about their attitudes and beliefs towards contraception. In general, we found that opinions fell into two camps. The first group, which represented the minority of our sample, included adolescents and parents who had negative attitudes about the use of contraception in general. The second group, which included the majority of our sample, held positive attitudes about at least one type of contraceptive method. It is worth noting that most of discussions about contraceptive methods were largely focused on the pill and condoms—the two methods with which adolescents and parents appeared to be most familiar.

Negative attitudes about hormonal contraception and/or condoms. While most adolescents believed that birth control should be used, some either had negative attitudes toward one or more contraceptive methods, or recounted the attitudes they had heard from other adolescents and parents. Negative attitudes about contraception generally came from the distrust some adolescents and parents held toward hormonal methods (in particular the Pill) and condoms. Among this group, most were concerned about the negative side effects of using hormonal methods. For example, describing the burden of taking hormonal contraceptives, one female adolescent stated, "[the Pill] gets you like fat, like you gain weight." Similarly, a mother of a female adolescent articulated her negative attitudes about hormonal contraceptives stating, "I don't really trust any [hormonal] methods. ... They affect your health." Other adolescents in one group said that they did not use hormonal methods because they required a prescription, and therefore could lead to parents or others finding out. One female adolescent reported: "birth control, you got to go a doctor and then your parents can find out and you don't want that."

In addition to holding negative attitudes toward hormonal contraception, this group also held negative attitudes about condoms, in part because they did not believe them to be reliable. As one female adolescent noted, "condoms don't always work." Other adolescents were opposed to their use because they felt condoms were not "pleasant" to use, and diminished sensation. As one male adolescent put it, "I mean to tell you the truth, I don't like using a condom. It feels better [without it]."

A few youth and parents who held negative attitudes about hormonal contraception and/or condoms had more extreme views. They believed the availability of these methods encourage adolescents to have sexual intercourse. For example, a mother of a female adolescent thought schools are: "giving them [adolescents] more freedom and giving them condoms and making it easier for them [to have sexual intercourse]." Some parents and adolescents also believed that hormonal contraception should be restricted to those in long-term relationships who want to avoid a pregnancy, and not for those in "less committed" relationships. As alluded to earlier, this belief appeared to be closely tied to disapproval of premarital sexual intercourse in particular for females. Echoing the sentiments of some, one male adolescent explained that, if you were a female who used the pill but was not in a long-term relationship, "you're probably considered like a ho."

**Positive attitudes about hormonal contraception and/or condoms.** Most adolescents and parents we spoke with shared positive attitudes about birth control, and described hormonal contraception and/or condoms as important tools for delaying parenthood and protecting against

STDs. Some adolescents spoke positively about birth control in very general terms; for example, one female shared: "I think that all teens should be on birth control since they be going to high school because that's when they really get started to [have sex]." Others mentioned the advantages of using a particular method or combination of methods. Another male adolescent who spoke openly about the fact the fact that he wasn't prepared to be a father stated: "I always say 'wear a condom,' because it will save your life [i.e., keep you from becoming a parent too early]." Other adolescents noted the benefits to using hormonal methods and condoms together as a more certain way to avoid pregnancy while also protecting against STDs. While adolescents suggested that condoms and the Pill were the most common forms of birth control among their peers, one female explained that she preferred to use the IUD because it is, "one of the best birth controls," meaning she did not have to remember to take it and did not experience some of the side effects she associated with other methods.

Parents also tended to share positive attitudes about at least certain methods of contraception. Many parents explained that they trusted condoms as a means for adolescents to protect against STDs and HIV, in addition to pregnancy. For example, one mother explained that she tells her adolescent son he "has to" use condoms with his girlfriend because he could "...have a lot of consequences if he doesn't use a condom. The girl will get pregnant, he could get STDs, a lot of things could happen that he is not ready for in the end. And it's not just him, [the consequences] will affect a lot of people." Other parents noted that condoms could still break, and mentioned the advantage of additional methods, including the Pill, injections, the implant, and the IUD. Notably, however, parents' positive attitudes towards hormonal contraception and/or condoms could be complicated by the fact that they disapproved of their adolescents having sexual intercourse or accessing birth control without parental permission. One mother with two adolescent sons stated, "I like birth control, I am not against it," but then went on to explain: "I don't think you should have a girl who is 16 going to get birth control without her parents' permission." Another mother with an adolescent daughter explained that, while her preference would be for schools to "never" give out birth control, she thought 17 would be an appropriate age if "[teens] are going to have sex [anyway]."

### **Knowledge: What do Adolescents Know?**

To help inform the development of a new prevention program, we asked adolescents what they and their friends knew about birth control and where they learned their information.

### Knowledge about Birth Control is Narrow

For the most part, adolescents reported knowing about the range of birth control methods; however, the depth of knowledge about some methods, in particular condoms and the Pills, far exceeded that for other methods. Overall, condoms appeared to be the method that adolescents were most familiar with. Indeed, when it came to the condoms, most adolescents reported that they were readily accessible and that most adolescents used them at some point or another. For example, an adolescent female explained: "They teach you since middle school because they have condoms in middle school, you know City Year? They came over and during art class they came over and they showed us how to put on a condom." Similarly, most adolescents appeared to be more familiar with the Pill than with other hormonal methods. As one female adolescent put it: "You don't get the right amount of information about how to prevent pregnancy...like

emergency contraceptive and all that...some people at my school don't even know what the Plan B pill was...so they just lack knowledge about...birth control"

The greater familiarity among adolescents with Pills and condoms may be due to the fact that they have been on the market for a much longer period of time compared with other methods, their greater accessibility especially for adolescents, or how information is disseminated in schools, which is the primary source of knowledge for most adolescents we spoke with, as discussed in detail below. While the majority of adolescents appeared to be familiar with the Pill and able to access condoms, it was unclear whether this translated into knowledge about how to use these methods accurately. Moreover, a number of adolescents either reported not knowing or having friends who did not know much about birth control methods or how they could be accessed. For example, one female adolescent told a story of a friend who lacked knowledge about birth control: "There was this person who had sex unprotected their first time and they thought it would be okay because they like used the back out method [i.e., withdrawal]. ... [We] should have to educate that person that it was not a good plan. And now they're just stressed, which they deserve." Other adolescents spoke of peers who didn't know how to use a condom, or also considered withdrawal an effective method for preventing pregnancy. In fact, female adolescents in one focus group decided to use the group as opportunity to help inform their fellow participants who were less knowledgeable about the various kinds of birth control.

Adolescent 1: So don't you have to take birth control before you have sex? To prevent it?

Adolescent 2: Yeah [you do]

Adolescent 1: But let's say we go to a party or something you just have sex with somebody then if you, if you got a condom then you have [a] chance you most likely won't get pregnant. But if you don't have a condom and you just decide to have sex then I think birth control is not an option anymore?

Adolescent 2: [Use] Plan B.

In addition to the lack of familiarity with a range of methods, we also heard a good deal of distrust of hormonal methods from both adolescents and parents, based on incomplete or informal information they had received. Both adolescents and parents expressed concerns about side effects associated with hormonal methods. Adolescents explained why condoms are the preferred method based on what they learned in health class, for example, one female adolescent shared: "Some girls are scared to be on the patch or needle or whatever; I know the side effects because of health class, some like gain a lot of weight and some like get blood clots so they are like no I'll just stick with condoms." Parents, in contrast, discussed side effects they or their friends experienced from trying hormonal methods. For instance, one mother with an adolescent daughter explained: "I was on the shot for three years and it affected my health. I gained weight, I was inflamed, I didn't get my period for two years. [I had a] hormonal imbalance, it was awful."

### School and Friends: Primary Sources of Information

Adolescents reported turning to three main sources for information about sexual intercourse and birth control: school (including health classes, school-wide assemblies), friends, clinics/doctors,

and the Internet. Although adolescents reported obtaining information from clinics/doctors and the Internet, these sources were mentioned less frequently. In contrast, schools and friends appeared to be the biggest purveyors of information. School, in particular, appeared to be the source that most consistently imparted information and reached the most adolescents.

Adolescents reported, "School[s] strongly recommends using condoms," and they made them readily available to students. However, although adolescents were open to hearing about this method, they also reported feeling frustrated by the heavy emphasis on condoms. As one male adolescent summed it up, "you get annoyed hearing the same thing [condoms] over and over." Indeed, some adolescents seemed to stop paying to the repeated messages. One male summed up his experience in the following way: "I was like, hold on, this felt familiar; it's the same thing every day [time]." This indirect approach to disseminating reproductive health knowledge coupled with a focus on few birth control methods may result in narrow, focused, surface level knowledge. In fact, adolescents even reported that the take-away message from school-wide assemblies was, in the words of a male adolescent, "like don't have sex so you won't get STDs...basically abstinence."

## Despite Good Intentions, Sources are Misguided

Although schools provided knowledge about reproductive health, when adolescents needed to actively seek knowledge, they reported turning to their friends for information. As one female adolescent noted: "Well, my friends, well, most of them are more experienced than me so I just go to them and ask them what I should do when I'm in that type of situation." Although adolescents felt comfortable talking with and requesting information from their friends, some were apprehensive about the accuracy of the information received. As one female explained, "I don't think all friends tell you the right information... one kid tells you one thing and the other, another thing, and they just confuse me." Parents reported similar experiences when they were growing up. One father with an adolescent son went on to describe the same apprehension that adolescents described about trusting their friends to have the knowledge: "I didn't really have information about sex or the consequences of it when I was a teenager...my mom was out of the loop. So that left my friends to fill in the void. So for the most part, it kind of worked out because I got some factual information and some that wasn't." Overall, it appears that adolescents, like their parents before them, piece together information from multiple sources and sift through the information to determine what they will use and what they will discard. It appears that for many the standard that is used to determine what is accurate and useful is trial and error.

#### **Communication**

# What Messages are Latino Adolescents Hearing about Dating, Birth Control, Sexual Relationships, and Becoming a Parent?

Adolescents across the focus groups identified a number of key messages they heard around these focal topics; in many cases, parents corroborated adolescents' accounts when they spoke of their experience talking (or trying to talk with) their sons and daughters. While adolescents and parents agreed on some messages (e.g., "wait to become a parent"), adolescents did not agree with other messages (e.g., "don't have sex"), and felt that such messages could actually hinder open communication with parents about these topics.

We describe these messages here as they may help inform program development and messaging. For example, a program may need to build on messages that adolescents are hearing (e.g. while adolescents are already getting the message "use protection," they may need additional information about how to access or certain forms of contraception, such as LARCs). In other cases, adolescents may hear anxiety provoking messages from their parents (e.g., "if you become pregnant or father a child, be prepared to face the consequences") that may hinder communication. While a program would not want to echo these messages, understanding that they are part of adolescents' daily lives can help a program better meet adolescents' needs.

"Wait to become a parent." Nearly all parents we spoke with reported telling their adolescents to wait to become a parent until they were "prepared;" in other words, until they had finished high school or college, or were emotionally mature and financially established enough to parent a child. The importance of this message was underscored by parents' concerns that adolescents may not fully understand the impact of early entry into parenthood on their chances for later life success. As one father who had both a male and female adolescent put it: "I tell them they don't want to become a parent before their time or they are going to be side tracked from what they want to do in life."

Adolescents in our focus groups seemed to hear this message, loud and clear. They spoke at length about what pregnancy during adolescence could mean for their life chances, and sometimes echoed the words or perspectives of their parents. As one female adolescent put it: "[Parents] never want us to have sex. ... Or if anything, they want you to finish ... high school and go to college and then you can do whatever. ... If you get pregnant at this age you're basically kind of blowing your future away." A male adolescent expressed a similar sentiment when he shared that parents "in general" viewed adolescent parenthood as "throwing your life away." Similarly, other males in the group described adolescent pregnancy as "messed up," "a burden" or an event that can "ruin your life."

Consistent with the findings reported in Chapter 2 as well as the attitudes expressed by adolescents, among parents who had discussed an ideal age for parenthood with their adolescents, most reported telling their adolescents to wait at least until they were in their early to mid-20s. However, as we discuss below, parents were less explicit when it came to communicating with adolescents just *how* to delay parenthood (i.e., how to negotiate intimate relationships or select a birth control method).

"Pon't have sex (until you're married)." Parents and adolescents both agreed that the messages directed at adolescents around sexual intercourse, while consistent, left much to be desired. Several adolescents, in particular females, shared stories of parents who simply told them "don't have sex" or "wait until you're married." The message to not have sexual intercourse could be strong and frequent; as one adolescent female put it: "My mom she tells me every day: 'You better not be with no dude. ... I didn't raise you that way. ... You better not be showing everybody your vagina." From the adolescents' perspective this was not the best approach. As another female explained, "If [parents] just come up and say 'Don't be having sex and all that stuff,' then it's like they're accusing you of something and that's not good." As suggested by this adolescent, the implication for female adolescents in particular, was that to have sexual intercourse meant you were "bad" and did not value yourself.

"If you do have sex, use protection." Most adolescents reported that condoms were readily available in schools and through clinics and community programs, and most also described receiving messages about the importance of using "protection." Adolescents in the focus groups mentioned a wide range of sources for information about different forms of contraception, including friends, doctors, relatives, siblings (or siblings' significant others), school personnel or program staff; in some cases, adolescents reported that these messages came from their parents. A few adolescents said that their parents had given them condoms. For instance, male adolescents recalled parents asking them if they were using condoms, and a few adolescent females spoke about their parents helping to get them birth control or talking to their parents, in particular their moms, about birth control. However, for the majority of adolescents we spoke with, explicit discussions about contraception (e.g., discussions about the pros and cons of different contraceptives, or assistance obtaining contraceptives) were largely absent from parent-adolescent communication.

A few parents explained that, although they did not want their adolescent children to have sexual intercourse, they still wanted their adolescents to be safe if sex happened. As the mother of one male adolescent who believed in postponing sexual intercourse until marriage, explained, "I said [to my son] 'It's OK that you use birth control and take care of yourself, but I don't want you to have sex." Another mother of a female adolescent shared her concern over how to balance giving adolescents the information they needed to "protect" themselves with also encouraging them to delay sexual intercourse. This mother thought it was good that schools discussed topics such as sexual intercourse and birth control because "some parents don't talk to their kids." At the same time, she worried that schools were making it easier for adolescents to have sex.

"If you become pregnant or father a child, be prepared to face the consequences (on your own)." Both adolescents and parents gave examples of parents sending the message that, if adolescents became pregnant or fathered a child, they would need to face the consequences "on their own." A male adolescent in one of the focus groups explained that his mother might enforce more rules in the event that his partner got pregnant, such as making him pay rent and get a job. Others described some more drastic consequences parents had threatened; some shared stories of parents who threatened to "kick [them] out of the house" if they or a partner became pregnant, while one female adolescent speculated that her immigrant parents would "send me back to the motherland" in the event of a pregnancy. A few adolescents noted that some parents may have no choice but to cut off a child who became a parent, as another child would mean an added expense the family could not afford. Male adolescents in one of the groups noted that having an adolescent become pregnant or father a child might be particularly challenging for an immigrant family. As one participant explained:

Most of the time when new immigrants come to the country it's like a struggle to get here...[those] parents are probably thinking "I brought you to this country and you do this already? You're not even here [and you already messed up], I'm disappointed."

Parents also reported warning their adolescents that they would not (or could not) continue to support them in the event of an early pregnancy. One mother reported telling her daughter: "You have to think really hard because I will not be with you [...]. I am not that type of grandma, I will not be with you if you get pregnant." Another mother shared how she tried to send a similar message to her adolescent son, explaining: "I wouldn't like that he is so young and getting a girl

pregnant, having a kid with another kid. That would be headache. I can't help him; it's his responsibility, that's what I tell him."

"You have a chance at a better life (if you delay parenthood)." Adolescents and parents suggested that parents also want their adolescents to delay parenthood in order to have "a better life than we did." Adolescents shared stories of parents who had faced challenges as single parents or as young parents, and who talked to their kids about these struggles in hopes that they wouldn't make the same mistakes. As one adolescent female put it, "I think that some parents, they were young parents... they would be like 'Oh, don't follow my footsteps.'" Indeed, parents who had gotten pregnant at a young age told of recounting these stories to their adolescents as cautionary tales. A mother of two adolescent sons shared that when her sons tell her "Mommy, you had your kids when you were 18," she will respond, "But I suffered by having you so young. So I don't want you to have kids so young, I want you to study." The desire to have a better life seemed especially salient for those who had immigrated to the United States. As the mother of an adolescent male explained: "I told [my son] I wanted him to work harder but not the way we had to work so hard [when we came to the United States]. Look at my hands—I have calluses. I don't want him to have hands like his mother from working hard in this country."

"Expectations (and dangers) are different for females vs. males." Consistent with the attitudes and values discussed in the previous section, adolescents heard and parents shared gender-specific messages around these topics. Adolescents reported hearing that females need to protect their honor—that is, remain chaste and avoid even the appearance of impropriety by having sexual intercourse. One adolescent female explained that her mother told her: "the girl has to have more pride than the boy because ... [she says] I would be stuck with the child if I get pregnant but not the boy. The boy can leave any time." At the same time, females spoke of how they could face very different expectations within the context of romantic relationships, where having sexual intercourse was often seen as a necessary "love proof." As one female adolescent put it: "If you're gonna have a boyfriend, he's gonna ask you to have sex. ... He will be like 'oh I would wait for you but you must have sex to stay in that relationship ... if you really love me you gotta have sex with me."

Adolescent males also faced gender-specific messages around sexual intercourse and related behaviors. While sexual intercourse might be more acceptable for male adolescents (one male adolescent recalled his father saying "you da man" upon learning he was sexually active), adolescents acknowledged that males could also feel pressure to be, or at least act, sexually confident and experienced. For instance, males in one focus group spoke of how they faced the stereotype of the "Latin lover" as Latino males.

### Characteristics of Communication between Latino Adolescents, their Parents, and their Peers

Adolescents and parents we spoke with described their experiences discussing (or sometimes, not discussing) dating, sexual intercourse, and becoming a parent. These topics did come up in parent-adolescent communication, although the resulting discussions could be awkward, infrequent, and not particularly informative. While adolescents spoke of having more comfortable discussions with friends or peers about these topics, peers could also be an imperfect source of information and guidance.

Parent-adolescent communication: "I'll talk about it...if I have to." Parents and adolescents alike stated that it was challenging to speak with each other about dating, sexual intercourse, birth control, and becoming a parent. Both reported that such conversations could be "awkward"—so much so, in fact, that conversations often did not get very far or go into great detail. As one adolescent female explained: "When I try to talk... with my mom about, like, girls things, she's gonna be like 'I don't want to talk about that.' ... When I... turned 12 and I started on my period, my mom was like 'Ahh, don't talk to me about that!" Other adolescents also mentioned they could not speak openly about these topics with their parents; in the words of one adolescent male, "Your parents ask you [about sex] and you tell them like half the story." Parents also shared examples about trying to bring up these topics with their adolescents and being shot down. One mother described her efforts to talk with her adolescent son about dating in the following way: "Sometimes in the TV stuff comes up and I [ask] him if he has any girlfriends or anything. He is very closed, he doesn't say anything to me." This mother went on to share how she would like more information about how to broach topics such as dating, becoming a parent and birth control. As she put it, "How do I start a conversation with him [so that] he feels comfortable talking to me about [it]? I just don't want to do it upfront, like [ask] 'Are you having sex?'"

In general, parents and adolescents appeared to struggle with how to broach the subjects of dating and sexual intercourse, and how to combat the discomfort they faced in discussing these issues. Many resolved the problem by accepting that it was an uncomfortable but necessary discussion. As one adolescent female put it: "I just feel awkward [talking to my parents], but if I ever had to have that conversation I would go to them first because I feel like if I had to have that conversation they would support me." The mother of an adolescent son expressed a similar sentiment when she explained: "I would be lying if I said I felt comfortable [talking to him about sex], but I have to do it."

Indeed, most parents did report talking to their adolescents about at least some of these topics, and most adolescents appeared to have had some form of discussion with their parents. While some parents had touched on one or more of these topics frequently, others described just a handful of conversations over the years. The depth and content of these conversations also varied. As one mother put it, "I ask [my daughter] if she is using birth control and I tell her to wait to have sex, wait until her time. But we don't talk about the details." In general, parents and adolescents seemed most comfortable discussing (delaying) becoming a parent while being less comfortable talking explicitly about sexual intercourse and contraception.

**Parent-Adolescent Communication: What Makes it Hard?** Adolescents and parents identified a number of factors which made parent-adolescent communication about dating, sexual intercourse, and becoming a parent challenging, and sometimes blocked communication altogether.

"Overprotective" parents. Adolescents stressed how hard it could be hard to talk to parents who they perceived to be too strict or overprotective, and how approaching such parents for information about sexual intercourse and birth control was typically off limits. As one adolescent female explained, "I cannot talk to my mother [...]. If I talk to her about sex she'd be like 'Girl, you are pregnant!" Similarly, another female described that she did not feel comfortable going to her parents for information because: "my parents don't agree for me to

have a relationship, not right now, because they really want me to focus on being in school. So I just really don't share with them." Several adolescents believed that "overprotective" parenting not only impeded conversation, but also could inadvertently drive adolescents to engage in the very behavior parents were seeking to prevent. As one adolescent male put it, "I think the stricter parents... their children, they don't even listen, I think they go out and do it. Because they're like kids, so they have to have some fun, you know?"

Differences in cultural norms. For immigrant households, differing cultural norms between the United States and parents' home countries could also present challenges to adolescent-parent communication around these topics. As one mother of an adolescent female explained: "In my country it's very different. You have to get permission [to date], and a 15-year-old cannot have a boyfriend, maybe at 18. But here [in the United States]... at 13 or 14, here they have a boyfriend and are having sex." Other parents (most of whom were immigrants themselves) echoed this experience, explaining that these topics were not discussed openly in their own households when they were growing up. As one mother of an adolescent male put it: "I come from a country where, when a child is born you don't talk to them about these things. It is a little uneducated, but there were things you didn't talk about. ... But yeah, now if [my son] gives me a small opportunity to share my thoughts I take the opportunity." In a similar vein, the mother of another male adolescent stated: "Everything [related to sex and birth control] is shameful to talk about [in my native country]. It needs to change... I have my kids and I'm going to talk to them about what goes on, because I don't want a curious teenager on my hands."

(Adolescents think) parents don't have the information. Adolescents' perception that parents may not be reliable sources of information about these topics, in particular birth control, also appeared to hinder communication. As one adolescent female put it," The only thing I wouldn't talk to [my parents] about is birth control because they don't really know about it. Like that's something that you talk to your doctor about." Similarly, an adolescent male explained, "I'd prefer to listen to a doctor [about sex and birth control] because they know what they're talking about. Parents or other people might just have had a bad experience."

# (Parents think) conversations aren't necessary until adolescents are sexually active.

Parents' belief that these topics did not need to be addressed proactively—for example, that parents did not need to discuss dating with adolescents until they thought adolescents were interested in dating, or that parents did not need to discuss reproductive health services with adolescents until adolescents were sexually active—also appeared to hinder communication. One father explained that he hadn't talked with his adolescent children (a son and a daughter) about using reproductive health services because "I just don't feel that they have that need right now" since neither reported dating nor being sexually active. This belief also appeared to make it hard for parents to understand why adolescents needed or wanted more information about these topics. For example, female adolescents in one of the focus groups explained that any program with the words "pregnancy prevention" in the name would make parents "suspicious." As one participant put it, parents might ask, "You're not having sex so why [do you need to go]? You shouldn't need it."

(Parents think) adolescents are getting this information elsewhere. Interestingly, some parents didn't talk to their adolescents because they believed that their adolescents were already getting this information from other sources, such as schools. As one adolescent male put it,

"Some parents think school already talked about it, because that's why they [have] health class." Indeed, one father of an adolescent son shared his opinion that schools were actually better equipped to talk with adolescents about these topics because parents may not have the time. "I think it's the schools [who talk to adolescents about this]. Because parents are working a lot and then they go to work at another job and then they go to sleep. And the kids go to school in the morning and the parents go to work again."

**Parent-adolescent communication: what makes it easier?** While adolescents and parents noted a number of barriers to open discussions, they also identified a number of factors that made it easier for them to discuss dating, sexual intercourse, and becoming a parent.

**Trust and timing.** Parents and adolescents also reported that having "trust" with each other—i.e., the ability to speak openly with each other—was critical. Adolescent females in one of the focus groups explained that, when adolescents spoke regularly with parents about more mundane aspects of their lives (e.g., "I went to Chipotle today."), it was easier to speak openly about more difficult topics (e.g., sexual intercourse). A few parents also mentioned that the timing of certain conversations also mattered. One mother explained that it was easy to talk with her adolescent daughter about these topics—she just needed "to find the right time," e.g., during the weekend when her daughter was "more in control of her time and in a better mood."

**Real-life examples.** Among parents who discussed these topics with their adolescents, several reported using real life examples of adolescent pregnancy as a jumping off point. One father recounted how while walking in the community with his daughter "I told her to look at the little 13, 14-year-old girls who have their babies. And I told her, 'That is not good,' and I asked her 'How are you going to avoid that?" Another mother of an adolescent female shared how she had begun a conversation with her daughter after her daughter revealed a friend of hers was pregnant. This mother explained: "I was telling her that she needs to think about her future and think about her career. [H]er friends are going to have to put their kids in daycare, and she [will] need to get a job. She shouldn't have sex with her first boyfriend she has and not use birth control." Interestingly, adolescents identified the use of such "real-life" examples as an approach they would like to see incorporated into a program.

Parents' desire to "do things differently." As discussed above, many (mostly immigrant) parents we spoke with grew up in households where sexual intercourse, reproductive health, and birth control were taboo topics. Several parents spoke of wanting to do things differently with their own adolescents. Turning her own experience into motivation to provide more for her children, one mother of a male adolescent explained: "My parents never talked to me about this, so I was learning about this so I could talk to my own family." Similarly, the mother of a female adolescent shared, "I wish I had an open conversation with my mother the way my daughter has with me. I try to give my daughter what I didn't have." The mother an adolescent male laid out this contrast in even starker terms; while she told her son, "you need to protect yourself," explaining how her own parents "never talked to me like that about health. They just said shut up, never say that word. ... [N]o one said anything to me, so now I try to not hide anything from my kids."

**Adolescent-peer communication: a mixed bag.** While adolescents and parents reported that their peers could be easier to talk with about these topics, adolescents acknowledged (and parents worried) that peers did not always provide the best information or guidance.

Getting the "right" information. Adolescents and parents identified adolescents' friends as important (though not always accurate) sources of information when it came to dating, sexual intercourse, birth control and becoming a parent. As discussed above, adolescents reported discussing these topics with their friends, especially when adolescents didn't feel comfortable approaching parents or other adults. A few adolescents identified particular kinds of friends who would be reliable sources to talk with. For example, one adolescent male recommended turning to "older friends" who could "tell you that they ... had children when they were in their teens, how like their life changed." However, some parents and adolescents shared their opinion that friends didn't always provide "the right information." One adolescent female explained that she knew who she could turn to for information about these topics, stating, "I know I'm not going to trust [my cousin] with anything because she got pregnant [without planning to], so I'm not going to trust her. But somebody with a stable relationship and I'm going to listen to them because they're smart about it." In addition to discussing sexual intercourse and related topics with their friends, adolescents across the focus groups reported that their peers frequently talked about sex. Some adolescents explained that this could be uncomfortable if you felt that you were not as "experienced" as other adolescents. In the words of one adolescent female: "other girls are talking about it and you feel left out because you can't really hit the topic because you haven't done it, so you're just like really the odd ball."

Conversations with partners. Some adolescents in the focus groups reported discussing dating, sexual intercourse, birth control and becoming a parent with their partners (i.e., with their "boyfriends" or "girlfriends"). Some adolescent females reported speaking openly about these topics with their boyfriends, with one explaining, "Me and my boyfriend we been together since 5th grade. ... We talk about birth control, we talk about everything. We have trusted each other that much that we talk about everything. So we be like, 'No kids for us until we graduate college and everything.'" However, others reported that many adolescent females worried about trusting information they received from boyfriends about sexual intercourse and birth control. As one female summed it up, "A lot of us [girls], like we believe what the boyfriends say. Some [girls] don't use protection when [they] have sex, like they go by the love."

Other adolescents pointed out that conversations between adolescent partners might be limited by adolescents' own limited knowledge—for example, as noted above, adolescents might just discuss condoms, the Pill and Plan B because those are the only methods of birth control they are familiar with. In general, however, conversations between romantic partners tended to be more the exception than the rule, as males in one group characterized proactive conversations between partners about birth control and STDs were even more "rare" because you're "just in the moment."

**Older partners.** A small number of adolescent females in the focus groups brought up the issue of older partners whom they cautioned might pressure them to have sexual intercourse or start a family. One female went on to share her experience of dating a 19-year-old male when she was 14, and explained how this male had tried to convince her run away with him. As she recalled: "He was telling me 'Oh, we should leave, you know, and have our own family.' ... Next thing

you know, like three months later we broke up. ... If I [had] left with him, where would I have been?"

# **Building an Adolescent Pregnancy Prevention Program for Latinos: What Latino Adolescents and Parents Think**

During our interviews and focus groups, we asked adolescents and parents for their thoughts and reactions to an adolescent pregnancy prevention program for Latino adolescents. We asked them whether they thought such a program was needed and wanted in their community, whether it should serve Latino adolescents only or adolescents of other racial/ethnic groups, what the program should include, how it should be delivered and what could be done to get adolescents to come and keep coming.

# Latino Parents and Adolescents want Teen Pregnancy Prevention Programs

The vast majority of adolescents and parents we talked with believed that adolescent pregnancy prevention programs are needed and would be beneficial for their community. There was, however, less agreement on whether programs should be geared specifically toward Latino adolescents. While some parents and adolescents thought there was need for a program aimed specifically at Latino adolescents (as evidenced by the higher rates of adolescent pregnancy among Latinos), some thought it would not be "fair" to only serve Latino adolescents, as non-Latino adolescents are also in need of pregnancy prevention services. Others worried that programs specifically aimed at Latinos might inadvertently confirm stereotypes that Latino adolescents "are the only ones getting pregnant."

Most adolescents believed that their parents and those of their friends would encourage them to participate in such a program. As one female adolescent put it, parents would want their adolescents to attend such a program because: "[it is] helping them out...Some parents don't want to talk to you about that or they feel awkward talking to [their adolescents] about it and then they may not have [all the] information ... that you will have and it's important because you have a lot of information which will benefit them and us." And, the majority of the parents we spoke with agreed. Parents expressed a desire for their adolescent to be informed; however, they also expressed a desire to be informed about the content their adolescents would be exposed to in teen pregnancy prevention programs (e.g., what adolescents would learn or talk about). Both adolescents and parents were enthusiastic about the idea of a program because they thought it could provide a place for adolescents to access accurate information about contraception, how to stay "on track" and to reinforce the consequences of an early pregnancy.

# What Should the Program Include?

Parents and adolescents expressed a preference for a holistic adolescent pregnancy prevention program, including information about sexual intercourse and birth control, as well as life skills and behaviors. Interestingly, although some parents identified topics they preferred were left up to parents to discuss with adolescents (e.g., homosexuality), the majority thought the program should cover "all topics."

Consistent with a holistic approach, adolescents, especially adolescent females, imagined a program that could help them negotiate their relationships with their parents (e.g., building parent-adolescent trust, parent training on how to discuss adolescent sexual intercourse or

address adolescent pregnancy). Similarly, most parents thought a program should help adolescents talk with their parents about topics such as sexual intercourse, birth control and dating. Adolescent females also spoke about wanting help negotiating relationships with partners, such as "how to say no to boys," as well as navigating relationships with older partners (as noted above).

To help fill the knowledge gap, adolescents and parents thought it was important for adolescents to learn how to use contraception effectively, although some parents thought that adolescents should be encouraged to delay sexual intercourse before teaching them about contraception. Other topics adolescents and parents mentioned that they would like to see included were: resources for adolescents (e.g., financial aid for pregnant or parenting adolescents, child care and health care information, places to go for STD testing); information on mentorship opportunities; help setting academic and career goals; encouragement for adolescents to stay in school; and information about tobacco, alcohol, drugs and gangs. A father of an adolescent male suggested that the program could identify what adolescents were interested in, and help them cultivate those interests to achieve their goals. Expressing the sentiment of many, he believed the best approach to helping adolescents avoid unplanned pregnancy is to "find out what [adolescents] care about or what they like and ... tell them how to achieve that." Perhaps most importantly, adolescents emphasized the need for a program that went beyond the message of "don't have sex," as that in it of itself was not perceived to either helpful or effective in preventing adolescent pregnancy.

# How Should the Program be Delivered?

Adolescents and parents expressed a diversity of opinions about how the program should be delivered. However, there was general consensus that the person(s) delivering the program should be well-informed, trustworthy, accessible and, most importantly, for the message to be most effective, the person had to be someone with whom the adolescents could relate. Both male and females adolescents suggested that all or part of the program be delivered by someone close to their peer group—a particularly common recommendation was to have a current or former adolescent parent facilitate workshops or be a guest speaker.

Although there was no consensus among adolescents on whether the teen pregnancy prevention program should be co-ed, there seemed to be more gravitation toward single-sex programs or, at a minimum, co-ed programs that had single-sex sessions. Summarizing the thoughts of some, one female adolescent said the program should be "females with females, males with males, because that's how you get more trust." Adolescents, particularly adolescent males, went on to note that existing teen pregnancy prevention programs and related services felt very female-focused, suggesting a need for more programs tailored to meet the specific needs of adolescent males. Interestingly, parents and adolescents agreed that there should be some form of parent involvement, although adolescents noted it would be awkward or uncomfortable to have parents present for particularly sensitive discussions.

While there was no agreement among participants about when and where the program should be held, adolescents and parents spoke about having a "convenient" program location, e.g., near or at adolescents' schools or in their neighborhoods, and either accessible by public transportation or within walking distance. Most importantly, adolescents and parents stressed that program

content should be engaging (e.g., interactive activities as opposed to long lectures or a lot of handouts). A female adolescent compared a teen pregnancy prevention program to her experiences in school, she explained "like in school, if it's boring, I would not like it – I would go to sleep or something, so I would rather learn somehow [in] some game. It has to be fun." Adolescents recommended activities that ranged from "road trips" to "bowling," although the common premise was opportunities for adolescents to be engaged while also learning and to have "bonding time" with one another.

# How do we Get Adolescents in the Door and Keep Them Coming Back?

Adolescents offered a number of suggestions for how to recruit and retain their peers in a teen pregnancy prevention program. Adolescents suggested that the program offer community service, internships, and opportunities to earn school credit or community service hours required for high school graduation for those who attended the program. Other suggestions for recruiting adolescents included: enlisting adolescents to recruit additional participants to the program; using social media such as Facebook, Instagram, or Twitter; and getting the word out to adolescents and parents through the school system (particularly at the beginning of the school year) or through clinics. Adolescents also spoke about the importance of offering incentives, which could be in the form of money, gift cards, or field trips. Serving food at the teen pregnancy prevention program was also frequently mentioned as a strategy to attract adolescents to the program.

# Implications for teen pregnancy prevention programs for Latinos

These study findings have several implications for the development of teen pregnancy prevention programs for Latinos. Specifically, our discussions with Latino adolescents and Latino parents of adolescents suggest that:

- Adolescents and parents are looking for teen pregnancy prevention PLUS programs
  - o Holistic programs that offer information about teen pregnancy prevention while also helping adolescents achieve educational and career goals are highly valued.
  - Parents and adolescents value teen pregnancy prevention programs, but they are more focused on reaching their (adolescents') educational and life goals. Teen pregnancy prevention is an important step to reaching goals but it is only one of many steps.
- ➤ (Many) parents and adolescents are eager to communicate about dating, sexual intercourse and contraception
  - o Adolescents value open dialogue with parents, even if they are not having it.
  - o Adolescents' partners and peers can be valuable purveyors of information and myth busters, if they are knowledgeable.
  - o Both parents and adolescents need help moving past the "don't have sex" or "don't date" discussions.
  - O Parents may need support to develop, practice, and reinforce the messages they want to send to their teens about these topics, as well as help avoiding mixed messages. While parents may not possess the latest and most up-to-date information about birth control, they are the most knowledgeable about the values and ideals they want to instill in their children.

- Programs should include thorough birth control counseling
  - Adolescents can benefit from counseling that covers the spectrum of contraceptive options, including newer forms of contraception such as long acting reversible contraceptives (LARCs), about which they may be less knowledgeable.
  - Parents may also benefit from additional information on contraceptive options, and information about how to talk to adolescents about contraception, including their own values towards contraception. Programs should also address head on parents concerns' about side effects from hormonal birth control methods and concerns that discussing birth control with their adolescents suggest they condone their sexual activity.
  - o This could also offer a platform to neutralize discussions around birth control use so that adolescents who use birth control are not perceived as promiscuous.
  - o Adolescents need to have sources besides parents for accurate information about contraceptive options.
- Programs should focus on adolescent romantic relationships
  - o This includes discussing how romantic relationships are developmentally appropriate, and how to discuss expectations around sexual activity within relationships. Adolescents may benefit from having multiple opportunities to role play situations they could face in romantic relationships, including negotiating personal sexual boundaries. This may be especially important for those with older partners.
  - o Gender norms (for males and females) are also important to address in these discussions, including pressures faced by adolescent males (e.g., the pressure to act sexually confident and experienced).
  - Discussions with parents and adolescents may help to address concerns that parents have about dating and sex, and encourage two-way dialogue around these topics.
- ➤ "Keeping it real" is a good way to engage adolescents
  - o Examples that draw from real-life situations are tangible to adolescents, and may help draw and engage adolescents.
  - o Adolescents do not want to be lectured, and will probably not return to a program that offers a classroom-like atmosphere, paperwork, or handouts.
- ➤ Programs should help parents and adolescents learn how to work through the clashing expectations from their native country and U.S. values
  - O The vast majority of the parents we spoke with were foreign-born, and the majority of the adolescents we spoke with were second generation (their parents were foreign-born). These conversations identified some significant differences in values that may not be seen in other groups:
  - Parents highly valued disclosure around their adolescents' activities, including use of reproductive health services, birth control, and activities in a teen pregnancy prevention program.
  - o The U.S. concept of dating was not accepted by many parents.
  - o Hormonal methods of contraception were not accepted by some parents.

#### **CHAPTER 5. PROGRAM REVIEW**

# Overview and summary

The previous chapters of this report have highlighted the high rates of pregnancies and births among Latino adolescents and have pointed to the roles that individual, partner, peer, parent, school, and community factors may play in these high rates. These factors have important implications for understanding the pathways to adolescent pregnancy and, thus, the "levers" that can be pulled to reduce rates of Latino adolescent pregnancy. To add to this understanding, it is important to identify the programmatic approaches that have found success in reducing adolescent pregnancy (or the key determinants of adolescent pregnancy) among this population. This chapter reviews 29 adolescent pregnancy prevention programs that have been rigorously evaluated with Latinos. Key findings of this chapter include:

- To date, the number of adolescent pregnancy prevention program evaluations with Latinos is extremely limited. This is especially true with regards to evaluations with males and evaluations that measure effects on pregnancy or use of hormonal methods. That said, most adolescent pregnancy prevention programs that have been evaluated with Latinos have a positive effect on at least one outcome related to adolescent pregnancy suggesting such outcomes are malleable and can be affected by prevention education programs.
- Comprehensive sex education programs and culturally-tailored programs show frequent success among Latinos. Conversely, existing evaluations of abstinence-based programs and school dropout prevention programs have not been frequently successful - although these programs have limited representation in this review. Future program approaches should explore combining pregnancy prevention approaches with culturally relevant efforts for Latino adolescents.
- Both middle school and high school programs showed effects on delaying sex, but only high school programs showed success improving condom use or contraceptive use. This is due, in part, to the low rates of sexual activity among middle school adolescents, which may not provide the statistical power needed to measure changes in contraceptive use that are a result of the program.
- Few programs showed impacts on contraceptive use beyond condoms. Most programs examined effects on condom use only, showing the need to expand program and evaluation efforts on approaches that focus on hormonal and long-acting methods of contraception.
- In general, communication skills and psychosocial skills seem to be particularly malleable outcomes. Based on available evaluation studies among Latinos, it appears that programs that seek to improve these skills are often successful. These outcomes may represent "low-hanging fruit" but it is important to note that previous chapters have pointed to the fact that sexual behaviors do not always reflect attitudes, beliefs, and intentions.
- Further adolescent pregnancy prevention programs and evaluations for Latinos are needed. Additional development of culturally-relevant programs and rigorous evaluations are critical for understanding what works to reduce sexual activity, increase contraceptive use, and prevent teen pregnancy for Latinos.

# **Background**

# General adolescent pregnancy prevention programs

Adolescent pregnancy prevention programs have long been an area of interest to direct service providers, researchers, policymakers, and other individuals and groups who work with youth. Systematic reviews of pregnancy prevention programs (which have not focused on Latino adolescents, specifically) have the ability to set the stage for understanding what might work for preventing pregnancy among Latino adolescents, although it cannot be assumed that general adolescent pregnancy prevention programs will work for Latino populations. Further, some of the existing reviews of general adolescent pregnancy prevention programs are more than a decade old and, thus, may be outdated<sup>6,7</sup> – a concern, given the changing landscape of adolescent pregnancy and adolescent pregnancy approaches in the 1990's and 2000's.<sup>4,5</sup> Additionally, some are limited in scope, 8 reviewing only a handful of programs and restricting the ability to make broad observations about program effectiveness.

That said, prior reviews of general adolescent pregnancy prevention programs reviews have been promising. Many reviews have concluded that the majority of existing adolescent pregnancy prevention programs positively influence adolescents' sexual risk-taking behavior by delaying sexual initiation, reducing the frequency of sexual intercourse, reducing numbers of sexual partners, and increasing condom and contraceptive use; additionally, these reviews have concluded that very few programs have negative effects. At the same time, some reviews have been mixed; for instance one review deemed adolescent pregnancy prevention programs to be effective at increasing contraceptive use and, to a lesser degree, to be effective at preventing pregnancy - but not effective at reducing sexual activity. Others have reached decidedly pessimistic conclusions; one review concluded that, in general, programs that attempt to delay sexual initiation, increase hormonal, or prevent pregnancy do not work - and that, among males, they might *increase* the likelihood of getting a female partner pregnant.

In addition to reviewing the overall effectiveness of adolescent pregnancy prevention programs, some reviews have delved deeper into program and curricular components to assess which program components work at preventing adolescent pregnancy. For example, prior reviews of evidence-based programs have shown that both abstinence-only and abstinence-focused program and comprehensive sex education programs (programs that include a focus on contraception) have been found to be effective, although abstinence programs do not seem to be especially effective in changing behavioral outcomes. Programs in a variety of settings (schools, clinics, and community-based settings), with a range of durations or contact hours, and with a range of approaches (such as early childhood, youth development, service learning, family-based, and community-wide approaches) have been found to be promising. Programs in a variety of settings.

Most recently, Child Trends conducted a review of 88 programs with random assignment evaluations that have been evaluated on whether they have an impact on sexual activity, condom and contraceptive use, and pregnancy; from the findings of this review, we concluded:

School-based programs are not often effective at reducing adolescent pregnancy risk, compared with programs in other settings. Community-based programs work more often for improving contraceptive use, whereas clinic- or hospital-based programs work most

often at reducing sexual activity and for preventing STDs and pregnancies.

Mid-length programs (3-6 months) are more frequently effective than short- or long-term programs. Contact hours do not seem to matter as much, although moderate numbers of contact hours (10-19) work more often than minimal or extensive contact hours. Programs with booster sessions might be effective at preventing STD risk (they show success in reducing sexual activity, increasing condom use, and preventing STD infections).

Programs with behavioral skill-building components are often successful in reducing adolescent pregnancy risk, as are programs with homework components. Goal-setting, counseling, and use of technology also seem to be effective in reducing adolescent pregnancy risk. On the other hand, programs that include psychosocial skill-building, service learning/community service, or a job/educational component are less frequently successful.

Interactive programs are more often successful than didactic, knowledge-based programs (meaning programs that rely on classroom instruction, versus group or interactive activities). Group-based programs are effective slightly more often than one-on-one programs. Programs that include parents and those that include a peer component have both been effective. Culturally-tailored programs also show success in reducing adolescent pregnancy risk.

# Latino adolescent pregnancy prevention programs

Notably, the program reviews described above (including the recent Child Trends review) have been limited in their applicability to Latino populations, as they have not focused solely on programs that work for this group. This represents an important limitation in the field. As the previous chapter noted, Latino adolescents may have unique individual and cultural characteristics that result in a heightened risk for pregnancy. Further, Latinos may respond differently to various programmatic approaches; it cannot be assumed that programs that have been evaluated with other populations will work for Latino populations - even those that have been found to have positive effects with other populations.<sup>13</sup>

A few notable exceptions to this exist - but have important limitations, nonetheless. One review of 20 HIV risk reduction programs for Latinos found that these programs often reduced the number of sexual partners, increased condom use, and prevented sexually transmitted diseases - but the review did not focus specifically on adolescents. Another program review identified promising Latino adolescent pregnancy prevention programs, but it was limited in two important ways: it failed to identify key programmatic components across these programs, and it failed to identify programs that have *not* shown success (which can improve our understanding of what does or does not work for this population). Perhaps the most comprehensive review of Latino adolescent pregnancy prevention programs assessed 26 programs that measured behavioral outcomes and found 15 to be effective at reducing sexual activity, increasing condom or contraceptive use, or preventing pregnancies or sexually transmitted diseases. This review also examined effectiveness for subpopulations of Latinos, with respect to urbanicity and age. The limitations of this review are similar to those in the previous review: it does not include insignificant or negative effects, and it does not present findings by program characteristics.

### **Methods**

We reviewed 115 programs with sexual and reproductive health outcomes in Child Trends' Lifecourse Interventions to Nurture Kids Successfully (LINKS) database, 31 teen pregnancy prevention programs identified by the Department of Health and Human Services' Office of Adolescent Health, and 46 teen pregnancy prevention programs identified by the National Campaign to Prevent Teen and Unplanned Pregnancy. Programs included in this chapter met the following criteria: 1) they had been evaluated with randomized control trials (RCTs) and quasi-experimental designs (QEDs), 2) evaluations occurred in the United States; 3) evaluated populations were adolescents or primarily adolescents (ages 10-19); 4) evaluated populations were at least 50 percent Latino, with a sample size of at least 20 OR the evaluation included a subpopulation analysis with a sample of at least 75 Latinos. Because our aim is to develop a teen pregnancy prevention program, we omitted programs for pregnant and parenting teens. Program outcomes include:

*Psychosocial outcomes*: knowledge, attitudes and beliefs, intentions, and self-efficacy. *Communication outcomes*: general communication and parent-child communication. Behavioral outcomes:

Sexual intercourse outcomes: initiation of sexual intercourse, recency/frequency of sexual intercourse, and multiple sexual partnerships (regardless of use of contraception).

*Condom/contraceptive use outcomes*: condoms, hormonal contraceptives, long-acting reversible contraceptives, dual methods, and "other" contraceptives (hormonal methods and/or condoms).

Sexually transmitted diseases (STDs)

Pregnancies

For each outcome, programs were coded as those that "work," those that have "mixed" findings, or those that "do not work." A program "worked" if it had a statistically significant impact/effect on an outcome and "mixed findings" if it worked for at least one measure of an outcome or at least one subpopulation, but not for all measures or for all groups of subpopulations. All findings were significant at the p<0.05 level. Each program's key program components were identified (such as their duration, location, and mode of delivery) to asses which components are linked with program success. We also explored patterns of components that are present in successful or unsuccessful programs. For a more detailed review of the methods of this program review, see Appendix B.

### **Current Review**

With the goal of developing an effective Latino adolescent pregnancy prevention program, this chapter 1) reviews the effects<sup>1</sup> of programs that attempt to prevent adolescent pregnancy or improve the behaviors, communication skills, and psychosocial skills that are tied to adolescent

<sup>&</sup>lt;sup>1</sup> This chapter reviews programs that have been evaluated in randomized control trials (RCTs) and those that have been evaluated in quasi-experimental designs (QEDs). Outcomes of RCTs are impacts; outcomes of QEDs are effects. This report, which synthesizes the outcomes of RCTs and QEDs, will refer to significant findings as effects.

pregnancy and 2) identifies promising programs and programmatic approaches.

# **Description of Latino Adolescent Pregnancy Prevention Programs**

Based on our review of programs, we identified 29 adolescent pregnancy prevention programs have been rigorously evaluated with Latino populations. Some of these programs that have been rigorously evaluated more than once; thus, the findings of this chapter are derived from 35 program evaluations. Of the 29 programs in this chapter, 17 were evaluated with randomized control trials (RCTs) and 12 were evaluated with quasi-experimental designs (QEDs). QEDs are less rigorous than RCTs, because they lack random assignment to a treatment and control group (thus limiting the ability to draw causal conclusions about the impact of a program), but all of the programs included in the review were evaluated with an intent-to-treat design. Programs varied by program type, setting, and other characteristics (described in detail below). These 29 programs and their outcomes are summarized in Table 5.1 at the end of the chapter, and detailed information about these programs and their evaluations can be found in Appendix C.

For each program, the outcome measures in **bold font indicate that a program "worked" for that outcome** (meaning that the program had a significant effect on that outcome); those *in bold and italic font indicate mixed findings* (meaning that the program worked for at least one measure of that outcome or worked for at least one subpopulation, but did not work for all measures or for all groups of subpopulations); those in normal font indicate that a program did not work (meaning that is had no significant effect on the outcomes measured or a negative effect). Across programs, some patterns emerge for population, type, setting, duration, and components:

- Program population: Relatively few programs have been evaluated with a population that
  is 100 percent Latino, although many have a culturally-responsive or culturally-tailored
  component. Most evaluations did not specify whether the Latino population in their
  sample was born in the U.S. or foreign-born. Most programs were delivered to mixed
  gender groups, but some were delivered to females only (none were delivered to males
  only).
- Program type: Most of the programs were comprehensive sex education programs or HIV risk reduction programs; only two were abstinence-only programs. Fourteen of the programs were based on a theory or conceptual model, most commonly the Social Cognitive/Social Learning Theory, the Theory of Planned Behavior, or the Health Belief Model.
- Program setting: The majority of programs were implemented wholly or in-part in school settings. Others were implemented in clinics, hospitals, community settings, and homes. Many were implemented in more than one setting. Almost all were in urban locations.
- Program duration: Programs varied in length from very brief, single sessions to severalyears-long interventions. In some cases, programs differed in dosage across multiple evaluations. Some programs offered unlimited access to services over a given period of

<sup>&</sup>lt;sup>1</sup> ARREST, Baby Think It Over, CAMP, ¡Cuídate!, Draw the Line, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, PATH-AT, Positive Prevention, Project SAFE, Project SNAPP, Reducing the Risk, Sisters Saving Sisters, and Teen Talk.

- time (such as over a six month period).
- Program components: Virtually all of the programs were multi-modal in their delivery, although a few consisted of single-components (such as the condom distribution program, Condom Availability). Nearly all were interactive. Most included a group component. One-third included a peer component, and one-third included a parent component.

### **Findings of Program Evaluations**

Because programs varied in terms of the number of outcomes measured and in the types of outcomes measured, any comparisons across the full set of 29 programs should be made with caution. That said, a few programs worked for ALL outcomes measured, many worked for at least one outcome, and some did not work for any:

- Only three out of 29 programs worked for ALL outcomes measured.<sup>1</sup>
- Twenty programs worked or had mixed findings (meaning that they worked for at least one outcome or for at least one sub-population).
- Six programs did not work for ANY outcomes measured (although it should be noted that four of these programs ONLY measured pregnancy as an outcome, and few programs have enough pregnancies to test program impacts).<sup>2</sup>

### **Findings by Outcome**

The following section describes the findings of the 29 adolescent pregnancy prevention program evaluations that were evaluated with Latino populations, by outcomes measured.

### Psychosocial outcomes

Tables D.1-4 in Appendix D show programs that measured psychosocial outcomes. Two-thirds of programs (18 out of 29) measured at least one psychosocial outcome.

- The majority of programs that sought to improve knowledge worked. As seen in Table D.1, D.10 of the 13 programs that measured knowledge worked that is, 10 programs had statistically significant effects on participant's sexual and reproductive health knowledge.<sup>3</sup>
- Two-thirds of the programs that sought to improve attitudes or beliefs showed success. Table D.2 shows that 11 out of 17 programs that measured this outcome worked or had mixed findings. More than half (nine programs) worked; one worked for some measures

<sup>&</sup>lt;sup>1</sup> Baby Think It Over, CAMP, and Project SAFE and SAFE-2

<sup>&</sup>lt;sup>2</sup> Middle School Leadership Program, Northeastern Illinois University Dropout Prevention Educational Partnership Program, PATH-AT, Success Express, Twelve Together, and Up with Literacy

<sup>&</sup>lt;sup>3</sup> ARREST, CAMP, Draw the Line, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Project SNAPP, Reducing the Risk, Sisters Saving Sisters, Teen Talk, and Shero <sup>4</sup> ARREST, Baby Think It Over, CAMP, Covey, Health Education Intervention, Information-Based HIV/STD Risk Reduction Intervention, Positive Prevention, Sisters Saving Sisters, and Shero

- but not others (*It's Your Game*), and one worked at showing diminishing effects by working at an initial follow-up point but not a later follow-up (*Reducing the Risk*).
- Programs that sought to improve intentions worked about half of the time. Table D.3 shows that half (six of 12) programs that measured intentions worked or had mixed findings. Four worked, one worked for females only (*ASPPP*), and one worked in one evaluation but not in another (*Reducing the Risk*).
- More than two-thirds of the programs that sought to improve self-efficacy showed success. As seen in Table D.4, seven of 10 programs that measured self-efficacy worked or had mixed findings; five worked, <sup>2</sup> and two showed diminishing effects by working initially, but not at later follow-ups (*It's Your Game* and *Project RESPECT*).

#### Communication outcomes

One-third (10 out of 29) of the programs measured effects on communication outcomes. Table D.5 in Appendix D provides more information.

- Most of the programs that sought to improve general sexual communication (communication about sexual activity with partners or friends) worked. Four of the six programs that measured general communication skills worked.<sup>3</sup>
- Half of the programs that sought to improve parent-child communication about sexual intercourse worked most commonly showing success with mother-child communication. Two of the five programs that measured parent-child communication about sexual intercourse worked; one of these only measured mother-child communication (*Families Talking Together*). One improved mother-child (but not father-child) communication about sexual intercourse (*CAMP*).

# Sexual activity outcomes

As seen in Tables D.6-8 in Appendix D, two-thirds of the programs (20 out of 29) measured sexual activity as an outcome (13 measured initiation of sexual intercourse, 14 measured frequency or recent sexual intercourse, and 15 measured number of sexual partnerships). Examining each of these domains individually:

• Programs that sought to delay sexual initiation were, for the most part, successful. Table D.6 shows the 13 programs that measured sexual initiation. The majority worked or had mixed findings: 10 out of 13 worked in at least one evaluation or for at least one subpopulation. Specifically, four of the 13 programs were found to work, 4 two worked for females only, 5 two programs worked for males only, 6 and one worked in one evaluation, but not in another evaluation (*Families Talking Together*).

<sup>&</sup>lt;sup>1</sup> CAMP, Information-Based HIV/STD Risk Reduction Intervention, Sisters Saving Sisters, and Shero

<sup>&</sup>lt;sup>2</sup> Covey, Health Education Intervention, Information-Based HIV/STD Risk Reduction Intervention, Positive Prevention, and Sisters Saving Sisters

<sup>&</sup>lt;sup>3</sup> ARREST, Covey, Health Education Intervention, and Shero

<sup>&</sup>lt;sup>4</sup> Covey, Health Education Intervention, and Positive Prevention

<sup>&</sup>lt;sup>5</sup> ASPPP and Poder Latino

<sup>&</sup>lt;sup>6</sup> Draw the Line and Teen Talk

• Programs that sought to reduce frequency of sex, recent sex, or number of sexual partners were successful less than half of the time. As seen in Table D.7, only five out of 14 programs that measured frequency or recency of sex worked or had mixed findings. Two programs worked, one worked for males only (*Draw the Line*), and two worked in one evaluation, but not a second evaluation. As seen in Table D.8, six out of 14 that measured number of sexual partners worked or had mixed findings. Five programs worked; one worked for females only (*Poder Latino*).

# Condom and contraceptive outcomes

As seen in Tables D.9 and D.10 in Appendix D, 17 programs measured condom use or contraceptive use as an outcome: 15 measured condom use, specifically, and six measured contraceptive use (which included 1) hormonal methods of contraception /IUDs or 2) "effective methods of contraception," defined as some combination of condoms and/or hormonal methods/IUDs). None measured long-acting reversible contraceptive (LARC) use, and none measured dual method (condoms AND hormonal methods/IUDs) use.

- More than half of the programs that sought to improve condom use were effective. Eight of the 15 programs that measured condom use worked or had mixed findings.
   Specifically, six of the 15 programs were found to work; two programs worked for some measures of condom use, but not all.
- NONE of the programs worked for contraceptive use, and only two had mixed findings. Six of the programs in this review assessed effects on contraceptive use. One measured hormonal method use and did not work (*Project SNAPP*). Five measured "effective method use." Among these, only two programs had mixed findings, and both were QED-evaluated programs: one worked for some measures of contraceptive use, but not others (*Reducing the Risk*); and one worked for males but not females (*ASPPP*). Three did not work 6

### Sexually transmitted diseases

Table D.11 in Appendix D shows the seven programs that measured STDs as an outcome. It should be noted that, while adolescents have very high rates of STDs compared with other age groups, this outcome is still relatively uncommon and, thus, it is difficult to detect significant effects on this outcome. Also, given the relatively small number of evaluations that measured this outcome, conclusions should be made with caution.

• Very few programs worked for STDs. Seven of the 29 programs included in this chapter assessed effects on STDs, but only two worked.<sup>7</sup>

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<sup>1 ;</sup> Cuídate! and It's Your Game

<sup>&</sup>lt;sup>2</sup> Families Talking Together and Reducing the Risk

<sup>&</sup>lt;sup>3</sup> ¡Cuídate!, Covey, Familias Unidas, Health Education Intervention, and Sisters Having Sisters <sup>4</sup> Condom Availability, Covey, Familias Unidas, Health Education Intervention, Sisters Saving Sisters, and Shero

<sup>&</sup>lt;sup>5</sup> ¡Cuídate! and Project Respect

<sup>6</sup> It's Your Game, Peer Providers, and Teen Talk

<sup>&</sup>lt;sup>7</sup> Project SAFE and SAFE 2 and Sisters Saving Sisters

### **Pregnancies**

Table D.12 in Appendix D shows the eight programs that measured pregnancy as an outcome. None of the 29 programs in this review measured births as an outcome. Although the rate of adolescent pregnancy is high in the U.S., especially among Latinos, this outcome is relatively uncommon, so it is difficult to detect a significant effect on this outcome.

• Very few programs worked at preventing pregnancy or causing a pregnancy – and the two that worked had effects among females only. Eight of the 29 programs included in this review assessed effects on pregnancy. Only one QED-evaluated program worked at preventing pregnancy among participants (*Peer Providers*) – although this outcome was only measured among females. Of note, a subpopulation analysis revealed that this program had particular success at preventing pregnancy among Latinas. An additional QED-evaluated program measured pregnancy, and the program worked for females only (*ASPPP*).

### **Findings by Program Characteristic**

Appendix E describes the findings of the 29 adolescent pregnancy prevention program evaluations that were evaluated with Latino populations, by program characteristics, including program setting, program duration and structure, mode of delivery, and by various program components, such as technology, family components, and peer components. Additionally, Appendix F includes a review of successful programs by clusters or patterns of program characteristics.

# **Findings by Program Type**

The following section describes the findings of the 29 adolescent pregnancy prevention program evaluations that were evaluated with Latino populations, by program type.

### Abstinence-only or Abstinence-focused Programs

Two of the programs were abstinence-based. With such a small number of programs, generalizations should be made with caution.

• The two abstinence-based programs that were evaluated with Latinos were not successful. Neither program worked for any outcome measured, meaning that they did not have statistically significant effects on any outcome.

# Comprehensive Sex Education Programs

More than one-third of the programs (11 of 29) were comprehensive sex education programs (programs that discuss condom and contraceptive use, in addition to abstinence, as an option to avoid pregnancy).

• Comprehensive sex education programs worked for psychosocial outcomes but showed less success with communication. All nine programs that measured psychosocial skills

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<sup>&</sup>lt;sup>1</sup> PATH-AT, Positive Prevention, and Success Express

- worked or had mixed findings. Three measured communication skills; *Reducing the Risk* worked for parent-child communication, *CAMP* worked for mother-child communication but not communication with fathers, friends, or partners, and *ASPPP* did not work.
- Comprehensive sex education programs were often successful in delaying sexual initiation and reducing sexual activity among those who have initiated sex. However, these programs did not frequently have success at reducing number of sexual partners. Five of six programs that measured sexual initiation worked or had mixed findings.<sup>2</sup> Four of six programs that measured recent or frequent sex worked or had mixed findings.<sup>3</sup>
  Two of seven programs that measured number of sexual partners worked or had mixed findings.<sup>4</sup>
- Comprehensive sex education programs were not frequently successful at improving condom use or preventing STDs; on the other hand, they might old promise for improving contraceptive use and prevent pregnancy. Only two of seven programs that measured condom use worked or even had mixed findings (¡Cuídate! and Sisters Saving Sisters). Two of the six programs that measured contraceptive use worked or had mixed findings. It is worth noting that although roughly the same proportion worked for these outcomes, the two that worked for contraceptive use were the only two in the program review to show success with this outcome (ASPPP and Reducing the Risk). Similarly, only one of five programs that measured STDs worked (Sisters Saving Sisters), yet two of the four programs that measured pregnancy worked (the only two in this review that showed promise for this outcome). <sup>5</sup>

# HIV-Risk Reduction Programs

Although not explicitly focused on pregnancy, HIV risk-reduction programs were frequently found to have positive effects. Four programs were HIV risk-reduction programs, <sup>6</sup> so taking into consideration the small number of this type of program, conclusions – while promising – are tentative. One of these programs, *Project SAFE and SAFE 2* only measured STDs, and it worked. The outcomes of the other three are below.

- These programs showed success with communication and psychosocial outcomes. All three programs measured communication or psychosocial outcomes; all worked for at least one outcome (*ARREST* and *Shero* worked fairly consistently across measures; *Project RESPECT* had much less success, but did show diminishing effects on self-efficacy).
- HIV risk-reduction programs did not seem to work at reducing sexual activity. All three programs measured sexual activity, and none worked for any measure.<sup>7</sup>
- These programs may have short-term effects on condom use, but they may not work at

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<sup>&</sup>lt;sup>1</sup> ASPPP, CAMP, Draw the Line, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Project SNAPP, Reducing the Risk, Sisters Saving Sisters, and Teen Talk

<sup>&</sup>lt;sup>2</sup> ASPPP, Draw the Line, It's Your Game!, Project SNAPP, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>3</sup> ¡Cuídate!, Draw the Line, It's Your Game!, and Reducing the Risk

<sup>&</sup>lt;sup>4</sup> ¡Cuídate! and Sisters Saving Sisters

<sup>&</sup>lt;sup>5</sup> ASPPP and Peer Providers

<sup>&</sup>lt;sup>6</sup> ARREST, Project RESPECT, Project SAFE and SAFE-2, and Shero

<sup>&</sup>lt;sup>7</sup> ARREST, Project RESPECT, and Shero

preventing STDs, and there is no evidence that they work for contraceptive use or pregnancies. Although, to the latter point, it should be noted that these programs focused their content related to STD and HIV risk, such as condom use and STD knowledge, rather than strictly on pregnancy prevention behaviors, such as hormonal contraceptive use). All three programs measured condom use. *ARREST* did not work, but the other two programs showed success at 2- and 3-month follow-ups. *Project RESPECT* did not prevent STDs, and none of the programs measured contraceptive use or pregnancies.

# Other Program Types

Other program types included in this review were parent-child programs, condom distribution programs, general risk-reduction programs, infant simulator programs, and school dropout prevention programs. All of these program types had limited representation in this review, so all conclusions in this section should be made with caution – and as an indication of more research needed with these program types.

- Parent-child programs were effective for some outcomes, but evidence is limited as to whether these programs work for improving parent-child communication. Two programs (Familias Unidas and Families Talking Together) focused on the parent-child dyad (although several programs included a parent component see "Findings by Program Component"). The former program did not delay sexual initiation or reduce frequency or recency of sexual intercourse outcomes; the latter had mixed findings across two evaluations on these measures. Familias Unidas also measured (and worked) for reducing number of sexual partners and increasing condom use but findings from one program are not necessarily generalizable. Interestingly, only one of these programs, Families Talking Together, measured parent-child communication as an outcome and it did work.
- Condom distribution programs showed promise for reducing sexual activity (especially among females), and there is some indication these programs work at improving condom use. Two programs had a condom distribution component. *Condom Availability* did not delay sexual initiation, whereas *Poder Latino* worked for females only. *Poder Latino* also worked for number of sexual partners among females. Neither program measured frequent or recent sexual intercourse. All worked for at least one outcome for at least one subpopulation; interestingly, only *Condom Availability* measured condom use, and it worked.
- General risk-reduction programs showed promise for sexual activity, but for psychosocial outcomes, findings were mixed. Two programs were designed to reduce risk-taking behaviors, such as substance use and sexual activity. These programs delayed sexual initiation, increased condom use, and improved attitudes, beliefs, and self-efficacy (but they did not work for improving knowledge or intentions).
- Infant simulator programs warrant exploration. One program (*Baby Think it Over*) used an infant simulator; it worked for its only measured outcome (attitudes and beliefs).
- School dropout programs may not work at preventing pregnancy. Four of these programs

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<sup>&</sup>lt;sup>1</sup> Covey and Healthy Education Intervention

were included in the review, <sup>1</sup> and none worked. However, it must be noted that all four measured only pregnancy, a difficult outcome for which to assess effects.

### Culturally-tailored Programs

Thirteen of the 29 programs were culturally-tailored programs (either tailored for Latino populations or for racial and ethnic minority populations). Although the above program types were considered mutually-exclusive, programs of all types (aside from the infant simulator program and the school dropout programs) were represented in this category.

- Culturally-tailored programs often improved communication and psychosocial skills. Five of six programs that measured communication,<sup>2</sup> and seven of eight programs that measured psychosocial skills worked or had mixed findings.<sup>3</sup>
- These programs also frequently reduced sexual activity especially by delaying sexual activity and limiting numbers of sexual partners. Four out of five programs that measured sexual initiation worked or had mixed findings, two out of five that measured recent or frequent sex worked or had mixed findings; and six out of nine that measured numbers of sexual partners worked or had mixed findings.
- Additionally, these programs were likely to improve condom use but it remains to be seen whether these programs would work for improving contraceptive use. Seven out of eight programs that measured condom use worked or had mixed findings. NONE of these programs measured contraceptive use.
- Likewise, these programs were frequently successful at preventing STDs but it remains to be seen whether these programs would work for preventing pregnancy. Two of the four programs that measured STDs worked (the only two in this program review that worked for preventing STDs). NONE of these programs measured pregnancy.

### **Findings by Subpopulation**

The following section describes the findings of the 29 adolescent pregnancy prevention program evaluations that were evaluated with Latino populations, by various subpopulations.

### Gender

Fourteen programs performed subpopulation analyses on females or were programs designed only for females. Seven programs performed sub population analyses on males.

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<sup>&</sup>lt;sup>1</sup> Middle School Leadership Program, Northeastern Illinois University Dropout Prevention Educational Partnership Program, Twelve Together, and Up with Literacy

<sup>&</sup>lt;sup>2</sup> CAMP, Covey, Families Talking Together, Health Education Intervention, and Shero

<sup>&</sup>lt;sup>3</sup> CAMP, Covey, Health Education Intervention, Information-Based HIV/STD Risk Reduction Intervention, Project RESPECT, Shero, and Sisters Saving Sisters

<sup>&</sup>lt;sup>4</sup> Covey, Families Talking Together, Health Education Intervention, and Poder Latino

<sup>&</sup>lt;sup>5</sup> ¡Cuídate! and Families Talking Together

<sup>&</sup>lt;sup>6</sup> Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, and Sisters Saving Sisters

<sup>&</sup>lt;sup>7</sup> Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, Shero, and Sisters Saving Sisters

<sup>&</sup>lt;sup>8</sup> Project SAFE and Sisters Saving Sisters

- Programs were frequently found to improve psychosocial skills among both females and males; however, programs that sought to improve communication skills showed more success among females that among males. All eleven programs that measured psychosocial skills among females worked or had mixed findings that is, they had statistically significant effects on at least one psychosocial outcome. Four of five programs that measured psychosocial skills among males worked or had mixed findings. On the other hand, two-thirds of programs (four of six) that measured communication skills among females worked or had mixed findings; only one of two programs that measured communication among males (parent-child communication in both cases) worked 4
- Programs that sought to delay sexual initiation or reduce recent or frequent sexual intercourse worked equally often for males and females, but programs that sought to reduce number of sexual partners worked more frequently for females. Roughly two-thirds of programs that measured sexual initiation worked or had mixed findings among both genders (four of seven for females<sup>5</sup> and three of five for males<sup>6</sup>). Similarly, roughly one-third of programs that measured frequent or recent sex worked or had mixed findings for both females and males (two of six for females<sup>7</sup> and three of five for males<sup>8</sup>). Contrarily, one-third of programs that measured number of sexual partners worked for females (three of nine), whereas none of the three programs that measured this outcome worked for males. <sup>10</sup>
- Programs worked more frequently for improving condom use as reported by females than as reported by males, but they showed equal success among males and females in improving contraceptive use. Six of 10 programs that measured condom use reported by females worked or had mixed findings, 11 compared with only one of four programs that worked among males (*Condom Availability*). For both females and males, just one of five programs that measured contraceptive use worked (*Reducing the Risk* and *ASPPP*, respectively).
- Based on evaluations completed to date, programs that sought to prevent pregnancy or STDs might only work with females. Three programs measured pregnancies among females, two worked; comparatively, two programs measured pregnancies among males.

<sup>&</sup>lt;sup>1</sup> Draw the Line, ASPPP, Covey, Health Education Intervention, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Project RESPECT, Reducing the Risk, Shero, Sisters Saving Sisters, and Teen Talk

<sup>&</sup>lt;sup>2</sup> Draw the Line, It's Your Game, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>3</sup> Covey, Health Education Intervention, Reducing the Risk, and Shero

<sup>&</sup>lt;sup>4</sup> Reducing the Risk

<sup>&</sup>lt;sup>5</sup> ASPPP, Covey, Health Education Intervention, and It's Your Game

<sup>&</sup>lt;sup>6</sup> ASPPP, Draw the Line, and Teen Talk

<sup>&</sup>lt;sup>7</sup> It's Your Game and Reducing the Risk

<sup>&</sup>lt;sup>8</sup> Draw the Line, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>9</sup> Covey, Health Education Intervention, and Sisters Saving Sister

<sup>&</sup>lt;sup>10</sup> ASPPP, Draw the Line, and It's Your Game

<sup>&</sup>lt;sup>11</sup> Condom Availability, Covey, Health Education Intervention, Project RESPECT, Shero, and Sisters Saving Sisters

but neither worked. Two of six programs that measured STDs among females worked, whereas neither of the two programs that measured STDs among males worked. 2

### Grade/age

Ten programs were implemented with middle school students (or adolescents who were, for the most part, between the ages of 10 and 13), and 11 programs were implemented with high school students (or adolescents who were, for the most part, between the ages of 14 and 18). The remaining programs were implemented with all adolescents (and are not included here).

- Programs with high school students worked more frequently for psychosocial and communication skills than did programs with middle school students. All six programs that measured psychosocial skills among high school students worked or had mixed findings,<sup>3</sup> compared with three of five that worked or had mixed findings among middle school students.<sup>4</sup> Three of four programs that measured communication skills among high school students worked,<sup>5</sup> whereas only one of two programs that measured this outcome among middle schools students worked (Families Talking Together).
- Based on a modest number of evaluations, programs had similar success at delaying sexual initiation with middle and high school students. However, programs worked more often for middle school students when it came to reducing sexual activity, whereas programs worked more often for high school students when it came to reducing number of sexual partners. Five of six programs that were evaluated on their effects on sexual initiation among high school students worked or had mixed findings, and three of four that were evaluated on this outcome among middle school students worked or had mixed findings. Only one of four programs that measured frequent or recent sexual intercourse among high school students had mixed findings (*Reducing the Risk* worked in one evaluation but not another), whereas three of five worked or had mixed findings among middle school students. Three of four program evaluations that measured number of sexual partners among high school students worked or had mixed findings, but none of the four programs that measured this outcome among middle school students worked.
- Based on a small number of evaluations, it seemed that programs that sought to improve condom or contraceptive use or that sought to prevent pregnancy or STDs only worked with high school populations. Four of six programs that measured condom use among

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<sup>&</sup>lt;sup>1</sup> Project RESPECT and Sisters Saving Sisters

<sup>&</sup>lt;sup>2</sup> ASPPP and Peer Providers

<sup>&</sup>lt;sup>3</sup> Baby Think It Over, Covey, Health Education Intervention, Positive Prevention, Project RESPECT, and Reducing the Risk

<sup>&</sup>lt;sup>4</sup> Draw the Line, It's Your Game, and Project SNAPP

<sup>&</sup>lt;sup>5</sup> Covey, Health Education Intervention, and Reducing the Risk

<sup>&</sup>lt;sup>6</sup> Covey, Health Education Intervention, Poder Latino, Positive Prevention, and Reducing the Risk

<sup>&</sup>lt;sup>7</sup> Draw the Line, Families Talking Together, and It's Your Game

<sup>&</sup>lt;sup>8</sup> Draw the Line, Families Talking Together, and It's Your Game

<sup>&</sup>lt;sup>9</sup> Covey, Health Education Intervention, and Poder Latino

<sup>&</sup>lt;sup>10</sup> Draw the Line, It's Your Game, Project SNAPP, and Success Express

high school students worked or had mixed findings; 1 none of the three that measured this outcome among middle school students worked.<sup>2</sup> One of two programs that measured contraceptive use among high school students had mixed findings (Reducing the Risk, one of only two programs in this review that showed success with this outcome); neither of the two programs with middle school students was found to work.<sup>3</sup> One of two programs that measured pregnancies among high school students worked (Peer *Providers*, one of only two programs in this review that showed success with this outcome); none of the four that measured this outcome among middle school students worked. Similarly, one of three programs that measured STDs among high school students worked (*Project SAFE*), whereas the sole middle school program with this outcome did not work (Project SNAPP). It should be noted, though, that these findings may reflect the fact that the incidence of pregnancy and STDs is so much lower among middle school students, thus making it difficult to assess effects on these outcomes for vounger adolescents.

### Latino-only

Fourteen programs were Latino-only programs<sup>5</sup> or conducted Latino subpopulation analyses.<sup>6</sup> The findings reported below included overall findings for these fourteen programs include notes about specific subpopulation findings (some evaluations that conducted subpopulation analyses did so only for certain outcomes, and this is noted below).

Programs were very likely to improve psychosocial and communication skills among Latinos. Eight of nine programs that measured psychosocial skills with Latinos worked or had mixed findings. Three were Latino-only programs, two did not include a subpopulation analysis for these variables, and three conducted subpopulations analyses: these three showed especially positive effects on psychosocial skills among Latinos, compared with non-Latino participants. All four programs that measured communication worked (three measured communication and one measured parent-child communication). <sup>10</sup> Three were Latino-only programs, but one included a subpopulation analysis and found higher parent-child communication among Latino participants (Reducing the Risk).

<sup>&</sup>lt;sup>1</sup> Condom Availability, Covey, Health Education Intervention, and Project RESPECT

<sup>&</sup>lt;sup>2</sup> Draw the Line, It's Your Game, and Project SNAPP

<sup>&</sup>lt;sup>3</sup> It's Your Game, and Project SNAPP

<sup>&</sup>lt;sup>4</sup> Middle School Leadership Program, Project SNAPP, Twelve Together, Up with Literacy

<sup>&</sup>lt;sup>5</sup> Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, PATH-AT, Poder Latino, and Shero

<sup>&</sup>lt;sup>6</sup> Condom Availability, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Peer Providers, Reducing the Risk, Sisters Saving Sisters, and Teen Talk

<sup>&</sup>lt;sup>7</sup> Covey, Health Education Intervention, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Reducing the Risk, Shero, and Sisters Saving Sisters

<sup>&</sup>lt;sup>8</sup> Covey, Health Education Intervention, and Shero

<sup>&</sup>lt;sup>9</sup> Information-Based HIV/STD Risk Reduction Intervention, Reducing the Risk, and Sisters Saving Sisters

<sup>&</sup>lt;sup>10</sup> Covey, Health Education Intervention, Reducing the Risk, and Shero

- Latino programs may delay initiation of sexual intercourse and reduce number of sexual partners (among females, especially), but they were less often successful at reducing frequency of sexual activity. Three-quarters of the programs (six of eight) that measured sexual initiation among Latinos worked or had mixed findings. Three were Latino-only programs. Three conducted subpopulation analyses. Of note, one of these programs, It's Your Game, worked especially well at delaying sexual intercourse among Latinos – in fact, this was the only group with a positive effect on initiation of vaginal sex (versus initiation of any kind of sex). One found no subpopulation differences in sexual initiation (Teen Talk). Interestingly, one program, Condom Availability, was not found to work among the whole evaluated sample, and was found to have negative effects on sexual initiation among Latinos (that is, Latinos in the program initiated sexual intercourse sooner than did their counterparts who did not receive the program). Less than half (three of seven) of the programs that were evaluated on their effects on frequent or recent sexual intercourse worked or had mixed findings.<sup>3</sup> One, ¡Cuídate!, was Latino-only, one did not conduct a subpopulation analysis with this variable, and one, *Reducing the Risk*, found no effect for Latinos in one evaluation. Two-thirds (six of nine) of programs that measured number of sexual partners worked or had mixed findings. Four of these were Latinoonly, and one, Sisters Saving Sisters, conducted a subpopulation analysis but did not find differential effects between Latino or black participants.
- These programs may increase condom and contraceptive use and prevent pregnancies and STDs but more evaluations are needed. Seven of ten programs that measured condom use among Latinos worked or had mixed findings. Five of these were Latino-only. The other two conducted subpopulation analyses, and, while the programs worked overall, there were no significant subpopulation differences between Latinos and non-Latinos. Four programs measured contraceptive use. *Reducing the Risk*, which had mixed findings overall, was slightly more promising among Latinos; subpopulation analyses found improved contraceptive use (non-significant) among Latinos in one evaluation and showed diminishing success with contraceptive use among Latinos in another evaluation. Another program, *Peer Providers*, did not improve contraceptive use overall, but it worked for one of three contraceptive use measures among Latinos only. A third program, *Teen Talk*, found that that Latino males in the program were marginally more likely than other males to have used contraception at first sexual intercourse, but they were less likely to use contraception consistently. Two programs measured pregnancy; one worked and showed particularly positive effects among Latinos (*Peer Providers*).

<sup>&</sup>lt;sup>1</sup> Covey, Health Education Intervention, It's Your Game, Reducing the Risk, Sisters Saving Sisters, and Poder Latino

<sup>&</sup>lt;sup>2</sup> Covey, Health Education Intervention, and Poder Latino

<sup>&</sup>lt;sup>3</sup> ¡Cuídate!, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>4</sup> Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, Poder Latino, and Sisters Saving Sisters

<sup>&</sup>lt;sup>5</sup> Condom Availability, Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, Shero, and Sisters Saving Sisters

<sup>&</sup>lt;sup>6</sup> Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, and Shero

<sup>&</sup>lt;sup>7</sup> Condom Availability and Sisters Saving Sisters

Three programs measured STDs; one worked, but subpopulation analyses were not significant (*Sisters Saving Sisters*).

### **Discussion**

The array of pregnancy prevention programs for Latino adolescents is limited. Very few programs have been evaluated with Latino or primarily Latino samples – only 29 out of more than 100 programs reviewed met this criterion. And the majority of these programs do not include pregnancy as an outcome measure; less than one-third of these programs assessed pregnancy as an outcome, only two showed success (defined here as a statistically significant effect on at least one outcome related to adolescent pregnancy), and neither showed success with males.

In reviewing the programs that have been effective at reducing Latino adolescent pregnancy or the behaviors, knowledge, and attitudes that are linked to adolescent pregnancy, it appears that the programs that have assessed non-behavioral outcomes have showed more consistent success than those that assess behavioral outcomes or pregnancy. The evaluation findings for the behaviors that directly lead to pregnancy – including sexual activity and condom and contraceptive use – provide a mixed picture. Of particular note, we found that only one of the programs in our review assessed hormonal method use as an outcome (although many evaluated condoms or "some form of effective birth control"), and that sole program did not have an effect. Moreover, none assessed LARC or dual method use. Of course, the populations served, the approaches used, and the settings in which interventions were delivered varied substantially. Rarely were there enough programs to support a definitive conclusion that something either "works" or "doesn't work". This points to the need to identify a theory of change or logic model that would improve the likelihood of reducing these more critical outcomes.

In sum, further evaluations of teen pregnancy prevention programs for Latinos are warranted. The need is substantial for females and acute for males. Although the programs in this review were often successful in improving psychosocial and communication skills among Latinos, they were less consistent in achieving positive sexual and reproductive health outcomes. For example, Latino programs may work for initiation of sex and number of sexual partners (among females, especially), but they showed less frequent success for frequency of sexual activity. A small number of evaluations hint at the fact that some of these programs may increase condom and contraceptive use and prevent pregnancies and STDs – but more evaluations are needed.

	ummaries of P					
Program	Description	Population		Dosage	Key Program	Outcomes Measured
Name		s Served	Context		Components	
4 DDECE	TTTT 2 . 1	hr T 1	la :	RCTs		E 6
ARREST	HIV-risk reduction program	Urban adolescents aged 12-16 (59% Latino)	Communit y settings	minute sessions	<ul> <li>Group component</li> <li>Interactive</li> <li>Role-playing</li> <li>Skills/practice</li> <li>Group component</li> <li>Homework</li> <li>Peer component</li> </ul>	<ul> <li>Frequency of sex</li> <li>Number of partners</li> <li>Condoms</li> <li>Communication</li> <li>Knowledge</li> <li>Attitudes/beliefs</li> <li>Self-efficacy</li> </ul>
¡Cuídate!	Comprehensiv e sex education program	Students in grades 8-11 (100% Latino)		Six 50- minute sessions	<ul><li>Culturally-tailored</li><li>Interactive</li></ul>	• Frequency of sex • Number of partners • Condoms
Draw the Line/Respect the Line (Draw the Line)	Comprehensiv e sex education program	Middle school students (59% Latino)	Schools	Twenty 45+- minute	<ul><li>Interactive</li><li>Group component</li></ul>	<ul> <li>Initiation of sex</li> <li>Frequency of sex</li> <li>Number of partners</li> <li>Condoms</li> <li>Knowledge</li> <li>Attitudes/beliefs</li> <li>Self-efficacy</li> </ul>
Familias Unidas	Parent-child program		y settings;	60+-minute sessions, plus family visits and boosters	<ul> <li>Interactive</li> </ul>	• Initiation of sex • Frequency of sex • Number of partners • Condoms
Families Talking Together	Parent-child program		Clinics; community settings; schools	One or two 30+ minute sessions, plus booster sessions	<ul><li>Counseling</li><li>Culturally-tailored</li></ul>	<ul> <li>Initiation of sex</li> <li>Frequency of sex</li> <li>Parent-child</li> <li>communication</li> </ul>
Information- Based HIV/STD Risk Reduction Intervention for Adolescent Girls	Comprehensiv e sex education program		Clinics	One 250- minute session	<ul> <li>Group component</li> <li>Technology</li> <li>Psychosocial skills</li> <li>Behavioral skills</li> <li>Culturally-tailored</li> </ul>	<ul> <li>Knowledge</li> </ul>
It's Your		Urban 7th grade students (44% Latino)	Schools	minute sessions	<ul> <li>Interactive</li> <li>Group component</li> <li>Technology</li> <li>Journaling</li> <li>Psychosocial skills</li> <li>Behavioral skills</li> <li>Homework</li> <li>Family component</li> </ul>	<ul> <li>Initiation of sex</li> <li>Frequency of sex</li> <li>Number of partners</li> <li>Condoms</li> <li>Other contraception</li> <li>Knowledge</li> <li>Attitudes/beliefs</li> <li>Intentions</li> <li>Self-efficacy</li> </ul>

Table 5.1. Summaries of Programs Included in this Review  Program Description Population Settings/ Dosage Key Program Outcomes Me							
Program	Description			Dosage	Key Program	Outcomes Measured	
Name	G 1 1	s Served	Context	0 1 1	Components	D :	
	School	8th grade	Schools		• Interactive	• Pregnancies	
	dropout	students			• Group component		
	prevention	(73%			• Psychosocial skills		
	program	Latino)	a		• Career/education		
	School	8th through	School		• Group component	<ul> <li>Pregnancies</li> </ul>	
	dropout	12th grade			• Counseling		
•	prevention	students			• Interactive		
	program	(86%			<ul> <li>Career/education</li> </ul>		
Prevention		Latino)					
Educational							
Partnership							
Program							
Positive	HIV-risk	9th grade	Schools	Six 45-	Interactive	<ul> <li>Initiation of sex</li> </ul>	
Prevention	reduction	students		minutes	<ul> <li>Group component</li> </ul>	<ul> <li>Frequency of sex</li> </ul>	
	program	(60%		sessions	<ul> <li>Role-playing</li> </ul>	• Condoms	
		Latino)			• Psychosocial skills	<ul> <li>Pregnancies</li> </ul>	
		ĺ			Behavioral skills	Knowledge	
						• Attitudes/beliefs	
						• Self-efficacy	
Project	HIV-risk	Females	Clinics	Two or four	• Culturally-tailored		
	reduction	aged 15-21		20-60 minute		• Condoms	
	program	(55%			• Interactive	• STDs	
	program	Latino)			• One-on-one	• Communication	
		Eatino			• Technology	<ul> <li>Attitudes/beliefs</li> </ul>	
					• Goal-setting	• Self-efficacy	
					• Psychosocial skills		
Project SAFE	HIV_rick	Latino and	Clinics	Three 180-		• STDs	
	reduction	black, aged	Cillics		• Group component	SIDS	
		14-43		sessions, plus			
	program	(68%			• Technology		
		Latino)			• Role-playing		
		Latino		support sessions			
				Sessions	• Goal-setting		
					• Psychosocial skills		
D	Camerini	I Inda a a 741	Calar-1		Booster sessions	- Initiation - C	
	Comprehensiv		Schools	_	• Interactive	• Initiation of sex	
	e sex	grade			• Group component		
	education	students			• Role-playing	• Number of partners	
	program	(64%			• Psychosocial skills		
		Latino)			<ul> <li>Peer component</li> </ul>	<ul> <li>Hormonal methods</li> </ul>	
						<ul> <li>Pregnancies</li> </ul>	
						• STDs	
						<ul> <li>Knowledge</li> </ul>	
						<ul> <li>Attitudes/beliefs</li> </ul>	
						<ul> <li>Intentions</li> </ul>	
		<u></u>	<u> </u>			<ul> <li>Self-efficacy</li> </ul>	
Sisters	Comprehensiv	Urban	Clinics	One 250-	<ul> <li>Culturally-tailored</li> </ul>	Number of partners	
	e sex	Latina and		minute	• Interactive	• Condoms	
	education	black			<ul> <li>Role-playing</li> </ul>	• STDs	
	program	females			• Group component	• Knowledge	
		aged 12-19			• Technology	• Attitudes/beliefs	
		(32%			• Psychosocial skills		
	I	Latina)	1		Behavioral skills	• Self-efficacy	

	ummaries of P			nis Review		
Program Name	Description	Population s Served	Settings/ Context	Dosage	Key Program Components	Outcomes Measured
Teen Talk	Comprehensiv			Six 120-	• Interactive	• Initiation of sex
	e sex		y settings;	minute	Role-playing	• Other contraception
	education	(53%	schools	sessions	• Group component	• Knowledge
	program	Latino)			• Technology	
	F - 6 8 - 11 - 1	,			• Psychosocial skills	
Twelve	School	7th grade	Schools	One school	Interactive	• Pregnancies
Together	dropout	students		year	<ul> <li>Mentoring</li> </ul>	-8 · · · ·
8	prevention	(53%		5	• Group component	
	program	Latino)			• Goal- setting	
	F 8				• Career/education	
					• Psychosocial skills	
Up with	School	6th-8th	Schools	One school	• Interactive	• Pregnancies
Cp wun Literacy	dropout	grade	2110010	year	• Group component	1.10811011010
y	prevention	students			• Psychosocial skills	
	program	(55%			• Career/education	
	program	Latino)			• One-on-one	
		<u> Datino)</u>		QEDs	One on one	
Baby Think I	Infant	High school	Schools;	Two+ days	Interactive	• Attitudes/beliefs
Over	stimulator	students	homes		<ul> <li>Group component</li> </ul>	
	program	(93%			• One-on-one	
		Latino)			<ul> <li>Counseling</li> </ul>	
					Baby simulator	
					<ul> <li>Family component</li> </ul>	
California's	Comprehensiv	Adolescents	Communit	Unlimited	• Interactive	• Initiation of sex
Adolescent	e sex	aged 11-17			• Group component	• Frequency of sex
Sibling	education	(77%	Joethings		• One-on-one	• Number of partners
Pregnancy -	program	Latino)			• Counseling	• Other contraception
Prevention	program	Eutino)			• Service learning	• Pregnancies
Program					• Career/education	• STDs
(ASPPP)					Carcer/caacation	• Parent-child
(7151 1 1 )						communication
						• Intentions
CAMP	Comprehensiv	Adologoopto	Sahaala	One school	• Culturally-tailored	
CAMF	-	aged 11-18	Schools		• Interactive	ommunication
	e sex			year		
	education	(79%			• Role-playing	• Communication
	program	Latino)			• Peer component	• Knowledge
						• Attitudes/beliefs
					• Theater production	• Intentions
C 1	G 1	Ct. 1 t	C 1 1	TT 1: '4 1	• Psychosocial skills	T '.' .' C
Condom	Condom	Students	Schools	Unlimited	• Condom	• Initiation of sex
Availability	distribution	aged 15-17			distribution	• Frequency of sex
	program	(28%			• Didactic only	• Condoms
<u> </u>	D: 1	Latino)	G :	D: 1	• Family-component	
Covey	Risk-reduction	_		-		• Initiation of sex
Leadership	program	(100%	y settings	long sessions		• Number of partners
Center		Latino)			• Group component	• Condoms
Intervention					Goal-setting	<ul> <li>Communication</li> </ul>
(Covey)					<ul> <li>Psychosocial skills</li> </ul>	
						<ul> <li>Attitudes/beliefs</li> </ul>
						• Intentions
		<u> </u>				• Self-efficacy

Table 5.1. St	ummaries of P	rograms Inc	luded in th	is Review		
Program	Description	Population		Dosage	Key Program	Outcomes Measured
Name Health Education Intervention	Risk-reduction program	s Served Aged 14-24 (100% Latino)	Homes	Five mailings	Components  • Self-administered  • Journaling  • Spanish translation  • Culturally-tailored	<ul><li>Communication</li><li>Knowledge</li><li>Attitudes/beliefs</li><li>Intentions</li></ul>
Promoting Alternatives for Teen Health through Artes Teatro (PATH-AT)	Abstinence program	Middle school students aged 12-15 (100% Latino)	Schools	Twelve 75- minute sessions	<ul> <li>Culturally-tailored</li> <li>Role-playing</li> <li>Group component</li> <li>Family component</li> <li>Peer component</li> <li>Psychosocial skills</li> </ul>	• Self-efficacy • Attitudes/beliefs • Intentions
Peer Providers of Reproductive Health Services to	Comprehensive e sex education program; Condom distribution program	(40% Latino)			<ul> <li>Counseling</li> <li>Group component</li> <li>One-on-one</li> <li>Condom</li> <li>distribution</li> <li>Follow-up calls</li> <li>Peer component</li> <li>Behavioral skills</li> </ul>	<ul><li>Condoms</li><li>Other contraception</li><li>Pregnancies</li><li>STDs</li></ul>
Poder Latino	Condom distribution program	Aged 14-20 (100% Latino)	Communit y settings; homes; schools	Unlimited	<ul> <li>Culturally-tailored</li> <li>Interactive</li> <li>Group component</li> <li>One-on-one</li> <li>Condom</li> <li>distribution</li> <li>Technology</li> </ul>	<ul> <li>Initiation of sex</li> <li>Frequency of sex</li> <li>Number of partners</li> </ul>
Reducing the Risk	Comprehensiv e sex education program	High school students (20% Latino)	Schools	minute sessions	<ul> <li>Interactive</li> <li>Group component</li> <li>Role-playing</li> <li>Homework</li> <li>Family component</li> <li>Psychosocial skills</li> </ul>	
The Shero Program (Shero)	HIV-risk reduction program	Females aged 12-21 (100% Latino)	Communit y settings	Nine 120- minute sessions	<ul> <li>Culturally-tailored</li> <li>Interactive</li> <li>Group component</li> <li>Role-playing</li> <li>Peer component</li> <li>Psychosocial skills</li> </ul>	<ul> <li>Frequency of sex</li> <li>Number of partners</li> <li>Condoms</li> <li>Communication</li> <li>Knowledge</li> <li>Intentions</li> <li>Attitudes/beliefs</li> </ul>
Success Express	Abstinence program	Middle school students (69% Latino)	Schools	Six sessions	<ul><li> Group component</li><li> Psychosocial skills</li><li> Goal-setting</li></ul>	<ul> <li>Frequency of sex</li> <li>Number of partners</li> <li>Parent-child communication</li> <li>Attitudes/beliefs</li> <li>Intentions</li> </ul>

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# Chapter 5: Programs

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### CHAPTER 6, ENGAGING ADOLESCENTS IN PROGRAMS

# Overview and summary

The effects of social and educational programs for young people can vary significantly, from very effective to not effective to even destructive. For this reason, in order to provide adolescents with the strongest opportunities to thrive and become successful adults, it is critical to identify programs and practices that foster positive development. Researchers, practitioners, and policy makers have increasingly recognized the importance of effective programs for adolescents. However, less attention is paid to the program features and practices that contribute to effective program implementation, which has become a major gap in the literature. Although many published program evaluations describe basic program features, the study design used to evaluate the effectiveness of the program, and the results, few of the study designs allow researchers to examine the effects of individual components. Thus, there is very little research that describes which implementation components of the program contributed the most to the program's effects or the quality with which the program was implemented.

To address the need for information about program implementation, Child Trends conducted both a review of the existing literature and interviews of program developers and practitioners who work with Latino populations in order to identify features and practices that contribute to successful program implementation. This chapter summarizes our findings. Before doing so, however, we first describe what we mean by "implementation" because multiple definitions exist in the literature.

# What Does "Implementation" Mean?

In this report, implementation refers to the actions that program providers and their organizations take to operate the program. Implementation occurs at both the program and organizational level, as Figure 6.1 indicates.

At the organizational level, leadership must engage in activities to support the program, such as fund raising, staff selection, training and supervision, and program monitoring. A well-developed literature exists on the organizational-level features required for strong program implementation. For example, the National Implementation Research Network (NIRN) at the University of North Carolina has done extensive work in this area, and researchers there have identified general strategies that organizations should take as they adopt and implement new programs. As we begin to develop a program model, we will draw on NIRN's framework to ensure that we have the organizational supports necessary to support successful program implementation. NIRN has applied its framework to a wide variety of social interventions.

At the actual program level, however, relatively little research information exists about effective strategies in teen pregnancy prevention programs. Out of 23 teen pregnancy prevention program evaluations that served a substantial proportion of Latino adolescents, only nine reported information about recruitment rates and only five provided information on participation rates. Limited information on a myriad of other implementation features such as staff recruitment, training, implementation quality and fidelity, cost, and needed resources is available in the published literature.

We have identified three major implementation activities:

- 1. outreach and recruitment to bring young people into the program;
- 2. engagement and retention to ensure that they attend the program regularly and that they engage in the activities; and
- 3. the strategies that foster the desired outcomes.

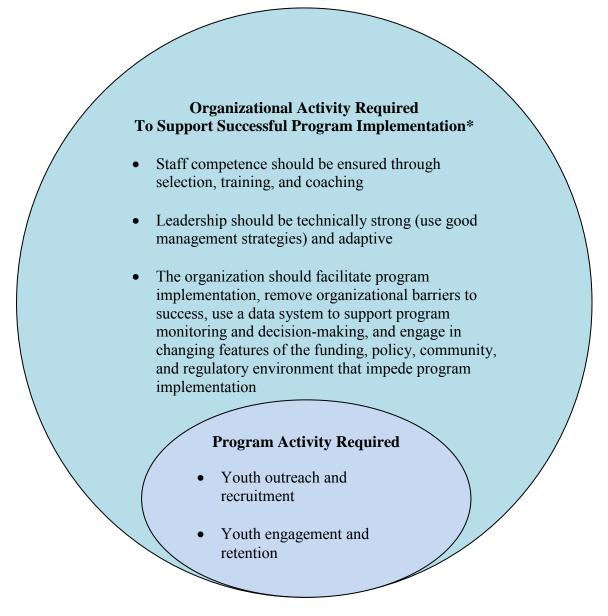
The first two activities depend, in large part, on whether or not the young person's attendance in the setting is mandatory or voluntary and what the consequences are if s/he is not present. If the program is located within a school, during the regular school day, and during regular class period, then outreach, recruitment, engagement and retention are *relatively* easy tasks. We emphasize "relatively" because in some schools truancy is so high that programs cannot deliver programs at the desired dosage. However, if a program is located either in a community-based setting or in a school and outside regular school hours (for example, during lunch or after school), then those four activities can pose significant challenges to the staff that run the program. Because so many of the programs that have been evaluated have operated outside regular school hours, this chapter examines outreach, recruitment, engagement and retention in some detail.

As discussed in the previous chapter, it is challenging to identify the program strategies that lead to desired outcomes (what program developers often call "core components") because both successful and unsuccessful programs often employ very similar strategies. Also, program evaluations often focus on the collective impact of all program components, and their designs typically do not allow researchers to identify the specific strategies that contribute to outcomes. Since programs are usually made up of multiple actions and events, much is unknown. Therefore, we must draw from a variety of sources, including basic research that examines the precursors to positive development, educational research that assesses educational strategies, evaluations of programs other than teen pregnancy prevention programs, and practitioner knowledge.

### **Findings in Brief**

As this chapter demonstrates, many of the strategies that are effective for non-Latino adolescents are also effective with Latino adolescents. Other strategies take on particularly strong relevance for Latinos. One obvious example is that when serving mono-lingual Spanish speakers, program materials should be translated into Spanish and staff should speak the language. Less obviously, providers serving Latino adolescents discussed the importance of addressing cultural norms, such as *familismo* and *machismo*, in ways that both affirmed the culture and permitted adolescents to develop additional norms, such as future-oriented thinking. Below we summarize our findings from both interviews and the program review. For more detailed information on outreach and recruitment strategies, see Appendix G; and for more detailed information on retention and engagement strategies, see Appendix H.

Figure 6.1: Organizational and Program Activity Required to Support Implementation



\*Adapted from the Implementation Drivers defined by the National Implementation Research Network

### Findings related to outreach and recruitment

- ➤ Face-to-face recruitment is particularly important in Latino communities due to cultural patterns of interaction.
- Parental buy-in facilitates recruitment efforts and is attainable through the use of face-to-face interactions and the use of networks and community institutions to reach parents.
- ➤ Other recruitment methods, such as using Spanish language TV and radio, can be helpful, but should be done in conjunction with personal, face-to-face approaches.

### Findings related to program setting

- Implementation of programs in school settings provides easy access to Latino participants and reduces attrition from the program, but getting school buy-in can be challenging and school infrastructure poses challenges for program delivery. It may also impact program content—not sure if you heard that.
- ➤ Programs implemented in community organizations have more flexibility than those in school settings, but recruitment, attendance, and retention can be challenging in these settings.

### Findings related to retention and engagement

- Interactive activities foster participant engagement and promote active learning.
- ➤ Warm, caring and knowledgeable staff facilitate engagement in programs
- > Program Materials may need to be in Spanish, English or both
- ➤ Discussions of Latino culture and adolescents' experiences within that culture and with being Latino in the United States are a promising strategy for making material relevant and meaningful.
- > Providing incentives and making programs fun helps foster adolescent engagement.

#### **Outreach and Recruitment**

According to the research literature, immigrant families are more likely to participate in social programs if they have met the recruiter in person or on the phone or are told about the program by a friend they trust. One initiative, which used community volunteers as facilitators, found that informal promotion by their facilitators was their best source of participants in workshops. Word-of-mouth can also be spread more formally, for instance by giving teen members of an organizational partner some materials to give to their friends. What becomes clear from both the evaluations and the interviews is that recruitment is a process that may begin with generating interest, include identifying the "right" locale for an intervention, and end with the development of relationships between providers and adolescents. For some programs, this process is included as one of the program's core components.

Information on recruitment success—that is, the proportion of participants recruited compared with the proportion of potential participants contacted—is available for only about one-third of the programs whose evaluations we reviewed, and those rates ranged from 60 to 80 percent of eligible participants. Almost all of the evaluations include information about recruitment methods, 79 and our interviews were rich with information.

<sup>&</sup>lt;sup>79</sup> Recruitment methods used in program evaluations tend to be more intensive than recruitment methods used when the program is being implemented as usual because the evaluations need to have a particular sample size. As a result, providers and evaluators tend to work very hard on recruitment and try a variety of methods. As a result, the results of recruitment conducted in the course of a program evaluation may be inflated. On the other hand, evaluations provide useful information about effective recruitment strategies.

#### **Methods**

Our research to investigate how to carry these activities out successfully with Latino youth included three activities:

- A review of teen pregnancy prevention evaluations;
- Interviews with the developers or evaluators of teen pregnancy programs that have shown effectiveness with Latino youth; and
- Interviews with providers of teen pregnancy prevention programs that serve Latinos

To identify implementation strategies most relevant to programs currently seeking to improve sexual and reproductive health outcomes for Latino youth, we reviewed impact and implementation evaluation studies associated with programs in the program review and selected only those programs which had been evaluated over the past decade and had a focus on teen pregnancy prevention (16 programs, associated with 23 program evaluation studies (16 random assignment and 7 quasi-experimental). We talked with program evaluators and developers because the information about implementation strategies in the published literature was so sparse. To recruit program developers/evaluators, we consulted our program evaluation review and identified programs that had been evaluated in the past 10 years. We then identified the primary authors of those evaluations or developers of those programs and contacted them to invite them to participate in our study.

We conducted 14 phone interviews with program staff. To recruit them, we conducted a web search to identify comprehensive and abstinence-only pregnancy prevention programs currently serving Latino adolescents. We then contacted the programs to recruit one of their staff members.

Each participant in both the evaluator/developer and the provider groups received a \$100 check as an incentive for their participation. Interviews were 45-90 minutes long and covered the following topics:

Providers' background and agency/organization information (for the program providers only)

- Program approach and model
- Program provider characteristics
- Recruitment and retention.
- Barriers and facilitators to implementing the program
- Perceived Program effectiveness

All interviews were transcribed immediately after the interviews. All transcripts were coded and analyzed using NVivo 9 software (QSR International Inc.) to identify key themes that emerged from the data pertaining to implementation barriers and facilitators.

The findings from our literature reviews and our discussions with providers and developers are remarkably similar, and we have therefore integrated the information from both, using the interviews to expand upon the information in the written literature.

# Recruit, retain, and promote bilingual/bicultural staff

One of the first steps that program management should take before recruiting young people to programs is to recruit, retain, and promote bilingual and bicultural staff. Staff who are familiar with similar communities and can speak the "language" of the target group, both literally and figuratively, will have better success in recruitment. Bilingual and bicultural staff will also build trust and connection with the community more effectively. In addition to relating and speaking Spanish, program staff can build rapport and trust with parents by holding special activities in the community where members of the community are invited to come, and as we describe below, engaging parents is critical.

# Recruiting Parents and Other Community Members

Both our interviews and evaluation review indicated that relationship building within the community was an important first step before recruiting Latino adolescents to programs. In particular, parents, schools, and community-based programs must know about and buy into the program.

Developing relationships with communities or families. Relationships were developed with schools, a juvenile detention facility, and adolescents. The individuals involved in developing these relationships were primarily project staff or the program developer.

Building relationships means spending time in the community, attending local events, and visiting shops and restaurants. Staff can use these venues to introduce themselves and their project, get to know the rhythms of daily life in the community, learn what people are most concerned about, and tailor the program appropriately by, for example, choosing a good meeting site. In addition, meeting a broad variety of stakeholders can open up opportunities such as recruitment at semi-private events.

**Parental buy-in facilitates recruitment efforts.** According to Martinez et al., immigrant families are more likely to participate if they have met the recruiter in person or on the phone or are told about the program by a friend they trust. Because minor children and adolescents need to obtain a parental consent for their participation in a pregnancy prevention program, program providers agreed that it is important to get Latino parents to buy-into the program. As one program provider said

Parents will determine if the students are involved [in the program]. Making sure they [parents] have enough information and knowledge about the program... they take ownership [of their adolescent's attendance].

Program providers reported that most, but not all, Latino parents readily agree to permit their adolescent children to participate in a pregnancy prevention program. These parents do so because they feel the program will provide accurate information compared to other sources of information that adolescents might resort to, as the following provider reported:

When we meet with the parents during orientation, they're happy their students are getting this information from [the program] rather than the streets or friends – that someone [who is] actually an educator can give them real answers and information.

Another provider echoed this statement: "once you talk to the parents and let them know what [the program] is about and . . . how it will benefit them, it's not much of a challenge."

Providers noted that parents who do not want their adolescents to participate in their program hold strong traditional beliefs about sex and contraception. In order for these parents to allow their adolescents participate in a pregnancy prevention program, staff may need to put an extra effort to give parents more in depth program information about how the program can benefit their adolescent children, and diligently build rapport and trust with these parents. A program provider reported how they recruit reluctant parents:

The counselors make a lot of effort getting into the homes, talking to the parents . . . We try to talk to them, and we talk to them on a personal note – tell them not just 'this is great info.' No, you get a personal note: I am Hispanic, in the community, and I care about your child. They have to feel that it matters to you.

Working with parents to build rapport and trust requires program staff to find appropriate times to speak with them and inform them about the program. The program providers noted that the back-and-forth with parents requires a manpower that slim budgets may not able to support and thus, not all programs have the capacity to do this.

# Developing Relationships with Schools and Community Organizations

Developing a relationship with the community can be critical to recruitment success, because it is sometimes faster and easier to build on previously established relationships than to forge new relationships. Partnership can be with a school or district, church, local physicians, clinic, trusted community-based organization, or even a museum or housing organization.

School buy-in requires effort. Schools can be particularly useful partners for several reasons. They can serve as a place from which programs can recruit participants, <sup>15,16</sup> they can serve as a setting for programs, and their educational structure can be used to make a program mandatory, since mandatory programs tend to have better retention rates. If schools do not have formal sex education, then bringing a teen pregnancy prevention program in can help both the program and the school. However, a common theme in the interviews with program providers was that it is challenging to work with schools because schools' structures and cultures differ from many youth development programs, including teen pregnancy prevention. Providers whose programs were implemented in schools stressed the importance of school buy-in. They remarked that schools serve as ideal points of access to adolescents, but to gain this access, they needed to cultivate strong relationships with people at multiple levels—both school staff and school district officials, which can be time consuming. One provider said that the program worked well due to "total cooperation between agency and school."

Although advantageous, half of the program providers working with schools thought that administrators did not fully support their programs. One program provider's comments illustrate how important it is in the process of engaging schools to ensure that school staff are informed about the program and the issues it addressed. Her comments also indicate that the process is ongoing because turnover in school staff may result in the need to reach out to new staff to inform them of the program and its need.

If they [school personnel] are not very familiar with the issues at hand and they're not really at tune with some of the cultural or background topics we deal with, virginity, tampons, and older male partners, it is a little more difficult for them to understand the benefit of the program. It's not instrumental...it is tiring. Especially if we've been there for years and someone changes ...we have to almost start over again. It works out ok but it requires a little more work on our part.

In general, program providers whose programs were implemented in the community thought it challenging to recruit program participants from schools because there can be lack of program buy-in from school administrators. While these providers thought school administrators may accept the program once they understand the programs' objectives and the benefits it can bring their students, they also indicated that they lacked the manpower to reach out to school personnel, schedule appointments, and inform them of the program. When discussing her work with schools, one program director said,

There's always challenges, it's often logistical you know, schools are big places so if we want to talk to the counselor, they need to know that we've talked to the principle and have an MOU and it's ok to talk with us and help us recruit. It takes time to get everyone on the same page".

Taken together, these findings suggest that recruiting participants from schools and implementing programs at schools require great effort from program staff. However, the providers that had surmounted them and worked in schools had found schools to be very important partners.

### Recruiting Adolescents

Recruiting Latino adolescents for voluntary pregnancy prevention programs that are operated in the community or in schools outside of regular class time often requires that providers generate initial interest in the program. In interviews, two program providers indicated that one way to cultivate adolescent interest, is to offer a fun sample of the program in the community or schools in where program staff is recruiting. This strategy provides adolescents a taste of the program and an opportunity to meet program staff. For example, a program director said,

If we're having a hard time in one school ... we'll have the schools call the students to come for lunch [to a program informational meeting] and we bring food and do a short activity. So they would have an idea of what the program would be if they joined.

This provides a good example of the strategy that both the evaluations most often listed as a recruitment method and that providers said worked best:

**Word of mouth referrals or campaigns.** This method included group and individual face-to-face outreach, phone calls, interactive promotion of the program by actors, presentations during school, and referral for participation by school counselors or clinic staff. Individuals responsible for recruiting participants were often school personnel for school-based programs or research staff. However, in some cases community-based institutions, such as health clinics, juvenile departments, and community-based organizations were primarily responsible for recruitment. "Face-to-face is the best way. It's better than just a flyer. They aren't going to call from a flyer,

unless you talk to them face-to-face." According to some providers, in-person recruitment not only relieves adolescents from the burden of having to make cold calls to the program, it also allows adolescents to ask questions about the program and provides an opportunity for staff to build rapport with the adolescents. <sup>17</sup>

**Advertising on television or radio.** This is a rarely used approach mentioned by only one evaluation and one provider. Television or radio advertisements were often in both Spanish and English and targeted Spanish markets. One author reported that it was most successful when used with word-of-mouth and face-to-face outreach methods. <sup>18</sup>

# The Pros and Cons of Implementing Programs in Schools and Community Based Organizations

Program providers reported challenges and benefits to implementing programs in schools and communities, and their comments provide insight into promising strategies for program implementation in school and community settings. Some of these challenges and benefits include program delivery, program group size, the physical environment of the room where the program is implemented, target population, and participant retention.

### Implementing Programs in Schools

While the program providers reported challenges to implementing their program in school settings, they also articulated benefits. For example, some program providers stated that "schools have more resources" compared to community programs, such as white boards to write on, desks, and air conditioned classrooms. Another benefit to working in schools is that participant attendance and retention rates tend to be higher compared to programs implemented in community organizations because the adolescents are already required to be in school. Having the program integrated into the school curriculum is even better. As one program provider described,

"It's good being in schools and having it as a required piece in the classes. It doesn't single out anybody. They all have to be a part of it."

**Despite the advantages of locating programs in schools, working with schools poses challenges.** Program providers cited four notable challenges when implementing pregnancy prevention programs in school settings. All except the last are surmountable through careful planning and training.

1. Coordinating the program timeline with teachers and other school personnel. According to these program providers, school timelines often conflict with the timeline of the program. A program provider articulated the challenge her program usually runs into when working with schools,

The relationship with the school is sometimes difficult in terms of we have a certain timeline we're trying to follow as an organization and the school has their own timeline so sometimes it is hard to plan things where we're all happy.

2. Large class size is not conducive to interactive program activities and group discussion. According to program providers, smaller class size (about 15 participants) is important and

conducive to engaging program participants. Limiting class size is possible for programs being conducted within the school but outside of regular class hours. However, if a program provider manages to find time during the regular school day (which aids significantly in outreach and retention), class size may be an issue because regular classrooms often have many more than 15 students.

3. In programs that are delivered in regular school-day classrooms, program facilitators find that the skill of the classroom teacher in managing the classroom affects the facilitator's ability to work in the classroom. It is easier to implement programs in classrooms in which the regular teacher has strong classroom management skills. Students are manageable and attentive to the program in these well-managed classrooms. However, in classrooms where the teacher has low classroom management skills, program facilitators and teachers, face challenges managing the classroom when implementing the program. A program provider provides an example of her experience implementing a program in a classroom setting,

"Some teachers are really supportive and they have awesome classroom management, and you have other teachers who really lack in that, and that makes it [program implementation] really hard."

4. The neediest young people may not go to school, and thus both regular school day classrooms and programs that are operated during lunch or after school are not good choices for programs that target those young people. Some program providers voiced their concerns that when they implement programs in schools. One reported, "The kids more desperately in need of this [program] are often left out".

Careful planning can at least partially address the first three challenges. School calendars affect both regular school day programs and after-school/lunch programs because school buildings may be closed. When program providers consider locating programs in schools they should consider the local school calendar and hours. Providing options to schools for program delivery, along with information about the advantages and disadvantages of various program timelines may be helpful to schools. Similarly, while it may be easier to engage program participants in small groups, it is possible to engage participants in larger groups by splitting them into smaller groups for periods of time or designing activities that engage the entire class. While there may be greater benefit to smaller groups, the education literature has found that the quality of the teacher is more important than class size: Good teachers have a larger impact on learning in large classrooms than mediocre teachers do in small classrooms, <sup>19</sup> which supports the need for strong staff to deliver programs.

### Implementing Programs in Community-based Organizations

Programs implemented in community organizations have more flexibility with respect to timeline and group size than those in school settings. They also have a potentially wider reach and may be able to recruit and retain high-risk young people who are no longer going to school. However, they face their own challenges. Most of the providers with whom we spoke said that the lack of resources was an issue: Programs often do not have a lot of resources and they often have to hold program sessions in classroom settings that are not optimal for program delivery. A program provider gave an example of delivering a program in an uncomfortable space, "... we might end up in a space not conducive to teaching... One time the heating system was

malfunctioning so like 250 degrees in there." In addition, attendance and retention rates tend to be lower compared with those when programs are implemented during regular school hours.

# **Retention and Engagement**

Programs may fail to deliver desired outcomes because they cannot retain participant attendance and interest, which we refer to as engagement. The Provider and Developer interviews were rich sources of information about how to promote retention and engagement. Although the information in the evaluation literature is spotty, those evaluations that provided information on attendance and retention indicated that most participants attended a large majority of sessions, and most participants finished the program. However, a significant minority of participants did not go regularly to the programs. Across the evaluations that included information on retention, the attrition was approximately 25%, and the range was very broad. Interviews and evaluations highlight some of the factors that play a role in Latino adolescents' program attendance and engagement.

Participant engagement is not only key to attendance—participants who are engaged and interested are more likely to attend programs—it is also key to achieving program effects. In other words, some of the same strategies that generate engagement also generate outcomes, and we discuss them together.

# Factors that Facilitate Engagement and Retention

**Provide opportunities for family engagement.** A message will be better received and more deeply understood if there is reinforcement at home. Adolescents are also more likely to continue their attendance (for voluntary programs) if caregivers buy into the message and encourage their children to participate. If caregivers view themselves as part of a "team" in improving the health and well-being of their teen, they will reinforce good behavior. Contact with parents can identify barriers to attendance, or can spread the messages of the intervention to non-participants as parents talk to one another. Family engagement does not necessarily mean that parents need to attend activities; getting parents to attend activities is often challenging. However, several successful teen pregnancy prevention programs have engaged families by including parent components in the program curriculum or by sending activities home with adolescents that parents and children can do together.

**Warm, caring and knowledgeable staff matter.** Having warm, caring, knowledgeable, and culturally-competent staff can encourage Latino adolescents to engage and attend the program. Across the board, the program providers attributed much of their success with participant engagement and retention to their high-quality staff. Several talked about the importance of having knowledgeable staff – many even discussed the importance of formal health training as a positive attribute for the program facilitators.

<sup>&</sup>lt;sup>80</sup> Baby Think It Over, Condom Availability, Familias Unidas, Families Talking Together, It's Your Game: Keep it Real, PATH-AT, Reducing the Risk

However, the providers tended to put an even greater emphasis on having warm and accessible staff, important attributes for building rapport with the adolescents. One program provider stated,

If you've got a good teacher and facilitator, we're seeing, with some evidence, the curriculum is very accessible for any of the kids and any experiences they may be bringing [to the program].

Also when asked about what helps with retention, a program provider stated, "the facilitators getting to know the youth really well, so they feel a sense of belonging to the group." Others made similar comments as the following provider stated when she discussed strategies for participant retention, "we take the time to show them we care and are invested in them."

In addition to high quality staff, about a third of the providers reported that it is important for facilitators and guest speakers with whom the participants could identify to deliver the program content. One provider suggested having former program participants deliver program content to new cohorts would be a great way to engage adolescents: "they can listen to [the facilitator] all day, but [the facilitator] is not actually participating in the program. But when they hear it from an older student who has been there, it works." Another program provider said that having facilitators who were either close in age to the participants or who had children of their own seem to be particularly relatable for adolescents. As another example, one program provider said:

We have someone who was a teen parent or is a teen parent to share their experience and use the language we use in the program and go through what they went through before they had a child – some of the difficulties what their experience has been, and especially their goals and how becoming a teen parent changed their goals or change the path to their goals.

**Community volunteers can be important program supports.** Including adult volunteers from the community can help provide a welcoming community where adolescents feel comfortable trying something new. <sup>25</sup> However, it is important that the volunteers are well trained to reinforce the messages of the program. <sup>26</sup> These volunteers can help to bridge the message of the program with cultural values, and ensure that the program remains culturally sensitive. <sup>27</sup>

**Adolescents respond to incentives for participation.** Providing incentives and making program activities "fun" can promote Latino participants' engagement. Across the interviews, nearly every program provider remarked that incentives help with engagement and retention efforts; as one provider summarized, "[we] are able to provide incentives for the kids – little knickknacks or snacks to help them decide whether to be in the program and make it exciting for them." Another surmised, "I think the gift cards [that the program provides for attendance] help them to come back."

Program providers also thought that "fun" activities are necessary to retain and engage participants – and they noted that this is also the case for Latino participants. As one program provider noted, "We don't want them to see it as a punishment, just an activity to choose." Some examples of fun activities included: group discussions, demonstrations, role plays, and the use

of technology. Some programs incorporated fun activities such as salsa dancing, field trips, art, theatrical plays, and games with prizes. Program providers noted that "they can't just sit in a chair for an hour" and that "we like to get them moving around and using visuals." Fun activities that made complex or abstract concepts more concrete were also engaging; one program provider reported:

We play a game where they guess how many grains of sand I dump into an envelope. The idea is that the sand represents the number of sperm that comes in one ejaculation into the vagina. And we are talking about upwards of 200-400 million, and the point is that it only takes one to get [a female] pregnant... that seems to work well."

Similarly, the program providers, in general, thought that role plays engaged participants and offered them a place to rehearse interactions they might have with partners or family members around important topics. As one provider described:

For Latinos specifically... we role play a lot. I think that [when] we do it over and over again, it starts to be normal, and they start? to come around toward the end and are able to open up a little bit more... and they're able to build rapport."

The use of technology was also cited as a promising way to engage participants in the activities and program. For example, one program provider stated that text messaging kept participants generally engaged in the program and that this strategy also worked to engage Latino participants. Incidentally, the few programs that incorporated a parent component reported that the use of technology was important to retain parents, especially for parents with low-literacy skills unable to complete homework assignments. Videos, podcasts and other digital technology seemed to be effective alternative ways to include parents. However, according to one program facilitator, finding Spanish language videos is a challenge.

### Barriers to Engagement and Retention

Latino adolescents have other priorities and needs that can shape participant retention and engagement. For programs that take place outside the regular school day, Latino adolescents most often cited conflicts with home, work, and school, or that they lacked money or transportation, as reasons for absence. <sup>28</sup> In fact, many barriers to participation relate purely to program access. Providing child care or transportation, adjusting meeting times to be compatible with participant preferences, and locating the program in a central or popular location, can mitigate the influence of these barriers. <sup>29,30</sup>

According to the program staff we interviewed, Latino adolescents, like other adolescents, stop attending after-school and community-based programs because they have other responsibilities at home. For example, they need to take care of their siblings or help their parents with chores at home. Program staff also thought that adolescents who have other priorities in their mind are likely to stop coming to the program. Some of the priorities that were cited included: adolescents needing to hold a job after school, having after school sport activities, or wanting to hang out with peers after school.

Many of the program providers also noted that the Latino populations they serve are economically disadvantaged and that many represented a vulnerable population; as a result,

many of their program participants were not getting their basic needs met, which can inhibit program attendance and engagement. However, the program providers mentioned that they attempted to overcome this barrier by providing basic necessities, such as food, and other necessary supplies, such as school supplies, to incentivize participants to remain in the program. One provider explained, "Where we go in the South area, which is considered low-income, they get backpacks. They're very happy because some can't afford [them] with three, four, five kids."

Lack of transportation can be a barrier to program retention of Latino adolescents. Program staff implementing programs in rural areas reported that sometimes adolescents stop attending the program due to lack of transportation. Some Latino adolescents are unable to rely on their parents to drive them to the program either because parents do not have a car or they do not have a driver's license due to their inability to show proper documentation to obtain a license. And of course, even when the participants have access to transportation, barriers to program attendance can still exist; as one provider put it, "it's just important that the kids know where we are and how to get there."

Program providers agreed that some program implementation strategies that work for adolescents of other racial/ethnic backgrounds also work for Latinos, such as interactive activities over didactic ones. However, program providers also discussed that in many instances they had to make several program adaptations to ensure the program was culturally sensitive and addressed the needs of the Latino population. Appendix H provides examples of activities the program provider discussed as they reported the key strategies discussed in this section.

# Interactive Activities Promote Active Learning

A common theme that emerged across the interviews was that the program providers thought Latino adolescents, like other adolescents, prefer interactive activities over didactic lessons, and most of the providers implemented curricula that incorporated interactive activities. However, many also reported that their curricula contained some modules that were didactic in nature. Didactic modules often included disseminating information about STDs and reproductive health development to help adolescents gain knowledge on these topics. In response to program participants' affinity for interactive activities, program providers reported adapting those modules to make them more interactive. For example, a program director incorporated an interactive component in a PowerPoint presentation that presented STD information, and another program facilitator used open-ended STD questions that engaged participants by sparking group discussions. That same provider noted that a bonus to asking questions and involving participants in interactive discussions was that it allowed the program facilitator to gauge the level of the groups' knowledge.

Group discussions about adolescents' attitudes, values, and stereotypes about a given topic were also perceived to be engaging for adolescents. These discussions made issues relevant and meaningful to the teens. A program provider stated that engaging group discussions often contain "juicy content that the [participants] will grasp onto and take it and run", such as "...values and stereotypes and communication, and speaking up for yourself".

Providers also noted that interactive activities permitted adolescents to learn skills. For example, one program provider said that the most successful activities were "the ones where they are practicing a skill." Another noted that "the role play is huge. Anything that helps them get out

'beyond the session.' I've turned the [program] book into a play – instead of just reading, I have them play a part." The program providers also cited experiential activities, such as condom demonstrations, to be attractive and engaging activities for adolescents. Program providers thought these activities are not only engaging, but also provide hands-on experience that some adolescents need to learn information.

# Program Materials May Need to be in Spanish, English, or Both

One of the most critical steps to making programs work for Latinos is to first gauge the language in which program participants feel most comfortable speaking. In some cases, some program facilitators reported implementing the program in English and/or Spanish, when a Spanish version of the program was available. However, in some situations programs were not available in Spanish, as one program provider noted, and thus, facilitators had to translate the program, in real time, as it was being implemented in English. According to the program provider, this was not an ideal situation stating, "... it's [the program] not translated in Spanish. ... we have bilingual staff that translate the lessons, but that makes the session longer and harder".

Interestingly, even in situations when the program was available in Spanish, further adaptations to language were needed. According to some of the program providers, programs may be translated into Spanish, but they may not incorporate culturally relevant elements or experiences of Latinos in the United States and thus may need further adaptation.

# Discussions of Latino Culture and Ethnic Background Enhance the Program's Relevance for Latino Youth

According to the research literature, Latino youth are more likely to be engaged if a program speaks to their own experience, <sup>31</sup> and fits into the way they think about the world, promoting cultural values and cultural pride. <sup>32</sup> Program facilitators should also be familiar with the differences between Latinos of various national or regional origins, and especially careful regarding cultural values around gender roles. <sup>33</sup> Over half of the evaluations that we reviewed indicated that being culturally responsive was important, and authors reported that culturally responsive strategies included developing programming collaboratively with the target population, addressing or incorporating relevant cultural issues in the program, and employing program facilitators who were the same race/ethnicity as most participants.

Program providers also emphasized that it was important to include discussions of Latino culture in their program. One provider noted that it was the cultural framework of the program that made that program successful; the provider stated, "I think we affirmed that being Latino is a good thing, and we have many things we have to draw on." From their experience with the Latino community, roughly half of the program providers stressed the importance of incorporating discussions about families because they see that parents and other family members are influential in adolescents' lives. They also discussed the use of constructs from Latino culture, such as familismo, which stresses the importance of family, familial solidarity, and adherence to traditional gender roles within the family structure (Galanti, 2003). Yet another program provider noted, that program staff "would talk about Latino cultural components...acculturation, things that most of us in the Latino community would embrace," to adapt the program for Latino adolescents.

According to program providers, discussions with Latino adolescents often involve exploring cultural and personal values and expelling myths. For example, some program providers stressed the importance of engaging adolescents in discussions pertaining to their and their families' cultural beliefs and values about sex, virginity and other topics. To do this, a program provider stated that the program facilitator tends to "...focus on machismo as well as talking to the guys about being proud of their heritage. And they do discuss some of the hardships of living in America and the conflict between American values and how it differs from their roots". Two providers noted that discussing these topics allowed adolescents to become aware of their own beliefs and values and how they align with their parents' and the mainstream culture.

Other ways in which program providers adapted programs as they implemented them was by simply naming characters in program activities with first names common to the Latino culture or incorporating illustrations or characters that portrayed the demographics of the Latino population.

Additionally, some of the program facilitators saw it important for Latino adolescents to discuss their experience of being first or second generation immigrants to the United States. According to one program provider, these types of discussions would help adolescents become aware of their (and their family's) cultural background and their experience immigrating to this country, and put their experience into perspective. According to the facilitators who raised the point, this would validate adolescents' experiences.

Despite agreement between the evaluation literature and the providers that tailoring programs was important to engaging Latino adolescents, more than half of the program providers implementing some of the evaluated programs stated that they had to adapt the pregnancy prevention programs to the specific needs of the Latino population. This suggests that even if the original developers made adjustments to the programs to make them more culturally relevant, providers implementing the programs did not think the modifications went far enough. And, unfortunately, many of the providers that were interviewed noted that even when they made their own adaptations, they did not always record or document their changes, and systematic implementation of those adaptations is not always done.

Some of the adaptations mentioned by program providers included in depth conversations and coverage of love, intimacy, and romantic relationships. For example, a program provider saw it crucial to discuss the elements of healthy relationships, while another program provider thought that Latino adolescents, in particular, need to learn how to talk to partners about contraception. Yet, another program provider also saw it important for Latina adolescents to role play interactions and refusal communication skills with older men because according to her, it is common for Latina females to have older partners.

Another important adaptation that program staff often discussed in the interviews was that they extended modules that incorporated information about anatomy and physiology of the reproductive health system. One-third of the program providers we interviewed thought Latino adolescents and parents lack basic information about the reproductive health system. A program provider illustrated this point in the following quote:

Here there are a lot of families that don't talk about it, and even in the house they don't commit conversations about this topic so when we have them learn about the reproductive system and the opposite sex they're kind of like should I be seeing this? They start questioning because it's not something they are used to.

Program facilitators also spoke about the need to emphasize future-oriented thinking among Latino adolescents. Facilitators thought that Latino adolescents may not always readily think about their future and, thus, they need to be encouraged to do so. A program facilitator expressed this sentiment in the following quote:

We need a program that emphasizes school as being important and also showing them that they do have a future; [A program] to provide them to be able to see what their future may hold. Maybe they will go to college. We want to see a future for them"

# **Implications for Future Programs**

Our review of the evaluation literature on program implementation and our discussions with program providers offer rich lessons for developing a teen pregnancy prevention program for Latinos. The following chapter presents a theory of change and logic model that draws on those lessons and those from previous chapters. Here we discuss some of the implications from our findings on program implementation.

Recruiting Latino adolescents to, and retaining their interest in, teen pregnancy prevention programs can be challenging. Not only must programs be engaging and interactive with well-trained, caring adult staff, a requirement for almost any youth program, but they must also be sensitive to the Latino culture. Recruitment may need to rely on word of mouth and personal interactions with both parents and their adolescents. Although recruitment methods, such as Spanish radio or TV and flyers can be useful additions, the importance of face-to-face interactions in Latino culture and the importance of ensuring that both parents and adolescents are aware of programs means that making personal connections with members of the community is critical. This suggests that relying on organizations that have existing ties to the local community may lessen the amount of outreach required because relationships have already been formed.

Given the challenges that programs face in retaining adolescents in programs, particularly those that meet over several sessions, locating programs in schools has advantages over locating programs in other community settings. First, while schools do not serve all adolescents because a substantial minority drop out, especially among Latinos, they serve the vast majority of young people, especially those of elementary- and middle-school age. Second, although schools can be challenging for programs to work with, they offer resources, such as well-equipped and comfortable space, that many community-based organizations cannot. And third, placing programs in regular classrooms during the school day enhances adolescent attendance in programs, a pre-requisite to achieving desired outcomes. Doing so, however, is not always possible, as schools and their districts may not be willing to give up class time for such programs. However, even programs that are offered outside of the regular class periods (such as at lunch or after school) may have an advantage in attendance, since the students are already in the building.

Once programs have recruited Latino adolescents, they must maintain their engagement in the program and make it relevant and meaningful for them and their parents. At the most basic level, this might require the use of Spanish-language materials. Equally importantly, however, is the use of strategies to engage them actively in the program through discussions, demonstrations, and skills practice. Also, including cultural elements within the program is important. This may mean the use of materials that are designed to visually appeal to Latino adolescents, such as videos that employ Latino actors. It also may include the use of cultural concepts with which Latino adolescents grow up. These concepts can be helpful in making program materials meaningful for adolescents, but they may also create difficulties. For example, machismo can foster a sense of taking care of family, which is positive, but it can also limit communication between young men and women, which has negative consequences for the correct and consistent use of contraception. Including discussions about cultural norms and how they can facilitate and impede responsible sexual decision making is important.

It is important to keep in mind that cultural norms are somewhat fluid and vary among Latinos from different countries or economic backgrounds. Even programs that are developed for Latinos may need adaptation to ensure that they are relevant for a particular group of Latinos. As a result, it may be important to offer guidance about the types of adaptations that may be helpful in engaging participants—and therefore encouraged by program developers—and those that may omit core components, which should be discouraged.

We conclude by noting that Latino adolescents also respond to many of the same program features that other non-Latino adolescents do, such as well-trained, caring adult facilitators and interactive activities that engage their interest. At the same time, however, programs need to acknowledge cultural differences without stereotyping the adolescents they serve.

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# CHAPTER 7. WHAT DOES IT ALL MEAN? A THEORY OF CHANGE AND LOGIC MODELS FOR TEEN PREGNANCY PREVENTION AMONG LATINO ADOLESCENTS

Latinos in the U.S. experience high rates of poverty, and research indicates that delaying childbearing is a key mechanism for reducing the risk of poverty. Accordingly, to reduce poverty among Latinos it seems important to reduce teen childbearing. However, few of the programs designed to prevent adolescent pregnancy specifically target Latinos, and those that do exist need to be more engaging and culturally relevant for this population. There is also a need for more program options that feature the latest research evidence suggesting the importance of relationships, educational opportunities, getting life goals and aligning sexual and contraceptive behavior to reach those goals, and having accurate knowledge combined with an openness toward contraceptive use, including LARCs, when teens become sexually active.

To identify and address these gaps, an inter-disciplinary team of researchers has conducted a multi-method research project in order to identify promising approaches to reducing early childbearing among Latino adolescents. This work, summarized in previous chapters, has included a review of research studies, a scan of intervention programs, focus groups with adolescents, interviews with parents and with program designers and program staff, as well as targeted secondary data analyses.

To develop recommendations for an intervention that can reduce adolescent pregnancy among Latinos, this project has triangulated findings from these diverse types of information and data. Our research finds no simple solutions, but rather highlights the reality that numerous factors are related to the risk of early sex, pregnancy and childbearing among Latinos. These influences include the family, peer group, partners, cultural norms, educational opportunities, the adolescent's own goals and preferences, and services available in the community.

In this chapter, we draw upon the knowledge gained from this broad review to develop a theory of change and a set of logic models to highlight the elements necessary for teen pregnancy prevention programs for Latinos that are culturally relevant and incorporate evidence-based practices. Below, we describe the assumptions and decision points that underlie these models.

### **Key Decision Points that Shape Program Development**

Numerous and very different approaches have been taken to preventing teen pregnancy. Our research team considered many options for program design, but ultimately it is necessary to make choices. Our theory of change and accompanying logic models are driven by several key decisions, which are described in more detail below. We decided that we would:

- Focus on younger adolescents, with developmentally appropriate strategies to extend the likely impact and support of youth as they navigate adolescence. We recommend beginning with an intervention for younger, middle school adolescents (grades 7 and 8, with a "booster" in grade 9);
- ➤ Create a culturally sensitive and relevant, but not culturally specific, approach to highlight experiences relevant to Latinos, but develop a program effective with other racial and ethnic groups;

- ➤ Focus on adolescents' relationships and communication with parents, peers, and romantic partners as a way of engaging adolescents, developing critical skills for negotiating adolescence, and for building on the importance of relationships within the Latino culture;
- > Not lecture adolescents about things they already know, such as the importance of education and the value of delaying childbearing, but rather help them align their goals with their sexual and reproductive behavior;
- ➤ Provide comprehensive reproductive health education to address individual and school-wide influences on sexual behaviors, including information and messages about abstinence and effective contraception, such as LARCs (long-acting reversible contraceptives);
- Locate the program in schools and find a community-based organization that has existing relationships in schools to maximize our reach and potential impact; and
- ➤ Include a focus on program sustainability, which is essential in order to take programs to scale.

These decisions have shaped other decisions; and, in the next section, we discuss both our reasoning behind our key decisions as well as the implications of these decisions. Then we describe our resulting theory of change and logic models.

# A Focus on Younger and Older Adolescents

As our research on Latinos and adolescent sexual activity indicates, a small minority of Hispanic adolescents (12% of girls and 19% of boys) have ever had sexual intercourse during the middle school years (before age 15), with rates increasing rapidly after that age. For example, one-third of 9<sup>th</sup> graders of all race-ethnic backgrounds have had sex, and this increases to two-thirds of 12<sup>th</sup> graders. These findings suggest that efforts to prevent teen pregnancy should begin in early adolescence - before most teens become sexually active -- and be sustained across the teen years, when many teens enter sexual relationships. One key decision that influences the development of any new prevention program centers on the age of the target population for intervention. There are pros and cons for choosing younger vs. older adolescents for an intervention and pilot, and these have influenced our recommendations.

### Pros and Cons of Program Efforts for Younger Adolescents

An intervention approach targeting middle school adolescents (younger adolescents) has many advantages. A primary reason for targeting program efforts to younger adolescents is to reach them before many of them have become sexually active so that they are more prepared to avoid unprotected sex when they are older. In addition, a number of pregnancy prevention program evaluations have indicated that comprehensive programs can be successful in delaying sexual initiation. (Interestingly, abstinence-only approaches have not been similarly effective.) Delaying sexual activity among younger teens is a key component of teen pregnancy prevention. Decision-making skills continue to improve throughout adolescence, so helping younger adolescents delay sexual activity can help assure that they are better prepared to make responsible decisions and use effective and consistent contraception when they become sexually active. In addition, many middle schools have a designated health class, which provides an opportunity for providing an in-school program that will reach a substantial number of students.

Also, Latinos drop out of school at higher rates and at younger ages than other racial/ethnic groups do, and reaching adolescents who have dropped out of school through programs can be challenging. Since teen pregnancy is an important reason that girls drop out of school, middle school is an opportunity to reach them beforehand. Finally, a middle school intervention will establish a foundation for positive youth development across the adolescent years, engaging teens in school and preventing poverty in the long-run.

There are also some challenges associated with working with younger adolescents. Middle school administrators are generally more hesitant than high school administrators about providing comprehensive sex education in a school setting because most young adolescents are not sexually active. Because relatively few middle school students have had sex or have even been in dating relationships, some may not relate to reproductive health messages or have the contextual knowledge to move the information from short to long-term memory.

# Methodological Challenges for Evaluating Programs for Younger Adolescents

While there are strong reasons for developing programs for younger adolescents, these programs present methodological challenges to evaluators. In particular, the low rates of sexual activity among middle school adolescents (which the program would support) means that models are not likely to have the statistical power to measure changes in contraceptive use. As a result, we recommend that the evaluation measure unprotected sex as a key outcome, which combines abstinence and, among sexually active adolescents, use of condoms or another type of contraception. Also, few providers will offer long acting reversible methods of contraception, including IUDs and implants, to younger teens, so we would be unable to measure impacts on LARCs. Instead, we recommend measuring program impacts on younger adolescents' knowledge and attitudes about LARCs. This would set the stage so that, when these teens enter high school, they will be more open to using LARCs.

Overall, we think it is more important to make recommendations about the program's target population based primarily on an analysis of the potential value of the program to young people and not on the potential evaluation design.

### Pros and Cons of Program Efforts for Older Adolescents

Targeting intervention efforts to "older" teens (those in high school) also has advantages and disadvantages. Because the percentage of teens who become sexually active increases across the high school years (from about 1/3 of 9<sup>th</sup> graders to almost 2/3 of 12<sup>th</sup> graders), this age group should relate to program messages about communication, limit setting, negotiation, and refusal skills within relationships. As a result, building a strong teen-partner relationship component represents an important element in a high school intervention. LARCs are also recommended as a first line method for older teens, so programs could encourage LARC use for sexually active teens, and an evaluation could measure impacts on overall contraceptive use, and use of hormonal or long acting methods of contraception. Because most existing evidence-based sex education programs measure only condom use, an evaluation of hormonal and long acting methods would have the potential to extend the field in this area. School administrators and parents of high school students are more likely to buy in to comprehensive sex education

programs and see them as developmentally appropriate. Finally, a high school intervention will be more likely to directly impact behaviors leading to teen pregnancy.

However, because a substantial percentage of high school students are sexually active, they may have already developed attitudes and behaviors related to contraceptive use that may be difficult to counter (e.g., they or their friends may have already had a bad experience with hormonal or long-acting contraceptive methods). Also, as more high school students become sexually active, abstinence messages may not resonate as well. In addition, a minority of adolescents would already have experienced pregnancy before a program was introduced in high school.

Based on a developmental perspective, our primary recommendation is to develop a program intervention for younger adolescents (7<sup>th</sup> and 8<sup>th</sup> graders). In particular, we recommend targeting program efforts around building parent and friendship relationships in 7<sup>th</sup> grade and adding program activities about romantic relationships in 8<sup>th</sup> grade. We also recommend considering the development of a brief "booster" program that would target students in ninth grade. However, the decision about which age group to target is a close call because there are also strong reasons to focus efforts on older adolescents. Thus, we are open to discussing an intervention targeting older youth and have, in fact, developed a logic model upon which we can build such an intervention. In a world without resource constraints, Latino adolescents would have access to both types of programs.

# Culturally Sensitive and Relevant—Not Culturally Specific

As the previous chapters highlight, the experience of Latinos in the U.S. is distinct from that of other groups, be it their sexual and contraceptive use behaviors or their risks linked to teen pregnancy and childbearing. As a result, we recommend that any program efforts targeted to Latinos should be culturally sensitive, and be relevant to Hispanic teens (and parents) who were born in and outside of the U.S.

Notably, however, many Latinos attend schools and live in communities that include substantial proportions of adolescents from other racial and ethnic groups. In fact, the majority of existing effective pregnancy prevention programs that have found behavioral impacts for Latinos have also included other racial and ethnic adolescent populations. In addition, Latino adolescents in our focus groups did not show a strong preference for program approaches that were strictly targeted to Hispanic students. As a result, our goal would be to design a teen pregnancy prevention program (or set of programs) that will be relevant for Latinos but will also target and be effective with other racial and ethnic populations. Thus, we do not recommend providing *culturally specific* program approaches tailored only to Latinos. Instead, we propose *culturally sensitive* approaches that incorporate experiences of Latino teens and their parents, as well as the recommendations from providers that work with Latino populations.

The implementation chapter identified ways to better recruit Latino adolescents into programs, and to engage and retain them over time. While some of these recommendations were culturally specific – including discussions of Latino culture and adolescent's experiences in that culture – many of the recommendations were relevant across adolescent populations (such as getting parent buy-in for program approaches, incorporating interactive activities to foster engagement, and having warm, caring, and knowledgeable staff). As a result, we recommend incorporating

culturally sensitive messages and activities that are relevant to the racially and ethnically mixed populations of middle schools and high schools, including messages that are relevant to Latinos as well as more generic messages.

# A Focus on Relationships and Communication

As children move through adolescence, the number and type of their relationships expand from a circle that includes friends, parents, and relatives to one that may also include romantic relationships, more varied friend relationships, and relationships with supportive adults and mentors. As their circle of relationships expand, so too does the importance of those relationships.

In our focus groups with Latino teens, we heard repeatedly that romantic, peer, and parent-child relationships influenced adolescents' knowledge about sexual activity and contraception and their decisions to have sexual relationships and use contraception. In these complex sets of relationships, adolescents experienced countervailing pressures and heard mixed messages. There was no doubt that adolescents needed reliable information about sex, reproductive health, and contraception; but, beyond information, they also needed help in communicating more effectively with parents and romantic partners and negotiating the boundaries of their relationships.

Romantic relationships among adolescents occur in the context of feedback from multiple sources—parents, peers, other adults, and the media—and the messages they hear from various sources can be contradictory with respect to both values and factual accuracy. Accordingly, young adolescents may find themselves in situations in which they have too little information and experience negotiating relationship decisions. Thus, a key program approach will involve skill-building activities in order to help adolescents work with peers and then romantic partners to negotiate and communicate their needs and to set limits, so that they can ultimately avoid risky sexual behaviors. Because adolescents develop friendship relationships before romantic relationships, we recommend focusing early intervention efforts on developing effective communication skills with their friends, peers, and parents before addressing romantic and sexual partner relationships. We also recognize that peer influences come from both individual peers and from the larger peer culture, e.g., in the school. Ideally, a program would affect messages and pressure from all sources.

Teens' relationships with their parents also shape their relationships with their peers and partners. So we anticipate incorporating a parent-teen relationship component. Adolescent focus group participants indicated a concern about the values and expectations of their parents; their comments also suggested that parents were vague in their advice and that their communications frequently backfired. For example, parents so strongly opposed early parenthood (and sexual activity before marriage) that their messages inadvertently discouraged their adolescent children from revealing that they were sexually active or getting advice about avoiding pregnancy.

### **Provide Comprehensive Reproductive Health Information**

Programs to reduce teen pregnancy among Hispanic adolescents need to be comprehensive, focusing on efforts to delay and reduce sexual activity and also to improve the consistent use of effective contraception. This involves providing comprehensive reproductive health information

and skill-building activities to improve motivation to delay sexual activity and use highly effective methods of contraception once teens become sexually active.

**Sexual Activity.** According to our analyses of national data, relatively few Hispanic middle school students have had sexual intercourse--about 12% of females and 19% of males report having sex before age 15. However, across all race-ethnic groups, the likelihood of having had sex increases across the high school years, from about one-third of 9<sup>th</sup> graders to almost two-thirds of 12<sup>th</sup>graders.

Because few middle-school aged youth have had sex, we anticipate that a program geared towards this age group would be primarily proactive, promoting abstinence (and the positive norm that most middle school adolescents are not having sex) and promoting staying on-track in school, addressing factors that may influence adolescents' decisions to have sex, and promoting healthy relationships - through improvements in communication, limit-setting, and refusal skills with peers and romantic partners. Our goal would be to contribute to a school culture that values abstinence, as well as strong friendships and relationships. As students approach high school, a program would continue to provide skills linked with delaying sexual intercourse, but would also focus on reducing risky sexual behaviors, such as the number of partners and frequency of sexual intercourse.

**Contraceptive Use.** Our analyses of national data highlighted the lower levels of contraceptive use and consistency among Hispanic adolescents compared with other teens. Focus groups with teens additionally highlighted concerns about side effects and relatively low knowledge about the range of contraception methods. As a result, we propose an age-appropriate two-pronged approach to improving consistent use of effective contraception.

First, during the middle school years, a primary goal would be to improve knowledge, attitudes, and norms about effective hormonal and long acting methods of contraception in order to encourage more support of their use. While few teens will be sexually active during the middle school years, it is important to set the stage so that they will be open to highly effective methods once they do become sexually active. Second, we would work with Latino parents to help support effective and consistent contraceptive use among their sexually active teens. This is particularly important because parents can have a large impact on adolescent decisions and behaviors. Efforts targeting middle school youth can focus on reducing unprotected sex, combining messages and skill-building about abstinence with an emphasis on increasing adolescents' knowledge, attitudes, and commitment to using effective contraception (primarily condoms, as LARCs aren't often prescribed for very young adolescents) when they first become sexually active. During this stage, we will also work to increase knowledge and acceptance of long acting methods (LARCs) among teens and their parents. During the high school years, we would emphasize the use of hormonal and long acting methods for sexually active teens. We anticipate that this will involve partnering with either a school-based health clinic or a community clinic that will provide contraceptive counseling and access tailored to high school students.

# School-based/partnership with CIS

High school dropout and teen childbearing are inter-related problems, according to research. As summarized in previous chapters, academic difficulties and school dropout increase the risk of an adolescent pregnancy, while teen childbearing similarly increases the risk of school dropout. And both high school dropout and teen parenthood increase the risk of poverty.

Partnering with schools to deliver teen pregnancy prevention programs provides significant benefits. Despite the challenges of operating school-based programs, such as developing strong partnerships with schools and working according to a school calendar, the advantages of collaboration are significant. A school-based program (either in-school or after school) provides a "captive audience" and the potential to reach a large number of teens. Partnering with an integrated student services program such as Communities in Schools magnifies the advantages because the teen pregnancy prevention program will be developed in a setting that already provides strong educational supports for students.

Communities in Schools (CIS) is a non-profit organization that serves 1.25 million students, across 27 states and the District of Columbia, through over 200 affiliates, providing integrated student services. CIS also provides tiered services; specifically, CIS provides school-wide academic and non-academic supports to all students, as well as intensive supports for students who are at the greatest risk of falling behind or dropping out (a little over one in ten students). Also, CIS has a focus on schools with high proportions of disadvantaged students

Recent research by Child Trends on integrated student services indicates that teen parenthood is the single largest factor resulting in high school dropout. For this reason, CIS is motivated to prevent teen pregnancy among students and therefore represents an implementation partner with a strong motivation to implement effective pregnancy. In addition, CIS seeks explicitly to be a "research-to-practice" network, so collaborating to develop a research-based intervention is completely aligned with the CIS mission.

Under the current grant, we have developed a Memorandum of Understanding with Communities in Schools that provides a framework for developing a partnership to prevent teen childbearing among students. We recommend partnering with 2-3 schools that have a strong CIS presence in order to test and pilot a sex education curriculum.

### **Focus on Sustainability**

One approach to ensure program sustainability is to become an evidence-based program because federal, state, and local funders increasingly focused on scaling up teen pregnancy prevention programs that show impacts based on rigorous evaluations. For example, the Office of Adolescent Health (OAH) anticipates ongoing funding of program replications of evidence-based programs. As a result, our ultimate goal will be to develop and rigorously test a new curriculum (or curricula) in order to expand the evidence base and be included the HHS list of evidence-based programs. Child Trends serves on the review team for these programs and can thus design an outcome evaluation that will qualify for this list, as long as the program shows key behavioral impacts, such as delayed sexual initiation for younger adolescents or consistent and effective contraceptive use for sexually active adolescents.

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However, even among those programs that make "a list" designating them as effective evidencebased programs, many programs nevertheless face challenges in scaling up. A program should include a well-designed curriculum with strategies and activities that are engaging to adolescents and that also cover the critical program elements. A curriculum needs to identify the core components that must be retained in the program and also identify the elements that can be adapted. It should also delineate program requirements in terms of school staff, time, and space; facilitators; training for facilitators; and costs for materials. Our review of programs identified numerous program models that have none of these features or that provide only a manual and rudimentary guidance. An effective, scalable program needs to anticipate and address these needs. Once the program model is defined, the curriculum written, and needed resources delineated, resources need to be obtained. Resources are needed for curricular materials, training to prepare staff to deliver the program, staff supervision, and the monitoring necessary to ensure that the program is delivered as intended. It also requires flexible leadership that can assist with fund-raising and policy work. Costs, therefore, can be separated into categories. Upfront costs are required for curriculum and training and for materials development (and periodic revisions if necessary). Ongoing costs are also incurred to train staff, buy needed materials, monitor the program, and other needed program supports. A third cost may be fees to program purveyors that disseminate the programs, provide training and credential organizations to run the programs. For non-profit organizations attempting to deliver programs as efficiently as possible, these fees can be burdensome.

In conversations with Communities in Schools leadership, they have explicitly noted that they would like an effective program that can be disseminated widely at minimal cost, and we think that can be done by relying on the CIS infrastructure for supplying materials, training, and monitoring strategies at minimal cost once the model and its associated training and monitoring plans have been developed and tested. CIS has already built and sustains the infrastructure needed to house a program. Because CIS has a national office that already provides training and supports program dissemination across its affiliates, the costs of disseminating the program within CIS schools can be minimized. Eventually, both CIS and Child Trends envision that this program could also be delivered through other national youth serving organizations that have similar or appropriate infrastructures. Working within these types of structures would eliminate the need to pay credentialing fees or the cost of high-priced program materials.

# Theory of Change and Logic Model

A theory of change provides a broad statement describing how an intervention is expected to lead to the desired outcome. It identifies the desired change, the activities that are intended to achieve the outcome, and the changes that one should expect to see along the way.

A logic model provides a much more detailed specification of the needed resources, activities, and outputs intended in an intervention and the desired short-, medium-, and long-term outcomes. It is considered a best practice to begin developing a logic model by specifying the desired long-term outcome – poverty reduction – and working backward to identify the steps that must occur in order to achieve poverty reduction through the prevention of early child-bearing.

Because our initial theory of change indicates that multiple factors contribute to delayed sexual activity and the effective use of contraception, our logic models describe multiple programmatic

components. These include working to improve the adolescent's engagement and interest in school and progression from one grade to the next (as a result of being implemented in the context of a high quality educational support program such as those provided by CIS), highlighting the links between teen pregnancy and school dropout and completion, and working to change norms relating to sexual behavior and contraceptive use among Latino adolescents. Changes in these kinds of factors are expected to lead to lower levels of adolescent childbearing and greater educational achievement, which ultimately reduce the likelihood of poverty.

Based on our research and key decisions, our Theory of Change for a proposed intervention is described below. Also included are two linked but distinct logic models - one for younger adolescents (middle school age) and another for older adolescents (high school age).

# Theory of Change for a Teen Pregnancy Prevention Program for Latinos

A program that facilitates positive peer, parent-child, and partner relationships and emphasizes reducing the risk of teen pregnancy in the context of high educational achievement with academic supports will reduce exposure to unprotected sex either by increasing abstinence or improving contraceptive use, which will reduce the experience of early pregnancy and parenthood, thereby increasing educational attainment and lowering the subsequent risk of poverty.

# Logic Models

Below are two logic models - one for younger adolescents (middle school aged) and one for older adolescents (high school aged). Our key goals for younger and older adolescents are the same -- to prevent teen pregnancy as a way of reducing intergenerational cycles of poverty for Latino families and children. These goals are in response to high teen birth rates and low high school graduation rates for Latinos relative to whites. Because the developmental needs and behaviors of adolescents vary with age, we have identified outcomes separately for younger and older adolescents.

### Logic Model for Younger Adolescents

Ultimate goals for younger adolescents. The logic models include our ultimate or long-term goals for a teen pregnancy prevention program effort, which are to reduce teen childbearing through late adolescence, increase post-secondary credentials and reduced poverty into adulthood. Although realistically these are not measurable goals for a middle school intervention, extensive research indicates that interventions to reduce teen pregnancy will also reduce high school dropout and ultimately improve long-term educational outcomes and reduce poverty.

**Medium-term outcomes for younger adolescents.** Medium-term outcomes required to achieve these ultimate goals include positive reproductive health outcomes as adolescents reach the high school years, targeting continued abstinence or, for sexually active adolescents, the effective, consistent, and sustained use of effective contraception, especially LARCs. Also included are on-time grade progression and achievement, as well as staying in school, because they predict a lower risk of pregnancy and also reduce the ultimate risk of poverty.

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Shorter-term behavioral outcomes for younger adolescents. A teen pregnancy prevention program for younger adolescents will address two critical short-term confirmatory behavioral outcomes that can be measured in follow-up studies: delaying the initiation of first sex and avoiding unprotected sex through using contraception if sexually active. By partnering with a CIS program that focuses on academic achievement, we also include on-time grade progression and academic achievement (including passing grades and test scores) as behavioral outcomes through the middle school years. These short-term outcomes will be addressed in the context of an intervention effort for younger adolescents and are hypothesized to improve medium-term outcomes. As noted above, because few teens become sexually active during the middle school years of a program intervention, we have not included hormonal and long acting method use as a key outcome in middle school. Instead, given the lack of knowledge and low acceptance of these methods, we promote positive knowledge and attitudes about these methods so that teens are prepared to use them when they become sexually active.

Knowledge, Attitudes/Norms and Skills for Younger Adolescents. In addition to individual behavioral outcomes, the logic model also addresses individual knowledge, attitudes, norms and skills that may influence these short-term behavioral outcomes. Based on our review of research, focus groups with teens, and interviews with parents and program providers, this logic model highlights effective communication with peers and parents as key skills starting in Year 1 of the younger adolescent program. The approach progresses to a focus on romantic partners in Year 2 of the younger adolescent program and in all years of the older adolescent program, targeting communication, negotiation, limit-setting and refusal skills within romantic relationships.

Attitudes and norms necessary to influence short-term outcomes include developing strong intentions to avoid teen pregnancy and postpone parenthood into the twenties, perceived responsibility for teen pregnancy prevention and a commitment to abstinence (all listed as confirmatory outcomes for Year 1). In Year 2, we highlight developing positive attitudes and perceived norms about LARCs and hormonal methods among teens and their parents, as well as a commitment to using effective contraception when teens become sexually active. Also included is positive self-efficacy about avoiding early sexual activity and responsible sexual decision-making if teens become sexually active.

Other attitudes and norms include setting positive life goals and a general plan to reach them and high post-secondary educational expectations (because a focus on future opportunities is linked to greater motivations to prevent pregnancy), and positive perceived peer norms about abstinence. Because peers and schools have such a large influence on adolescent attitudes and behaviors, our goal will be to collaborate with Communities in Schools to develop a school culture that values education, communication, supportive friendships, abstinence and minimal sexual risk-taking that will help teens delay parenthood.

Individual knowledge is also valuable for shaping attitudes and norms that may shape behavior. We target improving knowledge about the consequences of early sexual behaviors and highlighting that sexual activity is rare (and thus not normative) among middle school youth. We anticipate improving attitudes about hormonal methods and LARCs, in part through increasing knowledge about the effectiveness of these methods, their safety for teens, their limited side effects and that they are a "first line" option for teens when they do become sexually active. Teens will also need to know how to get contraception and how to use condoms. We

also suggest targeting knowledge about risk factors linked to early sexual behaviors and pregnancy, as well as knowledge about how teen pregnancy affects completing school (or dropping out), and thus may jeopardize educational expectations.

Inputs, Key Activities and Outputs for Younger Adolescents. The logic models include program inputs, an initial broad list of key activities, and outputs for teen pregnancy prevention program efforts. Based on our review of research and knowledge about implementation, key program inputs include working with facilitators who have a strong rapport with Latino adolescents. These facilitators will need training in the program model, and in group facilitation, interactive education, class management, and positive relationship building, as well as psychosocial and behavioral skills development to help engage and retain young adolescents in a program. A high-quality culturally-relevant curriculum will be developed, to include not only accurate information about sexual activity and contraception, but also interactive opportunities for skill building, including role-playing, that allows young adolescents to examine how cultural beliefs and values (including positive educational values) support responsible sexual decisionmaking. A key aspect of the program model is a partnership with Communities in Schools, so that an adolescent pregnancy prevention curriculum that focuses on sexual and reproductive health is embedded in a school program that provides supports for educational and academic development and opportunities for the future that will help students succeed in school and are critically linked to motivations to prevent teen pregnancy. This partnership can also potentially allow a comprehensive sex education program to tap into parent communication networks established through the school.

Key activities, as noted on the logic models, include considering an in-school program to ensure a substantial amount of student participation and using word of mouth and personal approaches to recruit Latino parents. Alternatively, an after-school program would also require intensive and personal approaches to recruit adolescents. Key activities also include providing a high-quality comprehensive sex education program, and incorporating interactive activities to help engage young adolescents. Key components will include a focus on communication, through homework assignments with parents and opportunities to examine and role-play peer, parent and dating relationships among younger adolescents and extending to partner and sexual relationships in older adolescence. Life skills/goal setting components will be included to promote planfulness and to help align intentions and behaviors. Also included will be activities to help promote a strong school culture about abstinence and healthy sexual decision-making.

Outputs include recruiting a substantial number of young adolescents into a program (either by including it as part of a required in-school session or recruiting adolescents to an after-school program), maintaining strong attendance and active participation by adolescents in the program, as well as full implementation of the program model. We also require a schools staff that is engaged and supports the intervention, as well as engaging parents.

### Logic Model for Older Adolescents

**Ultimate goals for older adolescents.** This logic model also includes our ultimate goals for a teen pregnancy prevention program effort, which are to increase post-secondary credentials and reduce poverty. Although realistically these are not measurable goals for a high school intervention, extensive research indicates that interventions to reduce teen pregnancy will also

reduce high school dropout and ultimately improve long-term educational outcomes and reduce poverty.

**Medium-term behavioral outcomes for older adolescents.** Medium-term outcomes required to achieve these ultimate goals include fewer sexual partners and reductions in teen births, accompanied by high school graduation and enrollment in post-secondary education in the late teen years and early adulthood.

**Short-term outcomes for older adolescents.** A teen pregnancy prevention program for older adolescents will address three key or confirmatory behavioral outcomes: delaying the initiation of first sex, reduced incidence of unprotected sex, and increased effective, consistent, and sustained use of effective contraception, especially LARCs.

**Knowledge, Attitudes/Norms and Skills for Older Adolescents.** In addition to the continuation of knowledge, attitude, and skills developed in younger adolescence, the logic model includes several additional short-term outcomes for older adolescents. These primarily focus on reaching the older adolescent outcomes of increasing effective and consistent contraceptive use, particularly use of hormonal and long-acting methods of contraception.

Inputs, Key Activities and Outputs for Older Adolescents. Many elements of the logic model will remain the same for older adolescents, but they would be implemented in ways that are developmentally appropriate for older adolescents who are cognitively and physically approaching adulthood. As with younger adolescents, key program inputs include facilitators who have a strong rapport with Latino adolescents and who are trained in the program model, in group facilitation, interactive education, and positive relationship building, as well as psychosocial and behavioral skills development to help engage and retain teens in a program. As with younger adolescents, a culturally-relevant curriculum will include not only accurate information about sexual activity and methods of contraception, but also interactive opportunities for skill building, role playing, and examination of the implications of parenthood for educational attainment. Because of the partnership with Communities in Schools, messages about the importance of preventing teen parenthood will be embedded in an environment that makes school success a viable alternative.

Key components will include a focus on communication skills with partners, peers and parents, as well as life skills/goal setting components. Activities to promote a strong school culture that supports healthy sexual decision-making are also key inputs.

Outputs include recruiting a substantial number of adolescents into a program (either by including it as part of a required in-school class or recruiting adolescents to an after-school program), and maintaining strong attendance and active participation by adolescents in the program. We also require having a school staff that is engaged and supports the intervention, as well as engaged parents – either through in-school events or more likely through homework assignments with their teens. Another output is complete implementation of the program, so that all components or lessons are delivered as designed.

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### Preliminary Program Structure

We anticipate that a middle school program approach (for younger adolescents) will take place over two school years, and a ninth grade "booster" program (for older adolescents) will also be provided. (A comprehensive middle school and high school approach could also be developed; but our thinking is that it is more manageable to begin with the younger age group, keeping options open for subsequently developing an intervention for older adolescents.) A two-year program with a brief booster should provide enough time to engage adolescents and influence their goals and behaviors. Because few adolescents have engaged in romantic or sexual behaviors in early middle school, we recommend starting a middle school program in seventh grade. During the first year of a middle school program, we would focus program efforts on peer and parent relationships, with greater emphasis on comprehensive sex education and romantic relationship information in the second year. A middle school program could potentially include booster sessions that extend into ninth grade that may help improve motivation and behaviors to continue promoting abstinence and reducing unprotected sex past the middle school years. The curriculum for the ninth grade students will include reproductive health information and a focus on romantic and sexual relationships across the program years. The middle school and ninth grade programs will target males and females, including both mixed-gender group program activities and break-out, male-only and female-only discussions.

# **Concluding Reflections**

Our goals in this report have been two-fold. We have sought to tackle an important disparity in contemporary American life – elevated rates of poverty among Latinos – and address a malleable contributor to that issue, specifically, high rates of adolescent childbearing among Latinos. Our review of a large body of information and evidence has led us to conclude that an effective approach will combine comprehensive sex education with a strong focus on educational success, which is why we require that the teen pregnancy prevention program be implemented in the context of a high quality educational support system. With that in mind, we have sought and attained a working relationship with Communities in Schools, a nationwide non-profit organization that employs an evidence-based approach to increasing academic achievement and attainment. We have, in addition, drawn upon the research and data that we compiled to identify the program elements that should comprise an intervention model, and we have shared these in the logic models provided above. These constitute the critical elements proposed for an intervention to reduce the incidence of adolescent childbearing among Latinos, thereby increasing their educational attainment and lowering their risk of poverty in adulthood. It is our aspiration to pilot and refine this model in collaboration with Communities in Schools.

Our second goal has been to model an evidence-informed approach to program development. Too often, programs are based on hunches and personal preferences. Our intention was to systematically review or conduct an array of relevant research – quantitative and qualitative information, basic research and evaluation research, academic and community based perspectives, and parent and adolescent viewpoints. This information has been distilled into a theory of change and two logic models, one for younger adolescents and one for older teens, in recognition that the outcomes and inputs need to differ for these age groups. Using this information to develop an intervention, we propose collaborating with Communities in Schools

and Dr. Karin Coyle of ETR, a deeply-experienced program designer, and we seek to model the next phase in developing an intentional, evidence-informed intervention approach.

It is our hope that this report provides both critical information for developing an effective intervention approach and serves as a model for efforts to address other important social issues.

### **Underlying Assumptions for the Logic Models**

We seek here to make the assumptions that ground our logic models explicit.

### Necessary but not sufficient assumptions for the logic models

### The program

- The teen pregnancy prevention program must be implemented in the context of a high quality educational support program: Educational supports that promote high expectations, academic achievement, and planfulness are necessary to sustain intentions to avoid teen pregnancy. In turn, a teen pregnancy prevention program that provides adolescents with the tools and world view to avoid teen pregnancy promotes academic achievement. CIS provides such a platform.
- > The program must be culturally relevant.

### The school

> School staff believes and conveys that all youth can complete high school and that avoiding early pregnancy is an important way of doing so.

### Adolescents must have:

- ➤ Knowledge about sex and contraception and how to access them;
- ➤ Access to adolescent and culturally respectful reproductive health services and contraception;
- A sense of positive future (that ideally involves educational attainment or post-secondary skill attainment)

# **Optimal/Ideal Components**

In order to avoid pregnancy, it is ideal if:

- Friends, partners and parents all value the importance of preventing teen pregnancy, and provide consistent and mutually reinforcing messages about delaying parenthood and the ways to accomplish that.
- While the primary influencers may have different perceptions and beliefs around teen sexuality, it is ideal if they are aligned around the fact that while abstinence is the most effective way to prevent teen pregnancy, that message is not very effective with sexually active teens, who need to know how to use contraception effectively and are committed to doing so.
- ➤ Teens are able to communicate effectively with their romantic partners about their sexual boundaries, their need to use contraception, and their need to avoid teen pregnancy, as well as to plan to do so.
- ➤ Males and females will understand that both males and females are responsible for preventing teen pregnancy.
- > Student culture discourages unprotected sex and pregnancy and values education in preparation for a positive and self-sufficient future.

# Theory of Change for Teen Pregnancy Prevention Program for Latinos

A program that facilitates positive peer, parent-child, and partner relationships and emphasizes reducing the risk of teen pregnancy in the context of high educational achievement and academic supports will reduce exposure to unprotected sex, either by abstinence or improved contraceptive use, which will then reduce the experience of early pregnancy, thereby increasing educational attainment and lowering the risk of poverty.

# Preventing Teen Pregnancy Among Latinos Program Logic Model: Younger Adolescents

Goal	Key Problems to Address				
To prevent teen pregnancy among Latino youth as a way of preventing poverty for Latino families and children.	Birth rates among Latino youth are high relative to white youth     Rates of graduation from high school are relatively low				

### **Overall Program Structure**

The program will begin in the seventh grade in a school setting (either in-school or after-school) and will take place over two school years. During the first year, the program will focus primarily on peer and parent relationships, and reproductive health content will be relatively light. The second year will focus on partner relationships with more focus on reproductive health. A brief "booster" might be offered in ninth grade. The program will include both boys and girls and break-out, boy-only and girl-only discussions.

### Inputs Key Activities

Facilitators with strong rapport with Latino adolescents

Training for facilitators in group facilitation, interactive education, class management, positive relationship building, and psychosocial and behavioral skills development

High quality curriculum that includes information on sexual activity and contraception, provides opportunities for social-emotional and behavioral skill building/role playing, and permits young people to examine how cultural beliefs and values (incl. educational values) support responsible sexual decision-making

Strong partnership with Communities in Schools (CIS) to disseminate the program in the schools in which it is involved

Mutually reinforcing relationship with CIS: the teen pregnancy prevention program will augment what CIS is already doing with students: CIS provides the educational supports that are needed to help adolescents succeed in school

Strong partnership with schools that allows full program implementation and use of existing structures (such as parent communication channels) to support the program

Recruit young people and their parents using word of mouth and personal approaches that appeal to Latinos, and deliver program in school so that all students (including those most at risk of pregnancy or dropping out) attend

Interactive activities that engage young people in discussions about positive relationships and how to communicate effectively with peers, parents, partners.

Comprehensive high quality sex education program for young people

Life skills/goal setting component to promote planfulness and alignment of goals with sexual and contraceptive behaviors

Homework activities that adolescents can do with parents to improve communication

Activities that promote strong school culture about abstinence and sexual decision-making

Opportunities for adolescents to examine peer, parent and dating relationships

### **Key Outputs**

- Desired number of young people are recruited to the program
- Parents complete "homework" with their adolescent(s)
- Strong attendance in program sessions
- Full implementation of all program components as designed
- Active participation by young people in program
- School staff are engaged in supporting the intervention

### **Short-term Outcomes for Younger Adolescents**

✓ Indicates confirmatory short-term behavioral outcomes

### Knowledge

### Year 1

- Knowledge about consequences of early sexual behaviors
- Knowledge that most peers are not having sex

#### Year 2

- Year 1 outcomes persist
- Knowledge about risk factors linked to pregnancy (e.g., you can get pregnant the 1<sup>st</sup> time you have sex)
- Knowledge of how teen pregnancy affects school dropout and completion
- Knowledge about risk-factors linked to early sexual behaviors (older partners, going steady, alcohol/drug use)
- ✓ Accurate knowledge about LARCs and hormonal methods: relative effectiveness, side effects, safety for teens, recommendations for teens
- Knowledge about where to get contraceptives; how to use condoms and other forms of contraception

### Attitudes/Norms

### Year 1

- Strong intentions and determination to avoid teen pregnancy and delay parenthood into the twenties
- ✓ Both boys and girls perceive themselves responsible for preventing teen pregnancy.
- ✓ Commitment to abstinence
- Perceived peer norms favoring abstinence
- Positive life goals and a general plan to reach them.
- Strong attitudes and behaviors regarding finishing high school
- High post-secondary educational expectations

### Year 2

- Year 1 outcomes persist
- ✓ Positive attitudes about hormonal methods, LARCs among teens and parents
- ✓ Commit to consistently using effective contraception if sexually active
- Self-efficacy about responsible sexual decision-making, avoiding early sexual activity and using contraception
- Perceptions that most peers believe youth who have sex should use contraception
- On-time grade progression and academic achievement through the middle school years

### Skills/Behaviors

### Year 1

- Effective communication with peers, friends and partners regarding educational and life goals and how delaying family formation is essential to those goals
- Communication with parents about friendships, relationships

### Year 2

- Year 1 outcomes persist
- ✓ Delayed initiation of sex
- ✓ Avoiding unprotected sex, consistent use of contraception if sexually active
- Limit-setting with friends, peers, partners
- Effective communication, negotiation, limit-setting, and refusal skills with romantic partners

### Group Knowledge, Attitudes/Norms and Behavior

 School/ peer culture that values planfulness, future-orientation, education, communication, supportive friendships, abstinence and minimal sexual risk taking, high school completion, post-secondary educational enrollment, and delay of parenthood into the 20s

### Medium-term Outcomes for Younger Adolescents (during mid- to late-adolescence, ages 15-17)

Reduced incidence of unprotected sexual intercourse (Abstinence; Increased effective, consistent and sustained use of effective contraception, especially LARCs, condoms and dual contraceptive use); Decreased frequency of sex and number of partners; Ontime grade progression, academic achievement and staying in school through the high school years

### Ultimate Goals for Younger Adolescents (as late teens and into early adulthood and adulthood)

Decreases in teen pregnancies and births; High school graduation; Increases in post-secondary credentials; Decreased poverty

Preventing Teen Pregnancy Among Latinos Program Logic Model:
Older Adolescents

Goal	Key Problems to Address					
To prevent teen pregnancy among Latino youth as a way of preventing poverty for Latino families and children	<ol> <li>Birth rates among Latino youth are high relative to white youth</li> <li>Rates of graduation from high school are relatively low</li> </ol>					

### Overall program structure

The program will begin in a high school setting (either in-school or after-school) and will take place over two school years, starting in ninth grade. Each year will focus on parent, peer and partner relationships, and combine reproductive health messages about 1) delaying/reducing sexual activity and 2) using effective and long-acting methods of contraception among sexually active teens. The program will include both males and females and break-out, male-only and female-only discussions.

### Inputs Key Activities

Facilitators with strong rapport with Latino adolescents

Training for facilitators in group facilitation, interactive education, and psychosocial and behavioral skills development

High quality curriculum that includes information on sexual activity and contraception, provides opportunities for social-emotional and behavioral skill building/role playing, and permits young people to examine how cultural beliefs and values (including educational values) support responsible sexual decision-making

Strong partnership with CIS to disseminate the program in the schools in which it is involved

Mutually reinforcing relationship with CIS: the teen pregnancy prevention program will augment what CIS is already doing with students: CIS provides the educational supports that are needed to help adolescents succeed in school

Strong partnership with schools that allows full program implementation and use of existing structures (such as parent communication channels) to support the program

Recruit young people and their parents using word of mouth and personal approaches that appeal to Latinos, as well as inschool format so that all students attend

Interactive activities that engage young people in discussions about positive relationships and how to communicate effectively with parents, peers and partners.

Comprehensive high quality sex education program for young people (need to define length and time)

Life skills/goal setting component to promote planfulness and alignment of goals with sexual and contraceptive behaviors

Opportunities for older teens to examine partner relationships, including interactive activities that engage teens in role-playing about communication, negotiating and limit setting in relationships.

Activities that promote strong school culture about sexual decision-making

# **Key Outputs**

- Desired number of young people are recruited to the program
- Strong attendance in program sessions
- Full implementation of all program components as designed
- Active participation by young people in program
- Formal school staff are engaged in supporting the intervention
- Parents are engaged and informed

### Short-term Outcomes for Older Adolescents

✓ Indicates confirmatory short-term behavioral outcomes

#### Knowledge

- ✓ Knowledge of how teen pregnancy affects school dropout and completion
- Knowledge about risk-factors linked to early and risky sexual behaviors (older partners, going steady, alcohol/drug use)
- ✓ Knowledge about risk factors linked to pregnancy (e.g., you can get pregnant even if you miss contraception just one time)
- Accurate knowledge about LARCs and hormonal methods: relative effectiveness, side effects, safety for teens,

recommendations for teens

✓ Knowledge about where to get and how to use contraceptives, including condoms, hormonal, and long-acting methods.

### Attitudes/Norms

- ✓ Strong intentions and determination to avoid teen pregnancy
- ✓ Both males and females perceive themselves as responsible for and capable of preventing teen pregnancy
- ✓ Commitment to abstinence
- ✓ Positive attitudes about hormonal methods, LARCs
- Commitment to using effective contraception if sexually active
- Positive life goals and a specific plan to reach them, with some well-defined short-term goals
- Self-efficacy about responsible sexual decision-making, contraception and avoiding teen pregnancy
- Strong attitudes towards finishing high school
- Post-secondary educational expectations and development of plans
- Perceived peer norms favoring contraceptive use if having sex
- Perceived peer norms favoring high school completion and post-secondary enrollment

### Behaviors/Skills

- ✓ Delayed initiation of sex / abstinence
- ✓ Reduced incidence of unprotected sexual intercourse
- ✓ Increased effective, consistent and sustained use of effective contraception, especially LARCs and dual contraceptive use
- Limited number of partners
- ✓ Limit-setting with friends, peers, partners
- Effective communication, negotiation, limit-setting, and refusal skills with romantic and sexual partners
- Effective communication with peers, friends and partners about educational and life goals and how sex and contraception are related to achieving those goals
- Communication with parents about relationships, sex, and pregnancy prevention
- On-time grade progression and academic achievement

### **Group Knowledge, Attitudes/Norms and Behavior**

 School/ peer culture that values planfulness, future-orientation, education, communication, supportive friendships and relationships, abstinence and contraceptive use, high school completion, post-secondary educational enrollment, and delay of parenthood into the twenties

### Medium-term Outcomes for Older Adolescents (as late teens, early adults, and adults (18-25+))

Decreased number of partners; High school graduation; Post-secondary enrollment; Decreases in teen births

### Ultimate Goals for Older Adolescents (as early adults and adults (20-25+)

Increases in post-secondary credentials; Decreased poverty

### APPENDIX A: DATA ANALYSES

### Introduction

This chapter utilized data from the National Survey of Family Growth (NSFG). The NSFG is an ongoing cross-sectional nationally representative survey conducted by the National Center for Health Statistics (NCHS) designed to gather information on family life, marriage and divorce, pregnancy, infertility, use of contraception, and the health of women and men ages 15 to 44. The analyses reported in this chapter were based on data from the 2006-2010 cycle of the NSFG, which included an oversample of Hispanics and youth ages 15-24.

### **Analytic Samples**

Six analytic samples were created to conduct the analyses:

- **Female adolescents.** The first analytic sample was limited to female adolescents currently ages 15 to 19 in the 2006-2010 survey (female teens). Of the 12,279 females surveyed, 2,284 were adolescents at the time of the interview. The female teen sample included 531 Hispanic, 423 non-Hispanic black (black), 1,122 non-Hispanic white (white), and 208 non-Hispanic other race or multiple race individuals.
- **Male adolescents.** The second sample was limited to male adolescents ages 15-19 (male teens). Of the male respondents (n=10,403), there were 2,378 adolescents, including 589 Hispanic, 437 black, 1,122 white, and 230 other race or multiple race individuals.
- **Hispanic female adolescents.** In order to assess variation among Hispanic female adolescents, a third sample restricted the female adolescent sample to those of Hispanic origin (n=531).
- **Hispanic male adolescents.** Similarly, to look at variation among Hispanic male adolescents, a fourth sample was limited to male adolescents of Hispanic origin (n=589).
- **Historical sample.** A fifth sample allowed us to look at changes in some measures of teenage reproductive health over time. We limited this sample to Hispanic, black, and white men (n=5,774) and women (n=7,373) born in 1960-1964, 1965-1969, 1970-1974, 1975-1979, and 1980-1984. It is important to keep in mind that these data are retrospective in nature, requiring some women to report on behaviors from a long time prior to the date of interview.
- Young adult parents. Finally, a sixth sample was limited to Hispanic, black, and white women ages 20-29 in 2006-2010 (n=4,088). This allowed us to assess *completed* levels of teenage fertility for a relatively young group of women, the most recent women for which these outcomes could be completely measured.

### Measures

We examined the reproductive health and behaviors and outcomes of adolescents across six primary domains. The types of measures included in each domain are listed below (see Tables

A.1 and A.2 for the full list of measures, for females and for males). Some of the measures were applicable to all adolescents, while others only applied to certain subpopulations, such as those who had ever had sexual intercourse, those who had sex in the past three months, those who had sex in the past month, or those who had a birth. We made sure and clearly noted for which population each measure was available.

- Sociodemographic Characteristics. Includes important background factors such as place of birth, country of origin, language spoken, socioeconomic status, religiosity, family structure, and school enrollment.
- Teen Pregnancy, Childbearing, and STDs. Includes measures about pregnancy, childbearing, and STDs, as well as measures about age at birth and whether a birth was intended or not.
- **Sexual Activity.** Includes measures such as whether teens have ever had sexual intercourse, and if so, the age at which they first had sex and the number of sex partners they have had.
- Contraceptive Method Use and Contraceptive Service Use. Includes measures about use of contraceptives, the types of methods used, and the consistency of condom use. For females, the use of contraceptive services was also asked.
- **Sex Education and Communication.** Includes measures of whether the respondent discussed reproductive health issues with parents prior to age 18 or received formal sex education on a range of topics, including how to say no to sex, birth control methods, STDs, and HIV/AIDS.
- Attitudes and Beliefs. Includes respondents' answers to such questions as how they would feel if they got pregnant or got their female partner pregnant and whether it is acceptable for teens aged 16 to have sex if they are close to each other.

# **Analytic approach**

We conducted all descriptive analyses using the Stata statistical software package (version 11.0, Stata Corporation, College Station, Tex.), and utilized weighting procedures to account for complex survey design effects. All statistically significant differences by subgroups (p<.05), for females and for males, are noted in the tables and figures.

Table A.1: The Reproductive Health Outcomes and Behaviors of Adolescent Females, By Critical Subpopulations											
	All teens	Hispanic teens <sup>1</sup> (ref)	White teens	Black teens	Native- Born Hispanic <sup>2</sup>	Foreign- Born Hispanic	Other Hispanic <sup>3</sup>	Mexican origin	Hispanic, aged 15-17	Hispanic, aged 18-19	
Unweighted N	2284	531	1122	423	425	106	185	339	315	216	
SEX, CHILDBEARING, AND STIS											
SEX											
Ever had sex	43.3%	43.8%	38.9%	43.9%	44.6%	34.7%	46.4%	42.2%	31.1%	64.1%***	
No. of sexual partners											
Lifetime (mean)	1.6	1.2	1.4	1.8*	1.2	1.2	1.6	1.0*	0.8	1.8***	
Lifetime (count)			†	*				*		***	
0	56.8%	56.2%	61.2%	56.1%	55.4%	65.3%	53.6%	57.9%	68.9%	35.9%	
1	15.2%	19.3%	13.1%	12.9%	19.5%	16.8%	13.7%	21.8%	14.7%	26.6%	
4+	14.6%	10.2%	13.6%	16.5%	9.5%	10.9%	16.2%	8.1%	5.7%	17.5%	
Age at first sex <sup>a</sup>											
Mean	15.4	15.3	15.5	15.2	15.3	15.5	15.0	15.5	14.7	15.8***	
Count										**	
Less than 15	27.5%	28.0%	26.2%	33.4%	29.6%	22.2%	38.7%	23.8%	41.3%	17.7%	
15-17	63.5%	63.6%	65.4%	58.7%	63.5%	66.2%	52.8%	68.3%	58.7%	67.3%	
18-19	9.0%	8.4%	8.4%	8.0%	6.9%	11.6%	8.4%	7.9%	0%	15.0%	
No. of sexual partners <sup>a</sup>											
Past 12 months (mean) <sup>a</sup>	1.6	1.4	1.6	1.5	1.4	1.6	1.8	1.2*	1.5	1.4	
Past 12 months (count) <sup>a</sup>								†		***	
0	60.3%	59.9%	64.1%	59.1%	59.6%	66.6%	57.3%	61.7%	71.4%	41.5%	
1	25.5%	28.8%	22.1%	27.2%	28.9%	23.9%	28.0%	29.2%	19.2%	44.2%	
2-3	10.5%	7.8%	10.2%	10.5%	8.7%	3.8%	6.1%	7.8%	7.3%	8.7%	
4+	3.7%	3.5%	3.6%	3.2%	2.9%	5.8%	8.6%	1.4%	2.2%	5.6%	
Sex in the past 3 mos <sup>a</sup>	72.4%	71.3%	73.0%	70.5%	68.2%	82.8%	75.4%	70.8%	62.1%	78.4%*	
PREGNANCY & CHILDBEARING											
Ever pregnant	11.2%	17.8%	6.1%***	16.3%	17.4%	14.3%	15.5%	19.2%	9.2%	31.6%***	
Ever had a birth	6.7%	14.1%	3%***	9.3%*	13.1%	13.0%	12.7%	15.0%	4.9%	28.8%***	

Child Trends' Appendices

Ever had an unintended birth <sup>b</sup>	91.8%	95.6%	87.2%	91.2%	95.4%	92.5%	100.0%	95.5%	95.0%	95.7%
Age at first live birth (mean) <sup>b</sup>	16.8	16.8	16.7	16.7	16.9	16.7	16.9	16.8	15.9	17.1***
,										
STIs										
Treated for an STD in the past 12 months	4.3%	3.5%	3.4%	8.2%*	4.2%	0.6%***	5.2%	2.9%	3.4%	3.7%
Ever diagnosed with HPV/herpes/syphilis	2.2%	1.9%	1.8%	2.7%	2.0%	0.8%	1.8%	1.9%	1.2%	2.9%
CONTRACEPTIVE AND CONTRACEPTIVE SERVICE USE										
CONTRACEPTIVE USE										
Ever used contraceptive	50.3%	46.7%	49.0%	48.7%	47.2%	38.8%	48.9%	45.4%	34.0%	67.1%***
Had sex, ever used contraceptive <sup>a</sup>	98.9%	95.7%	99.3%	99.5%	98.6%	99.1%	97.7%	99.0%	98.0%	99.1%
Had sex, contraceptives ever used <sup>a</sup>										
Condom	95.9%	95.6%	96.5%	97.7%	95.8%	94.9%	95.7%	95.4%	94.9%	96.2%
Pill	55.6%	42.3%	61.9%***	46.8%	43.5%	41.5%	40.3%	43.0%	37.0%	46.5%
Hormonal Implant	0.6%	0.8%	0.3%	1.0%	0.8%	0.8%	0.6%	0.9%	0.6%	0.9%
IUD/coil/loop	2.5%	8.1%	1.3%***	0.8%***	8.4%	5.3%	9.8%	7.9%	0.0%	14.4%*
Implant (Norplant or IUD)	3.1%	8.9%	1.7%***	1.8%*	9.3%	6.1%	10.4%	8.8%	0.6%	15.3%***
Injectables	20.3%	24.0%	14.7%*	34.3%†	21.3%	36.6%	16.7%	28.0%	15.3%	30.8%†
Hormonal method	67.0%	62.8%	68.7%	67.7%	62.5%	64.2%	63.2%	61.3%	50.9%	72.1%*
Natural family planning/calendar method	15.5%	11.4%	14.5%	22.1%*	9.0%	19.3%†	18.1%	8.1%†	7.6%	14.2%
Withdrawal	57.2%	54.8%	61.2%	43%*	55.8%	46.5%†	55.7%	52.5%	53.8%	55.7%
Other method (excludes M/F sterilization)	3.8%	4.9%	1.8%†	9.7%	5.7%	1.0%*	8.6%	2.6%	6.6%	3.5%
Sterilization (respondent)	0.1%	0.4%	0%***	0.0%	0.5%	0.0%	1.2%	0.0%	0.0%	0.7%
Other method (includes M/F sterilization)	4.4%	5.5%	2.2%*	10.3%	5.7%	3.7%	10.8%	2.6%†	6.6%	4.7%
Had sex, used a method at first sex <sup>a</sup> Type of contraceptive used at first sex	78.3%	74.0%	82.9%*	72.9%	72.8%	78.4%	81.9%	72.1%	71.6%	75.9%

Hormonal/Long-Acting Reversible Method <sup>a</sup>	6.6%	7.3%	6.8%	6.2%	7.3%	5.7%	7.7%	7.3%	7.4%	7.1%
Condom <sup>a</sup>	53.4%	60.2%	51.3%	56.5%	58.6%	68.3%	68.3%	58.0%	60.4%	60.0%
Dual methods <sup>a</sup>	14.6%	5.3%	20.4%	9.8%	5.9%	2.3%	5.1%	5.1%	2.5%	7.5%
Other <sup>a</sup>	3.7%	1.3%	4.5%	0.4%	1.0%	2.1%	0.8%	1.7%	1.3%	1.3%
None <sup>a</sup>	21.7%	26.0%	17.1%***	27.1%	27.2%	21.6%	18.1%	27.9%	28.4%	24.1%
Has sex, ever used emergency contraception <sup>a</sup>	13.9%	14.6%	14.3%	8.5%†	13.7%	20.9%	18.1%	12.7%	9.5%	18.6%†
Used any method at most recent sex <sup>c</sup> Type of contraceptive	85.3%	79.4%	89.6%*	81.6%	80.3%	81.4%	85.6%	76.7%	86.4%	75.1%
method used at most recent			†							†
Hormonal/Long-Acting Reversible Method <sup>c</sup>	25.3%	29.6%	25.7%	16.6%	30.8%	26.2%	27.0%	31.9%	25.4%	32.1%
Condom <sup>c</sup>	30.9%	29.1%	29.3%	45.4%	29.9%	34.9%	25.3%	31.3%	46.2%	18.5%
Withdrawal <sup>c</sup>	9.1%	5.9%	10.5%	5.9%	6.3%	3.4%	7.2%	3.8%	3.1%	7.6%
Dual methods <sup>c</sup>	19.8%	14.7%	24.0%	13.4%	13.0%	16.9%	25.4%	9.7%	11.1%	16.8%
Other <sup>c</sup>	0.1%	0.2%	0.1%	0.3%	0.3%	0.0%	0.7%	0.0%	0.6%	0.0%
None <sup>c</sup>	14.7%	20.6%	10.4%	18.4%	19.8%	18.6%	14.4%	23.3%	13.6%	24.9%
Consistency of condom use in past 4 weeks										
Mean (scale of 0 to 1) d Frequency	0.5	0.4	0.5	0.6*	0.4	0.5	0.6	0.4	0.5	0.4
Never <sup>d</sup>	40.6%	44.6%	42.0%	31.3%	44.5%	42.7%	32.2%	52.9%	34.7%	50.5%
Some of the time <sup>d</sup>	12.0%	15.4%	10.6%	17.0%	18.9%	5.0%	15.5%	13.8%	20.5%	12.5%
Always <sup>d</sup>	47.4%	40.0%	47.4%	51.8%	36.6%	52.3%	52.3%	33.3%	44.8%	37.1%
CONTRACEPTIVE SERVICE USE Ever used contraceptive					 		 		 	
service	35.9%	29.8%	36.6%	34.7%	30.5%	24.1%	37.9%	25.7%*	20.4%	45.2%**
Contraceptive service provider type			**					*		***

No services	64.1%	70.1%	63.1%	65.2%	69.5%	76.0%	62.1%	74.3%	79.6%	54.8%
Title X Clinic	5.9%	5.2%	5.2%	8.6%	6.0%	2.1%	9.2%	3.2%	3.7%	7.6%
Non-title X clinic	5.0%	6.8%	3.0%	7.1%	7.0%	6.8%	4.2%	8.2%	4.6%	10.3%
Other	25.1%	17.9%	28.7%	19.2%	17.6%	15.1%	24.4%	14.3%	12.0%	27.3%
SEX EDUCATION AND COMMUNICATION										
TALK WITH PARENTS Ever discussed any sex ed topic with parents prior to age 18 Ever discussed with parents prior to age 18	78.4%	73.8%	79.8%*	82.1%*	76.4%	64.0%†	79.2%	71.0%†	78.0%	67.2%**
how to say no to sex	61.5%	56.6%	63.3%†	67.8%**	59.0%	50.5%	59.8%	55.5%	59.5%	52.1%
methods of birth control	51.1%	43.1%	54.9%**	50.5%	45.5%	32.73%†	49.3%	39.5%	43.9%	41.8%
where to get birth control	39.3%	31.5%	42.6%*	42.3%*	34.4%	20.3%*	43.1%	26.7%*	32.2%	30.4%
STDs	54.3%	52.9%	53.5%	64.0%**	56.3%	40.9%*	61.5%	48.7%*	55.7%	48.6%
how to prevent HIV/AIDS	41.0%	38.7%	38.5%	54.4%***	39.7%	36.5%	48.3%	34.9%*	39.5%	37.4%
how to use a condom	29.9%	23.3%	28.8%	44%***	24.5%	19.4%	31.2%	20.0%†	22.1%	25.3%
FORMAL SEX EDUCATION Received any formal sex education prior to age 18 Received formal sex education prior to age 18 on	97.0%	95.8%	97.3%	96.4%	96.3%	92.0%†	96.1%	95.6%	94.6%	97.7%*
how to say no to sex	88.7%	82.7%	90.6%**	89.0%†	83.9%	81.0%	87.7%	80.4%	84.6%	79.6%
methods of birth control	70.5%	67.6%	70.4%	66.8%	65.7%	70.6%	71.7%	66.6%	59.4%	80.7%**
STDs	93.8%	92.1%	94.1%	92.0%	92.1%	90.6%	93.5%	91.4%	89.9%	95.6%***
how to prevent HIV/AIDS	89.3%	89.5%	89.1%	88.4%	89.9%	87.0%	91.5%	88.5%	88.2%	91.7%
Among 18-19 year olds, received any sex ed before first sex	91.9%	91.2%	92.4%	88.6%	91.1%	91.6%	92.8%	90.5%	N/A	N/A
ATTITITUDES AND BELIEFS										
SEX, PREGNANCY, CONTRACEPTION										

OK for unmarried 16 year olds to have sex if they are close										
Agree or Strongly Agree OK for unmarried 18 year olds to have sex if they are close	28.0%	27.9%	28.5%	23.9%	30.3%	19.0%†	33.7%	26.0%	31.7%	21.8%†
Agree or Strongly Agree If became pregnant, would feel	61.7%	59.9%	60.9%	60.2%	59.2%	59.3%	68.1%	56.0%*	54.4%	68.8%†
a little please or very	13.6%	20.6%	7.8%***	19.3%	16.8%	28.9%*	14.0%	24.0%*	13.7%	31.6%***
What is the chance that if partner uses a condom, respondent would feel less pleasure										
% pretty good or almost certain it would be embarassing to discuss using a condom with new partner	10.4%	7.9%	10.0%	11.9%	8.1%	9.4%	6.1%	8.6%	8.6%	6.8%
% pretty good or almost certain if a new partner used a condom, respondent would appreciate it	16.4%	22.6%	14.9%*	17.6%	20.2%	35.1%*	16.2%	25.6%	25.1%	18.7%
% pretty good or almost certain	93.1%	88.3%	96.1%***	88.3%	90.5%	80.0%†	90.9%	86.8%	90.6%	84.8%
FAMILY AND GENDER Better to get married than to go through life being single.										
% Agree or Strongly Agree	53.9%	52.0%	56.7%	45.3%	50.3%	59.7%	47.6%	54.3%	57.2%	43.5%*

									•	
Divorce is usually best										
solution when a couple										
can't work out marital										
problems.  % Agree or Strongly										
Agree of Strongly Agree	38.5%	48.6%	34.8%***	37.2%*	42.9%	68.4%**	49.8%	49.2%	48.1%	49.5%
A young couple shouldn't										
live together unless										
married.										
% Agree or Strongly	30.3%	31.7%	29.2%	36.7%	28.9%	46.6%*	24.2%	35.1%*	34.5%	27.3%
Agree	30.370	31.770	27.270	30.770	20.770	40.070	24.270	33.170	34.370	27.370
OK to have and raise										
children when the parents are living together but not										
married.										
% Agree or Strongly	<b>54</b>	<b></b>	50 T-:	50 to	<b></b>	20.7	<b>5</b> 0.000	<b>5</b> 4.0	<b></b>	<b>45</b> 444
Agree	71.6%	76.6%	69.5%	69.4%	75.6%	80.5%	79.8%	74.9%	77.5%	75.4%
Much better for everyone if										
the man earns the main										
living and the woman takes										
care of the home and										
family. % Agree or Strongly										
Agree of Strongry Agree	23.9%	28.6%	20.7%**	27.5%	21.3%	53.0%***	22.1%	31.7%†	28.4%	28.9%
SOCIODEMOGRAPHIC										
CHARACTERISTICS										
Predominantly spanish	1.9%	10.3%	0%***	0%***	2.3%	33.7%***	8.2%	11.6%	6.1%	17%*
speaking	1.770		070						0.170	
Foreign born	6.4%	20.8%	1.4%***	3.8%***	N/A	N/A	19.0%	21.6%	16.1%	28.2%*
Mexican origin	12.6%	70.0%	N/A	N/A	69.3%	76.7%	N/A	N/A	70.5%	69.3%
Informal marital status			**	***						***
Never married	94.1%	90.8%	95.3%	98.1%	91.8%	90.2%	92.2%	89.7%	98.1%	79.2%
Married	1.1%	2.9%	0.8%	0.0%	2.3%	3.5%	2.4%	3.3%	0.3%	7.1%
Cohabiting	4.8%	6.3%	3.9%	1.9%	5.9%	6.4%	5.4%	7.0%	1.6%	13.8%
Lives with both	44.7%	45.3%	53.6%*	18.6%***	46.9%	41.3%	38.5%	10 00/ +	49.0%	20.50/ +
biological/adoptive parents	44./%	43.3%	33.0%*	10.0%	40.9%	41.3%	36.3%	48.8%†	49.0%	39.5%†
Lives with at least one	85.3%	84.4%	87.8%	83.5%	85.3%	85.0%	86.8%	82.7%	92.4%	71.6%***
parental figure	05.570	01.470	07.070	03.570	03.370	05.070	00.070	02.170	) <del>2.</del> <del>7</del> / 0	71.070
Currently enrolled in	83.2%	78.6%	86.5%**	81.7%	81.2%	74.7%	80.1%	77.0%	92.4%	56.5%***
school Currently in school or										
working part-time/full-time	90.1%	86.8%	92.4%**	87.6%	89.2%	84.0%	86.5%	86.3%	94.9%	73.8%***
Religious Affiliation			***	***		**				
<b>0</b> 1			***	***		**				

No religion	19.6%	13.2%	22.2%	12.2%	13.8%	11.4%	16.6%	11.7%	11.0%	16.8%
Catholic	25.5%	56.6%	21.7%	6.5%	53.6%	67.6%	48.7%	61.1%	55.5%	58.4%
Protestant	45.0%	25.9%	44.6%	77.0%	29.5%	12.1%	31.0%	23.0%	28.8%	21.3%
Other religion	9.8%	4.2%	11.5%	4.3%	3.0%	8.9%	3.7%	4.3%	4.7%	3.5%
Importance of religion in daily life			*	***						
Very important	38.6%	37.6%	35.4%	57.1%	34.7%	48.8%	33.3%	38.9%	39.4%	34.7%
Somewhat important	36.1%	43.6%	35.6%	28.6%	45.5%	36.2%	43.6%	44.1%	44.9%	41.6%
Not important	25.3%	18.8%	28.9%	14.4%	19.8%	15.0%	23.1%	17.1%	15.8%	23.7%
Religious service attendance			***	**						
More than once a week	12.8%	8.5%	14.6%	16.0%	8.5%	9.7%	11.4%	7.2%	10.9%	4.6%
Once a week	22.1%	29.1%	20.0%	26.6%	28.1%	29.2%	20.9%	32.3%	27.6%	31.5%
2-3 times a month	11.6%	13.0%	10.0%	16.4%	13.6%	11.8%	9.0%	14.7%	15.2%	9.5%
Once a month	8.2%	9.1%	6.6%	12.7%	8.5%	13.4%	9.0%	9.3%	10.9%	6.2%
3-11 times a year	8.7%	4.9%	10.0%	6.9%	5.0%	5.3%	4.4%	5.3%	5.0%	4.8%
Once or twice a year	11.1%	13.3%	10.5%	9.2%	14.4%	9.7%	17.3%	12.0%	10.7%	17.4%
Never	25.4%	22.1%	28.3%	12.3%	21.9%	20.9%	28.1%	19.4%	20.0%	26.0%
Family structure at age 14				***						
Both biological parents	61.0%	62.6%	68.2%	32.4%	62.3%	62.0%	55.2%	66.3%	62.8%	62.3%
One biological parent and one step/adoptive parent	12.7%	12.3%	12.3%	15.1%	12.0%	15.1%	10.8%	12.2%	11.1%	14.2%
Single parent	16.0%	16.1%	11.3%	36.8%	17.0%	13.2%	22.5%	13.7%	16.1%	15.9%
Other	10.3%	9.0%	8.2%	15.7%	8.8%	9.8%	11.5%	7.8%	9.9%	7.6%
Highest parental education										
Both parents combined <sup>e</sup>			***	***		*		*		
Less than high school	8.4%	27.9%	2.6%	5.6%	24.7%	37.5%	17.4%	33.0%	25.3%	32.0%
High school graduate or GED	25.1%	27.3%	23.5%	35.3%	26.7%	31.9%	27.0%	27.3%	29.1%	24.3%
Some college, including 2-year degrees	30.7%	24.1%	30.0%	38.0%	27.8%	12.0%	28.4%	22.5%	24.1%	24.1%
Bachelor's degree or higher	35.9%	20.8%	43.8%	21.1%	20.8%	18.7%	27.2%	17.1%	21.5%	19.6%
Mother employed from age 5-15				*		**				†
Full-time	57.2%	54.4%	54.9%	62.6%	60.0%	33.9%	60.5%	51.2%	57.5%	49.4%
Part-time	21.2%	20.6%	22.3%	24.0%	20.9%	20.0%	20.7%	20.6%	20.8%	20.2%

Equal parts full-time and part-time	3.8%	3.2%	4.3%	2.8%	3.0%	4.9%	1.4%	4.0%	4.8%	0.7%
Not at all (for pay)	17.7%	21.8%	18.5%	10.6%	16.1%	41.2%	17.4%	24.3%	16.9%	29.8%

†p<.01; \*p<.05; \*\*p<.01;

\*\*\*p<.001

Applicable to all

respondents, unless

otherwise noted.

- 1 Standard population for age for white and black teens.
- 2 Standard population for age for foreign-born Hispanic teens.
- 3 Standard population for age for Mexican-origin Hispanic teens.

aOnly applicable to

respondents who ever had

sex with a man.

bOnly applicable to those

with a birth.

cOnly applicable to respondents who had

sex with a man in the last 3 months.

dOnly applicable to those who had sex

with a man in the last month.

 $^{\rm e} Only$  applicable if respondent had a mother/mother-figure and/or a

father/father-figure while growing up.

<sup>f</sup>Only applicable to teens

aged 18-19

Table A.2: The Reproductive Health O	utcomes and	Behaviors	of Adolescen	t Males, By Cri	tical Subpopu	lations				
	All teens	Latino teens¹ (ref)	White teens	Black teens	Native- Born Hispanic <sup>2</sup>	Foreign- Born Hispanic	Non- Mexican origin <sup>3</sup>	Mexican origin	Aged 15-17	Aged 18-19
Unweighted N	2378	589	1122	437	443	145	199	385	343	246
SEX, CHILDBEARING, AND STIS										
Ever had sex	42.1%	46.3%	38.5%*	61%**	43.5%	47.8%	50.2%	44.2%	29.4%	69.9%***
No. of sexual partners										
Lifetime (mean)	2.1	2.6	1.7*	3.5†	2.2	3.2†	3.1	2.3	1.3	4.3***
Lifetime (count)			*	**						***
0	57.93	53.7%	61.5%	39.0%	56.5%	52.2%	49.8%	55.8%	70.6%	30.1%
1	12.58	11.8%	12.9%	13.5%	12.5%	8.4%	11.9%	11.9%	9.8%	14.7%
2-3	12.64	14.7%	10.6%	19.9%	13.9%	16.0%	14.0%	14.4%	11.0%	19.7%
4+	16.85	19.8%	15.0%	27.6%	17.1%	23.4%	24.3%	17.9%	8.6%	35.5%
Age at first sex <sup>a</sup>										
Mean	15.2	14.9	15.6**	14.5†	14.9	14.7	14.8	15.0	14.2	15.4***
Count			**							**
Less than 15	33.3%	40.8%	23.7%	45.7%	39.0%	49.7%	45.4%	38.7%	57.4%	31.0%
15-17	58.7%	53.7%	65.1%	49.0%	55.3%	45.9%	45.6%	57.5%	42.6%	60.2%
18-19	8.1%	5.6%	11.2%	5.3%	5.7%	4.4%	9.1%	3.9%	0.0%	8.8%
No. of sexual partners <sup>a</sup>										
Past 12 months (mean) <sup>a</sup>	1.7	1.6	1.8	1.7	1.5	1.7	1.8	1.5	1.6	1.6
Past 12 months (count) <sup>a</sup>				†						
0	10.52	9.6%	8.4%	15.9%	8.5%	7.1%	7.8%	10.7%	7.6%	10.8%
1	49.86	54.5%	50.1%	41.2%	56.2%	4.9%	48.8%	57.2%	54.1%	54.7%
2-3	28.73	28.3%	29.7%	30.3%	28.4%	33.2%	32.6%	25.8%	32.1%	26.0%
4+	10.88	7.7%	11.8%	12.6%	6.8%	11.1%	10.8%	6.2%	6.2%	8.5%
Sex in the past 3 mos <sup>a</sup>	66.4%	64.9%	67.5%	64.4%	65.0%	66.9%	67.8%	64.2%	60.3%	67.5%
CHILDBEARING										
Ever biologically fathered a child	2.3%	4.1%	1.5%*	4.7%	4.0%	3.2%	6.1%	3.3%	1.2%	8.3%**
Ever had an unintended birth <sup>b</sup>	83.8%	81.8%	90.3%	78.8%	76.6%	80.5%	100.0%	64.8%*	100.0%	77.8%
	I	ļ					1		l	

Age at first live birth (mean) b	16.6	16.8	16.5	16.5	17.2	17.4	17.1	17.4	16.8	17.4*
STIs										
Treated for an STD in the past 12 months	2.0%	1.9%	1.7%	4.5%†	2.0%	1.1%	2.1%	1.8%	1.6%	2.3%
Ever diagnosed with HPV/herpes/syphilis	0.4%	0.3%	0.4%	0.8%	0.3%	0.0%	0.7%	0.1%*	0.0%	0.6%
CONTRACEPTIVE USE										
Had sex, used a method at first sex <sup>a</sup>	85.4%	84.1%	88.1%	81.8%	85.1%	82.6%	87.7%	81.9%	86.5%	82.6%
Type of contraceptive used at first sex Hormonal/Long-Acting Reversible Method <sup>a</sup>	3.2%	1.1%	** 5.1%	1.1%	1.6%	0.0%	1.7%	1.6%	0.4%	1.5%
Condom <sup>a</sup>	63.3%	70.1%	58.2%	69.2%	67.5%	75.6%	76.2%	66.5%	75.0%	67.3%
Dual methods <sup>a</sup>	16.3%	8.3%	22.5%	10.6%	10.2%	5.9%	7.4%	9.0%	6.9%	9.2%
Other <sup>a</sup>	2.7%	4.5%	2.5%	9.8%	5.9%	1.1%	4.0%	4.9%	4.2%	4.7%
	14.6%	15.9%	11.9%	18.2%	14.9%	17.4%	12.3%	18.1%	13.5%	17.4%
None <sup>a</sup>	11.070	13.570	11.570	10.270	11.570	17.170	12.570	10.170	13.570	17.170
Used any method at most recent sex c	92.5%	86.5%	96.5%**	91.0%	84.0%	93.1%	84.3%	87.6%	93.9%	82.6%†
Type of contraceptive method used at most recent sex			***							***
Hormonal/Long-Acting Reversible Method <sup>c</sup>	14.7%	16.4%	17.9%	9.0%	18.3%	9.9%	17.2%	15.3%	11.6%	18.9%
Condom <sup>c</sup>	40.8%	45.1%	33.6%	53.3%	42.0%	59.2%	36.2%	50.3%	69.9%	32.0%
Withdrawal <sup>c</sup>	3.6%	5.8%	2.9%	3.3%	5.4%	5.2%	5.6%	5.9%	1.2%	8.2%
Dual methods <sup>c</sup>	33.3%	19.2%	42.2%	25.2%	18.3%	18.9%	25.4%	16.0%	11.2%	23.5%
None <sup>c</sup>	7.5%	13.5%	3.5%	9.0%	16.0%	6.9%	15.7%	12.5%	6.1%	17.4%
Consistency of condom use in past 4 weeks										
Mean (scale of 0 to 1) d	0.7	0.6	0.7	0.8*	0.6	0.7	0.7	0.6†	0.8	0.6**
Frequency				*		†				
Never <sup>d</sup>	22.5%	30.2%	20.3%	17.3%	29.4%	27.2%	21.8%	34.5%	10.9%	37.1%*
Some of the time <sup>d</sup>	11.5%	13.3%	13.0%	8.2%	19.6%	2.5%	11.2%	14.7%	10.7%	14.3%*
Always <sup>d</sup>	66.0%	56.5%	66.7%	74.5%	51.1%	70.3%	67.0%	50.8%	78.4%	48.7%*
SEX EDUCATION AND COMMUNICATION										

TALK WITH PARENTS										
Ever discussed any sex ed topic with parents prior to age 18	68.5%	71.0%	66.8%	78.4%*	74.2%	61.4%*	72.3%	70.2%	71.3%	70.7%
Ever discussed with parents prior to age 18										
how to say no to sex	41.5%	29.4%	45.3%***	43.5%***	33.8%	17.7%**	30.3%	29.3%	33.1%	24.1%†
methods of birth control	29.2%	26.3%	32.3%*	25.1%	27.5%	21.4%	32.1%	23.8%	22.7%	31.2%
where to get birth control	19.2%	17.8%	20.5%	17.4%	18.7%	14.7%	24.6%	14.8%*	16.1%	20.2%
STDs	48.2%	48.0%	46.2%	61.0%***	50.2%	40.3%†	53.8%	45.4%†	47.3%	49.0%
how to prevent HIV/AIDS	38.0%	44.8%	34.1%***	45.7%	47.2%	37.8%†	50.7%	41.9%†	46.1%	43.1%
how to use a condom	37.4%	39.8%	33.8%†	50.5%*	40.8%	37.1%	51.0%	34.6%**	37.5%	43.0%
FORMAL SEX EDUCATION										
Received any formal sex education prior to age 18 Received formal sex education prior to age	97.2%	96.4%	97.7%	96.3%	96.5%	97.1%	97.2%	96.0%	97.4%	94.9%
18 on										
how to say no to sex	82.5%	76.8%	85.3%**	79.1%	78.9%	72.0%	80.0%	75.5%	77.8%	75.4%
methods of birth control	60.8%	59.0%	62.9%	53.4%	57.7%	62.2%	68.0%	55.1%*	55.5%	63.8%
STDs	91.8%	90.6%	92.3%	89.7%	91.1%	88.7%	92.3%	89.9%	91.3%	89.6%
how to prevent HIV/AIDS	87.9%	87.1%	87.5%	86.0%	86.7%	87.9%	89.6%	85.9%	86.8%	87.6%
Among 18-19 year olds, received any sex education before first sex <sup>g</sup> Among 18-19 year olds, received sex education on <sup>g</sup>	91.5%	87.8%	93.2%*	85.3%	90.8%	81.6%	88.2%	87.5%	N/A	N/A
how to say no to sex										
before first sex	72.7%	67.5%	74.7%	66.8%	73.9%	54.9%	75.2%	64.0%	N/A	N/A
after first sex	7.1%	7.7%	5.7%	14.9%	5.1%	12.9%	5.0%	8.9%	N/A	N/A
never received	20.2%	24.8%	19.6%	18.3%	21.1%	32.3%	19.8%	27.1%	N/A	N/A
methods of birth control			†							
before first sex	60.4%	53.0%	63.0%	54.8%	56.8%	45.5%	59.3%	50.6%	N/A	N/A
after first sex	7.0%	10.8%	5.4%	11.7%	7.3%	17.8%	14.3%	9.3%	N/A	N/A
never received	32.6%	36.2%	31.6%	33.6%	35.9%	36.8%	26.4%	40.1%	N/A	N/A
STDs										
before first sex	84.1%	81.4%	85.7%	73.9%	83.0%	78.3%	79.0%	82.8%	N/A	N/A
after first sex	8.4%	8.2%	7.3%	17.0%	6.1%	12.4%	10.0%	7.4%	N/A	N/A

never received	7.6%	10.4%	7.0%	9.1%	10.9%	9.4%	11.0%	9.8%	N/A	N/A
how to prevent HIV/AIDS										
before first sex	80.0%	79.7%	80.1%	70.9%	81.0%	77.0%	77.5%	80.5%	N/A	N/A
after first sex	7.9%	7.9%	7.0%	15.1%	5.7%	12.4%	11.6%	6.3%	N/A	N/A
never received	12.1%	12.4%	12.9%	14.1%	13.3%	10.6%	11.0%	13.2%	N/A	N/A
ATTITITUDES AND BELIEFS										
SEX, PREGNANCY, CONTRACEPTION										
OK for unmarried 16 year olds to have sex if they are close										
% Agree or Strongly Agree	38.7%	38.4%	38.5%	39.3%	36.9%	40.5%	43.2%	35.9%†	36.0%	41.7%
OK for unmarried 18 year olds to have sex if they are close										
% Agree or Strongly Agree	68.8%	69.2%	68.7%	72.1%	71.3%	61.7%	71.9%	67.9%	65.2%	74.8%*
If got female pregnant, would feel  % A little pleased or very pleased	18.9%	35.3%	11.5%***	29.5%	31.3%	45.0%*	31.1%	37.2%	28.6%	44.6%**
What is the chance that										
if used a condom, respondent would feel less pleasure										
% pretty good or almost certain	21.0%	21.3%	22.3%	18.2%	21.0%	20.8%	21.8%	20.9%	18.6%	24.9%
it would be embarassing to discuss using a condom with new partner										
% pretty good or almost certain	14.8%	15.9%	13.8%	14.5%	13.7%	23.7%*	11.8%	18.0%	20.8%	9.3%*
if respondent used a condom, new partner would appreciate it										
% pretty good or almost certain	81.0%	74.5%	84.4%***	81.4%†	77.0%	66.7%*	73.9%	74.9%	71.3%	78.9%
FAMILY AND GENDER										
Better to get married than to go through life being single.										
% Agree or Strongly Agree	70.5%	71.1%	72.3%	62.9%†	66.6%	85.3%**	64.7%	74.2%	72.6%	69.0%

Divorce is usually best solution when a										
couple can't work out marital problems.  % Agree or Strongly Agree	41.3%	46.8%	39.6%	43.4%	42.9%	55.6%*	41.7%	48.7%	46.9%	46.5%
A young couple shouldn't live together	41.570	40.070	39.070	75.770	42.970	33.070	41.770	40.770	40.970	40.570
unless married.										
% Agree or Strongly Agree	31.2%	34.2%	30.6%	32.1%	31.8%	41.8%	37.1%	30.1%	37.1%	30.1%
OK to have and raise children when the										
parents are living together but not married.										
% Agree or Strongly Agree	70.0%	75.3%	69.1%	69.4%	78.3%	65.4%	82.1%	71.9%†	71.3%	80.3%
Much better for everyone if the man earns										
the main living and the woman takes care										
of the home and family.	27.004	4.6.60/	0 < 1 0 / shale	27.40/.1	26.00/	70.50/ statesta	20.00/	40.50/ %	40.00/	50.50V
% Agree or Strongly Agree	37.9%	46.6%	36.1%**	37.4%†	36.9%	73.5%***	39.8%	49.5%*	43.8%	50.5%
SOCIODEMOGRAPHIC CHARACTERISTICS										
Predominantly spanish speaking	2.0%	10.8%	0.0%***	0.0%***	0.8%	38.3%***	13.1%	9.8%	8.8%	13.4%
Foreign born	7.8%	26.3%	2.5%***	4.0%***	N/A	N/A	27.7%	25.9%	21.3%	33.2%*
Mexican origin	12.8%	69.0%	N/A	N/A	69.5%	66.5%	N/A	N/A	69.0%	69.1%
Informal marital status			**	†						***
Never married	97.3%	95.3%	97.7%	98.2%	94.9%	97.2%	97.3%	94.4%	99.1%	90.0%
Married	2.7%	0.0%	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%
Cohabiting	2.3%	4.6%	1.8%	1.8%	5.0%	2.8%	2.4%	5.6%	0.9%	9.8%
Lives with both biological/adoptive parents	48.8%	49.2%	53.2%	26.2%***	49.2%	49.4%	46.9%	50.4%	50.3%	47.6%
Lives with at least one parental figure	89.4%	88.7%	89.5%	86.4%	90.7%	87.3%	85.9%	89.9%	95.9%	78.6%***
Currently enrolled in school	82.3%	72.4%	83.9%***	82.2%**	76.3%	69.0%	70.3%	73.4%	92.3%	44.6%***
Currently in school or working part-time/full-time	91.0%	88.1%	92.0%*	89.1%	87.5%	90.6%	85.2%	89.6%	93.7%	80.3%**
Religious Affiliation			***	***				***		
No religion	22.1%	15.6%	25.8%	17.4%	17.7%	8.8%	26.3%	10.8%	13.8%	18.2%
Catholic	27.2%	59.8%	22.3%	7.8%	57.9%	63.2%	46.9%	65.5%	59.6%	60.1%
Protestant	42.8%	20.4%	43.2%	70.0%	21.0%	20.7%	18.8%	21.3%	21.6%	18.7%
Other religion	8.0%	4.1%	8.8%	4.7%	3.4%	7.2%	8.0%	2.4%	5.0%	3.0%
Importance of religion in daily life			***	**		*		**		
Very important	32.3%	32.6%	27.9%	47.6%	29.2%	43.7%	27.7%	34.9%	33.7%	31.2%
Somewhat important	37.1%	47.4%	34.6%	31.3%	48.4%	45.0%	41.5%	50.3%	48.1%	46.5%

Not important	30.5%	20.0%	37.6%	21.1%	22.5%	11.3%	30.8%	14.8%	18.2%	22.4%
Religious service attendance										**
More than once a week	11.5%	12.2%	11.3%	11.0%	11.2%	17.0%	12.6%	12.2%	15.7%	7.4%
Once a week	21.7%	23.9%	18.9%	26.5%	24.6%	22.3%	20.3%	25.7%	29.0%	16.7%
2-3 times a month	11.0%	10.9%	9.3%	16.5%	10.2%	14.3%	9.0%	11.8%	12.1%	9.1%
Once a month	8.1%	8.9%	7.8%	7.8%	8.2%	10.0%	5.8%	10.4%	7.6%	10.8%
3-11 times a year	8.1%	7.4%	9.0%	4.8%	8.0%	5.5%	6.6%	7.6%	6.8%	8.2%
Once or twice a year	12.8%	10.3%	15.1%	9.5%	11.2%	6.8%	11.4%	9.5%	8.0%	13.4%
Never	26.9%	26.5%	28.5%	23.9%	26.6%	24.0%	34.2%	22.8%	20.8%	34.4%
Family structure at age 14				***						*
Both biological parents	62.7%	64.3%	68.1%	36.4%	63.6%	62.9%	62.6%	65.5%	59.6%	70.9%
One biological parent and one step/adoptive parent	10.9%	12.1%	10.6%	10.9%	11.6%	14.8%	9.5%	12.9%	13.8%	9.6%
Single parent	16.0%	14.3%	12.7%	32.6%	16.3%	9.2%	12.9%	14.8%	14.8%	13.7%
Other	10.4%	9.3%	8.6%	20.1%	8.6%	13.1%	15.1%	6.8%	11.8%	5.8%
Highest parental education										
Both parents combined <sup>f</sup>			***	***		***		†		*
Less than high school	7.3%	26.4%	2.3%	4.5%	19.1%	44.3%	17.9%	30.5%	20.7%	34.4%
High school graduate or GED	26.3%	30.4%	23.8%	36.0%	31.0%	31.4%	34.8%	28.5%	32.6%	27.4%
Some college, including 2-year degrees	28.0%	19.8%	28.0%	32.9%	23.0%	11.4%	19.7%	19.8%	20.0%	19.6%
Bachelor's degree or higher	38.4%	23.4%	46.0%	26.7%	26.9%	12.9%	27.7%	21.3%	26.7%	18.7%
Mother employed from age 5-15 e						†				*
Full-time	58.3%	57.1%	55.3%	71.0%	60.1%	47.5%	55.8%	57.8%	54.9%	60.3%
Part-time	20.3%	21.2%	21.7%	14.7%	21.8%	21.6%	20.0%	21.5%	25.3%	15.5%
Equal parts full-time and part-time	3.9%	2.0%	4.1%	5.2%	2.1%	2.1%	1.6%	2.2%	2.3%	1.5%
Not at all (for pay)	17.5%	19.7%	18.8%	9.2%	16.0%	28.9%	22.6%	18.5%	17.5%	22.7%

<sup>†</sup>p<.01;\*p<.05; \*\*p<.01; \*\*\*p<.001

Applicable to all respondents, unless otherwise noted.

<sup>1</sup> Standard population for age for white and black teens.

<sup>2</sup> Standard population for age for foreign-born Hispanic teens.

<sup>3</sup> Standard population for age for Mexican-origin Hispanic teens.

aOnly applicable to respondents who ever had sex with a female.

bOnly applicable to those who biologically fathered a child.

cOnly applicable to respondents who had sex with a female in the last 3 months.

dOnly applicable to those who had sex with a female in the last month.

eOnly applicable if respondent had a mother or mother-figure while growing up.

fOnly applicable if respondent had a mother/mother-figure and/or a father/father-figure while growing up.

gOnly applicable to teens aged 18-19

#### APPENDIX B: METHODS USED FOR THE EVIDENCE REVIEW

### **Methods**

The purpose of this evidence review was to identify programs and approaches, implemented in the United States, that appear to be effective in reducing risk for teen pregnancy and behavioral antecedents for Latino adolescents, ages 10-18. We developed search criteria and embarked on an extensive search of existing evaluation studies, which led us to our final study findings. Below we describe, in detail, the search methods, study inclusion criteria, coding methods, and analysis methods used to identify promising programs and approaches.

### **Search Methods**

Several sources were consulted to identify program evaluations to screen for this evidence review. During our initial search, we reviewed three key sources, several of which were developed or co-developed by Child Trends (CT) to identify evaluations that have assessed impacts on sexual and reproductive health outcomes and involved adolescent Latino adolescents. These resources were: (a) the <u>Child Trends' LINKS database</u> 666; (b) the <u>OAH Teen Pregnancy</u> Prevention (TPP) database;<sup>2</sup> and the National Campaign's Interventions with Evidence of Success database.<sup>3</sup> First, we searched the CT/LINKS database (a searchable online database of randomized, intent-to-treat evaluations), using the keywords, "reproductive health", "Latino", "middle school" and "high school" and identified 100 evaluations (associated with 52 programs). Second, we consulted the full set of 200 evaluation studies (published up until 2010) identified as meeting basic study inclusion criteria from the OAH/TPP Evidence Review, a systematic review of studies analyzing program effects on sexual behavior and related consequences among adolescents ages 19 and younger, conducted for the Office of Adolescent Health (OAH). This review resulted in two quasi-experimental design (QED) evaluations, associated with two programs. Third, we identified eight additional evaluations (6 QED and 2 RCT) associated with seven out of the 46 programs included in the National Campaign's Interventions with Evidence of Success database.

After compiling an initial set of studies from the above sources, we conducted a broader search of research databases, such as Google Scholar, PubMed, PSYCInfo, and EBSCOhost. Keywords used to search these additional research databases included: reproductive health; sexual behavior; pregnancy; condom use; contraceptive use; sex education; prevention; program evaluation; adolescents; quasi-experimental; random assignment; Latino, and Hispanic. Approximately 413 additional evaluations were identified. Figure B.1 summarizes data sources consulted and the number of corresponding evaluations identified.

### **Study Inclusion Criteria**

http://www.thenational campaign.org/resources/programs.aspx/

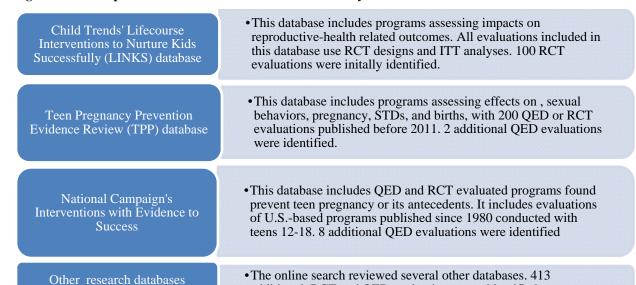
<sup>&</sup>lt;sup>1</sup> URL for Child Trends' LINKS Database http://www.childtrends.org/Links/

<sup>&</sup>lt;sup>2</sup> URL for TPP Database: http://www.hhs.gov/ash/oah/oah-initiatives/tpp/tpp-database-v1.html

<sup>&</sup>lt;sup>3</sup> URL for National Campaign's database:

In total, approximately 523 evaluation studies assessing program effects<sup>4</sup> on teen pregnancy and its antecedents among Latino populations were screened to assess for meeting study inclusion criteria. First, we focused our review specifically on programs that assessed program effects on a range of reproductive-health related outcomes, regardless of whether programs were specifically designed to prevent pregnancy.

Figure B.1: Multiple Data Sources Were Reviewed to Identify Evaluation Studies For This Review

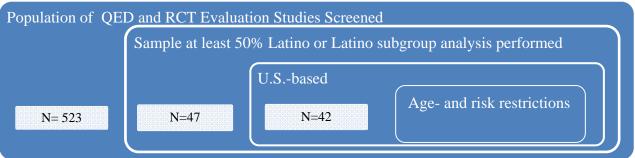


Although we had originally planned to limit our reviews to random assignment, intent-to-treat evaluations with Latinos comprising a large majority (over 75 percent) of participants, we found these criteria to severely limit the number of programs eligible for review. Thus, we expanded our search to include programs evaluated using QEDs with comparison groups. Still finding a lack of programs, we expanded our criteria to include QEDs with within-group designs and evaluations with Latinos comprising at least 50 percent of the total sample. Because the aim of this project is to identify approaches for preventing teen pregnancy among Latinos in the United States, we further limited the criteria to focus on evaluations assessing the program effects of U.S-based programs on teen pregnancy or the antecedents of teen pregnancy and those working primarily with adolescents ages 10 to 18 (excluding pregnant or parenting teens). Figure B.2 presents an overview of our study selection process. Evaluations with a sample that was at least 50 percent Latino had to include a minimum of 20 Latino respondents in its analytic sample. We included evaluations with a more ethnically diverse sample, only when a subgroup analysis for Latinos was conducted or when findings were reported separately for Latinos.

additional RCT and QED evaluations were identified

<sup>&</sup>lt;sup>4</sup>We acknowledge that intervention findings for RCTs evaluations are typically referred to as program impacts and those of QEDs are typically described as program effects. However, for the purpose of this study, which reviews the findings of RCT and QED evaluation studies, we refer to all intervention findings as program effects.

Figure B.2: Evaluation Screening and Study Selection Process Used In This Study.



### **Coding Methods**

First we coded program effects on each outcome measure of interest (Table B.1).

### **Table B.1: Outcomes Measures in Program Evaluations**

### Psychosocial

### Knowledge

- Knowledge about condoms/condom use
- Knowledge about contraceptives/contraceptive use
- Knowledge about sexual intercourse/sexual risk
- Knowledge about fertility/pregnancy
- Knowledge about STDs/HIV

#### Attitudes and beliefs

- Attitudes and beliefs about abstinence/sexual intercourse
- Attitudes and beliefs about condoms/contraceptives
- Attitudes and beliefs about pregnancy
- Attitudes and beliefs about STDs/HIV
- Attitudes and beliefs about peers sexual activity
- Attitudes and beliefs about gender roles related to sexual activity
- Beliefs about perceived peer norms

#### **Intentions**

- Intentions to remain abstinent/have sexual intercourse
- Intentions to use condoms/contraceptives
- Intentions to avoid pregnancy

### **Self-efficacy**

- Self-efficacy to use condoms/contraceptives
- Self-efficacy to abstain from sexual intercourse

### Communication

### Communication

- Negotiation, refusal, or assertiveness skills related to condom/contraceptive use
- Negotiation, refusal, or assertiveness skills related to sexual intercourse

### **Parent-Child Communication**

- Parent-child communication about condoms/contraceptives
- Parent-child communication about sexual intercourse
- Parent-child communication about fertility/pregnancy

### **Behavioral**

### **Sexual Activity**

- Initiation of sexual intercourse
- Frequency/recency of sexual intercourse (e.g., sex in the past three months)
- Lifetime/recent number of sexual partners

### **Condom Use**

- Use of condoms at first sexual intercourse
- Use of condoms at most recent sexual intercourse
- Consistent use of condoms

**Contraceptive Use**: hormonal methods, long-acting reversible contraceptive methods (LARCs, including IUDs and implants), dual methods (hormonal methods and condoms), or "other" methods (some combination of hormonal methods and/or condoms)

- Use of contraceptives at first sexual intercourse
- Use of contraceptives at most recent sexual intercourse
- Consistent use of contraceptives

### **Sexually Transmitted Diseases**

- Biologically-confirmed sexually transmitted diseases
- Self-reported sexually transmitted diseases

### **Pregnancy**

### **Coding Program Components**

Codes describing program components such as dosage, implementation setting, implemental locale, program type, and mode of delivery were also assigned to each evaluation. Details on how program components were coded are described in B.2: *Analytic Codes Used to Describe Program Components*.

Table B.2.	<b>Analytic Codes Used to Describ</b>	e Program Components				
	Age	Middle (grades 6-8/ages 10-13) or high school (grades 9-12/ages 14-18)				
Target Populatio	Gender	Female, male, or both				
	Region	Urban, suburban, or rural				
	Latino-only	Population is 100% Latino				
Dosage	Contact hours	Brief (<10) hours (3); did (10-19) hours; extended (20+)				
	Duration of program	Short (<3 months); Mid (3-6 months); Long (6+ months)				
Program Setting	School-based	Program is offered in school, before, during, or after school hours				
	Clinic/Hospital-based	Program is offered at an outpatient clinic or hospital				
	Community-based	Program is offered at a community center, recreational center, faith-based setting, or community-based organization				
	Home-based	Program is delivered in families' home				
Activities	Psychosocial skill-building	Activities that build knowledge, attitudes and beliefs, perceived norms, intentions, self-efficacy, and/or communication skills				
	Behavioral skill-building	Activities that build behavioral skills related to safe sexual intercourse, such as practicing condom use on an anatomical model				

	Goal-setting	Activities that build skills related to planning, means-end thinking future orientation, and setting goals
Program Type	Comprehensive sex education program	Emphasizes the benefits of abstinence and teaches about contraception
	Abstinence program	Emphasizes abstinence from sexual intercourse, and often excludes many discussions of the use of birth control and how to practice safe sex.
	Youth development/adult preparation program	Emphasizes positive youth development, with a focus on promoting education, employment, and career success and increasing life skills
	HIV-risk reduction program	Emphasizes HIV/STD risk reduction strategies, including condom use
	Other risk reduction program	Emphasizes the reduction of risk for other negative outcomes, such as high school dropout, substance abuse, and delinquency
	Infant stimulator program	Emphasizes the perception of the consequences of teen pregnancy through time spent with an infant simulator
	Condom distribution program	Provides access to condoms
	Parent-child program	Target population includes both parents and children
Mode of Delivery	Group-based	Intervention delivered to a group of young people
	One-on-one	Intervention delivered to participants on a one-on-one basis
	Interactive	Intervention requires participants to interact with others
	Didactic Only	Intervention disseminates information through presentations or lectures
	Technology	Intervention incorporates the use of electronic technology or media
	Peer-to-peer	Intervention uses peer providers to facilitate the program
	Counseling	Intervention includes sessions with a health or mental health practitioner
	Role playing	Participants act out different hypothetical scenarios
	Homework	Intervention requires participants to engage home-based exercises between sessions, either with or without parents
Program Strategie S	Culturally-tailored	Program is adapted or designed to respect the culturally-based values and linguistic preferences of participants
	Service learning/ community service	Activities that involve youth in volunteer activities or community service
	Job/Educational preparation	Activities that prepare youth for employment and education
	Parent component	Activities and/or curricula that involved parents or caregivers
	Booster sessions	Check-in sessions provided after program completion

### Coding Program Effects

We developed a three-tiered coding system to classify program effects. First, for each evaluation, each outcome measure meeting our study inclusion criteria was coded, within a specific outcome. Program effects for particular subgroups were coded for gender, age, and region. Second, for evaluations reporting program effects at more than one follow-up point, we then reviewed codes assigned for given outcomes across follow-up points. Third, for programs with more than one evaluation, programs were assigned a combined rating based on the ratings of each component evaluation. Figure B.3 presents coding decision rules for each of our main program ratings: "Found to Work", "Mixed Findings", and "Not Found to Work".

Figure B.3: Coding Decision Rules Used to Determine If a Program Worked

FOUND TO WORK **Programs with one pretest-posttest evaluation** were coded as "found to work" if a positive or beneficial statistically significant effect (p<0.05) was found for the full sample at the majority of associated outcome measures. If one gender represented at least 50 percent of the sample, we coded this as "Works for Females" or "Works for Males". If one nativity status represented at least 50 percent of the sample, we coded this as "Works for Native-Born" or "Works for Foreign Born".

**Programs with one evaluation that reports program effects at more than one followup point** were coded as "found to work" if a positive or beneficial statistically significant effect (p<0.05) was found for the full sample for the majority of follow-up points, suggesting improvement, or at the final follow-up point, suggesting a positive delayed impact.

**Programs with more than one evaluation** were coded as "found to work" if the majority of evaluations found the program to work for particular outcome, the program would be rated as having "Found to Work" for that outcome

MIXED FINDINGS **Programs with one pretest-posttest evaluation** were coded as "mixed findings" if an evaluation tested subgroup differences and found significant program by subgroup interactions (indicating that subgroup membership moderated program effects: for example, works for males but not females).

Programs with one evaluation that reports program effects at more than one follow-up point were coded as "mixed findings" if an evaluation included an even number of follow-up points for a given outcome measure and effects were split half and half between either "does not work" and "mixed" or between "works" and "does not work" The exception to this would be if the last follow-up point was found to have a positive/beneficial and significant impact, in which case, we would code this "works" because it is possible that improvements on this particular outcome measure take longer to achieve.

**Programs with more than one evaluation** were coded as "mixed findings" if evaluations were split between not working and working for a particular outcome.

NOT FOUND TO WORK **Programs with one pretest-posttest evaluation** were coded as "mixed findings" if a non-significant or marginally significant effect ( $p \ge 0.05$ ) was found for the majority of outcome measures, suggesting no change; or a negative or a harmful statistically significant effect (p < .05) was found, suggesting an iatrogenic effect.

**Programs with one evaluation that reports program effects at more than one follow-up point** were coded as "mixed findings" if a non-significant or marginally significant effect (p≥0,05) was found for the majority of follow-up points, suggesting no change; or negative or a harmful statistically significant effect (p<.05) was found, suggesting an iatrogenic effect. **Programs with more than one evaluation** were coded as "not found to work" if the majority of evaluations found the program did not work for a particular outcome, the program would be rated as having "Not Found to Work" for that outcome.

### **Qualitative Comparative Analysis Method**

Initially, an interocular approach was used to manually compare program components with umbrella codes for each program, by examining the number of programs using or not using a component and quantifying how many work and do not work within those categories and then (in reverse) examining the number of programs that work and do not work quantifying the number of programs using that component within those categories.

However, because this method limited our analysis to identifying single program components,

rather than a constellation of components, we ran several exploratory analyses with the qualitative comparative software, TOSMANA<sup>5</sup>. The purpose of using this type of comparative analysis software is to explore patterns in combinations of characteristics that exist in sets of cases. For the present evaluation of teen pregnancy prevention programs, two sets of cases were defined: (a) successful programs, or all programs that worked for at least one behavioral outcome (delay in the initiation of sexual intercourse, decrease in frequency of sexual activity, decrease in the number of sexual partners, use of condoms, use of hormonal birth control methods, and pregnancies), (b) unsuccessful programs, or all programs that did not work for any of these behavioral outcomes.

Combinations of characteristics (both present and absent) that distinguished successful from unsuccessful programs were examined by entering varying groups of characteristics (e.g., program duration, intensity, activities, strategies, and logistics) into the software, which then uses Boolean logic to reduce the combinations of characteristics to the minimum number possible for differentiating between successful and unsuccessful programs. The software analyzes combinations of characteristics that predict both success and failure among programs, going beyond traditional variable-based analyses to identify patterns of conditions that are present in more than one program.

We used the qualitative comparative software to first analyze combinations of program characteristics among the full set of teen pregnancy prevention programs, regardless of setting or targeted age. Next, we limited the programs included in the analysis to just those that took place in school-based settings, followed by two additional subgroup analyses, one for school-based programs targeting middle school children (ages 10-13), and one for school-based programs targeting high school adolescents (ages 14-18).

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<sup>&</sup>lt;sup>5</sup> Cronqvist, L. (2011). Tosmana: Tool for Small-N Analysis (Version 1.3.2.0.). Trier, Germany: University of Trier.

### APPENDIX C: SUMMARIES OF RCT AND QED PROGRAM EVALUATIONS

### **RCT Program Evaluations (n=17)**

- 1. ARREST
- 2. ¡CUIDATE!
- 3. DRAW THE LINE/RESPECT THE LINE
- 4. FAMILIAS UNIDAS
- 5. FAMILIES TALKING TOGETHER
- 6. <u>INFORMATION-BASED HIV/STI RISK REDUCTION INTERVENTION FOR ADOLESCENT GIRLS</u>
- 7. IT'S YOUR GAME: KEEP IT REAL
- 8. MIDDLE SCHOOL LEADERSHIP PROGAM
- 9. NORTHEASTERN ILLINOIS UNIVERSITY DROPOUT PREVENTION EDUCATIONAL PARTNERSHIP PROGRAM
- 10. POSITIVE PREVENTION
- 11. PROJECT RESPECT
- 12. PROJECT SAFE
- 13. <u>PROJECT SNAPP (SKILLS AND KNOWLEDGE FOR AIDS AND PREGNANCY PREVENTION)</u>
- 14. SISTERS SAVING SISTERS
- 15. TEEN TALK
- 16. TWELVE TOGETHER
- 17. UP WITH LITERACY

### ARREST

verview

The ARREST Program was developed to reduce the risk of AIDS among inner-city adolescents. In a random assignment study, adolescents in the ARREST intervention were compared with adolescents placed in a wait-list control group. Following the intervention, compared with control subjects, treatment subjects had significantly greater AIDS-related knowledge, greater perceived risk of becoming HIV-infected, and superior communication and assertiveness skills. In spite of ARREST's positive impact on these outcomes, treatment subjects did not report changes in their sexual behaviors. At follow-up, no significant differences were found between treatment subjects and control subjects on frequency of sexual intercourse, number of sexual partners, or use of condoms. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

Description of Program

Description of Program: The ARREST (AIDS Risk Reduction Education and Skills Training) Program was developed to reduce the risk of AIDS among inner-city adolescents. The three-session curriculum was based on the health belief model and social learning theory and had five primary objectives: 1) to provide students with information about HIV transmission and prevention; 2) to provide students with instruction on how to purchase condoms and demonstrations on how to properly use condoms with spermicide; 3) to provide students with instruction on how to evaluate their level of risk and identify situations that are associated with risk behavior; 4) to improve students' decision-making, communication, and assertiveness skills; and 5) to help students establish peer groups that will support and encourage HIV prevention and risk reduction. Each ARREST session included 30 minutes of review and question-and-answer and 60 minutes of new information. New information was presented via direct instruction, modeling, skills-building exercises, role play, and group discussion. At the end of each session, a take-home exercise was provided so that students could practice skills targeted during that session.

Target Population: Inner-city, minority adolescents.

Evaluation

*Reference*: Kipke, M., Boyer, C., & Hein, K. (1993). An evaluation of an AIDS risk reduction education and skills training (ARREST) program. *Journal of Adolescent Health*, 14, 533-539.

Program Information/Curriculum: <a href="http://www.socio.com/passt14.php">http://www.socio.com/passt14.php</a>

Evaluated Population *Evaluated Population:* A total of 87 adolescents ages 12 to 16 years from New York City served as the study sample for this investigation. Of this group, 59% of subjects were Latino and 41% were black.

Latino Population: Of the evaluated sample, 59% were Latino.

Teen Pregnancy
Outcomes

- Consistent condom use in last month
- Use of contraception at last sex
- Number of sexual partners in past month
- Currently sexually active, age at first intercourse
- Prior pregnancy
- Knowledge of STI transmission
- Negative attitudes and beliefs about the cause of AIDS
- Perceived risk of AIDS
- Self-efficacy about ability to protect themselves from HIV/AIDS
- Intercourse with a person known to have HIV
- Communication skills
- Assertiveness skills

pproach

Subjects were recruited from three community-based agencies that provided alternative educational instruction and an after-school program to high-risk youth in New York City. Subjects were randomly assigned to either the treatment group or the control. Treatment subjects were divided into groups of 10-12 adolescents and took part in three 90-minute ARREST sessions with their group. ARREST sessions were led by two AIDS educators. Control subjects were put on a wait list and were given the opportunity to take part in the ARREST intervention once the study was complete. All subjects were surveyed at baseline and again, four weeks later, following completion of the ARREST intervention. At both pretest and posttest, subjects were videotaped as they responded to three high-risk role-play scenarios. Subjects' tapes were coded for demonstrated communication and assertiveness skills.

Results

Results: Following the intervention, subjects assigned to the treatment group had increased their AIDS-related knowledge to a greater extent than had control subjects. Treatment subjects had also increased their perception that adolescents are at risk for becoming HIV-infected and decreased their negative attitudes about AIDS. Treatment students had not significantly increased their sexual self-efficacy, however. Analysis of role-play responses revealed that, compared with control subjects, treatment subjects had significantly better assertiveness and communication skills in high-risk scenarios. In spite of ARREST's positive impact on knowledge, attitudes, and assertiveness and communication skills, treatment subjects did not report changes in their sexual behaviors. At follow-up, no significant differences were found between treatment subjects and control subjects on frequency of sexual intercourse, number of sexual partners, or use of condoms. Note: One adolescent was included in preliminary analyses, but dropped from primary analyses.

Results for Latinos: There are no outcomes specifically reported for the Latino population in this sample.

### :CUÍDATE!

¡Cuídate! is an HIV risk-reduction curriculum designed for Latino adolescents. In a random assignment study, students assigned to take part in the ¡Cuídate! intervention were compared with students assigned to a control health-promotion intervention. During the 12-month follow-up period, subjects assigned to the ¡Cuídate! intervention were less likely to report having had sexual intercourse than were subjects assigned to the control intervention. ¡Cuídate! subjects were also less likely to report sex with multiple partners, more likely to report using condoms consistently, and less likely to report unprotected sex. No overall impacts were found on condom use at last sex or proportion of days of protected sex. The intervention was particularly successful with Spanish speakers. Among Spanish speakers, ¡Cuídate! participants were nearly five times as likely to have used a condom at last intercourse, compared with control subjects.

# Evaluation Description of Program

Description of Program: ¡Cuídate! (Spanish for "Take Care of Yourself") is an adaptation of the Be Proud! Be Responsible! curriculum for black adolescents. Based on social cognitive theory, ¡Cuídate! includes eight hours of instruction and focuses on increasing HIV/AIDS-related knowledge and weakening problematic attitudes toward risky sexual behavior. The lessons incorporate salient aspects of Latino culture, such as the importance of family and gender-role expectations. Abstinence and condom use are presented as culturally acceptable and effective ways to prevent sexually transmitted diseases (STIs), including HIV. Intervention activities include small-group discussions, videos, interactive exercises, and skill-building activities.

Target Population: Latino adolescents

Reference: Villarruel, A., Jemmott, J., & Jemmott, L. (2006). A randomized controlled trial testing an HIV prevention intervention for Latino youth. Archives of Pediatrics & Adolescent Medicine, 160, 772-777.

Program Information/Curriculum: http://selectmedia.org/products-page/?category=6

Population **Evaluated** 

Evaluated Population: A total of 553 Latino adolescents living in northeast Philadelphia served as the study sample for this investigation. Most subjects (85%) were Puerto Rican and nearly half (45%) were born outside the mainland United States. The majority of subjects were students in grades 8 through 11, ages 13-18.

Latino Population: The study sample was 100% Latino. Of this group, 85% were Puerto Rican and 45% were foreign born.

# **Teen Pregnancy**

- Frequency of condom use in past 3 months
- Consistent condom use
- Condom use at last intercourse

- Ever had sex, had sex in past 3 months
- Frequency of sexual intercourse in past 3 months
- Number of sexual partners in past 3 months

Subjects were recruited from three high schools and community-based organizations in Northeast Philadelphia. Non-Latino subjects were not excluded from participation but were excluded from analyses. Subjects were randomly assigned to either the treatment group or the control group. Treatment subjects took part in the ¡Cuídate! intervention over the course of two consecutive Saturdays. Control subjects took part in a health-promotion intervention that was similar to ¡Cuídate! in organization, format, length, and delivery mode. The health-promotion intervention focused on behaviors related to significant health issues affecting Latinos. Both the ¡Cuídate! intervention and the health-promotion intervention were facilitated by bilingual Latino adults, the majority of whom were Puerto Rican. All facilitators received 2.5 days of training on the intervention they were assigned to lead. All subjects were surveyed before the intervention, immediately after the intervention, and 3-, 6-, and 12-months later. Surveys measured sexual activity and condom use and were available in English and Spanish.

Results

Results: During the 12-month follow-up period, subjects assigned to the ¡Cuídate! intervention were less likely to report having had sexual intercourse than were subjects assigned to the control intervention. ¡Cuídate! subjects were also less likely to report sex with multiple partners, more likely to report using condoms consistently, and less likely to report unprotected sex. No overall impacts were found on condom use at last sex or proportion of days of protected sex. The intervention was particularly successful with Spanish speakers. Among Spanish speakers, ¡Cuídate! subjects were nearly five times as likely to have used a condom at last intercourse, compared with control subjects. The intervention also achieved success with sexually inexperienced students. Among students who entered the program having not had sex, ¡Cuídate! subjects participated in significantly fewer acts of unprotected sex than did control subjects. There were no significant differences between ¡Cuídate! subjects and control subjects among English speakers.

Results for Latinos: Same as above; the entire evaluated sample was Latino.

### DRAW THE LINE/RESPECT THE LINE

verview

Draw the Line/Respect the Line is a 3-year, school-based program for 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> graders, designed to prevent HIV, other STIs, and pregnancy. In a large-scale study of the program's effectiveness among California middle-school students, ten schools were randomly assigned to implement the Draw the Line/Respect the Line curriculum and nine schools were assigned to a control group. The program was found to have an impact on the sexual behavior of males, but not females. males from schools that taught the Draw the Line/Respect the Line curriculum were significantly less likely to start having sex than were males from control schools. Further, males from Draw the Line/Respect the Line schools had sex less frequently and with fewer partners than did males from control schools. The program failed to impact condom usage among males or females.

Description of Program

Description of Program: The Draw the Line/Respect the Line curriculum consists of 20 lessons. The 6<sup>th</sup> grade curriculum includes five lessons that primarily focus on limit-setting and refusal skills in non-sexual situations. The 7<sup>th</sup> grade curriculum includes eight lessons that shift the focus to sexual situations; students learn about the consequences associated with sexual intercourse and are encouraged to set limits regarding sex. Students are also taught intra and interpersonal skills designed to help them maintain limits and respect the limits of others. The 8<sup>th</sup> grade curriculum includes seven lessons. These lessons develop students' practical skills; in them, students learn how to use condoms and practice refusal skills in dating contexts. Lessons are highly interactive and involve a diversity of activities, including small and large-group discussions, paired and small-group skill practices, stories, and individual activities. The program is designed to be appropriate for students of all races/ethnicities.

Target Population: Middle school students.

Evaluation

*Reference*: Coyle, K., Kirby, D., Marin, B., Gomez, C., & Gregorich, S. (2004). Draw the Line/Respect the Line: A randomized trial of a middle school intervention to reduce sexual risk behaviors. American Journal of Public Health, 94(5), 843-851.

Program Information/Curriculum: <a href="http://pub.etr.org/ProductDetails.aspx?prodid=S028">http://pub.etr.org/ProductDetails.aspx?prodid=S028</a> <a href="http://www.socio.com/srch/summary/pasha/full/passt20.htm">http://pub.etr.org/ProductDetails.aspx?prodid=S028</a> <a href="http://www.socio.com/srch/summary/pasha/full/passt20.htm">http://pub.etr.org/ProductDetails.aspx?prodid=S028</a> <a href="http://www.socio.com/srch/summary/pasha/full/passt20.htm">http://www.socio.com/srch/summary/pasha/full/passt20.htm</a>

Evaluated Population

Evaluated Population: This study included 19 ethnically diverse public middle schools from an urban area of northern California were selected to participate in this study. Out of the 4,164 6<sup>th</sup> grade students enrolled at these schools, 2,829 (68%) received parental consent to participate and filled out baseline surveys. Five percent of these students were black, 16% were Asian, 59% were Latino, 17% were white, and 3% were of other ethnicities. Approximately 4% of students reported having had sexual intercourse at baseline.

Latino Population: Of the evaluated sample, 59% were Latino.

Feen Pregnancy
Outcomes

- Condom use last intercourse
- Ever had sex
- Sex in past 12 months
- Number of sexual episodes in past 12 months
- Number of sexual partners in past 12 months
- Initiation of sex

- Knowledge about HIV and condoms
- Attitudes about having sex
- Normative beliefs about sex
- · Self-efficacy to refuse sex

Approach

Study participants with parental consent completed a baseline survey during the spring of 6<sup>th</sup> grade. This survey assessed their past sexual behaviors and their sexual attitudes, beliefs, and knowledge. Ten of the 19 study schools were randomly assigned to receive the Draw the Line/Respect the Line curriculum, while the other nine schools continued implementing their existing sex education curricula. The Draw the Line/Respect the Line curriculum was taught by experienced health educators who received training in the curriculum. Follow-up surveys were administered the spring of 6th 7th, 8th, and 9th grade. Retention rates were 91%, 88%, and 64% across grades.

esults

Results: From 6<sup>th</sup>-9<sup>th</sup> grade, males from the Draw the Line/Respect the Line schools were significantly less likely to report having initiated sexual activity than males from the control schools, and the magnitude of this difference increased with time. The program had no impact on females in this regard. At every follow-up, males from the Draw the Line/Respect the Line schools were significantly less likely to have engaged in sex during the past 12 months than males from the control schools. Further, at the 8<sup>th</sup> grade follow-up, males from the Draw the Line/Respect the Line schools reported having engaged in sex significantly less frequently and with fewer partners over the past year than males from control schools. The program had no impact on any of these outcomes for females. Both males and females from Draw the Line/Respect the Line schools had greater HIV and condom-related knowledge than control students, and this difference remained significant through the 9<sup>th</sup> grade follow-up. The program had no impact on condom use by either gender of students.

*Results for Latinos:* Among Latino participants, retention was highest in the control group, despite the fact that their overall retention was lower than retention of Asians, others, and whites.

### **FAMILIAS UNIDAS**

Overview

Familias Unidas is a program that aims to increase parents' involvement in their adolescent's home- and school-life. Through facilitator-led group discussion sessions with other parents and in-home discussions with their adolescent, parents gain an understanding of the importance of their engagement, and how to use parenting skills to decrease problem behaviors. In two evaluations, there were positive impacts on adolescents' safe sexual behavior. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

Description of Program

Description of Program: Familias Unidas uses several strategies to promote parent-child engagement and interaction. Parental involvement is encouraged through offering problem-scenarios and participatory exercises. Group discussion is used to help parents understand their importance in protecting their child from harm. Program activities allow parents to interact with their child's peers, connect to their child's peer network, and facilitate their child's interaction with positive peer influences. School counselors visit parents to increase their connection with their child's school experience. Planned in-home parent-child discussion sessions are designed to strengthen bonds within the family. Parent groups meet with facilitators. During the first stage of the group, the goal is to engage parents in the program and create cohesion among the group. In the second stage, facilitators discuss parents' concerns about the child: in the family, with peers, and in school. In the third stage, parents learn the skills necessary to decrease adolescent problem behavior and increase bonding with school and academic achievement. Home visits are used during the third stage. Group facilitators have at least a master's-level education, and have an average of five years of clinical experience. Facilitators are trained in sensitivity towards Latinos and American culture. Facilitators are trained across three 8-hour days and facilitate six sessions. The program package, which includes training, adherence-monitoring and supervision, and evaluation assistance, costs \$50,000.

Target Population: Latino adolescents and their parents.

*Reference*: Pantin, H., Prado, G., Lopez, B., Huang, S., Tapia, M., Schwartz, S., Sabillon, E., Brown, C., & Branchini, J. (2009). A randomized controlled trial of Familias Unidas for Hispanic adolescents with behavioral problems. *Psychosomatic Medicine*, 71(9), 987-995.

Evaluation 1

Program Information/Curriculum:

Hilda Pantin, PhD

Center for Family Studies, Department of Epidemiology and Public Health

Miller School of Medicine, University of Miami

1425 NW 10<sup>th</sup> Ave, 3<sup>rd</sup> Floor

Miami, FL 33136

hpantin@med.miami.edu (305) 243-2343

Website: <a href="http://www.mionline.org/article.php?id=41">http://www.mionline.org/article.php?id=41</a>

**Evaluated Population** 

Evaluated Population: A total of 213 Latinos 8<sup>th</sup> grade students (136 males and 77 females) were evaluated based on high rankings according to parent reports of behavior problems. Adolescents resided with at least one Latino immigrant parent and attended at least one of three targeted, predominantly Latinos middle schools located within the Miami-Dade County, Florida, school district. Families were from low-income backgrounds (13% reported household incomes of less than \$30,000). The mean age of adolescents was 13.8 years. A slight majority of adolescents (n=93) and parents were born in Honduras (27%), Cuba (20%) and Nicaragua (16%). Of the foreign- born adolescents, 37% (n=34) had been living in the United States for less than three years, 45% (n=42) between three to 10 years, and 18% (n=17) for more than 10 years.

*Latino Population:* This sample is 100% Latino. A slight majority of adolescents (n=93) and parents were born in Honduras (27%), Cuba (20%) and Nicaragua (16%). Of the foreign-born adolescents, 37% (n=34) had been living in the United States for less than three years, 45% (n=42) between three to 10 years, and 18% (n=17) for more than 10 years.

# Feen Pregnancy Outcomes

- Sex without a condom (last intercourse, past 90 days)
- Initiation of sex
- Sex in past 90 days

- Ever contracted an STI
- Consumed drugs or alcohol before last intercourse

Approach

After meeting study inclusion criteria, 109 adolescents and their families were randomly assigned to the experimental condition, and 104 to a community control condition, in which families were given three referrals to agencies that serve youth with behavior problems. Participants were assessed at baseline, and at 6, 18, and 30 months, on a variety of measures sexual risk behaviors. Program dosage for the families in the experimental group included nine 2-hour group sessions, ten 1-hour family visits, and four 1-hour booster sessions.

Results: There were positive impacts on adolescents' condom usage. But there were no impacts on initiation of sex or on sex in Results the past 90 days. Results for Latinos: The entire evaluated sample was Latino. Evaluation Reference: Prado, G., Pantin, H., Huang, S., Cordova, D., Tapia, M., Velazquez, M., Calfee, M., Malcom, S., Arzon, M., Villamar, J., Jimenez, G., Cano, N., Brown, C., & Estrada, Y. (2012). Effects of a family intervention in reducing HIV risk among high-risk Hispanic adolescents. Archives of Pediatric and Adolescent Medicine, 166(2), 127-133. Evaluated Population: The evaluated population consisted of 242 adolescents ages 12 to 17 who: self-identified as being of **Evaluated Population** Latino origin (at least one parent had to have been born in a Spanish-speaking Central or Latin American country); had plans to remain residents of South Florida for the duration of the study; and were delinquent (defines as having been arrested or having committed at least one of the following offenses: trespassing, breaking and entering, burglary, assault, serious fighting, hazing, vandalism, possession of alcohol or a controlled substance, or possession of a weapon). These 242 adolescents also had to have a parent or primary caregiver who provided consent for their participation and who agreed to participate in the program as well. Latino Population: The sample was 100% Latino, with at least one parent who was born in a Spanish-speaking Central or Latin American country. • Unprotected vaginal sex at last intercourse Teen Pregnancy • Number of sexual partner in past 90 days Inconsistent condom use during vaginal sex in past 90 • Vaginal sex in past 90 days • STI incidence rate Using a random-numbers table, the 242 families (the adolescents and their parents or primary caregivers) were randomized into one of two groups following their completion of the baseline survey; these two groups were the Familias Unidas treatment group (120 families) or the control group (122 families). The control group, called the "community practice" group, received treatment-as-usual (that is, the standard services provided to youth and parents of delinquent youth, including the HIV prevention program provided by the local public school system). Those in the treatment group received eight 2-hour group sessions, four 1-hour family visits over a three-month period. Group sessions involved parents or caregivers only; the group **Approach** visits involved both the parents or caregivers and the adolescents. Data collection from adolescents and their parents occurred at baseline and at a follow-up 6 months post-baseline. Participants received \$60 for their completion of the baseline survey and \$70 for their completion of the follow-up survey. The primary outcome of interest was HIV risk behavior. Adolescents were first asked whether they had ever had sex; those who had were asked if they had ever had a sexually transmitted disease (STI). They were then asked about the following behaviors during the 90 days prior to the follow-up condom use during vaginal sex; condom use during anal sex; condom use during vaginal sex while under the influence of drugs or alcohol; and number of vaginal sexual partners. Results: At follow-up, adolescents who had ever had sex and who were in the Familias Unidas group were less likely than their counterparts in the control group to report inconsistent condom use during vaginal or anal in the previous 90 days. Likewise, they reported fewer instances of unprotected sex while under the influence of alcohol or drugs. They were also less likely to Results report that their most recent vaginal or anal sex occurred without a condom. Further, they were less likely to report ever having an STI (however this should be interpreted with caution due to the small number of participants who reported contracting an

*Reference:* Prado, G., Pantin, H., Briones, E., Schwartz, S., Feaster D., Huang, S., Sullivan, S., Tapia, M., Sabillon, E., Lopez, B., & Szapocznik, J. (2007). A randomized controlled trial of a parent-centered intervention in preventing substance use and

HIV risk behaviors in Hispanic adolescents. Journal of Consulting and Clinical Psychology, 75(6), 914-926.

STI), and they had significantly fewer partners in the previous 90 days.

Results for Latinos: The entire evaluated sample was Latino.

# **Evaluated Population**

Evaluated Population: A sample of 266 Latino 8<sup>th</sup> graders and their primary caregivers across two cohorts (one from May 2001-July 2004 and one from May 2002-July 2005). Adolescent participants had an average age of 13.4 years and their parents had a mean age of 40.9 years. Of the 266 adolescents, 128 were male and 138 were female; 34 of the enrolled parents were male and 232 were female. Over 81% of the families reported annual incomes of less than \$30,000.

Latino Population: The sample was 100% Latino. Of this group, 40% of the adolescents were born in the United States. Parents and non-native born adolescents were from Cuba (40%), Nicaragua (25%), Honduras (9%), Columbia (4%), and other Latino countries (22%). Of the foreign-born adolescents, 50% had lived in the United States for less than three years. Thirty-four% of adolescents had lived in the United States for between three and ten years and 16% had lived in the United States for more than ten years. The parents of the adolescents who were born in the United States were from Nicaragua (33%), Cuba (20%), and Honduras (12%).

# Feen Pregnancy Outcomes

- · Ever had sex
- Had sex within the previous 90 days
- Had unprotected sex (sex without a condom) in the last 90 days
- Had consumed drugs or alcohol before last intercourse
- Had ever contracted a sexually transmitted disease

### roach

Participants were recruited from their 7<sup>th</sup> grade homeroom classrooms with a letter from study staff. Interested parents contacted study staff and were screened to see if they met the eligibility criteria: at least one parent was born in a Spanish-speaking country in the Americas, the child was attending school at one of three participating middle schools, the adolescent would be in the 8<sup>th</sup> grade in the next school year, neither the adolescent or parent had been hospitalized for psychiatric reasons, the family would not be moving out of the area in the next 3 years, the adolescent was living with the primary caregiver, and the caregiver could attend weekly weekday meetings. Using an urn randomization computer program, participants were randomly assigned to one of three treatment groups. The groups were randomized to ensure balance on gender, years living in the United States, having initiated substance use, and having initiated oral, vaginal, or anal sex. The three treatment groups were: Familias Unidas + PATH, English for Speakers of Other Languages (ESOL) + PATH, or ESOL + HeartPower! For Latinos (HEART). In the two comparison groups, ESOL acted as an attention control for Familias Unidas and HEART was an attention control for PATH. Participants participated in their group's first program from September and December of the intervention period and then participated in the second program from January to April. Both programs were administered in Spanish. Adolescents completed computer-assisted self-administered surveys at baseline and at 6, 12, 24, and 36 months post baseline. Questions about sexual risk behaviors were from Jemmott et al.'s Sexual Behavior instrument. Parents were interviewed by trained Latino interviewers with family functioning items. Parents chose whether to complete the surveys or interviews in English or Spanish. Forty-one percent of adolescents and all parents chose to be assessed in Spanish.

### Results

Results: Adolescents in Familias Unidas + PATH had statistically lower rates of STI infection than adolescents in the other two groups; however very few adolescents in any group reported having had an STI. Adolescents in Familias Unidas + PATH reported significantly lower incidences of unsafe sex (defined as unprotected sex at last intercourse and alcohol or drug use before last intercourse) than adolescents in the ESOL + PATH group (19% vs. 44%). There was no impact on initiation of sex. Too few adolescents reported having sex in the previous 90 days to allow analyses of these items, but initial analyses suggest no program effects.

Results for Latinos: The entire evaluated sample was Latino.

### **FAMILIES TALKING TOGETHER**

Overview

Families Talking Together is a parent-based intervention program aimed at preventing risky sexual behavior among Latino and black adolescents. The program's intervention is delivered to mothers in a pediatric clinic setting while they wait for their children to complete a routine doctor's visit. The intervention consists of a 30-minute meeting between the mother and a social work interventionist. After the intervention, the mother is given materials to help start a discussion with their child about sexual activity. A randomized control trial found statistically significant evidence that participation in the intervention was associated with reduced rates of beginning sexual intercourse and frequency of sexual intercourse. There was marginally statistically significant evidence that participation in the intervention reduced adolescent rates of oral sex. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

Description of Program

Description of Program: Families Talking Together consists of a brief parental intervention given to mothers in a pediatric clinic while their child completes a routine physical examination. While the adolescent child is with the doctor, the mother is led to a private room where she meets with a social work interventionist for 30 minutes. In the meeting, the social work interventionist gives the mother materials to start discussions about sexual activity with their child and shows the mother how to use the materials. The written materials consist of a manual with nine modules (adolescent development, self-esteem, parental self-efficacy for communication, parenting strategies for reducing adolescent sexual risk-taking, improving the parent-adolescent relationship, adolescent assertiveness skills for peer pressure, adolescent sexual behavior, health consequences of adolescent sexual activity, and birth control). The intervention and materials encourage mothers to speak to their child about the social impacts of sexual activity, which are perceived as more important by adolescents than health outcomes. After the intervention, the mother meets with their child's doctor to discuss the examination; during this meeting the doctor endorses the Families Talking Together program. Following the intervention, mothers get two "booster" calls; the first call is one month after the intervention and the second is five months after the intervention. During the calls, mothers are asked if they have reviewed the intervention materials, then the social work interventionist answers any questions the mother has and reminds the mother to discuss the materials with their child.

Target Population: Latino and black adolescents, ages 11- to 14-year-olds and their mothers.

Evaluation 1

*Reference:* Guilamo-Ramos, V., Bouris, A., Jaccard, J., Gonzalez, B., McCoy, W., & Aranda, D. (2011). A parent-based intervention to reduce sexual risk behavior in early adolescence: Building alliances between physicians, social workers, and parents. *Journal of Adolescent Health*, 48, 159-163.

Program Information/Curriculum: Program information and curriculum materials unavailable.

Evaluated Population Evaluated Population: A total of 264 Latino and black mother-adolescent dyads (133 dyads in the experimental group and 131 dyads in the control group) were evaluated. The sample was 85% Latino, and 73% of the parents and 63% of the adolescents reported speaking mostly Spanish at home. While 23% of the mothers were born in the United States, 71% of the youth were born in the United States. The average age of the parents was 40.7 years and the average age of the adolescents was 12.9 years.

*Latino Population:* Of the evaluated sample, 85% is Latino; 23% of the mothers were born in the United States, 71% of the youth were born in the United States.

Teen Pregnancy
Outcomes

- Initiation of vaginal sex
- Frequency of vaginal sex in the previous 30 days
- Given or received oral sex
- Consistency of condom use

Approach

The mother-adolescent dyads were recruited by a bilingual researcher in the waiting room of a community pediatric clinic in the Bronx neighborhood of New York City. Dyads who agreed to participate were screened to ensure the mother was the primary female caregiver of the child and lived with the child. Data on the adolescents' sexual behavior was collected with surveys at enrollment and nine months after the parent intervention. Information was collected at both time points on whether the adolescent had ever had vaginal sexual intercourse, the frequency with which they had vaginal sexual intercourse, and whether they had ever performed or received oral sex from a member of the opposite sex. Mothers also completed a survey when enrolled into the study about their parenting practices.

Results

Results: Families Talking Together significantly reduced rates of transitioning to sexual activity. In the nine months after the intervention, rates of sexual activity for adolescents whose mothers received the intervention stayed at 6% while rates of sexual activity among adolescents in the control group increased from 6% to 22%. At the nine month survey, the frequency of sexual intercourse among adolescents in the control group increased from 1.01 to 1.53 while rates among the intervention group did not increase. Rates of oral sex were also reduced, but these results were only marginally significant. Analysis of consistent condom use was not possible due to an insufficient number of cases to meaningful evaluate. No results specific to Latino participants were reported.

Results for Latinos: There are no specific outcomes reported for the Latino population included in the sample.

Evaluation 2

*Reference:* Guilamo-Ramos, V., Jaccard, J., Bouris, A., Gonzalez, B., Casillas, E., & Banspach, S. (2011). A comparative study of interventions for delaying the initiation of sexual intercourse among Latino and black youth. *Perspectives on Sexual and Reproductive Health*, 43(4), 247-254.

Evaluated Population

Evaluated Population: The evaluated population consisted of 2,016 Latino and black mother-adolescent dyads from five middle schools in the New York neighborhoods of Harlem and the Bronx. Dyads included a Latino or black adolescent enrolled in 6<sup>th</sup> or 7<sup>th</sup> grade at the time of enrollment and a mother (defined as an adult female who lived in the household with and who was a primary caregiver of the adolescent). Of the dyads, 75% were Latino, and 25% were black. Of the adolescents, 77% were native-born, and 32% reported speaking Spanish as a primary language at home. Half of the adolescents were male. The mothers had a mean age of 40.1 years and the adolescents had a mean age of 12.2 years.

*Latino Population:* Of the evaluated sample, 75% were Latino sample; 77% were native-born, and 32% reported speaking Spanish as a primary language at home.

# Teen Pregnancy Outcomes

- Mother-adolescent communication about sex
- · Ever had intercourse

### • Frequency of intercourse in past 30 days

## proach

The dyads were randomly assigned via a computer program to one of three intervention groups: a parent-adolescent Families Talking Together group, an adolescent-only Making a Difference! group (more information about this program can be found here), and a combined parent-adolescent Making a Difference! + Families Talking Together (MAD+FTT) group. Of the evaluated sample, 666 mother-adolescent dyads were assigned to the Families Talking Together intervention, 679 to the Making a Difference! intervention, and 671 to the MAD+FTT intervention. On the first day of the school-based intervention, the Families Talking Together manual was distributed to the mothers in that intervention group, and the corresponding modules were discussed. During the same time, the first five modules of Making a Difference! were implemented to that intervention group and to the combined intervention group. For the Families Talking Together group, the second program day included a review of content and a focus on the homework assignments. On the second day, those in the Making a Difference! group and the combined group covered the remaining modules. Those in the Families Talking Together group also received one- and six-month "booster" calls. Mother-adolescent dyads who could not attend the school-based sessions were provided with a home visit to complete the interventions. Self-administered questionnaires were completed at baseline and at a 12-month follow-up to assess sexual initiation, frequency of sexual intercourse in the past 30 days, and mother-adolescent communication about sex.

esults

Results: At baseline, 8% of those in the Families Talking Together had initiated sex, 5% in the Making a Difference! group, and 8% of the MAD+FTT group. Among those who had had sex, the mean frequency of sexual intercourse in the past month was just over two times for each of the three groups. At 12-month post-intervention, there were no differences in sexual initiation, comparing those in the Families Talking Together group, the Making a Difference! group, and the MAD+FTT group. There were also no differences in frequency of sexual intercourse, among those who had already initiated sex at baseline. There were no differences between the Families Talking Together group and the MAD+FTT group. However, there were differences between groups in terms of mother-adolescent communication about sex: the adolescents in either of the two Families Talking Together groups were more likely than those in the adolescent-only Making a Difference! group to have ever talked with their mother about sex.

Results for Latinos: There are no outcomes specifically reported for the Latino population in this sample.

### INFORMATION-BASED HIV/STI RISK REDUCTION INTERVENTION FOR ADOLESCENT GIRLS

Overview

The information-based HIV/STI risk reduction program is designed to reduce the risk of unprotected sexual intercourse among sexually experienced Latino and black adolescent females. The program provides information related to on HIV and STI risk reduction via culturally- and developmentally-appropriate small group sessions. An experimental evaluation of information-based risk-reduction program found that participation in the program had a marginally significant positive impact on whether the participants had multiple sexual partners in the prior three months. It also found a significant positive impact on HIV/STI risk reduction knowledge, condom-use knowledge, condom hedonistic beliefs, technical skill beliefs, impulse control beliefs, and condom use intention.

Description of Program

Description of Program: The information-based HIV/STI risk-reduction intervention is a brief, small-group program that aims to promote HIV/STI risk reduction among black and Latina female adolescents. It is designed to be both culturally- and developmentally-appropriate. The program is administered over three, 250-minute sessions. Program content addresses HIV/STI transmission, the elevated risk of HIV/STI among inner-city minority female adolescents, and personal HIV/STI vulnerability. The program stresses the importance of condom use and rebuts the belief that condoms interfere with sexual enjoyment. The program discusses diverse messages about sex to which females are exposed and promotes personal responsibility for sexual risk reduction in romantic relationships. Program content is delivered via group discussion, videotapes, and demonstration models of condom use.

Target Population: Sexually experienced black and Latino adolescent females

Evaluation

*Reference:* Jemmott, J. B., Jemmott, L. S., Braverman, P. K., & Fong, G. T. (2005). HIV/STI risk reduction interventions for black and Latino adolescent girls at an adolescent medicine center: A randomized control trial. *Archives of Pediatrics and Adolescent Medicine*, *159*, 440-449.

Program Information/Curriculum: http://www.selectmedia.org/programs/sisters.html

Evaluated Population Evaluated Population: The evaluated population included 682 sexually-experienced adolescent females (463 black and 219 Latino) who were recruited from an adolescent medical clinic in Philadelphia, PA. The participants were ages 12 to 19 (mean age of 15.5), and all could read and speak English. Participants were eligible for the study if they were not currently pregnant and were not planning to move from the area of the clinic.

Latino Population: Of the evaluated sample, 32% were Latino. Of the Latino participants, 93% were Puerto Rican.

Feen Pregnancy
Outcomes

- Number of days in last three months in which had unprotected sex
- Number of sexual partners in last three months
- STI (testing positive)
- HIV/STI risk reduction knowledge
- Condom-use knowledge

- Condom hedonistic beliefs
- Condom use intention
- Technical skill beliefs
- Impulse control beliefs
- · Negotiation beliefs

Approach

Participants who volunteered for a "Women's Health Project" initiative to reduce health risks in the black and Latino populations were recruited from a low-income, inner-city adolescent medical clinic in a hospital in Philadelphia, PA. Participants were stratified by age and randomly assigned to one of two treatment groups or a control group. The first treatment group received the <u>Sisters Saving Sisters</u> program (the skill-based HIV/STI risk-reduction program) and the second received the information-based HIV/STI risk-reduction program. The control group received a "health-promotion" intervention that focused on behavioral risk reduction for heart disease, cancer, and stroke. Participants received \$40 for participating in the programs. Self-reported data for outcome measures were collected at baseline and then at 3, 6, and 12 months after the intervention (and STI tests for gonorrhea, Chlamydia, and trichomoniasis were administered at 6 and 12 months).

Results

Results: Compared with the control group, there were no impacts of the information-based program on the number of days that the adolescent reported having unprotected sex in the prior three months. There were also no impacts on the number of partners in the prior three months, negotiation beliefs or STI infection. At the 12-month follow-up only, those in the information-based risk reduction group were marginally less likely to have multiple partnerships in the prior three months than those in the control group. There were positive impacts on HIV/STI risk reduction knowledge, condom-use knowledge, condom hedonistic beliefs, technical skill beliefs, and impulse control beliefs.

Results for Latinos: There were no differences among the black and Latino populations in terms of STI rates or sexual risk behavior. However, the information-based intervention had a greater impact on increasing hedonistic beliefs among Latino participants than black participants (when compared to the control intervention). Additionally, the information-based intervention had a greater impact on increasing HIV/STI knowledge on Latino participants than black participants (when compared to the skill-based intervention).

#### IT'S YOUR GAME: KEEP IT REAL!

verview

It's Your Game: Keep it Real is a school-based HIV, STI, and pregnancy prevention program that targets middle school students. Through grade-specific curricula that utilize both group and individual components, the program encourages students to set limits on their personal risk behaviors and to use refusal skills, while also providing information on puberty, safe sex, dating, and STIs, HIV, and pregnancy. A parent-child homework component is also used at both grade levels to help encourage dialogue on relevant topics. An experimental evaluation of IYG found that the program was successful in significantly reducing the proportion of those in the program group who had initiated sex from 7<sup>th</sup> to 9<sup>th</sup> grade. The program also had significant impacts on initiation of oral and anal sex, as well as on certain psychosocial outcome measures (e.g., general beliefs about waiting to have sex, self-efficacy to use condoms).

ription of Progran

Description of Program: The intervention consists of twelve, 45-minute school-based sessions, conducted in the 7<sup>th</sup> grade and then in the 8<sup>th</sup> grade. For both grade levels, lessons utilize both group-based and individual activities, the latter of which includes keeping a personal journal (to express opinions and feelings) and working through program material on laptop computers (educational activities on determinants of sexual risk-taking that specifically adapt to gender and sexual experience differences). Classroom sessions are based around teaching students decision-making life skills that revolve around selecting personal limits for engaging in risky behaviors, detecting warning signs of situations that could challenge those limits, and protecting limits by utilizing refusal skills and other strategies (Select, Detect, Protect paradigm). For the 7<sup>th</sup> grade curriculum, topics are covered that include setting personal limits and practicing refusal skills for sexual behavior and in a general context (e.g., skipping school, cheating, drug and alcohol use), characteristics of healthy relationships, and information on puberty, sex, and STIs. The 8<sup>th</sup> grade curriculum includes these same topics, as well as the importance of STI, HIV, and pregnancy tests for sexually active individuals, training for contraceptive/condom use, and healthy dating relationships. All lessons are conducted by trained facilitators. A separate parent-child homework component is also built into both the 7<sup>th</sup> and 8<sup>th</sup> grade versions of the program. Activities are designed to initiate and encourage dialogue between parents and their children on topics that include sexual behavior, dating, and friendship qualities.

Target Population: Middle school students.

Evaluation

*Reference:* Tortolero, S., Markham, C., Peskin, M., Shegog, R., Addy, R., Escobar-Chaves, S., & Baumler, E. (2010). It's your game. Keep it real: Delaying sexual behavior with an effective middle school program. *Journal of Adolescent Health*, 46(2), 1-19.

Program Information/Curriculum: https://sph.uth.edu/iyg

Evaluated Population Evaluated Population: Participants consisted of 907 7<sup>th</sup> grade students (average age = 13 years) from ten urban, low-income, middle schools in Texas. Fifty-nine percent of the total sample was female; 42% of the sample was black, and 44% was Latino. The authors made an a priori decision to define the analysis sample as comprised of all students who took the 8<sup>th</sup> grade survey. These students were followed into more than 50 high schools to collect follow-up data.

Latino Population: Of the evaluated sample, 44% were Latino.

**Feen Pregnancy Outcomes** 

- Sexual initiation (vaginal, oral and anal sex)
- Vaginal sex in past 3 months
- Number of lifetime partners (vaginal, oral and anal sex)
- Number of partners in last 3 months (vaginal and anal)
- Number of partners in last 3 months without a condom
- Number of times having sex in last 3 months without effective pregnancy prevention (not defined)
- Condom use at last vaginal sex
- Number of times having sex without condom in last 3 months (vaginal and anal)

- Beliefs about waiting to have sex
- Self-efficacy to refuse sex
- Intention to have sex (vaginal or oral) in next year
- · Condom knowledge
- · STI knowledge
- HIV/STI knowledge
- Intentions to remain abstinent until end of high school
- Intention to remain abstinent until marriage
- · Perceived friends' sexual behavior
- Perceived friends' beliefs about waiting to have sex
- Perceived friends' beliefs about condoms

pproach

Each of the ten schools selected for the study were randomized into either the intervention (n=349 students) or control (n=558 students) conditions, at which point students were recruited. Significant differences did exist between groups at baseline in terms of race/ethnicity and age. Students assigned to the control condition continued to receive their regular health classes, which were school-specific. To evaluate the program's effectiveness, student self-report data were collected using audio-computer assisted interviews on participation and initiation of sexual activity (oral, vaginal, anal), as well as for the following psychosocial outcomes: general beliefs about waiting to have sex; beliefs about abstinence until marriage; perceived friends' beliefs about waiting to have sex; perceived friends' sexual behavior; self-efficacy to refuse sex; condom knowledge; perceived friends' beliefs about condoms; self-efficacy to use condoms; exposure to risky situations; STI signs/sex knowledge; HIV/STI knowledge; reasons to have sex; reasons not to have sex; intention to have oral sex in next year; intention to have vaginal sex in next year; intention to be abstinent through high school; and intention to remain abstinent until marriage. Data were collected at baseline and at the 9<sup>th</sup> grade follow-up (approximately 24 months later). Only students who reported sexual activity in the past

controls were included, for baseline measures of outcomes as well as for confounding variables specific to each dependent variable.

Results: At the 9<sup>th</sup> grade follow-up, sexual initiation was assessed among the participants who had reported having no sexual experience at the 7th grade baseline; a significantly lower proportion of the intervention group reported initiating sex than in the control group (30% vs. 23%). In looking at specific types of sex, the intervention group had significantly lower proportions initiating oral and anal sex. There were no significant differences between conditions for initiation of vaginal sex. Significant differences were also found in the subgroup analyses. On overall reports of initiating sex, significant positive impacts were found for Latinos and females, but not for males and blacks. For initiation of oral sex, significant positive impacts were found for blacks and females, and for initiation of anal sex, these impacts were found for blacks, males, and females. Latinos were the only subgroup to have significant positive differences for initiation of vaginal sex. Significant difference was also found in the subgroup analyses for students who engaged in specific sexual behaviors in last 3 months at 9-month follow-up. There was a positive impact on frequency of vaginal sex in past three months. There were no significant differences between conditions for any of the measures for number of sexual partners, condom use, nor contraceptive use. Psychosocial outcomes for the intervention and control conditions were compared for both the 8<sup>th</sup> and 9<sup>th</sup> grade levels. For the 8<sup>th</sup> grade level, significant positive impacts were found for beliefs about abstinence until marriage, perceived friends' beliefs about waiting to have sex, self-efficacy to refuse sex, condom knowledge, self-efficacy to refuse condoms, exposure to risky situations, STI signs/sex knowledge, HIV/STI knowledge, reasons not to have sex, and intention to have oral sex within the next year. For the 9<sup>th</sup> grade level, significant positive differences were found for beliefs about abstinence until marriage, perceived friends' sexual behavior, condom knowledge, perceived friends' beliefs about condoms, exposure to risky situations, STI signs/sex knowledge, and HIV/STI knowledge. No significant differences were found at either grade level for general beliefs about waiting to have sex, reasons to have sex, intention to have vaginal sex in the next year, and intention to remain abstinent until marriage.

three months provided self-report data on additional measures of sexual behaviors. Multi-level models were estimated, and

*Results for Latinos:* Latinos were the only subgroup to have significant positive differences for initiation of vaginal sex. Additionally, Latino participants in the control condition were 64% more likely to initiate sex than Latino participants in the intervention condition, when controlling for covariates.

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### MIDDLE SCHOOL LEADERSHIP PROGRAM

Overview

Middle School Leadership Program is a leadership workshop that meets weekly. It is designed for eighth graders who have poor grades in math and English, have high absenteeism, or are at-risk for dropping out of school. The workshops are aimed at improving communication skills, facilitating school engagement and easing the transition into high school. An evaluation of the program found it to lack significant impacts on pregnancy in the past year. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

# Description of Program

Description of Program: Middle School Leadership Program is a leadership workshop that meets weekly. The workshops are aimed at improving communication skills, facilitating school engagement and easing the transition into high school. The workshops consist of discussions on trust, values, self esteem, decision-making, and personal expectations. Estimated costs per student each month are \$33.

*Target Population:* Eighth grade students with poor school attendance, low academic grades, have leadership potential and had been suspended in past year.

Evaluation

*Reference:* Dynarski M, Gleason P, Rangarajan A, & Wood R. (1998). *Impacts of dropout prevention programs, final report.* Washington, D.C.: Mathematica Policy Research, Inc.

Hershey, A. M., Adelman, N., & Murray, S. (1995). *Helping kids succeed: Implementation of the School Dropout Demonstration Assistance Program*. Princeton, New Jersey: Mathematica Policy Research, Inc., from <a href="http://mathematica-mpr.com/publications/PDFs/education/helpkids dropout prevention.pdf">http://mathematica-mpr.com/publications/PDFs/education/helpkids dropout prevention.pdf</a>

Program Information/Curriculum: Program information and curriculum materials unavailable.

### Evaluated Population

Evaluated Population: The study sample comprised 334 students in 8<sup>th</sup> grade with middle school absenteeism, low math and English grades. The study took place in Albuquerque, New Mexico. Among the treatment group, 64% were females, 73% were Latino, and 20% had a mother with less than a high school education.

Latino Population: Of the evaluated sample, 73% were Latino.

## Teen Pregnancy Outcomes

• Pregnancy within the past year

# Approacl

Students were randomly assigned to the Middle School Leadership Program (n=215) or to a control group (n=119). Students assigned the control group were permitted to participate in other educational programs. Students were assessed at baseline as well as approximately 18 months and 30 months later. (The first cohort was followed for three years while the second cohort was followed for two years.) Pregnancy in the last year was assessed through self-report. Students also completed survey questions about student and parent characteristics, including age, race, parent's educational attainment and employment status, and receipt of public assistance.

Results

Results: There were no significant impacts on pregnancy in the last year.

Results for Latinos: There are no outcomes specifically reported for the Latino population included in this sample.

### NORTHEASTERN ILLINOIS UNIVERSITY DROPOUT PREVENTION EDUCATION PARTNERSHIP PROGRAM

Overview

Northeastern Illinois University Dropout Prevention Educational Partnership Program is an in-school program for students grade eight through twelve designed to engage students academically. It targets students with low test scores who are behind grade level. The program consists of block scheduling with small class sizes, group activities and team teaching. Grouped classes include English, life science, algebra, art and homeroom. In addition to grouped classes, other program components include counseling, tutoring and additional resources such as a connection to social service agencies. An evaluation of the program found it to lack significant impacts on pregnancy in the past year in year two of the program, and have negative significant impacts in Year 3. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

### Description of Program

Description of Program: Northeastern Illinois University Dropout Prevention Educational Partnership Program is an in-school program for students grade eight through twelve designed to engage students academically. It targets students with low test scores who are behind grade level. The program consists of block scheduling with small class sizes, group activities and team teaching. Grouped classes include English, life science, algebra, art and homeroom. In addition to grouped classes, other program components include counseling, tutoring and additional resources such as a connection to social service agencies.

Target Population: Students grades eight through twelve who have low test scores and are behind grade level.

Reference: Dynarski M, Gleason P, Rangarajan A, & Wood R. (1998). Impacts of dropout prevention programs, final report. Washington, D.C.: Mathematica Policy Research, Inc.

# Evaluation

Hershey, A. M., Adelman, N., & Murray, S. (1995). *Helping kids succeed: Implementation of the School Dropout Demonstration Assistance Program*. Princeton, New Jersey: Mathematica Policy Research, Inc., from <a href="http://mathematica-mpr.com/publications/PDFs/education/helpkids\_dropout\_prevention.pdf">http://mathematica-mpr.com/publications/PDFs/education/helpkids\_dropout\_prevention.pdf</a>

Program Information/Curriculum: Program information and curriculum materials unavailable.

# Evaluated Population

Evaluated Population: The study sample comprised 171 students in eighth through twelfth grade who are behind grade level and have low test scores. The study took place in Chicago, Illinois. Among the treatment group, 51% were females, 86% were Latino, and 52% had a mother with less than a high school education.

Latino Population: Of the evaluated sample, 86% were Latino.

# Teen Pregnancy Outcomes

• Pregnancy within the past year

# Approach

Students were randomly assigned to the Northeastern Illinois University Dropout Prevention Educational Partnership Program (n=106) or to a control group (n=65). Students assigned the control group were permitted to participate in other educational programs. Students were assessed at baseline as well as approximately 18 months and 30 months later. (The first cohort was followed for three years while the second cohort was followed for two years.) Pregnancy in the last year was assessed through self-report. Students also completed survey questions about student and parent characteristics, including age, race, parent's educational attainment and employment status, and receipt of public assistance.

Results

*Results:* At year two follow-up there was no significant impact on pregnancy in the last year. However at year three follow-up there was a significant negative impact on pregnancy in the last year for females in the evaluated group.

Results for Latinos: There are no outcomes specifically reported for the Latino population included in this sample.

### POSITIVE PREVENTION

Overview

Positive Prevention is an HIV/STI prevention education curriculum for high school students. In a random assignment study, students in classes assigned to receive the Positive Prevention curriculum were compared with students in classes assigned to a control group. Among students who were sexually inexperienced at baseline, students from Positive Prevention classrooms were significantly less likely than control students to have initiated sexual activity over the six-month follow-up period. Students in the treatment group increased their self-efficacy to abstain from sex and their self-efficacy for condom use.

# Description of Program

Description of Program: The Positive Prevention curriculum consists of six lessons, each 45 minutes in length. Lessons address myths and stereotypes associated with HIV, the effects of HIV, risk behaviors related to HIV, communication and refusal skills, and community resources for HIV testing and counseling. Students developed personal contracts to avoid HIV/STIs. Though all lessons emphasize the message that students should protect themselves by abstaining from sex altogether, condom use skills are taught. There are three adaptations of the Positive Prevention program. The first, as opposed to being abstinence focused, is a comprehensive sex education program which includes discussion of contraceptives. The second adaptation is geared towards special populations and involves more simplified texts and activities and an added focus on personal hygiene. The third is adapted to be implemented independently or at home. To date none of these adaptations of Positive Prevention have been rigorously evaluated.

Target Population: 9<sup>th</sup> through 12<sup>th</sup> grade students.

Evaluation

Reference: LaChausse, R.G. (2006). Evaluation of the Positive Prevention HIV/STI curriculum. American Journal of Health Education, 37(4), 203-209.

Program Information/Curriculum: <a href="http://www.positiveprevention.com/index.html">http://www.positiveprevention.com/index.html</a>

### Evaluated Population

Evaluated Population: A total of 287 9<sup>th</sup> grade students from four Southern California high schools served as the study sample for this investigation. Of this group, 16% of students were black; 60% were Latino; 10% were white; 3% were Asian American; 2% were Native American; and 9% were of another ethnicity. At baseline, 12% of students reported already having had sexual intercourse.

Latino Population: Of the evaluated sample, 60% were Latino.

### Feen Pregnancy Outcomes

- Frequency of condom use in past 2 months
- Frequency of sexual intercourse in past 2 months
- Knowledge of HIV/AIDs
- Self-efficacy to abstain from sexual activity
- Attitudes towards abstaining from sexual intercourse
- Self efficacy of condom use
- Initiation of sexual intercourse

Approach

Classes of students were randomly assigned to the treatment group or the control group. Classes assigned to the treatment group received the Positive Prevention curriculum as part of their physical science class. Classes assigned to the control group did not receive this curriculum. All students completed baseline surveys before the program began. Students completed follow-up surveys one month and six months after completion of the curriculum. Students who indicated that they did not answer survey questions honestly were excluded from analysis.

sults

Results: Among those students who reported being sexually inexperienced at baseline, only 9% of students in Positive Prevention classes reported having initiated sexual intercourse by the 6-month follow-up, compared with 24% of students in control classes. This constituted a significant difference, and the computation of odds ratios revealed that, among virgins at baseline, students in the control group were five times more likely than students in the treatment group to have had sex after six months. Over the 6-month follow-up period, treatment students increased their self-efficacy to abstain from sexual activity and to use condoms to a greater extent than did control students. Among sexually active students, non-experimental analyses found the Positive Prevention program was not associated with increases in condom use or decreases in sexual activity, however. The Positive Prevention program had no impact on students' knowledge about HIV/AIDS or their attitudes toward abstaining from intercourse. Note: Analyses did not take into account that randomization occurred at the level of the classroom.

Results for Latinos: There are no outcomes specifically reported for the Latino population included in this sample.

#### PROJECT RESPECT

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Project RESPECT is a counseling intervention aimed at reducing HIV risk behaviors in high-risk adult populations. An amended version of Project RESPECT was developed in conjunction with Project RESPECT developers and was designed for use with black and Latina inner-city adolescents. This amended Project RESPECT consists of one brief counseling session on reducing STI risk. An evaluation found that participation in the intervention, when paired with a video on HIV infection and condom use, was associated with an increased likelihood of adolescents having used condoms at last intercourse with their main partner at three months after the intervention.

### Description of Program

Description of Program: Project RESPECT consists of one 15-20 minute interactive counseling session with a trained health care assistant at a clinic. Goals of the session include exploring the adolescent's STI risk behaviors, identifying risk-reduction techniques, discussing barriers to the techniques, creating goals and a realistic STI risk reduction plan, and identifying resources to reduce STI risk and improve follow through on the risk reduction plan.

Target Population: Black and Latina urban adolescent females

Evaluation

*Reference:* Roye, C., Silverman, P., & Krauss, B. (2007). A brief, low-cost, theory-based intervention to promote dual method use by black and Latina female adolescents: A randomized clinical trial. *Health Education & Behavior*, *34*(4), 608-621.

Program Information/Curriculum: <a href="http://www.cdc.gov/hiv/topics/research/respect/">http://www.cdc.gov/hiv/topics/research/respect/</a>

# Evaluated Population

Evaluated Population: All participants were black or Latina females of 15- to 21-years-old average age was 18), not pregnant or known to be HIV positive, and spoke English. Participants were using or were about to start using hormonal contraception at enrollment: 34% were using oral contraceptives, 14% Depo-Provera, 4% Norplant, 2% the Lunelle injection, and 1 female had an IUD. Forty-seven percent used a condom at last vaginal intercourse with main partner; 58% used a condom at last vaginal intercourse with a casual partner.

Latino Population: Of the evaluated sample, 55% were Latina.

## Teen Pregnancy Outcomes

- Condom use at last intercourse with main partner
- Self-report of STI infection
- Belief that participant would contract HIV in the future
- Number of casual partners

- Communication with partners about their sexual history
- Self-efficacy for condom use
- Asking the main partner if he had been tested for HIV or about his STI history

# Approach

A sample of 400 female adolescents was recruited from a New York City Planned Parenthood location. Due to high attrition rates, only 221 females (55% of the original sample) participated in a 3-month follow-up and 197 females (49% of the original sample) participated in a 12-month follow-up. Seventy percent of enrolled participants completed a computer-based baseline study at enrollment. Along with the amended Project RESPECT program, the evaluation also tested a video intervention. This involved watching a brief (21-minute) video which showed two black and Latina females describing the circumstances of their HIV infection and then addressing barriers to condom use. Participating females were randomized into one of four groups: the amended Project RESPECT intervention group, the video intervention group, the amended Project RESPECT + video intervention group, or a control group. All participants completed a questionnaire amended from the Project RESPECT questionnaire 3 and 12 months post intervention. Questionnaire topics included condom self-efficacy, types of intercourse and protected and unprotected sexual acts in the previous two months and types of male partners (main, casual, and new).

Results: At the 3-month follow-up, there was some evidence that those in the amended Project RESPECT + video intervention group were significantly more likely to have used a condom at last vaginal intercourse with a main partner; the result was significant with a chi-square analysis, but only marginally significant with logistic regression. However, this was not sustained at the 12-month follow-up. At three months, females in the amended Project RESPECT intervention + video intervention group were more likely to report that they could get their partner to use a condom. This outcome was marginally significant at the 12-month follow-up. There were too few females reporting having a casual partner to allow for an analysis of this outcome. There were no significant findings for any other outcomes. There was some evidence that the amended Project RESPECT intervention + video intervention was more effective for Latina as compared with black participants. While there was no statistically significant difference in reported condom use at last vaginal intercourse with a main partner for the two racial groups at baseline or at the 3-month follow-up, there was a larger increase in condom use relative to the control group at the 12-month follow-up for Latinas. At 12 months, 53% of Latinas in the amended Project RESPECT + video intervention group reported condom use, as opposed to 33% of Latinas in the control group. Fifty-three percent of black females in the amended Project RESPECT + video intervention group reported using a condom at 12 months, as opposed to 43% of black females in the control group.

#### PROJECT SAFE Overview Project SAFE is a small-group intervention adapted from the AIDS Risk Reduction Model for black and Latina females at risk for STI infection. The intervention is organized around three objectives: recognition of risk, commitment to change, and acquisition of skills. An evaluation found that the program reduced rates of STIs. Description of Program: Project SAFE has three objectives and consists of three small-group sessions for black and Latina females at risk for STI infection. "Recognition of risk" includes developing an awareness of minorities' increased STI risk. Description of addressing myths about STIs and the selection of sexual partners, and increasing an understanding of personal STI risk. "Commitment to change" provides information about STIs and treatment, condom use, relationship goals, and decision-making skills. "Acquisition of skills" focuses on communication and negotiation skills within relationships and about condom use, identifying triggers to unsafe sex, and setting goals. Target Population: Black and Latina females with non-viral STIs such as chlamydia or gonorrhea. Evaluation 1 Reference: Shain, R., Piper, J., Newton, E., Perdue, S., Ramos, R., Champion, J., & Guerra, F. (1999). A randomized, controlled trial of a behavioral intervention to prevent sexually transmitted disease among minority females. The New England Journal of Medicine, 340, 93-110. Program Information/Curriculum: http://www.socio.com/hap10.php Teen Pregnancy Evaluated Evaluated Population: The sample included English-speaking females ages 14-43 (intervention n=313; control n=304). All tested positive for a non-viral STI, most had low educations/incomes, and 71% were younger than 24. Latino Population: Of the evaluated sample, 68% were Latina (424 Mexican-American and 193 black participants). • Chlamydial or gonorrheal infection Approach Participants who tested positive for a chlamydia, gonorrhea, syphilis, or a trichomoniasis were recruited from clinics in San Antonio, TX, treated if needed, and counseled about the participant's sexual history and answers to a knowledge-based test for 15 minutes by a nurse. They were interviewed at baseline, 6, and 12 months. Females in the intervention group participated in three, 3-4 hour, small-group sessions. Results: In the 12 months after the intervention, females in the intervention group had significantly lower rates of subsequent STI infection (chlamydia or gonorrhea) compared with females in the control group. Results for Latinos: There are no outcomes specifically reported for the Latino population included in this sample. Evaluated Evaluation Reference: Shain, R., Piper, J., Holden, A., Champion, J., Perdue, S., Korte, J., & Guerra, F. (2004), Prevention of gonorrhea and chlamydia through behavioral intervention: Results of a two-year controlled randomized trial in minority women. Sexually Transmitted Diseases, 31(7), 401-408. Evaluated Population: The sample included English-speaking females ages 14-43 (intervention n=237; enhanced intervention n=262; control n =276). All had non-viral STIs, most had low educations/incomes, 53% were younger than 20, and 91% were younger than 30. Latino Population: Of the evaluated sample, 75% were Latina (585 Mexican-American and 190 black). **Feen Pregnancy** • Chlamydial or gonorrheal infection Participants were recruited from clinics in San Antonio, treated if needed, and counseled about sexual history for 15 minutes by Approach a nurse. They were interviewed at baseline, 6, 12, and 18 months. Those in the intervention participated in three, three-hour weekly small-group sessions. Groups were ethnicity-specific and conducted by an ethnicity-matched female facilitator. The enhanced intervention also included 90-minute support group meetings addressing topics such as partners' behaviors, condom use, abuse, communication, love, trust, and intimacy. Results Results: The intervention and enhanced-intervention had positive impacts on Chlamydia and gonorrhea infection.

#### PROJECT SNAPP (SKILLS AND KNOWLEDGE FOR AIDS AND PREGNANCY PREVENTION)

Overview

Project SNAPP was two-week-long AIDS and pregnancy prevention program offered to students in six Los Angeles middle schools. Program components included interactive activities, role-playing, and social and communication skills training. Activities were led by peer educators, the majority of whom were teen mothers or HIV positive. Experimental evaluation shows that participation in Project SNAPP did not significantly impact teens' sexual activity, contraceptive use, STI rates, or pregnancy rates, and appeared to negatively impact rates of birth control pill usage.

### Description of Program

Description of Program: Project SNAPP (Skills and kNowledge for AIDS and Pregnancy Prevention) was an AIDS and pregnancy prevention program offered to middle school students in six Los Angeles schools (Kirby, Korpi, Adivi & Weissman, 1997). The program consisted of 8 SNAPP sessions administered over two weeks, and was designed to make teens aware of adolescent sexuality issues and help them gain better communication and resistance skills through interactive activities. Peer educators, 50% of whom were teen mothers and 20% who were HIV positive, received extensive training and led SNAPP sessions.

Target Population: Middle school students.

Evaluation

*Reference:* Kirby, D, Korpi, M, Adivi, C, & Weissman, J. (1997). An impact evaluation of Project SNAPP: An AIDS and pregnancy prevention middle school program. *AIDS Education and Prevention*, *9*, Supplement A, 44-61.

Program Information/Curriculum: Program information and curriculum materials unavailable.

# **Evaluated Population**

Evaluated Population: A total of 1,657 students in 102 seventh-grade classrooms in six Los Angeles middle schools were evaluated. The participants were Latino (64%), Asian (13%), and white or black (<10% each).

Latino Population: Of the evaluated sample, 64% were Latino.

# Teen Pregnancy Outcomes

- Delayed initiation of sexual intercourse
- Frequency of sexual intercourse
- Number of partners in last 12 months
- Condom use at last sex
- Use of birth control pills at last sex
- Pregnancy rate
- STI rate
- Knowledge about pregnancy and HIV risk, protective behaviors, health care rights, and community resources
- Personal beliefs and perceptions of peer beliefs about when teens should have sex

- Perceived chance of getting HIV if have sex without condom Perceived chance of getting pregnant if have sex without contraception
- Reasons not to have sex
- · Reasons to have sex
- Pregnancy would mess up my future
- HIV would mess up my future
- Reasons to use a condom
- Reasons not to use a condom
- Importance of avoiding pregnancy
- Self-efficacy to avoid sex and unprotected sex
- Can say no to sex without hurting feelings

**Approach** 

Adolescents were either assigned to the experimental group-Project SNAPP, for which they received 8 sessions on adolescent sexual health delivered over the course of 2 weeks-or a control group that received the regular lecture-style sexuality education the school offered.

sults

Results: This program affected participants' knowledge but did not change attitudes, beliefs, intentions, behaviors or self efficacy. There was a positive significant impact on overall the knowledge score at both follow-ups. With regard to self efficacy, there were mixed impacts for participants' reported ability to say no to sex without hurting feelings, with impacts at the 5-month follow-up but no impact at 17-month follow-up, however there was no impact on self-efficacy to avoid sex and unprotected sex. However, there were no impacts on intentions to use contraceptives or condoms and on beliefs related to the perceived chance of becoming pregnant or getting HIV if engaging in sex without contraception and the importance of avoiding pregnancy. In addition, there were no impacts on attitude-related scales measuring reasons not to have sex, reasons to use a condom, reasons not to use a condom, personal belief and perceptions of peer beliefs about when teens should have sex, and self-efficacy to avoid sex and unprotected sex. Finally, there were no significant impacts on sexual initiation, frequency of sexual intercourse, having sex without "wanting to", number of sexual partners, sex under the influence of drugs or alcohol, condom use, birth control use, STI rates among sexually experienced teens, and pregnancy (among females) at either the 5-month or 17-month follow-up.

#### SISTERS SAVING SISTERS

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Sisters Saving Sisters is a program designed to reduce the risk of unprotected sexual intercourse among sexually experienced Latino and black adolescent females. The program provides three, 250-minute interventions with information on HIV and STIs and techniques and skills to encourage practicing safer sex. A randomized control trial found that participation in the program was associated with a lower frequency of unprotected sex and of unprotected sex while intoxicated, fewer sexual partners, greater HIV/STI knowledge, greater condom use knowledge, greater condom use intentions, greater condom hedonistic beliefs, greater technical skill beliefs, greater impulse control beliefs, and lower STI rates at one or more of the intervention's follow-ups.

### Description of Program

Description of Program: Participants meet in small groups of between two and ten adolescent females and complete activities including group discussions, watching videos, and participating in games and experiential exercises including role-playing. The sessions are designed to address beliefs about HIV/STI risk reduction, condom use, condom-use negotiation, STI risks within minority populations, and barriers to condom use and responses to these challenges. The sessions are designed to be culturally and developmentally appropriate for the participants.

Target Population: Sexually experienced black and Latino adolescent females.

Evaluation

*Reference:* Jemmott III, J., Jemmott, L., Braverman, P., & Fong, G. (2005). HIV/STI risk reduction interventions for black and Latino adolescent girls at an adolescent medicine center. *Archives of Pediatrics and Adolescent Medicine*, *159*, 440-449.

Program Information/Curriculum: http://www.selectmedia.org/programs/sisters.html

# Evaluated Population

Evaluated Population: A sample of 682 adolescent females, 463 black and 219 Latino. Of the Latino participants, 93% were Puerto Rican. The participants were 12- to 19-years-old, with a mean age of 15.5 years and could read and speak English. Participants were sexually experienced and were not pregnant.

Latino Population: Of the evaluated sample, 32% were Latino.

## Teen Pregnancy Outcomes

- Number of days in last three months in which had unprotected sex
- Number of sexual partners in last three months
- STI (testing positive)
- HIV/STI risk reduction knowledge
- Condom-use knowledge

- Condom hedonistic beliefs
- Condom use intention
- · Technical skill beliefs
- Impulse control beliefs
- Negotiation beliefs

pproach

Participants were recruited from a low-income, inner-city adolescent medical clinic in a hospital in Philadelphia, PA. All participants had volunteered for a "Women's Health Project" initiative to reduce health risks. Some of the mothers of enrolled females were also randomized (separately from their daughters) into an intervention deigned to teach the mothers how to discuss health issues with their daughters; findings from this sub-evaluation were not included in this study. The intervention was conducted at the hospital where participants were recruited. The outcomes of adolescents participating in this skill-based model were compared with those receiving a general health-promotion control intervention and those receiving an information-based intervention addressing STI risks within minority populations, HIV and STI transmission, risk reduction in sexual relationships, and condom use.

sults

Results: Adolescents in the skills-based intervention group did not report less frequent unprotected sex at 3 and 6 months, but they did report statistically significantly less frequent rates at 12 months than those in the health-based control group or the information-based intervention. At 12 months after the intervention, adolescents in the skill-based intervention group reported having significantly fewer sexual partners than those in the health-based control group and were significantly less likely to report multiple partners than the health-control group. These differences were not observed at 3 and 6 months after the intervention The skills-based intervention group was marginally significantly less likely to have an STI at 12 months than the health-based control group. These differences were not observed between the skill-based and information-based groups and were not observed between any groups at 3 and 6 months. The skills-based intervention had positive impacts on HIV/STI knowledge, condom use knowledge, condom use intentions, condom hedonistic beliefs, technical skill beliefs, and impulse control beliefs. It had no impacts on negotiation beliefs.

*Results for Latinos:* There were no differences for the black and Latino populations in terms of STI rates or sexual risk behavior. Compared with the information-based intervention, the skills-based intervention was more effective at increasing condom negotiation beliefs and technical skill beliefs among Latino participants than black.

#### TEEN TALK

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Teen Talk is a teen pregnancy prevention program based on the health belief model and social learning theory. A large-scale evaluation compared Teen Talk with similar programs that lacked Teen Talk's theoretical foundation. This evaluation found that Teen Talk is somewhat more effective than similar programs for males, but not for females.

# Description of Program

Description of Program: Teen Talk is a six-session, 12 to 15-hour intervention intended to familiarize adolescents with their personal susceptibility to pregnancy and to increase their awareness of the negative consequences associated with adolescent childbearing. Teen Talk highlights the benefits of delayed sexual activity and consistent, effective contraceptive use and aims to decrease the psychological, interpersonal, and logistical barriers associated with abstinence and contraceptive use. Teen Talk has four content areas: factual information, group discussion of factual information, group discussion of values, feelings, and emotions, and discussion of decision-making and personal responsibility. Program activities include lectures, simulations, leader-guided discussions, role-playing, games, and films. Teen Talk is based on two theories: the health belief model suggests that an individual's willingness to undertake preventative actions (such as contraceptive use) is related to that individual's perceptions of personal susceptibility to the problem, the seriousness of the problem, and the costs and benefits associated with undertaking preventative action; social learning theory predicts that teenagers will be better able to avoid pregnancy if provided with opportunities to observe appropriate and inappropriate behavior and to act out appropriate behavior.

Target Population: Teenagers.

# Evaluation

*Reference:* Eisen, M., Zellman, G., & McAlister, A. (1990). Evaluating the impact of a theory-based sexuality and contraceptive education program. *Family Planning Perspectives*, 22(6), 261-271.

 ${\it Program\ Information/Curriculum:}\ {\it \underline{http://www.socio.com/srch/summary/pasha/paspp02.htm}$ 

# Evaluated Population

Evaluated Population: In the mid-1980s, six family planning service agencies and one independent school district were selected from Texas and California to participate in this study. Selected agencies serviced urban and rural communities. 1444 clients were consented to a baseline interview. All recruits were between the ages of 13 and 19% were white, 24% were black, 53% were Latino, and 8% were Asian. Within the entire evaluated population, 58% lived with both of their parents.

Latino Population: Of the evaluated sample, 53% were Latino.

# Feen Pregnancy Outcomes

- Knowledge and beliefs about reproductive physiology, pregnancy and sex myths, birth control and STIs; and contraceptive effectiveness.
- Consistent contraceptive use

- Contraceptive use at most recent sex
- Contraceptive use at first sex (the pill, the condom, the diaphragm, the sponge and foam or jelly were classified as effective methods)
- · Coital status

## pproach

Assignment to the Teen Talk group of a control group was by individual or by classroom unit, depending on agency requirements. The purpose of this study was to see whether Teen Talk's basis in the health belief model and social learning theory rendered it more effective than existing programs, so students assigned to control groups received their normal sex. Existing programs varied from agency to agency, but typically covered reproductive biology, contraceptives, STIs, dating, sexual values, and decision-making. Unlike Teen Talk, these programs did not focus on teenagers' perceptions of their own susceptibility to pregnancy, on the seriousness of pregnancy, or on the benefits of using birth control. The Teen Talk Program was led by educators who had attended a two-day training seminar on the curriculum. These educators led Teen Talk's six sessions over the course of two to three weeks. In many cases, agencies whose existing program was shorter than the Teen Talk program adjusted their program to better match the Teen Talk program on number and length of sessions. All study participants were interviewed before taking part in a program, immediately after completing a program, and again 12 months later. Of the original 1444 recruits, 1328 (92%) completed the immediate follow-up interview and 888 (62%) completed the 1-year follow-up. Interviews assessed sexuality-related knowledge, beliefs, and behavior.

### Sulfs

Results: Post-intervention, Teen Talk participants had higher sexual knowledge than did control teenagers. In spite of the Teen Talk program's explicit focus on perceptions of susceptibility to pregnancy, seriousness of pregnancy, benefits of birth control, and barriers to attaining birth control, teenagers assigned to the Teen Talk intervention were no more likely to have changed their perceptions about any of these matters than were teenagers assigned to existing programs. Among teenagers who had never had intercourse prior to participation in the study, males assigned to the Teen Talk program were significantly more likely to maintain abstinence over the next year than were males assigned to existing programs. This difference was not observed among females. In regards to contraceptive use, there were no significant impacts on effective contraceptive use at last intercourse, contraceptive use at first intercourse, or contraceptive use efficiency in the follow-up year. However, a sub population analysis revealed a negative/harmful impact on initiation and maintaining effective contraceptive use for females.

*Results for Latinos:* Ethnicity was not associated with abstinence. Latino males in the program were marginally more likely than other males to have used contraception at first sexual intercourse, but they were less likely to use contraception consistently.

#### TWELVE TOGETHER

verview

Twelve Together is a peer support and mentoring program offering weekly after-school discussion groups led by trained adult volunteers. Homework assistance, college visits, and an annual weekend retreat are also key components of the program. This program is designed for middle school and high school students who have poor academic performance, attendance, and/or disciplinary problems, placing them at-risk for dropping out of school. An evaluation of the program found it to lack significant impacts pregnancy in past year. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

# Description of Program

Description of Program: Twelve Together is a peer support and mentoring program consisting of weekly after-school discussion groups led by trained adult volunteers. This program is designed for middle school and high school students who have poor academic performance, attendance, and/or disciplinary problems, placing them at-risk for dropping out of school. Groups are led by two trained volunteer adult facilitators who moderate discussions. Topics range from personal and family issues to social issues. In addition to engaging in discussion groups, participants pledge to attend class, study regularly, and to work to improve academic grades. Facilitators, usually college students, also provide homework assistance. The program is inaugurated with a weekend camping trip to promote group cohesion and develop teamwork-building skills. The program also provides visits to local college campuses and social events. Estimated costs per student each month are \$220.

*Target Population:* Middle- and high-school students with poor school attendance, low academic grades, and/or disciplinary problems.

Evaluation

Reference: Dynarski M, Gleason P, Rangarajan A, & Wood R. (1998). Impacts of dropout prevention programs, final report. Washington, D.C.: Mathematica Policy Research, Inc.

Program Information/Curriculum: Program information and curriculum materials unavailable.

#### Evaluated Population

*Evaluated Population:* The study sample comprised 494 students in 7<sup>th</sup> grade with high school absenteeism, low academic grades, and/or disciplinary problems. Students resided in the Sweetwater Union High School District, located in Chula Vista, CA. Among the treatment group, 55% were females, 53% were Latino, and 20% had a mother with less than a high school education.

Latino Population: Of the treatment group, 53% were Latino.

# Feen Pregnancy Outcomes

• Pregnancy within the past year

pproach

Students were randomly assigned to the Twelve Together program (n=259) or to a control group (n=235). Students assigned the control group were permitted to participate in other educational programs. Students were assessed at baseline as well as approximately 18 months and 30 months later. (The first cohort was followed for three years while the second cohort was followed for two years.) Pregnancy was assessed through self report. Students also completed survey questions about student and parent characteristics, including age, race, parent's educational attainment and employment status, and receipt of public assistance.

Results

Results: There were no impacts on pregnancy in past year.

#### **UP WITH LITERACY**

verview

Up With Literacy is an in-class and after-school tutoring program for students grades six through eight who have low standardized test scores. The program's aim is to bring students up to grade level as well as to increase self-esteem, form bonds with other students and adults, and feel comfortable asking for help. College students (called College Aids) tutor students both individually and in groups two to four days of the week. Assistance is offered for English, math, science and social studies. In addition to tutoring, after school-sessions include guest speakers, improvisational drama, strategic board games, conflict management training and word-processing skill building. An evaluation of the program found it to lack significant impacts pregnancy in past year. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

# Description of Program

Description of Program: Up With Literacy is an in-class and after-school tutoring program for students grades six through eight who have low standardized test scores. The program's aim is to bring students up to grade level as well as to increase self-esteem, form bonds with other students and adults, and feel comfortable asking for help. College students (called College Aids) tutor students both individually and in groups during the last two periods of the school day as well as for two hours after school two to four days of the week. Assistance is offered for English, math, science and social studies. In addition to tutoring, after school-sessions include guest speakers, improvisational drama, strategic board games, conflict management training and word-processing skill building. Estimated costs per student each month are \$178.

Target Population: Middle school students with low standardized test scores.

Reference: Dynarski M, Gleason P, Rangarajan A, & Wood R. (1998). Impacts of dropout prevention programs, final report. Washington, D.C.: Mathematica Policy Research, Inc.

# Evaluation

Hershey, A. M., Adelman, N., & Murray, S. (1995). *Helping kids succeed: Implementation of the School Dropout Demonstration Assistance Program.* Princeton, New Jersey: Mathematica Policy Research, Inc., from <a href="http://mathematica-mpr.com/publications/PDFs/education/helpkids">http://mathematica-mpr.com/publications/PDFs/education/helpkids</a> dropout prevention.pdf

Program Information/Curriculum: Program information and curriculum materials unavailable.

#### Evaluated Population

*Evaluated Population:* The study sample comprised 282 of sixth, seventh, and eight grade students with low standardized test scores. Students resided in the Long Beach Unified School district, located in Long Beach, CA. Among the treatment group, 50% were females, and 55% were Latino, and 25% had a mother with less than a high school education.

Latino Population: Of the treatment group, 55% were Latino.

# Feen Pregnancy Outcomes

• Pregnancy within the past year

## pproach

Students were randomly assigned to the Up With Literacy Program (n=168) or to a control group (n=114). Students assigned the control group were permitted to participate in other educational programs. Students were assessed at baseline as well as approximately 18 months and 30 months later. (The first cohort was followed for three years while the second cohort was followed for two years.) Pregnancy was assessed through self report. Students also completed survey questions about student and parent characteristics, including age, race, parent's educational attainment and employment status, and receipt of public assistance.

Results

Results: There were no impacts on pregnancy in past year.

#### QED Program Evaluations (n=12)

- 1. BABY THINK IT OVER
- 2. CALIFORNIA'S ADOLESCENT SIBLING PREGNANCY PREVENTION PROGRAM
- $\begin{array}{ll} \textbf{3.} & \underline{\textbf{COMMUNITY AWARENESS MOTIVATION PARTNERSHIP (CAMP) TEEN THEATRE} \\ & \underline{\textbf{INTERVENTION}} \\ \end{array}$
- 4. CONDOM AVAILABILITY PROGRAM
- 5. COVEY LEADERSHIP CENTER RISK AND RESILIENCE INTERVENTION
- 6. HEALTH EDUCATION INTERVENTION
- 7. PEER PROVIDERS OF REPRODUCTIVE HEALTH SERVICES TO TEENS
- 8. PODER LATINO
- 9. PROMOTING ALTERNATIVES FOR TEEN HEALTH THROUGH ARTES TEATRO (PATHAT) PROGRAM
- 10. REDUCING THE RISK
- 11. THE SHERO'S PROGRAM
- 12. SUCCESS EXPRESS

#### **BABY THINK IT OVER**

Using a simulation doll, Baby Think It Over aims to show students the amount of responsibility involved in caring for an infant. This particular intervention targets ninth-grade Latino students, and has seven main objectives: To increase the degree to which the adolescent recognizes that 1) caring for a baby affects an adolescent's academic and social life, 2) other family members are affected by having an adolescent with a baby in the family, 3) there are emotional risks for each parent in having a baby during adolescence, 4) there are family and cultural values related to having a baby during adolescence, 5) to postpone parenthood until a later age (for the majority until graduation from high school), 6) until education and career goals were met, and 7)until marriage. Baby Think it Over was found to have a significant relationship with the effect of having a baby on academics, social life, and other family members; emotional risks, understanding and handling an infant's crying; and apprehension of the amount of responsibility involved in infant care.

# Description of Program

Description of Program: Baby Think It Over uses a computerized infant simulation doll to offer adolescents experiences similar to those in caring for an infant. The doll cries at random intervals and only stops crying once the adolescent attends to the baby by inserting a key into the dolls back. Participants keep logs throughout the two-and-a-half day intervention period. Participants are to keep the key attached to their wrist 24 hours every day. Babysitting is only permitted in certain situations, for example to take an exam. The doll records data, which includes the time it takes the adolescent to attend to the baby in addition to any type of "rough handling". If "rough handling" or neglect is recorded then they receive one-on-one counseling with a health class teacher and are required to take a parenting class. In addition, students attend presentations and group discussions led by staff from a local social services agency. These sessions cover topics such as adolescent pregnancy in the community, risk factors, and cost of parenthood.

Target Population: Teenagers.

Reference: De Anada, D. (2006). Baby Think it Over: evaluation of an infant simulation intervention for adolescent pregnancy prevention. Health and Social Work, 31(1), 26-35.

# Evaluation

Program Information/Curriculum:

Realityworks, Inc. 2709 Mondovi Road Eau Claire, Wisconsin 54701

1-800-830-1416 (phone) 715-830-2050 (Fax)

information@realityworks.com www.realityworks.com

Population Evaluated

Evaluated Population: The sample included 353 high school students, predominantly in ninth-grade ages 14 and 15. The sample included 140 male participants and 204 female participants (nine students did not report gender). The sample was 93% Latino, including 71% Mexican American, 5% Central American, and 17% other Latino.

Latino Population: No additional information was provided.

# Approach Teen Pregnancy Outcomes

- Beliefs about effect of baby on family members
- Beliefs about effect of baby on emotional risks
- Belief about amount of time it takes to care for baby
- Belief about need to complete school/job prior to having a
- Belief about the age they would like to have first baby
- Belief about how much baby interferes with social life
- Belief about how much baby interferes with job/ career
- Belief about how much baby interferes with education

Constructs were measured with two instruments, BTIO-1 and BTIO-2. Participants were used as their own controls through paired pretest-posttest comparisons with all data entered anonymously.

Results

Results: The program had positive, significant effects on adolescent beliefs about effect of baby on: (a) academic and social life; (b) family members; (c) emotional risks; (d) social life; (e) job/ career; and (f) education. Also changed beliefs about the amount of: (a) time it takes to care for baby; (b) school/job preparation needed prior to having a baby; and (c) the age they would like to have their first baby.

Results for Latinos: There were no subpopulation analyses. The majority of the evaluated sample is Latino.

#### CALIFORNIA'S ADOLESCENT SIBLING PREGNANCY PREVENTION PROGRAM California's Adolescent Sibling Pregnancy Prevention Program targets siblings of adolescents who have been pregnant or are parents. There are no specific services required of providers participating in the California's Adolescent Sibling Pregnancy Prevention Program. Providers were expected to meet with clients face-to-face every month. They were also expected to **Dverview** implement a variety of services that aim to prevent pregnancy and related risk factors. Results indicate that female clients had a significantly lower pregnancy rate than comparison females in addition to a lower rate of sexual initiation. They also significantly decreased their frequency of school truancy and definite intentions of remaining abstinent. In addition, males were found to have significantly higher rates of contraceptive use. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy. Description of Program: The program is implemented through 44 nonprofit social service agencies, community-based organizations, school districts and county health departments across California. Each site offers a unique combination of Description of services. Services include individual case management; academic guidance; training in decision making skills; job placement; self-esteem enhancement; community service; and contraceptive and sexuality education. On average, program clients received 18.4 hours of service over the evaluation period, ranging from 45 minutes to more than 95 hours. On average, clients received 11 hours of individual services, and seven hours of group activities over the evaluation. Target Population: Siblings of adolescents who have been pregnant or are parents. Reference: East, P., Kiernan, E. & Chavez, G. (2003). An evaluation of California's Adolescent Sibling Pregnancy Prevention Program. Perspectives on Sexual and Reproductive Health, 35(2), 62-70. Evaluation Program Information/Curriculum: California Department of Health Services, Maternal & Child Health Branch 714 P Street, Room 750 Sacramento, CA 95814 Phone: 1.866. 241.0395 \*note: program is not available for purchase. Evaluated Population: A total of 1,594 adolescents ages 11-17 enrolled in the evaluation; 77% in the treatment group were Population **Feen Pregnancy** Evaluated Latino (71% of the comparison group); 59% female, 41% male; average age is 13.5 years. Latino Population: Of the evaluated sample, 77% of the treatment group were Latino. • Parent-child communication • Number of sexual partners • Intention (i.e., perceived likelihood of abstaining • Condom/contraceptive use (i.e., consistent contraceptive use) from sexual intercourse) • Pregnancy (i.e. becoming pregnancy or causing a pregnancy) · Initiation of sexual intercourse • Frequency of sexual intercourse (i.e., in last 3 At the time of enrollment, all participants were interviewed about their family background, in addition to completing a 59-item Approach questionnaire. An expanded version of the same questionnaire was administered 9 months later as a posttest. The evaluation involved monitoring the services that program clients received at all of the sites. Providers were required to note the following at every client encounter: duration of service; how service was delivered; and content area. On average, program clients received 18.4 hours of service over the evaluation period, ranging from 45 minutes to more than 95 hours. On average, clients received 11 hours of individual services, and seven hours of group activities over the evaluation. Results: Program findings were non-significant for all outcomes. The program had no effect on parent-child communication, number of sexual partners in the past 9 months, frequency of sexual intercourse in the last 3 months, and STIs. However, the Results program had mixed effects on several outcomes due to working for females but not males; these outcomes include: (a) intentions (or "perceived likelihood" of abstaining from sexual intercourse; (b) initiation of sexual intercourse; and (c) pregnancy. For the measure of consistent contraceptive use, a positive effect was found for males, but not females. Results for Latinos: There were no subpopulation analyses. The majority of the evaluated sample is Latino.

#### COMMUNITY AWARENESS MOTIVATION PARTNERSHIP (CAMP) TEEN THEATRE INTERVENTION

Overview

CAMP addresses the role of contraceptive use in safe sex behavior through an informative, entertaining, and culturally adapted drama program. The program intends to increase knowledge about risky sexual behaviors while also affecting teen's safe sex behaviors. Results from a quasi-experimental study reveal that the intervention increased participants' reported intentions to delay sex and use contraceptives. In addition, there were short term changes in safe-sex behavioral intentions and knowledge.

# Description of Program

Description of Program: The program includes a 1-hour long theater performance, which uses culturally relevant music and skits. CAMP uses an ethnically diverse cast of 10 adolescents and young adult actors between the ages of 15 and 25. Urban teen culture was represented in the performance through the use of rap music. The actors also incorporated mannerisms, clothing styles, dance styles, and phrases that were commonly used by the target population. The performance includes 12 different skits in two different forms: informational facts and scene depictions. Five facts provided information about early pregnancy, STIs, and HIV/AIDS. Other skits include scenes of adolescents encountering issues of sexual pressure, situations involving HIV/AIDS, STIs, and early pregnancy. Skits aimed to provide a model for teens of behaviors to either abstain from sexual activity or to use condoms consistently. Skits also modeled personal self control over sexual health.

Target Population: Urban, predominantly Latino adolescents, age 11-18.

Evaluation

*Reference:* Guzman, B., Casad, B., Schlehofer-Sutton, M., Villanueva, C., & Feria, A. (2003). CAMP: A community-based approach to promoting safe sex behaviour in adolescence. *Journal of Community and Applied Social Psychology, 13*, 269-283.

Program Information/Curriculum: http://www.calstatela.edu/faculty/bguzman/choices/camptheater.html

#### Evaluated Population

*Evaluated Population:* A total of 1,613 adolescents between the ages of 11 and 18 received the intervention, with 961 receiving both pre and posttests. Within the sample, 79% were Latino, with the majority native born.

Latino Population: Of the evaluated sample, 79% were Latino.

## Teen Pregnancy Outcomes

- Knowledge (i.e., knowledge of HIV, the definition of abstinence, and male roles in sexual decision-making and childbearing).
- Beliefs (i.e., beliefs that they should use birth control; beliefs that condoms can prevent STIs)
- Intentions to postpone sexual intercourse
- Communication (i.e., comfort with communication with their mothers; communication with their friends, boyfriends, or girlfriends)

## pproach

A total of 1,613 adolescents in the eighth and ninth grades in seven different schools in southern California participated in the CAMP Teen Theatre Program. Participants completed a questionnaire prior to viewing the theater presentation that collected information on demographics, past sexual activity, and current contraceptive use. Questions also assessed intentions to use contraceptives and to postpone sex; frequency and comfort of communication about sexual issues; and knowledge of HIV and STIs, abstinence, and male responsibility. The pretest was administered one day prior to the performance. Participants who had parental consent viewed the 1-hour theater program the following day. Immediately after the performance, participants had a 15-minute open-forum discussion with the program actors to answer questions directly. The following day, participants completed the posttest questionnaire, and were debriefed and allowed to ask any remaining questions regarding any of the topics covered during the performance.

sults

*Results:* The program had a positive, significant effect on knowledge of HIV, the definition of abstinence, and male responsibility (and on beliefs they should use birth control and that condoms can prevent STIs) and a positive, significant effect on intentions to postpone sexual intercourse. However, there was no overall effect on communication. Specifically, the program had a positive effect on comfort with communication with mothers, but not on comfort with communication fathers, and no effect on comfort with communication with their friends, boyfriends, or girlfriends.

Results for Latinos: There were no subpopulation analyses. The majority of the evaluated sample is Latino.

#### CONDOM AVAILABILITY PROGRAM

### vervie

The Untitled Condom Availability Program is a school-based program designed to increase condom availability in New York City public schools. A quasi-experimental design study compared rates of sexual activity and condom use in Chicago and New York City public schools to evaluate the effect of the program. Findings suggest that adding an education component to condom availability has a modest effect on increased condom use. In addition, making condoms available does not encourage students who have never had sex to become sexually active.

### Description of Program

Description of Program: The Untitled Condom Availability Program was implemented system-wide, in 1991, by the New York City (NYC) Board of Education. The program was designed to effect sexual activity and condom use through the increased availability of condoms, as well as several other components such as HIV/AIDS classroom information sessions and designated resource staff.

Target Population: New York City high school students.

# Evaluation

*Reference:* Guttmacher, S., Lieberman, L., Ward, D., Freudenberg, N., Radosh, A., & Des Jarlais, D. (1997). Condom availability in New York City public high schools: Relationships to condom use and sexual behavior. *American Journal of Public Health*, 87(9), 1427-1433.

Program Information/Curriculum: Program information and curriculum materials unavailable.

# Evaluated Population

*Evaluated Population:* A total of 7,119 students from 12 NYC schools and 5,738 students from 10 Chicago schools completed the cross-sectional survey. Most students were between the ages of 15 to 17 years and the sample had slightly more males than females. Approximately 28% of the sample was Latino and nearly half the sample (47%) was black.

Latino Population: Of the evaluated sample, 28% were Latino.

# Teen Pregnancy Outcomes

Initiation of sexual intercourse

- Frequency of sexual intercourse in past 6 months
- Condom/contraceptive use (i.e., condom use at last sexual intercourse)

## pproach

To evaluate the Condom Availability Program, 12 NYC schools and 10 Chicago schools were randomly selected to participate in a cross-sectional survey. The program was implemented in NYC schools and demographically similar schools in Chicago were used as a comparison. Program implementation included: (1) assembling an HIV/AIDS team to oversee the program; (2) teaching at least six HIV/AIDS lessons in each grade; (3) designating and maintaining at least one onsite resource rooms for condom availability and prevention materials; (4) staffing this site at minimum 10 periods a week; (5) identifying at least one female and one male staff member to serve as the condom resource room volunteer; and (6) arranging for an HIV/AIDS information for parents.

### esults

*Results:* Program effects were found in a comparison of two study sites, one that has never conducted the program (new students condition) and another that has been conducting the program for at least one year (continuing students condition). Logistic regressions were conducted for condom use at last sex and sexual activity and showed increased odds of condom use at last sex for continuing students (compared with new students) and no effect on frequency of sexual intercourse in the past 6 months. Interestingly, the program had no effect on sexual initiation.

*Results for Latinos:* A subgroup analysis found no significant differences in program effects on condom use between Latino and non-Latino participants, but found that Latinos had higher rates of sexual initiation than non-Latinos.

#### COVEY LEADERSHIP CENTER RISK AND RESILIENCE INTERVENTION

Overview

The risk and resilience intervention developed by the Covey Leadership Center is an intervention focused on personal and reproductive health risks. It is designed to effect four main outcomes: knowledge; attitudes; intentions; and last 3 months of substance use and risky sexual behaviors. It is specifically geared towards inner-city, low-income, young Latina females. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

Description of Program

Description of Program: The intervention takes the form of twice-weekly sessions over two and a half weeks. The classes are held in Spanish and led by Covey-trained co-facilitators. Workshops use real life stories of alcohol and drug use and sexual risk taking, taken from interviews with females living in comparable cultural and economic situations, give the participants the opportunity to examine their own lives and new ways of thinking and behaving. Workshops also include the "seven habits of highly effective people", which includes "be proactive", "start with the end in mind", "put first things first", "think win-win", "listen first to understand, then to be understood", "synergize", and finally "promoting daily attention to avoiding substance use and sexual risk taking behaviors". These principles are intended to help females solve problems more effectively and make positive decisions.

Target Population: Inner-city, low-income, young Latina females.

Evaluation

Reference: Lindenburg, C., Solorzano, R., Bear, D., Strickland, O., Galvis, C., & Pittman, K. (2002). Reducing substance use and risky sexual behavior among young, low-income, Mexican-American women: Comparison of two interventions. Applied Nursing Research, 16(2), 137-148.

Program Information/Curriculum: Program information and curriculum materials unavailable.

Evaluated Population: The study used a voluntary sample of 56 predominantly Mexican-American, low-income females between the ages of 15 and 24.

Latino Population: No additional information was provided.

Teen Pregnancy Evaluated

- Knowledge
- Attitudes (i.e., about risky sexual behaviors and substance use)
- Intentions (i.e., to abstain from sexual intercourse, to use condoms, or to use contraception).
- Sexual self-efficacy (self-efficacy to avoid risky sexual behaviors and substance use).
- Abstinence
- Number of sexual partners
- Condom/contraceptive use (i.e., use of condoms)

The study compared two programs, Covey Leadership Center Risk and Resilience Intervention used a convenience voluntary sample of 56 low-income young Mexican-American females, ages 15 to 24. Recruitment took place over 1 month, from seven primary care clinics. Local Spanish newspapers and radio advertising was also used. Childcare, transportation tokens, and refreshments were provided as incentives of enrollment and participation. After initial telephone consent, subjects were invited to attend a program enrollment session. The enrollment sessions included soliciting written informed consent and completing the baseline interview questionnaire. Immediately after the completion of the baseline interview, subjects were randomized by lottery to one of the two intervention groups. Twenty-nine females were randomized to the risk and resilience intervention group and 27 to the health information intervention group. All activities were conducted in the classrooms of the local Red Cross. Each participant received financial compensation at the completion of both the baseline and the follow-up interviews.

Results: There were significant decreases in some sexual risk-taking behaviors for both interventions. Both married and single participants reported a significantly greater ability to discuss HIV/AIDS precautions with one's sexual partner. Participants also reported more frequently taking safe sex precautions, including using condoms, limiting the number of sexual partners and abstaining from having sex between pretest and posttest time points. Condom use at last sexual intercourse improved among both single and partnered (married or common-law relationships) participants. In addition, attitudes towards risky sexual behaviors improved and sexual self-efficacy to avoid risky sexual behaviors significantly increased in both groups. Interestingly, the program had no effect on intentions to abstain from sexual intercourse, to use condoms, or to use contraception or on knowledge about risky sexual behavior and substance use.

Results for Latinos: N/A: The entire sample was Latina.

#### **HEALTH EDUCATION INTERVENTION**

The Health Education Intervention consisted of carefully selected health education Spanish language pamphlets specific to three preventive topics of interest: substance use (alcohol, tobacco, and illicit drug use), teen and unintended pregnancies, and STIs and HIV/AIDS. The intervention is found to have positive outcomes in all four intended outcome areas: knowledge; attitudes; intentions; and last 3 months of substance use and risky sexual behaviors. Other outcome measures were assessed in this evaluation; this summary describes outcomes related to sexual behaviors or teen pregnancy.

# Description of

Description of Program: The Health Education Intervention used information pamphlets, which were mailed to participants once a week over a 5 week period. In addition, each participant received an interactive personal diary to document reflections and responses. Program topics were chosen and designed to be culturally appropriate, and to have positive outcomes in knowledge, attitudes, intentions and substance use and risky sexual behavior.

Target Population: Inner-city, low-income, young Latina females.

Evaluation

Reference: Lindenburg, C., Solorzano, R., Bear, D., Strickland, O., Galvis, C., & Pittman, K. (2002), Reducing substance use and risky sexual behavior among young, low-income, Mexican-American women: Comparison of two interventions. Applied Nursing Research, 16(2), 137-148.

Program Information/Curriculum: Program information and curriculum materials unavailable.

Evaluated Population: The study used a voluntary sample of 56 predominantly Mexican-American, low-income females between the ages of 15 and 24.

Latino Population: No additional information was provided.

# Feen Pregnancy Evaluated

- Knowledge
- Attitudes (i.e., about risky sexual behaviors and substance use)
- Intentions (i.e., to abstain from sexual intercourse, to use condoms, or to use contraception).
- Sexual self-efficacy (self-efficacy to avoid risky sexual behaviors and substance use).
- Abstinence
- Number of sexual partners
- Condom/contraceptive use (i.e., use of condoms)

The study compared two programs, Covey Leadership Center Risk and Resilience Intervention used a convenience voluntary sample of 56 low-income young Mexican-American females, ages 15 to 24. Recruitment took place over 1 month, from seven primary care clinics. Local Spanish newspapers and radio advertising was also used. Childcare, transportation tokens, and refreshments were provided as incentives of enrollment and participation. After initial telephone consent, subjects were invited to attend a program enrollment session. The enrollment sessions included soliciting written informed consent and completing the baseline interview questionnaire. Immediately after the completion of the baseline interview, subjects were randomized by lottery to one of the two intervention groups. Twenty-nine females were randomized to the risk and resilience intervention group and 27 to the health information intervention group. All activities were conducted in the classrooms of the local Red Cross. Each participant received financial compensation at the completion of both the baseline and the follow-up interviews.

Result: There were no statistically significant differences found between the effects of the two prevention interventions on the four main outcomes (knowledge; attitudes; intentions; and risky sexual behaviors), when initial baseline differences were controlled for. Neither intervention was found to significantly increase sexual risk-taking knowledge scores. In addition, no direct behavioral changes were reported for among either intervention groups. There were significant decreases in some sexual risk-taking behaviors for both interventions. Both married and single participants reported a significantly greater ability to discuss HIV/AIDS precautions with one's sexual partner. Participants also reported more frequently taking safe sex precautions, including using condoms, limiting the number of sexual partners and abstaining from having sex between pretest and posttest time points. Condom use as well as contraceptive use at last sexual intercourse improved among both single females and partnered (married or common-law relationships) females. In addition, sexual self-efficacy and resilience scores significantly increased in both groups.

Results for Latinos: There were no subpopulation analyses. The majority of the evaluated sample is Latino.

#### PEER PROVIDERS OF REPRODUCTIVE HEALTH SERVICES

The Peer Providers of Reproductive Health Services to Teens model provides adolescents with outreach education. It also aims to provide low cost or no cost services in a nonjudgmental, adolescent-centered and confidential environment. It aims to effect sexual behavior outcomes, such as use of birth control and condoms, as well as regularly visiting the clinic for annual exams. The program is found to have positive outcomes for reported pregnancy, but no effect on birth control use for females, no effect on birth control at most recent sex for males, and a negative effect for consistent birth control use for males. In addition, no effect was found for condom use for females and a negative effect for males.

# Description of Program

Description of Program: The Peer Providers of Reproductive Health Services to Teens model has three key components. First, before clients receive clinical services from a medical provider, peer providers meet with them for an intake session. The peer provider discusses with the client his or her reason for the visit, explains what to expect during a physical exam and answers any questions the client may have about abstinence, birth control options and safer-sex practices. Every intake session includes discussion about the importance of condom use to prevent STIs, including HIV. Many clinics also include a condom use demonstration. Second, peer providers make follow-up phone calls to each female client after their first visit, and then quarterly, to reinforce health education information, answer questions, provide lab results, encourage consistent contraceptive use and condom use, and make follow-up appointments if necessary. Peer providers do not call male clients on a regular basis, but only to provide abnormal test results or follow-up on specific problems because of concerns that male clients may be more resistant to this aspect of the model. Lastly, two-person teams of young adult outreach health educators provide group outreach to adolescents in mainstream and alternative schools, and individual outreach to male adolescents in a variety of community settings. They provide information about reproductive anatomy and physiology, birth control and condom use, and services available at peer provider clinics. This program is evaluated over 3 years.

Target Population: Adolescents.

# Evaluation

Reference: Brindis, C., Geierstanger, S., Wilcox, N., McCarter, V., & Hubbard, A. (2005). Evaluation of a peer provider reproductive health services model for adolescents. Perspectives on Sexual and reproductive Health, 37(2), 85-91.

Program Information/Curriculum: Program information and curriculum materials unavailable.

Evaluated Population: A total of 1,424 female and 166 male adolescent clients of five California community health clinics, between the ages of 14 and 20.

Latino Population: Of the female sample evaluated, 41% were Latina; of the male sample, 37% were Latino.

# **Feen Pregnancy** Evaluated

- Frequency of birth control use
- Birth control use at last sex
- Effective method of birth control
- Frequency of condom use.
- Pregnancy
- Contracting STIs

# Approach

Clients were assigned to four groups: clinic only (adolescents who received only clinical services); clinic-outreach (adolescents who receive clinical services and individual or group outreach); clinic and telephone clients (females who received clinical services and were successfully reached for telephone follow-up sessions, but did not receive outreach services); and full-model (female clients who received clinical services, outreach services, and follow-up telephone calls). The study used questionnaires at the first and last clinic visits to measure reported frequency of birth control use and of condom use to prevent STIs, and birth control use at last intercourse. Bacterial STI tests were documented through use of laboratory test. Measures were also taken on the number and proportion of clients who made three or more visits during the three-year study.

# Results

Results: The program had no effect on condom use for females and a negative effect for males. Additionally, the program did not work for several contraceptive outcomes including birth control use for females and birth control use at most recent sex for males. The program had a negative effect on consistent birth control use for males. No effect was found on contracting STIs. However, the program did have a positive effect on pregnancies for treatment group females. The program also had a positive effect on one of three measures of contraceptive use among Latinos.

Results for Latinos: Latino clients who received the full model were more likely than those in the clinic only group to report consistent birth control use, and less likely to report pregnancy.

#### PODER LATINO Poder Latino was implemented in Boston, Mass in 1990 as a community-based AIDS prevention program targeting Latino vouth. The program was designed to increase HIV/AIDS awareness and to reduce the risk of HIV infection by increasing the use of condoms among sexually active teens. The program resulted in an increased likelihood that a teen would have a condom in their possession and lowered the risk of HIV infection in males and females (though these findings were not statistically significant). The evaluation described below investigates whether the HIV prevention program increased the level of sexual activity among Latino adolescents, as critics have suggested that increased availability of condoms may lead to an increase in sexual activity. Description of Program: The Untitled HIV Prevention Program, a multi-faceted community intervention, implemented both condom promotion and distribution activities designed to increase HIV/AIDS awareness and to reduce the risk of HIV infection Description of by increasing the use of condoms among sexually active teens. The program lasted 18-months and included activities led by specially trained peer leaders. Intervention activities included: workshops in schools, community organizations, and health centers; group discussions in homes; presentations at community events; and door-to-door canvassing, which included the distribution of a kit that provided condoms and information for proper use. Target Population: Latino adolescents. Reference: Sellers, D., McGraw, S., & McKinlay, J. (1994). Does the promotion and distribution of condoms increase teen sexual activity? Evidence from an HIV prevention program for Latino youth. American Journal of Public Health, 84(12), 1952-1959. Evaluation Program Information/Curriculum: Sociometrics Program Archive on Sexuality, Health & Adolescence Phone, 1.800.846.3475 Fax. 1.650.949.3299 pasha@socio.com http://www.socio.com Evaluated Population: A total of 586 Latino, between the ages of 14 and 20 years, adolescents completed the baseline interview, Teen Pregnancy Evaluated and were predominantly Puerto Rican (94%). Latino Population: The entire evaluated sample was Latino. Of this sample, 94% were Puerto Rican. • Initiation of sexual intercourse • Frequency of sexual intercourse in past 6 months • Multiple partners in past 6 months | Approach The intervention was evaluated using a longitudinal comparison of probability samples of Latino youth from Boston, the intervention city, and Hartford, Conn, the comparison city. Trained, bilingual staff conducted baseline interviews prior to the intervention implementation and follow-up interviews with the youth. The study had a 92% response rate (from baseline to Results: There was no evidence to suggest that increasing condom promotion and distribution (availability) increased sexual activity or promoted promiscuity among the Latino adolescents. The program had a significant, positive effect on the initiation of sexual intercourse and the likelihood of having multiple partners in the past 6 months for females, but not males. There was no difference for females on this outcome. Among males, there was an increase in the likelihood for multiple partners among males in the intervention group compared with the comparison group. There were no effects found on the frequency of sexual intercourse for either males or females in the past 6 months.

Results for Latinos: There were no subpopulation analyses. The majority of the evaluated sample is Latino.

#### PROMOTING ALTERNATIVES FOR TEEN HEALTH THROUGH ARTES TEATRO (PATH-AT) PROGRAM

Promoting Alternatives For Teen Health Through Artes Teatro (PATH-AT) Program targets Latino/a middle school students who are at risk for early sexual experimentation and pregnancy. PATH-AT takes place over 12 weeks, and is based on the Why Am I Tempted (WAIT) Curriculum. The curriculum is designed to provide adolescents with information and skills to choose abstinence. Initial results from a quasi-experimental study have found there to be an increase in the proportion of youth in the intervention who plan to wait until marriage to have sex, however no significant effects.

Description of Program

Description of Program: PATH-AT is an after school abstinence program that implements the WAIT curriculum. It includes 12 weekly sessions, each lasting 1 1/4 hours long. They are lead by two peer educators, and supervised by at least two adults and a faculty sponsor. Sessions begin with an icebreaker, followed by a presentation of the lesson. Rewards are offered to students for attendance and participation in classroom discussions and activities. The WAIT curriculum emphasizes the financial and emotional costs associated with teen pregnancy, and the skills necessary for building healthy relationships. It is reinforced by theater arts and parent/family activities. During 6 of the 12 sessions, participants were exposed to relevant abstinence-based mini-plays. In addition, the program sponsored a Family Theater Night, in which participants were exposed to two additional mini-plays. All mini-plays were performed by professional actors and often included direct interaction with audience members. Participants also engaged in writing skits, role playing and other theater based activities that represented abstinence. These were performed in front of families at Family Theater Night. In addition to this event, parents also attended a series of Let's Talk workshops and Graduation conferences, Let's Talk workshops were lead by PATH-AT health educators, and focused on the consequences of premarital teen sex, parent and adolescent communication, sexual and reproductive health, media pressure, effective conflict resolution, sexually transmitted diseases, and how to raise emotionally healthy children. These workshops lasted two hours. These were designed to facilitate communication between parents and teens about sexuality and relationships. All events were conducted in English and Spanish.

Target Population: Latino adolescents.

Evaluation

Reference: Bailer, B., Zuniga, M., Ring, L., & Gil-Trejo, L. (2009). Year two evaluation results of the Promoting Alternatives for Teen Health through Artes Teatro (PATH-AT) Program. California: California State University Fullerton, Social Science Research Center.

Program Information/Curriculum: http://www.northridgehospital.org/Who We Are/Community Programs/199776.

Evaluated Population: The sample included 150 Latino middle school students (ages 12 to 15) recruited each semester at each of three schools.

Latino Population: The entire evaluated sample was Latino.

Feen Pregnancy Evaluated

- Plans to abstain from sexual intercourse until marriage
- Belief that pre-marital sex makes it "somewhat harder" or "much harder" to stay in school

Approximately 150 middle school students attending three different schools were recruited and assigned to the intervention each semester. Participants met with peer educators for 1.25 hours per week to complete the WAIT Training. During 6 (half) of the sessions, participants were exposed to culturally relevant abstinence-based short plays. Families were also invited to the Let's Talk workshops and Family Theater Night. Another 150 students attending demographically similar schools were assigned as the comparison condition and participated in a Nutrition and Fitness Program. These students met with peer educators for the same 1.25 hours per week to complete "Healthy Me" Training. These students were also exposed to fitness themed culturally relevant short plays. Program outcomes were assessed using the OAPP CORE Questionnaire which was administered to intervention and comparison groups pre-intervention and at the end of the curriculum.

Results: Preliminary analyses report no significant effects in either of the outcomes assessed (i.e., plans to abstain or beliefs about premarital sex). However, the percentage of intervention participants who plan to wait until marriage to have sex rose from 24% to 33%, where the comparison group decreased from 33% to 27%. Additionally, 81% of students in the intervention group continue to agree that that premarital sex makes it "somewhat harder" or "much harder" to stay in school, while 72% of students in the comparison group uphold this belief.

Results for Latinos: N/A; the entire evaluated sample was Latino.

#### REDUCING THE RISK Reducing the Risk is a school-based sex education program that uses techniques grounded on social learning theory, including Overview modeling, in-class and out-of-class practice of skills for abstaining from intercourse, and for contraception. The program was designed to increase contraceptive knowledge, increase contraceptive practice, inform perceptions and intentions regarding sexual behavior, reduce initiation of intercourse, unprotected intercourse, pregnancy, and increase communication with parents. Description of Program: Reducing the Risk is a sex education program delivered by teachers in a school setting. The curriculum Description of is divided into 15-sessions, each 50 minutes in length. The curriculum includes sessions on abstinence, birth control, and prevention of STIs and AIDS. Based on constructs from social learning theory, role-plays and modeling are used to help the students demonstrate effective techniques for applying the lessons learned through the program. Homework assignments included interviews with parents in an effort to increase parental communication. Target Population: High school students. Kirby, D., Barth, R., Leland, N., & Fetro, J. (1991). Reducing the Risk: Impact of a new curriculum on sexual risk-taking. Evaluation Family Planning and Perspectives, 23(6), 253-263. Program Information/Curriculum: <a href="http://www.etr.org/traininginstit/rtr.htm">http://www.etr.org/traininginstit/rtr.htm</a> Evaluated Evaluated Population: A total of 1,033 students completed the pretest (treatment group = 586 and comparison group = 447). The mean age of students surveyed was 15.3 years and 56% were in the tenth grade. 47% of the sample was male and the majority of students were white (62%). Latino Population: Of the evaluated sample, 20% were Latino. • Contraceptive knowledge • Sexual initiation (for sexual inexperienced subgroup only) Teen Pregnancy Outcomes • Perceptions of peer sexual behavior (e.g., whether • Use of birth control at first intercourse they are having sex or using contraception) • Use of birth control at most recent intercourse Sexual intentions: Intention avoid unprotected sex, • Use of birth control all or most of the time (frequency of use) intention to avoid kissing and sexual foreplay • Frequency of unprotected sex: Not using birth control at most Parent-child communication: Ability and willingness recent intercourse (for full sample, with abstainers=0 • Frequency of unprotected sex: Not using birth control all or most to discuss sexual topics with parents. Specifically, parent-child communication about sex; parent-child of the time (for full sample, with abstainers=0) communication about abstinence; parent-child • Pregnancy (percent ever pregnant or caused pregnancy) communication about pregnancy; parent-child communication about birth control; and parent-child communication about STIs) Approach The program was implemented and evaluated in 13 California high schools. To measure the effect of the program, classes of students were assigned to either a treatment group or comparison group. Assessments were given prior to the implementation of the program and immediately following the conclusion of the program. Follow-up assessments were collected at 6- and 18months post-intervention. Results: The program had a positive, significant effect on contraceptive knowledge at both follow-up points, but no effect on sexual intentions. Specifically, no effects were found at either time point for intentions to avoid unprotected sex; and mixed effects were found for intentions to avoid foreplay with their girlfriend or boyfriend (e.g., a significant effect at 6 months, but no effect at 18 months). In addition, the program also had a mixed effect on perceptions of peers' sexual activity (treatment group was less likely to think their peers were having sex or using contraception) at 6-month follow-up, but not at 18-months. The program had positive significant effects on participants' communication with parents (for 3 out of 5 outcome measures). More specifically, positive significant effects included significant effects at both the 6- and 18- month follow ups for parent-child communication about sex and for parent-child communication about abstinence; and they also included delayed effects for parent-child communication about pregnancy (not significant at 6 months but significant at 18 months). Mixed effects were found for parent-child communication about birth control (significant at 6 months but not at 18 months) and no effects were found at either follow-up point for parent-child communication about STIs. Among students who were sexually inexperienced at pretest, the program significantly reduced the likelihood that they would initiate sex at the 18-month follow-up. Program effects on contraceptive use varied. Significant effects were found for birth control (use at first intercourse was not significant at either follow up for the sexually inexperienced subgroup, while use at frequency of use was significantly higher among sexually experienced and inexperienced intervention group participants, compared to their counterparts in the comparison group, by the 18 month follow up). However, the program had no effects at either follow-up on the two measures unprotected sex (the percent

*Results for Latinos:* Latinos were less likely to perceive their peers to be having sex and more likely to experience knowledge gains than Latinos in the comparison group (at 6- and 18-month follow ups). Among Latino students who had not initiated sex by pretest, the program had no effect sexual initiation or unprotected sex.

of the time). Finally, the program had delayed effects on sexual initiation and no effect on pregnancy rates.

of students who did not use birth control at most recent sex and the percent of students who did not use birth control all or most

#### Barth, R., Fetro, J., Leland, N., & Volkan, K. (1992). Preventing adolescent pregnancy with social and cognitive skills. Journal Evaluation of Adolescent Research, 7(2), 208-232. ~ Evaluated Population: A total of 1,033 students completed the pretest (treatment group = 586 and comparison group = 447). The mean age of students surveyed was 15.3 years and 56% were in the tenth grade. 47% of the sample was male and the majority of Evaluated Population students were white (62%). Latino Population: Of the evaluated sample, 20% were Latino, Measures of acculturation were not included, though 30% of students indicated that they were not Catholic and the questionnaires were completed in English (suggesting a bicultural group). • Contraceptive use (i.e., type of contraceptive used, use of effective • Contraceptive knowledge **Teen Pregnancy** · Intentions to avoid pregnancy birth control methods, use of birth control at first intercourse, use • Perceptions of peers' sexual behavior (e.g., of birth control all or most of the time) perceptions of peers' sexual activity, use of birth • Ever gotten pregnant(not evaluated) control, past pregnancy scares, and current pregnancy) • Current pregnancy • Initiation of sexual intercourse ("age of first sex") • Frequency of sexual intercourse in the past 30 days Approach Same as above Results: Positive, significant effects were found for contraceptive knowledge (effects at posttest and at the 6-month follow up. and mixed effects for perceptions of peers' sexual behaviors (significant, positive effects at posttest, but effects faded by the 6month follow up). No effects for the majority of sexual intentions measures at posttest (3 out of 4), and no effects on any measures at the 6-month follow up. Results on behavioral outcomes varied. (a) no effects were found on the initiation of sexual intercourse at either follow up; (b) a delayed (positive and significant) effect was found for frequency of any birth control use (including condoms and hormonal contraceptives); and (c) a delayed (positive and significant) effect on frequency of sexual intercourse in past 30 days was found for those who were sexually-inexperienced at pretest. Finally, no effects on current pregnancy were found at either follow-up.

*Results for Latinos:* This study received a mixed rating because it found effects on the frequency of birth control use (the percent of students reporting using birth control all or most of the time) at posttest, but these effects faded by the 6-month follow-up.

#### THE SHERO PROGRAM

## verview

The SHERO's Program (a female-gendered version of the word hero) is based on the AIDS risk reduction model. The intervention covers information on HIV transmission and prevention, such as condom negotiation, refusal of sex, and condom use, through interactive games, group discussions, role-plays, and mini-lectures. Sessions also included a focus on other issues that affect the sexual health of Mexican American adolescents in the community, such as cultural pressures and desires to be a mother, sexual relationships with older men, and gang affiliation. In a quasi-experimental evaluation, significant improvements were revealed on measures of self-esteem, condom attitudes, carrying condoms, beliefs regarding a female's control of her sexuality, beliefs regarding sexual assault, perceived peer norms, and HIV/AIDS and STI knowledge.

# Description of Program

Description of Program: The SHERO'S Program takes place over nine sessions. Topics include HIV/AIDS and STI prevention strategies in addition to strategies to face cultural pressures. The program is implemented through interactive games, group discussions, role-plays, and mini-lectures. The intervention was delivered in groups of 15-20 at the community-based organization. Each 2 hour session was facilitated by a young Mexican American female staff member from the community in addition to other young females of color from local organizations.

Target Population: Mexican-American female adolescents.

Evaluation

*Reference:* Harper, G., Bangi, A., Sanchez, B., Doll, M., & Pedraza, A. (2009). A quasi-experimental evaluation of a community-based HIV prevention intervention for Mexican American female adolescents: The SHERO'S Program. *AIDS Education and Prevention*, 21(B), 109-123.

Program Information/Curriculum: Program information and curriculum materials unavailable.

# Evaluated Population

*Evaluated Population:* The sample include 378 Mexican American female adolescents aged 12-21 years who were recruited from community-based social venues in low-income urban neighborhoods in a large U.S. Midwestern city.

Latino Population: The entire evaluated sample was Latino.

## Teen Pregnancy Outcomes

- Having vaginal sex
- Number of partners
- Carrying condoms
- Sexual communication
- HIV/AIDS knowledge & STI knowledge
- Condom attitudes
- Condom use, last two months
- · Belief that leading a man on justifies force

- Token refusal of sex (females indicating an unwillingness to engage in sex when they are actually willing)
- Plans for using condom on more frequent basis when having vaginal sex
- Perceived peer norms about sexual behaviors and protection

proach

A total of 378 Mexican American female adolescents aged 12 to 21 years were recruited from community-based social venues in two low-income urban neighborhoods. The nine-session SHERO'S program was compared with a brief comparison condition, which included a single 2-hour information session, focusing on HIV/AIDS prevention, and was delivered at a local library. Facilitators for this were also young female staff members. All study procedures were conducted in English Data were collected at pre-intervention, immediately post-intervention (in time with the 9 month SHERO program), and at 2-month follow-up.

Results

Results: The intervention had several positive outcomes including condom attitudes, perceived peer approval of protective sexual behaviors, beliefs about forced sex from males, and mixed signals from females, intentions to use condoms during vaginal sex, knowledge scores for HIV/AIDS and STIs, and sexual communication. While there was marginally significant effect on having vaginal sex a posttest, this was not sustained at 2-month follow-up. There was no effect on number of partners at posttest or 2-month follow-up. However, there was a positive effect on condom use in the past two months.

Results for Latinos: N/A: The entire evaluated sample was Latino.

#### SUCCESS EXPRESS Success Express is an abstinence promotion program targeting middle school-age adolescents. The curriculum focuses on self-Overview esteem, communication skills, peer pressure, and teaching the value that sex should be confined to marriage. Intervention participants were found to have increases in precoital sexual activity compared with the comparison group. Description of Program: Success Express is a six-session program targeting middle school-aged adolescents. Five of the sessions teach behaviors, attitudes, and skills based around abstinence. The final session is used to gather posttest data and for Description of students to participate in a graduation ceremony. The first session focuses on self-esteem and family values with an emphasis on the messages adolescents receive from their social environment. Session two focuses on adolescent patterns of growth and development, highlighting reproductive knowledge. The third session examines pressures that adolescents face to become sexually active, such as pressure from the media and peers, decision making and behaviors. Target Population: Low-income, minority, middle school aged students. Evaluation Reference: Christopher, F., & Roosa, M. (1990). An evaluation of an adolescent pregnancy prevention program: Is "just say no" enough? Family Relations, (39), 68-72. Program Information/Curriculum: Program information and curriculum materials unavailable. Approach Teen Pregnancy Evaluated Evaluated Population: A total of 320 adolescents were evaluated. Of the sample, 61% were female; 39% male; average age was 12.8 years; 69% were Latino, 21% were black, 8% were white; and 2% Native Americans. Latino Population: Of the evaluated sample, 69% were Latino. • Lifetime sexual involvement • Attitudes about premarital sexual intercourse • Family communication problems & openness of • Age expect to have sex for first time family communication • Belief about best age for engaging in sex for first time • Belief about best age for marriage Pretesting was conducted during the first session of Success Express. Posttest data were collected during the sixth and final session. Additionally, 3- and 6-month follow-up data were collected. The Success Express program was conducted at eight sites, including five schools and three community centers, where it was implemented to the health curriculum. Results: No significant effects were revealed for the variables of self esteem, family communication problems, openness of

Results: No significant effects were revealed for the variables of self esteem, family communication problems, openness of family communication, best age for engaging in sex for the first time, age expect to have sex for the first time, best age for marriage, attitudes about premarital sexual intercourse, and best friend's lifetime sexual interaction. However, participants and comparisons were significantly different in their posttest lifetime sexual behavior, with the participants having higher scores of lifetime sexual involvement. In addition, participants increased their mean sexual interaction level between time 1 and time 2 while comparisons did not.

Results for Latinos: N/A; the majority of the evaluated sample is Latino.

#### APPENDIX D: WHAT WORKS TABLES

Table D.1: Knowledge

Not Found To Work	Mixed Findings	Found To Work
RCT-evaluated programs	N/A	RCT-evaluated programs
<ul> <li>Positive Prevention is an abstinence program. The program had no impact on knowledge about HIV/AIDs.</li> <li>QED-evaluated programs</li> <li>Covey is a risk-reduction program. The program had no effect on knowledge about risky behaviors (risky sexual behavior and substance use).</li> <li>Health Education Intervention is a risk-reduction program. The program had no effect on knowledge about risky behaviors (risky sexual behavior and substance use).</li> </ul>		<ul> <li>ARREST is an HIV risk-reduction program. The program had a positive impact on knowledge about HIV.</li> <li>Draw the Line is a comprehensive sex education program. The program had a positive impact on knowledge about HIV and condoms.</li> <li>Information-Based HIV/STD Risk-reduction Intervention is a comprehensive sex education program. The program had a positive impact on knowledge about HIV/STDs and condom use.</li> <li>It's Your Game is a comprehensive sex education program. The program had positive impacts on knowledge about condoms, HIV/STDs, and sexual intercourse.</li> <li>Project SNAPP is a comprehensive sex education program. The program had a positive impact on knowledge about contraception, pregnancy, and HIV/STDs.</li> <li>Sisters Saving Sisters is a comprehensive sex education program had positive impacts on knowledge of HIV/STDs and condom use.</li> <li>Teen Talk is a comprehensive sex education program. The program had a positive impact on knowledge about sexual intercourse, pregnancy, and contraception.</li> </ul>
		QED-evaluated programs
		<ul> <li><u>CAMP</u> is a comprehensive sex education program. The program had positive effects on knowledge of HIV, abstinence, and male roles in sexual decision-making and childbearing.</li> <li><u>Reducing the Risk</u> is a comprehensive sex education program. The program had a positive effect on knowledge about pregnancy and contraception.</li> <li><u>Shero</u> is an HIV risk-reduction program. The program had a positive</li> </ul>

program. The program had a positive effect on HIV/AIDs and STD

knowledge.

#### **RCT-evaluated programs**

- <u>Draw the Line</u> is a comprehensive sex education program. The program had no impact on attitudes about having sexual intercourse or about abstaining from sexual intercourse, on beliefs about the popularity of sexual intercourse or about peer perceptions of the popularity of sexual intercourse, or on attitudes about female or male pressure about sexual intercourse.
- <u>Project RESPECT</u> is an HIV riskreduction program. The program had no impact on belief that they will contract HIV in the future.
- Project SNAPP is a comprehensive sex education program. The program had no impacts on reasons to avoid sex or use condoms; beliefs about ideal age of sexual initiation, risk of pregnancy or HIV, peer sexual activity; or attitudes about avoiding pregnancy or HIV. The program had positive impacts on attitudes about peer condom use and about being friends with someone who has HIV.
- <u>Teen Talk</u> is a comprehensive sex education program. The program had no impacts on beliefs about control over their fertility and sexual health.

#### **QED-evaluated programs**

- PATH-AT is a youth development/adult preparation program. The program had no effect on the belief that adolescent pregnancy makes it harder to stay in school.
- <u>Success Express</u> is an abstinence program. The program had no effect on ideal age for sexual initiation or on attitudes about premarital sexual intercourse.

#### **RCT-evaluated programs**

• It's Your Game is a comprehensive sex education program. The program had positive impacts on beliefs about delaying sexual intercourse until marriage and delayed impacts on perceptions of peers' sexual activity and beliefs about condoms; the program had positive impacts on reasons to abstain from sexual intercourse and perceptions of friends' reasons to have abstain from sexual intercourse at 8th grade followup, but not at 9<sup>th</sup> grade follow-up; the program had no impacts on beliefs about delaying sexual intercourse or on reasons to have sexual intercourse.

#### **QED-evaluated programs**

• Reducing the Risk is a comprehensive sex education program. The program had an effect on perceptions of peers' sexual activity and use of contraception (treatment group was less likely to think their peers were having sex or using contraception) at 6-month follow-up, but not at 18-months.

#### **RCT-evaluated programs**

- <u>ARREST</u> is an HIV risk-reduction program. The program had an impact on attitudes about AIDS.
- Information-Based HIV/STD Riskreduction Intervention is a comprehensive sex education program. The program had a positive impact on condom attitudes and perceived partners' condom attitudes.
- <u>Positive Prevention</u> is an abstinence program. The program had a positive impact on attitudes about abstinence.
- <u>Sisters Saving Sisters</u> is a comprehensive sex education program. The program had a positive impact on condom attitudes and perceived partners' condom attitudes.

- <u>Baby Think It Over</u> is an infant simulator program. The program had positive effects on beliefs about delaying childbearing and negative consequences of adolescent births.
- <u>CAMP</u> is a comprehensive sex education program. The program had a positive effect on beliefs that they should use birth control or on beliefs that condoms can prevent STIs.
- <u>Covey</u> is a risk-reduction program. The program had a positive effect on attitudes about risky sexual behavior and substance use.
- <u>Health Education Intervention</u> is a risk-reduction program. The program had a positive effect on attitudes about sexual behavior and substance use.
- Shero is an HIV risk-reduction program. The program had a positive effect on perceived peer approval of protective sexual behaviors and beliefs about condoms, forced sex, and "mixed signals."

**Table D.3: Intentions** 

#### **RCT-evaluated programs**

- It's Your Game is a comprehensive sex education program. The program had no impact on intentions to have sexual intercourse in next year or to delay sexual intercourse until marriage; the program had a positive impact on intentions to have oral sex in next year and to delay sexual intercourse until after high school at 8th grade follow-up, but not at 9th grade follow-up.
- <u>Project SNAPP</u> is a comprehensive sex education program. The program had no impact on intentions to use condoms/birth control or on intentions about "how far to go" sexually.

#### **QED-evaluated programs**

- <u>Covey</u> is a risk-reduction program. The program had no effect on intentions to abstain from sexual intercourse, to use condoms, or to use contraception.
- <u>Health Education Intervention</u> is a risk-reduction program. The program had no effect on intentions to abstain from sexual intercourse, to use condoms, or to use contraception.
- <u>PATH-AT</u> is a youth development/adult preparation program. The program had no effect on plans to abstain until marriage.
- <u>Success Express</u> is an abstinence program. The program had no effect on the age that participants expect age to initiate sexual intercourse.

#### **QED-evaluated programs**

- ASPPP is a comprehensive sex education program. The program had a positive effect on perceived likelihood of abstaining from sexual intercourse for females, but not males.
- Reducing the Risk is a comprehensive sex education program. The program had a positive effect on intentions to avoid unprotected sexual intercourse in one evaluation, but not another.

#### **RCT-evaluated programs**

- <u>Information-Based HIV/STD Risk-reduction Intervention</u> is a comprehensive sex education program. The program had a positive impact on condom use intention.
- <u>Sisters Saving Sisters</u> is a comprehensive sex education program. The program had a positive impact on condom use intention.

- <u>CAMP</u> is a comprehensive sex education program. The program had a positive effect on intentions to postpone sexual intercourse.
- <u>Shero</u> is an HIV risk-reduction program. The program had a significant effect on intentions to use condoms when having vaginal sex.

Table D.4: Self-efficacy

#### **RCT-evaluated programs**

- <u>ARREST</u> is an HIV risk-reduction program. The program had no impact on self-efficacy to protect against HIV/AIDS.
- <u>Draw the Line</u> is a comprehensive sex education program. The program had no impact on self-efficacy to refuse sexual activity.
- Project SNAPP is a comprehensive sex education program. The program had no impact on self-efficacy to avoid sexual intercourse and unprotected sexual intercourse at 5- or 17-month follow-ups (marginal impact at 17-months) and an initial positive impact on self-efficacy to say "no" to sexual intercourse at 5-months that lost significance at 17-months.

#### **RCT-evaluated programs**

- <u>It's Your Game</u> is a comprehensive sex education program. The program had a positive impact on self-efficacy to refuse sexual intercourse and to use condoms at 8th grade follow-up, but not at 9th grade follow-up.
- <u>Project RESPECT</u> is an HIV riskreduction program. The program had a positive impact on condom selfefficacy at 3-month follow-up and a marginal impact at 12-months.

#### **RCT-evaluated programs**

- Information-Based HIV/STD Risk-reduction Intervention is a comprehensive sex education program. The program had positive impacts on self-efficacy to use condoms and to have impulse control, but no impact on self-efficacy to negotiate condom use.
- <u>Positive Prevention</u> is an abstinence program. The program had a positive impact on self-efficacy to abstain from sex and to use condoms.
- <u>Sisters Saving Sisters</u> is a comprehensive sex education program. The program had positive impacts on self-efficacy to use condoms and to have impulse control, but no impact on self-efficacy to negotiate condom use.

- <u>Covey</u> is a risk-reduction program.
   The program had a positive effect on self-efficacy to avoid risk behaviors (risky sexual behaviors and substance use)
- <u>Health Education Intervention</u> is a risk-reduction program. The program had a positive effect on self-efficacy to avoid risk behaviors (risky sexual behaviors and substance use).

**Table D.5: Communication** 

Not Found To Work	Mixed Findings	Found To Work
	General Communication	
RCT-evaluated programs	N/A	RCT-evaluated programs
• <u>Project RESPECT</u> is an HIV risk-reduction program. The program had no impact on communication with partner about sexual history.		<ul> <li><u>ARREST</u> is an HIV risk-reduction program. The program had a positive impact on communicating reasons for abstaining from sex.</li> </ul>
QED-evaluated programs		QED-evaluated programs
• <u>CAMP</u> is a comprehensive sex education program. The program had no effect on comfort with communication with their friends, boyfriends, or girlfriends.		<ul> <li>Health Education Intervention is a risk-reduction program. The program had a positive effect on sexual communication with partner.</li> <li>Covey is a risk-reduction program. The program had a positive effect on sexual communication with partner.</li> <li>Shero is an HIV risk-reduction program. The program had a positive effect on sexual communication.</li> </ul>

#### Parent-Child Communication

#### **QED-evaluated programs**

- ASPPP is a comprehensive sex education program. The program had no effect on parent-youth communication.
- <u>Success Express</u> is an abstinence program. The program had no effects on family communication problems or openness of family communication.

#### **QED-evaluated programs**

• <u>CAMP</u> is a comprehensive sex education program. The program had a positive effect on comfort with communication with their mothers, but not on comfort with communication with their fathers.

#### **RCT-evaluated programs**

- <u>Families Talking Together</u> is a parentchild program. The program had a positive impact on mother-child communication about sexual intercourse.
- <u>Reducing the Risk</u> is a comprehensive sex education program. The program had positive effects on parent-child communication about sex and sexual and reproductive health topics.

**Table D.6: Initiation of Sexual Intercourse** 

#### **RCT-evaluated programs**

- Familias Unidas is a parent-child program. The program had no impact on sexual initiation.
- Project SNAPP is a comprehensive sex education program. The program had no impact on sexual initiation.

#### **QED-evaluated programs**

• Condom Availability is a condom distribution program. The program had no effect on sexual initiation for the whole group and had a negative impact for Latinos.

#### **RCT-evaluated programs**

- education program. The program delayed sexual initiation for males, but not females.
- Families Talking Together is a parent-child program. The program delayed sexual initiation for one evaluation, but not another.
- Teen Talk is a comprehensive sex education program. The program delayed sexual initiation for males, but not females.

#### **QED-evaluated programs**

- ASPPP is a comprehensive sex education program. The program delayed sexual initiation for females. but not males.
- Poder Latino is a condom distribution program. The program delayed sexual initiation for females, but not males.
- Reducing the Risk is a comprehensive sex education program. The program had an effect on sexual initiation in one evaluation, but not another.

#### **RCT-evaluated programs**

- Draw the Line is a comprehensive sex It's Your Game is a comprehensive sex education program. The program had positive impacts on initiation of sex (vaginal, oral, and anal) and on initiation of vaginal sex for Latinos.
  - Positive Prevention is an abstinence program. The program had a positive impact on sexual initiation.

- Covey is a risk-reduction program. The program had a positive effect on abstaining.
- Health Education Intervention is a comprehensive sex education program. The program had a positive effect on abstaining.

Table D.7: Frequency of Sexual Intercourse

had no effect on past 6-month sexual

<u>Poder Latino</u> is a condom distribution program. The program had no effect on past 6-month sexual frequency.
 <u>Shero</u> is an HIV risk-reduction program. The program had no effect

on sex in the past 2 months.
<u>Success Express</u> is an abstinence program. The program had a negative

effect on sexual involvement.

intercourse.

#### Not Found To Work **Mixed Findings** Found To Work **RCT-evaluated programs RCT-evaluated programs RCT-evaluated programs** • ARREST is an HIV risk-reduction • Draw the Line is a comprehensive sex • ¡Cuídate! is a comprehensive sex program. The program had no impact education program. The program had education program. The program had on past month sexual intercourse. a positive impact on had sexual a positive impact on frequency of intercourse in the past 12 months for • Familias Unidas is a parent-child sexual intercourse. males, but not females. program. The program had no impact • It's Your Game is a comprehensive on frequency of sexual intercourse. • Families Talking Together is a parentsex education program. The program child program. The program had a • Positive Prevention is an abstinence had a positive impact on frequency of program. The program had no impact positive impact on frequency of sexual sexual intercourse in past 3 months. intercourse in past 30 days for one on frequency of sexual intercourse. evaluation and no impact for another. • Project SNAPP is a comprehensive sex education program. The program **OED-evaluated programs** had no impact on sexual frequency. **QED-evaluated programs** • Reducing the Risk is a comprehensive sex education program. The program had mixed results for frequency of • ASPPP is a comprehensive sex sexual activity for one evaluation, and education program. The program had no effect for frequency of sexual no effect on frequency of sexual activity for another. activity. • Condom Availability is a condom distribution program. The program

#### **Table D.8: Number of Sexual Partners** Not Found To Work **Mixed Findings** Found To Work **QED-evaluated programs RCT-evaluated programs RCT-evaluated programs** • ARREST is an HIV risk-reduction • Poder Latino is a condom distribution • ¡Cuídate! is a comprehensive sex program. The program had no impact program. The program had a positive education program. The program had on number of past month sexual effect on number of sexual partners in a positive impact on number of sexual past 6 months for females, but not partners. partners. males. • Draw the Line is a comprehensive sex • Familias Unidas is a parent-child education program. The program had program. The program had a positive no impact on number of past year impact on number of sexual partners sexual partners. in past 90 days. • Information-Based HIV/STD Risk-• Sisters Saving Sisters is a reduction Intervention is a comprehensive sex education comprehensive sex education program. The program had a delayed program. The program had no impact impact on number of sexual partners on multiple sexual partners in past 3 months. • It's Your Game is a comprehensive sex education program. The program **QED-evaluated programs** had no impact on number of lifetime or past 3-month sexual partners. • Covey is a risk-reduction program. • Project RESPECT is an HIV risk-The program had a positive effect on reduction program. The program had number of sexual partners. no impact on number of sexual • Health Education Intervention is a partners. risk-reduction program. The program • Project SNAPP is a comprehensive had a positive effect on number of sex education program. The program sexual partners. had no impact on number of sexual partners. **QED-evaluated programs** • ASPPP is a comprehensive sex education program. The program had no effect on number of past 9-month sexual partners. • Shero is an HIV risk-reduction program. The program had no effect

on number of sexual partners.

Table D.9: Use of Condoms for STD and/or Pregnancy Prevention

#### **RCT-evaluated programs**

- <u>ARREST</u> is an HIV risk-reduction program. The program had no impact on condom use in past month.
- <u>Draw the Line</u> is a comprehensive sex education program. The program had no impact on condom use at last sexual intercourse.
- <u>Information-Based HIV/STD Risk-reduction Intervention</u> is a comprehensive sex education program. The program had no impact on days of sexual intercourse without condoms.
- It's Your Game is a comprehensive sex education program. The program had no impacts on condom use at last sexual intercourse, condom use in past 3 months, or number of partners in past 3 months that did not use condoms.
- <u>Positive Prevention</u> is an abstinence program. The program had no impact on past 2-month condom use.
- <u>Project SNAPP</u> is a comprehensive sex education program. The program had no impact on condom use.

#### **QED-evaluated programs**

• <u>Peer Providers</u> is a comprehensive sex education program. The program had no effect on condom use for females and a negative effect for males.

#### **RCT-evaluated programs**

- <u>¡Cuídate!</u> is a comprehensive sex education program. The program had mixed impacts on condom use. There was a positive impact on consistent condom use in past 3 months, but no impact on condom use at most recent sex. And there was a positive impact on frequency of unprotected sexual intercourse (sex without a condom) in past 3 months, but no impact on proportion of days of unprotected sexual intercourse.
- <u>Project RESPECT</u> is an HIV risk-reduction program. The program had a positive impact on condom use at last intercourse with main partner at 3-month follow-up, but not at 12-month follow-up.

#### **RCT-evaluated programs**

- <u>Familias Unidas</u> is a parent-child program. The program had a positive impact on condom use in two studies, and mixed impact on condom use in another evaluation.
- <u>Sisters Saving Sisters</u> is a comprehensive sex education program. The program had a delayed impact on number of days of sexual intercourse without a condom in past 3 months.

- Condom Availability is a condom distribution program. The program had a positive effect on use of condom at last intercourse (although subpopulation analysis was not significant for Latinos).
- <u>Covey</u> is a risk-reduction program.
   The program had a positive effect for use of condoms.
- <u>Health Education Intervention</u> is a risk-reduction program. The program had a positive effect for use of condoms.
- <u>Shero</u> is an HIV risk-reduction program. The program had a positive effect on condom use in past 2 months.

Table D.10: Contraceptive Use

Not Found To Work	Mixed Findings	Found To Work			
Use of Hormonal Contraceptive Methods Only					
RCT-evaluated programs	N/A	N/A			
• <u>Project SNAPP</u> is a comprehensive sex education program. The program had a negative impact on birth control pill use at last sexual intercourse.					
Use of Long-acting Reversible Contraceptives (LARCs)					
N/A	N/A	N/A			
Use of Dual Methods (Condoms plus Hormonal Methods)					
N/A	N/A	N/A			
Use of a Effective Method (Some Combination of Condoms and/or Hormonal Methods)					
RCT-evaluated programs	QED-evaluated programs	N/A			

- It's Your Game is a comprehensive sex education program. The program had no impact frequency of having sexual intercourse in past 3 months without effective birth control.
- Teen Talk is a comprehensive sex education program. The program had no impacts on effective contraceptive use at first or most recent sexual intercourse; subpopulation analyses revealed a negative impact on contraceptive use for females.

#### **QED-evaluated programs**

• Peer Providers is a comprehensive sex education program. The program had no effect on birth control use for females, no effect on birth control at most recent sex for males, and a negative effect for consistent birth control use for males.

- ASPPP is a comprehensive sex education program. The program had a positive effect on consistent
- contraceptive use for males, but not females. • Reducing the Risk is a comprehensive sex education program. Across
- evaluations, the program had positive impacts on some measures of contraceptive use, but not others.

Table D.11: Contracting Sexually Transmitted Diseases (STDs)

• <u>Peer Providers</u> is a comprehensive sex education program. The program had

no effect on contracting STDs.

e v	,	
Not Found To Work	Mixed Findings	Found To Work
RCT-evaluated programs	N/A	RCT-evaluated programs
<ul> <li>Information-Based HIV/STD Risk-reduction Intervention is a comprehensive sex education program. The program had no impact on testing positive for STDs.</li> <li>Project RESPECT is an HIV risk-reduction program. The program had</li> </ul>		• <u>Sisters Saving Sisters</u> is a comprehensive sex education program. The program had no impact on testing positive for an STD at 6 months, but did have a delayed marginal impact at 12 months.
no impact on self-reported STIs or positive Chlamydia tests.		QED-evaluated programs
<ul> <li>Project SNAPP is a comprehensive sex education program. The program had no impact on STD rates.</li> </ul>		<ul> <li>Project SAFE and SAFE-2 is an HIV risk-reduction program. The program had a positive impact on contraction of Chlamydia or gonorrhea.</li> </ul>
QED-evaluated programs		or oy 8
• ASPPP is a comprehensive sex education program. The program had no on STDs in past 9 months.		

Table D.12: Pregnancy

Table D.12: Pregnancy		
Not Found To Work	Mixed Findings	Found To Work
RCT-evaluated programs	QED-evaluated programs	QED-evaluated programs
<ul> <li>Middle School Leadership Program is a youth development program. The program had no impact at year 2; and a negative impact at year 3.</li> <li>Northeastern Illinois University         Dropout Prevention Educational             Partnership Program is an intensive youth development program. The program had no impact on pregnancy.     </li> <li>Project SNAPP is a comprehensive sex education program. The program had no impact on pregnancy rates.</li> <li>Twelve Together is a youth development program. The program had no impact on pregnancy.</li> <li>Up with Literacy is a youth development program. The program had no impact on pregnancy.</li> </ul>	ASPPP is a comprehensive sex education program. The program had a positive effect on becoming pregnant for females, but not on causing a pregnancy for males.	• Peer Providers is a comprehensive sex education program. The program had a positive effect on pregnancies for the whole treatment group (although this was only measured among females), and had a positive effect on Latinos.
QED-evaluated programs		
• Reducing the Risk is a comprehensive sex education program. The program had no effect on pregnancy.		

#### APPENDIX E: FINDINGS BY PROGRAM CHARACTERISTICS

#### **Findings by Program Setting**

The following section describes the findings of the 29 adolescent pregnancy prevention program evaluations that were evaluated with Latino populations, by program setting.

#### School-based Programs

The majority of evaluated programs for Latinos are implemented in school settings. Eighteen of the 29 programs were implemented in school settings, and these programs measured psychosocial, communication, and behavior outcomes.

- ➤ One-third of school-based programs did NOT work for any outcome on the other hand, this means that two-thirds of the programs worked for at least one outcome for at least one subpopulation. Six out of the 18 programs did not work for ANY outcomes that is, they did not have statistically significant effects on any outcome measured. However, four of these programs ONLY measured pregnancy as an outcome. Only measured pregnancy as an outcome.
- School-based programs seemed to work most often at improving communication and psychosocial outcomes. Nearly all of the programs that measured communication worked or had mixed findings (three of four),<sup>3</sup> and nearly all that measured psychosocial outcomes worked or had mixed findings (eight of 10).<sup>4</sup>
- School-based programs seemed to work at delaying sexual intercourse, but did not seem to work as often for reducing sexual risk among those who have already begun having sexual intercourse. Seven of nine programs that measured sexual initiation worked or had mixed findings. But few of the programs that sought to reduce frequent or recent sexual intercourse or number of sexual partners showed success (five out of 10<sup>6</sup> and two out of six, respectively). Only one of the six programs that measured condom use worked (*Condom Availability*), and one had mixed findings (*¡Cuídate!*). None of the four programs that measured contraceptive use worked. None of the programs that measured STDs or pregnancy worked (one measured STDs; six measured pregnancy).

<sup>&</sup>lt;sup>1</sup> Middle School Leadership Program; Northeastern Illinois University Dropout Prevention Educational Partnership Program, PATH-AT, Success Express, Twelve Together, and Up with Literacy

<sup>&</sup>lt;sup>2</sup> Middle School Leadership Program; Northeastern Illinois University Dropout Prevention Educational Partnership Program, Twelve Together, and Up with Literacy

<sup>&</sup>lt;sup>3</sup> CAMP, Families Talking Together, and Reducing the Risk

<sup>&</sup>lt;sup>4</sup> Baby Think It Over, CAMP, Draw the Line, It's Your Game, Positive Prevention, Project SNAPP, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>5</sup> Draw the Line, Families Talking Together, It's Your Game, Poder Latino, Positive Prevention, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>6</sup> ¡Cuídate!, Draw the Line, Families Talking Together, It's Your Game and Reducing the Risk <sup>7</sup> ¡Cuídate! and Poder Latino

#### Clinic/Hospital-based Programs

Less than one-quarter of the programs in this review were implemented in clinic or hospital settings (seven out of 29). Given the relatively small number of evaluations implemented in these settings, conclusions should be made with caution.

- These programs may or may not work for communication, but they often seemed to improve psychosocial skills. Only two included communications variables; one worked for parent-child communication (Families Talking Together), and one did not work for general communication (Project RESPECT). More than half of these programs (four out of seven) included psychosocial outcomes, and all worked or had mixed findings. Sisters Saving Sisters and its non-skills-based counterpart, Information-Based HIV/STD Risk Reduction Intervention, worked for all four psychosocial domains.
- ➤ All evaluations included at least one behavioral outcome but whether or not they worked for the behavioral outcome(s) varied. Three of five programs that measured sexual intercourse worked or had mixed findings. One worked for all participants (although the participants were all female in this program, Sisters Saving Sisters), one worked for males only (Teen Talk), and one had mixed findings across evaluations (Families Talking Together). Two out of four that included condom use worked or had mixed findings; one worked (again, Sisters Saving Sisters), and one showed diminishing success over two follow-ups (Project RESPECT). Neither of the two programs that included contraceptive use worked.
- ➤ Clinic/hospital-based programs showed promise for preventing pregnancy. Just one program included pregnancy as an outcome; however, it did have statistically significant effects (*Peer Providers*).
- ➤ The evaluations of these programs were the most likely to include STDs as an outcome, compared with other those in other settings; however, that does not mean that the programs worked for that outcome. Five of the seven program evaluations assessed STDs, but only two worked (*Project SAFE and SAFE-2* and *Sisters Saving Sisters*).

#### Community-Based Programs

One-fifth of programs (six of 29) were in community settings. Again, the small number of programs in this setting necessitate that conclusions be tentative.

- ➤ Most of the programs included communication and psychosocial outcomes, and most worked for at least one of these outcomes. Four of six programs measured communication and psychosocial skills. Three of the four worked for both communication and psychosocial skills. \*ASPPP\*, however, improved abstinence intentions (for females only) but did not work for communication skills.
- > All of these program evaluations measured sexual intercourse outcomes; they seemed to work at delaying sexual initiation among females, but they did not often

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<sup>&</sup>lt;sup>1</sup> Information-Based HIV/STD Risk Reduction Intervention, Project RESPECT, Sisters Saving Sisters, and Teen Talk

<sup>&</sup>lt;sup>2</sup> ARREST, Covey, and Shero

work at reducing sexual risk among those who had already initiated sexual intercourse. All three programs that measured sexual initiation worked or had mixed findings – one worked for all participants, who, in this case, were all female (*Covey*). Two worked for females but not males (*ASPPP* and *Poder Latino*). Only one of five reduced frequent or recent sexual intercourse (*¡Cuídate!*), and only half (three of six) reduced number of sexual partners.<sup>1</sup>

- ➤ Most of the evaluations assessed condom use, but just one assessed use of contraceptives other than condoms these programs may not increase condom use, but show promise for increasing contraceptive use. Four out of six programs included condom use as an outcome; only one (*Covey*) worked. The one program that included a measure of contraceptive use (*ASPPP*) worked for males only.
- ➤ One program evaluation included STDs or pregnancies as outcomes and it showed promise for preventing pregnancy. *ASPPP* did not work for STDs; but it worked for pregnancy among females.

#### Home-Based Programs

Three programs were completed in-part or in-whole in the home (*Baby Think it Over, Familias Unidas*, and *Health Education Intervention*), which means that these initial conclusions warrant further research. Note: in this review home-based programs are differentiated from programs with homework - see "Findings by Program Component" for review of the findings of programs with homework components.

- Two home-based programs included communication or psychosocial outcomes and they showed success. *Health Education Intervention* worked for communication skills, attitudes and beliefs, and self-efficacy, although it did not work for knowledge or intentions. *Baby Think it Over* only measured attitudes and beliefs, and it worked for these outcomes.
- Home-based programs had mixed findings for sexual activity outcomes, but were effective at increasing condom use. Health Education Intervention delayed sexual initiation, whereas Familias Unidas did not (nor did it reduce frequent or recent sex). Both reduced number of sexual partners and increased condom use, though. Neither evaluation included contraceptive use, STDs, or pregnancies in their list of measured outcomes.

#### **Findings by Program Duration and Structure**

The following section describes the findings of the 29 adolescent pregnancy prevention program evaluations that were evaluated with Latino populations, by duration and structure.

#### **Program Duration**

The majority of the programs were "short-term," lasting under six months in duration (17 out of 29). Twelve were "long-term," lasting six months or longer. *Familias Unidas* was evaluated as both a short and long program and is included in both sets of analyses.

> Short-term programs seemed to improve communication and psychosocial skills; long term programs also seemed to improve psychosocial skills. Six out of eight short-

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<sup>&</sup>lt;sup>1</sup> Covey, ¡Cuídate!, and Poder Latino

- term programs that measured communication worked,<sup>1</sup> and 12 out of 14 short-term programs that measured psychosocial skills worked or had mixed findings.<sup>2</sup> Few long-term programs measured these outcomes. Two out of 12 measured communication, but neither worked.<sup>3</sup> Four out of 12 measured psychosocial outcomes; all four had statistically significant effects on at least one psychosocial outcome.
- ➤ Short-term programs were slightly more likely to be effective than long-term programs in reducing number of sexual partners, but they were equally likely to be effective in reducing sexual activity among those who had already had sexual intercourse. Five out of 11 short term programs⁴ versus two out of five long-term programs that measured number of sexual partners worked or had mixed findings.⁵ On the other hand, three-quarters of both types of programs that measured sexual initiation worked or had mixed findings (six out of eight short-term⁶ and four out of six long-term⌉). Similarly, one-third of both types of program had some degree of effectiveness in reducing recent or frequent sex (three out of nine short-term programs³ and two out of six long-term programs worked or had mixed findings³).
- Short-term programs may improve condom and contraceptive use and reduce STD risk, but they were not successful at preventing pregnancies. Seven of 11 short-term programs that measured condom use worked or had mixed findings, <sup>10</sup> and two of five were found to prevent STDs. <sup>11</sup> Only one of three programs that measured contraceptive use showed promise (*Reducing the Risk*), but it is important to remember that this program was one of only two programs in the whole review that showed promise for this outcome. Neither program that measured pregnancy worked. <sup>12</sup>
- ➤ Long-term programs may be successful at preventing pregnancy, although this may be a function of the follow-up times in the evaluations of these programs. Although only two out of six long-term programs were found to have success at preventing pregnancy, these were the only two of the 29 programs in this review that worked for this outcome. <sup>13</sup>

<sup>&</sup>lt;sup>1</sup> ARREST, Covey, Families Talking Together, Health Education Intervention, Reducing the Risk, and Shero

<sup>&</sup>lt;sup>2</sup> ARREST, Baby Think It Over, Covey, Health Education Intervention, Information-Based HIV/STD Risk Reduction Intervention, Positive Prevention, Project RESPECT, Project SNAPP, Reducing the Risk, Sisters Saving Sisters, Shero and Teen Talk

<sup>&</sup>lt;sup>3</sup> ASPPP and CAMP

<sup>&</sup>lt;sup>4</sup> Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, and Sisters Saving Sisters <sup>5</sup> Familias Unidas and Poder Latino

<sup>&</sup>lt;sup>6</sup> Covey, Families Talking Together, Health Education Intervention, Positive Prevention, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>7</sup> ASPPP, Draw the Line, It's Your Game, and Poder Latino

<sup>8 ¡</sup>Cuídate!, Families Talking Together, and Reducing the Risk

<sup>&</sup>lt;sup>9</sup> Draw the Line and It's Your Game

<sup>&</sup>lt;sup>10</sup> Covey, ¡Cuídate!, Familias Unidas, Health Education Intervention, Project RESPECT, Shero, and Sisters Saving Sisters

<sup>&</sup>lt;sup>11</sup> Project SAFE and SAFE-2 and Sisters Saving Sisters

<sup>&</sup>lt;sup>12</sup> Project SNAPP and Reducing the Risk

<sup>&</sup>lt;sup>13</sup> ASPPP and Peer Providers

#### **Program Contact Hours**

Programs varied widely in number of contact hours, with eight programs offering fewer than 10 contact hours (limited contact hours), eight programs offering 10-19 contact hours (moderate contact hours), and 13 programs offering more than 20 (or unlimited) contact hours (extended contact hours). Three programs offered booster sessions.

- > Regardless of contact hours, programs were often effective at delaying sexual initiation, but programs with fewer contact hours may work slightly more often for reducing sexual activity among those who had already initiated sexual intercourse. Three of four limited contact hour programs, all three moderate contact hour programs, programs, <sup>2</sup> and four of six extended contact hour programs that measured sexual initiation were found to be effective.<sup>3</sup> Two of six limited contact hour programs<sup>4</sup> and two two of three moderate contact hour programs that measured recent or frequent sexual intercourse showed success.<sup>5</sup> Just one of five extended contact hour programs showed promise, having statistically significant effects for males only (*Draw the Line*).
- > On the other hand, programs with a high number of contact hours worked more often for improving psychosocial skills, reducing numbers of sexual partners, improving condom use, and preventing pregnancy. All five extended contact hour program evaluations that measured psychosocial skills found that the programs worked or had mixed findings; 6 comparatively, six of seven moderate contact hour programs 7 and five of six limited contact hour programs worked or had mixed outcomes. Three out of five programs with extended contact hours worked at reducing number of sexual partners. Comparatively, two out of six limited contact hour programs 10 and one out of four moderate contact hour programs (Sisters Saving Sisters) that measured number of sexual partners worked or had mixed findings. More than half of the extended contact hour programs that measured condom use worked or had mixed findings (three out of five). 11 Half of the limited and moderate contact hour programs that measured condom use worked or had mixed findings (three out of six <sup>12</sup> and two out of four, <sup>13</sup> respectively). Two out of 13 extended contact hour programs showed success at preventing pregnancy,

<sup>&</sup>lt;sup>1</sup> Families Talking Together, Health Education Intervention, and Positive Prevention

<sup>&</sup>lt;sup>2</sup> It's Your Game, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>3</sup> ASPPP, Covey, Draw the Line, and Poder Latino

<sup>&</sup>lt;sup>4</sup> ¡Cuídate! and Families Talking Together

It's Your Game and Reducing the Risk

<sup>&</sup>lt;sup>6</sup> Baby Think It Over, ASPPP, CAMP, Covey, and Draw the Line

<sup>&</sup>lt;sup>7</sup> Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Reducing the Risk, Shero, Sisters Saving Sisters, and Teen Talk

<sup>&</sup>lt;sup>8</sup> ARREST, Health Education Intervention, Positive Prevention, Project RESPECT, and Project **SNAPP** 

Covey, Familias Unidas, and Poder Latino

<sup>&</sup>lt;sup>10</sup> ¡Cuídate! and Families Talking Together
<sup>11</sup> Condom Availability, Covey, and Familias Unidas

<sup>&</sup>lt;sup>12</sup> ¡Cuídate!, Health Education Intervention, and Project RESPECT

<sup>13</sup> Shero and Sisters Saving Sisters

- but they were the only two programs in this review that worked for this outcome.<sup>1</sup>
- ➤ Programs with booster sessions showed similar findings to programs with extended program hours even though they ranged in their number of actual contact hours.² Only three programs included booster sessions, so conclusions should be made with caution about this structural component. However, it appeared that, like programs with longer durations, programs with booster sessions might be effective at improving psychosocial skills, reducing number of partners, and improving condom use when used. One, Familias Unidas, measured condom use, and it worked. One, Families Talking Together, was evaluated on parent-child communication, and it worked. One, Familias Unidas, measured condom use, and it worked. One, Project SAFE and SAFE 2, measured STDs, and it worked. Two programs measured sexual initiation and recent/frequent sex; one did not work, and one worked in one evaluation by not another evaluation. None of the three programs were evaluated for their effects on psychosocial skills, contraceptive use, or pregnancy.

### Findings by Mode of Delivery

The following section describes the findings of the 29 adolescent pregnancy prevention program evaluations that were evaluated with Latino populations, by mode of delivery.

#### Group vs. One-on-One Program Delivery

Most programs (23 of 29) were delivered in groups; seven were delivered one-on-one. Six programs had one-on-one and group components.<sup>3</sup>

- ➤ Programs with one-on-one components did not seem to improve communication, but they frequently were effective for psychosocial outcomes. On the other hand, group programs were often successful in both of these domains. Two one-on-one programs measured communication neither worked, meaning that neither had statistically significant effects on any measure of communication. Comparatively, five of seven group programs that measured communication worked or had mixed findings. Three one-on-one program evaluations measured psychosocial outcomes, and all worked or had mixed findings; 12 of 14 programs that were evaluated on their effects on psychosocial outcomes showed success.
- > Programs with one-on-one components showed success at reducing sexual activity for females, but not males. Three one-on-one programs measured sexual activity; none

<sup>&</sup>lt;sup>1</sup> ASPPP and Peer Providers

<sup>&</sup>lt;sup>2</sup> Familias Unidas, Families Talking Together, and Project SAFE and SAFE-2

<sup>&</sup>lt;sup>3</sup> Baby Think It Over, ASPPP, Peer Providers, Poder Latino, Project SAFE and SAFE-2, and Up with Literacy

<sup>&</sup>lt;sup>4</sup> ASPPP and Project RESPECT

<sup>&</sup>lt;sup>5</sup> ARREST, CAMP, Covey, Reducing the Risk, and Shero

<sup>&</sup>lt;sup>6</sup> Baby Think it Over, ASPPP, and Project RESPECT

<sup>&</sup>lt;sup>7</sup> ARREST, Baby Think It Over, ASPPP, CAMP, Covey, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Project SNAPP, Reducing the Risk, Shero, Sisters Saving Sisters, and Teen Talk

- worked for all participants. However, two delayed sexual initiation for females, <sup>1</sup> and one reduced number of sexual partners for females (*Poder Latino*). One did not work (*Project RESPECT*, which, unlike the other two, did not have a group component in addition to the one-on-one).
- ➤ Group programs were often found to be successful in delaying sexual initiation, but not reducing sexual activity once sexual intercourse had been initiated. Seven out of 9 programs that measured sexual initiation worked or had mixed findings.² Only four out of 11 reduced recent or frequent sex,³ and five out of 13 reduced number of sexual partners.⁴
- ➤ Programs with one-on-one components may not work for condom or contraception use; group programs were more often found to be effective for these outcomes. Just two of the seven one-on-one programs measured condom use and two measured contraceptive use; neither worked consistently (*Project RESPECT* had diminishing success for condom use, and *ASPPP* worked for contraceptive use for males only). Comparatively, five out of 11 group programs were found to work or to have mixed findings for condom use, <sup>5</sup> and two out of six had mixed findings for contraceptive use (but these two programs were the only two in this program review that were found to improve contraceptive use). <sup>6</sup>
- ➤ Programs with one-on-one components were most promising for preventing pregnancy; Group programs showed more promise for preventing STDs. Two out of the three one-on-one programs that measured pregnancy worked or had mixed findings. For this outcome, this is the highest proportion of effective programs for any program type, structure, mode of delivery, or component. One of four one-on-one programs that measured STDs worked (*Project SAFE and SAFE-2*), compared with two of six group programs (*Project SAFE and SAFE-2*, which included a group and one-on-one component, and *Sisters Saving Sisters*).

#### Peer-to-peer Program Delivery

Seven programs included peer-to-peer program delivery (either as the sole mode of delivery or as one of several modes of delivery). Given the relatively small number of evaluations implemented by peers, conclusions should be made with caution.

➤ Peer-to-peer programs seemed to improve communication and psychosocial skills. All three programs that measured communication worked or had mixed findings. Four of

<sup>&</sup>lt;sup>1</sup> ASPPP and Poder Latino

<sup>&</sup>lt;sup>2</sup> ASPPP, Covey, Draw the Line, It's Your Game, Poder Latino, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>3</sup> ¡Cuídate!, Draw the Line, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>4</sup> ¡Cuídate!, Covey, Familias Unidas, Poder Latino, and Sisters Saving Sisters

<sup>&</sup>lt;sup>5</sup> ¡Cuídate!, Covey, Familias Unidas, Shero, and Sisters Saving Sisters

<sup>&</sup>lt;sup>6</sup> ASPPP and Reducing the Risk

<sup>&</sup>lt;sup>7</sup> ASPPP and Peer Providers

<sup>&</sup>lt;sup>8</sup> ARREST, CAMP, and Shero

- of five that measured psychosocial skills worked or had mixed findings. 1
- ➤ Peer-to-peer programs might delay sexual initiation among females, but they did not seem to reduce sexual activity among those who have already initiated sexual intercourse. One of two programs that measured sexual initiation worked for females only (*Poder Latino*). On the other hand, none of the four programs that measured recent or frequent sexual intercourse worked. One of four programs that measured number of sexual partners worked for females only (*Poder Latino*).
- Peer-to-peer programs also did not seem to work for condom and contraceptive use. Only one of four programs that measured condom use worked (*Shero*), and neither of the two programs that measured contraceptive use worked.<sup>3</sup>
- ➤ However, peer-to-peer programs show promise for preventing pregnancy. One of the two programs that measured pregnancy worked and, interestingly, it was the sole program in this review delivered entirely by peers (*Peer Providers*).

#### **Findings by Program Component**

The following section describes the findings of the 29 adolescent pregnancy prevention program evaluations evaluated with Latino populations, by various program components.

### Behavioral Skill-building

Seven programs had behavioral skill-building components; this relatively small number indicates that findings should be considered with caution.

- ➤ Interestingly, programs with behavioral skill-building frequently seemed to be effective at improving psychosocial skills. Only one program with a behavioral skill-building component measured communication (*ARREST*), and it had a statistically significant positive effect. All five programs that measured psychosocial skills had positive or mixed findings.<sup>4</sup>
- ➤ Behavioral skill-building might delay sexual initiation, but this component did not consistently reduce risk among those who were already sexually active. All four programs that measured sexual initiation showed success; two worked for all participants, one worked for males only (*Draw the Line*), and one worked for females only (*Poder Latino*). However, only one of five programs that measured frequent or recent sexual intercourse worked (*It's Your Game*), and one worked for females only (*Draw the Line*). Likewise, only one of five programs that measured number of sexual partners worked for all participants (*Sisters Saving Sisters*, which was a female-only program) and one worked for females only (*Poder Latino*). One of six programs that measured condom use worked (*Sisters Saving Sisters*); neither of the two programs that measured contraceptive use improved contraceptive use among sexually active

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<sup>&</sup>lt;sup>1</sup> ARREST, CAMP, Project SNAPP, and Shero

<sup>&</sup>lt;sup>2</sup> ARREST, Poder Latino, Project SNAPP, and Shero

<sup>&</sup>lt;sup>3</sup> Peer Providers and Project SNAPP

<sup>&</sup>lt;sup>4</sup> ARREST, Draw the Line, It's Your Game, Positive Prevention, and Sisters Saving Sisters

<sup>&</sup>lt;sup>5</sup> It's Your Game and Positive Prevention

adolescents.1

➤ However, there is potential for behavioral skill-building programs to reduce STDs and pregnancies. One program (*Peer Providers*) measured pregnancy, and it was found to work. Two program evaluations measured STDs, and one (*Sisters Saving Sisters*) was successful. Notably, *Sisters Saving Sisters* was compared with the *Information-Based HIV Risk Reduction Program*; these programs were identical except that the former included behavioral skill-building and the latter did not – and the latter did not prevent STDs.

#### Psychosocial Skill-building

Psychosocial skill-building components were used in 21 programs.

- Not surprisingly, psychosocial skill-building programs often improved psychosocial and communication skills. Nearly all of the programs that were evaluated on their effects on psychosocial skills worked or had mixed findings (14 out of 16).<sup>2</sup> Two-thirds of the programs (six of nine) that measured communication worked or had mixed findings.<sup>3</sup>
- Programs with a psychosocial skill-building component often delayed sexual initiation but were less often successful at reducing the frequency of sexual intercourse or number of sexual partners among teens who had already initiated sexual intercourse. Almost all (eight out of nine) psychosocial skill-building programs that measured sexual initiation worked or had mixed findings. In contrast, less than half (five of 11) that measured frequent or recent sexual intercourse worked or had mixed findings, and only one-quarter (three of 12) reduced number of sexual partners.
- ➤ Psychosocial skill-building programs may not be effective at increasing condom use, but they might increase contraceptive use. Less than half of programs that measured condom use worked or had mixed results (five of 11). However, two of five programs that measured contraceptive use had mixed findings (the only two in this program review to show success with this outcome). \*\*
- > Some psychosocial skill-building programs might prevent pregnancies for females and might be effective at preventing STDs. Five programs measured pregnancy; one worked for females but not males (ASPPP). One-third of the programs (two of six) that

<sup>&</sup>lt;sup>1</sup> It's Your Game and Peer Providers

<sup>&</sup>lt;sup>2</sup> ARREST, ASPPP, CAMP, Covey, Draw the Line, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, PATH-AT, Positive Prevention, Project RESPECT, Project SNAPP, Reducing the Risk, Sisters Saving Sisters, Success Express, Shero, and Teen Talk

<sup>&</sup>lt;sup>3</sup> ARREST, CAMP, Covey, Families Talking Together, Reducing the Risk, and Shero

<sup>&</sup>lt;sup>4</sup> ASPPP, Covey, Draw the Line, Families Talking Together, It's Your Game, Positive Prevention, Reducing the Risk, and Teen Talk

<sup>&</sup>lt;sup>5</sup> ¡Cuídate!, Draw the Line, Families Talking Together, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>6</sup> ¡Cuídate!, Covey, and Sisters Saving Sisters

<sup>&</sup>lt;sup>7</sup> ¡Cuídate!, Covey, Project RESPECT, Shero, and Sisters Saving Sisters

<sup>&</sup>lt;sup>8</sup> ASPPP and Reducing the Risk

measured STDs worked.1

## Technology Component.

Nine programs had a technology component (most often a video). **Technology programs did not improve communication skills, but seemed to improve psychosocial skills.** Only one program evaluation with a technology component measured communication and it did not work (*Project RESPECT*). However, every evaluation (six of six) that measured psychosocial skills worked or had mixed findings.<sup>2</sup>

- ➤ Programs with a technology component were found to work for delaying the initiation, frequency, and recency of sexual intercourse, but they had mixed results for reducing the number of sexual partners. Both programs with a technology component that measured initiation of sexual intercourse either worked for all participants (*It's Your Game*) or worked only for males (*Teen Talk*). Likewise, both programs that measured frequency or recency of sexual activity worked. On the other hand, just two of five programs that measured number of sexual partners worked.
- ➤ Programs that used technology seemed to have some effect on condom use, but not on contraceptive use. Six program evaluations measured condom use; half of them worked or had mixed findings. Three programs measured contraceptive use; none worked. 6
- ➤ Technology programs may work for pregnancies, but findings were mixed for STDs. Only one program measured pregnancy, and it worked (*Peer Providers*). Five programs measured STDs, but only two worked.<sup>7</sup>

## **Counseling Component**

Eight programs had a counseling component.

- ➤ Counseling did not seem to improve communication, but it worked for psychosocial skills. Three programs measured communication; only *Families Talking Together* worked. All three that measured psychosocial skills worked or had mixed results. 8
- ➤ To date, programs with a counseling component did not have success with sexual outcomes. None of the three programs that measured sexual initiation worked consistently; two had mixed findings, with one working for females only (ASPPP) and one that worked in one evaluation but not another (Families Talking Together). Likewise, none of the three counseling programs that measured frequency or recency of sexual intercourse worked consistently; one had mixed findings, having worked in one

<sup>&</sup>lt;sup>1</sup> Project SAFE and SAFE-2 and Sisters Saving Sisters

<sup>&</sup>lt;sup>2</sup> Baby Think It Over, Information-Based HIV/STD Risk Reduction Intervention, It's Your Game, Project RESPECT, and Sisters Saving Sisters

<sup>&</sup>lt;sup>3</sup> ¡Cuídate! and It's Your Game

<sup>&</sup>lt;sup>4</sup>; Cuídate! and Sisters Saving Sisters

<sup>&</sup>lt;sup>5</sup> ¡Cuídate!, Project RESPECT, and Sisters Saving Sisters

<sup>&</sup>lt;sup>6</sup> It's Your Game, Peer Providers, and Teen Talk

<sup>&</sup>lt;sup>7</sup> Project SAFE and SAFE-2 and Sisters Saving Sisters

<sup>&</sup>lt;sup>8</sup> Baby Think It Over, ASPPP, and Project RESPECT

- evaluation but not another (*Families Talking Together*). Only one of three programs that measured number of sexual partners worked (*Familias Unidas*).
- ➤ Counseling programs showed promise with condom and contraceptive use. Two of three programs that measured condom use showed success (*Familias Unidas* worked; *Project RESPECT* had a diminishing effect). Two programs measured contraceptive use; one worked for males (*ASPPP*).
- ➤ Counseling programs seem to be effective at reducing pregnancies, but are less effective at reducing STDs. Two of three programs that measured pregnancies showed success the only two in the review that showed success with this outcome. Four programs measured STDs; only one worked (*Project SAFE and SAFE-2*).

## Goal-setting Component

Seven programs had a goal-setting component. Given the relatively small number of programs that included goal-setting, conclusions should be made with caution.

- ➤ Goal-setting may not be an effective way to improve communication; it may or may not work for psychosocial skills. One of three programs that measured communication worked (*Covey*). None of the four programs that measured psychosocial skills worked, although three had mixed results across measures.<sup>2</sup>
- ➤ Goal-setting programs showed promise for delaying sexual initiation, but may not reduce frequency of sexual activity or number of sexual partners among adolescents who are already sexually active. Both programs that measured sexual initiation worked for delaying initiation of sex.<sup>3</sup> In contrast, neither program that measured frequency of sex worked.<sup>4</sup> Only one of three programs that measured number of sexual partners worked (*Covey*).
- ➤ While goal-setting programs may increase condom use, more research is needed on general contraceptive use. Two out of three programs that measured condom use showed success: one worked (*Covey*), and one showed diminishing effects (*Project RESPECT*). No program evaluation measured contraceptive use.
- ➤ Goal-setting programs may not work for preventing pregnancy, but they warrant further attention for preventing STDs. However, the number of studies is too small to reach a definitive conclusion. Two program evaluations measured pregnancies, and neither worked. One of two programs that measured STDs worked (*Project SAFE and SAFE-2*).

#### Homework Component

Five programs had a homework component. The small number of programs means that conclusions must be tentative.

<sup>&</sup>lt;sup>1</sup> Peer Providers and ASPPP

<sup>&</sup>lt;sup>2</sup> Covey, Positive Prevention, and Project RESPECT

<sup>&</sup>lt;sup>3</sup> Covey and Positive Prevention

<sup>&</sup>lt;sup>4</sup> Positive Prevention and Success Express

<sup>&</sup>lt;sup>5</sup> Middle School Leadership Program and Twelve Together

- ➤ Programs with homework were generally effective at improving communication and psychosocial skills. All four programs that measured communication worked. All four that measured psychosocial skills worked or had mixed findings.
- These programs were often effective at delaying sexual initiation and reducing recent or frequent sex; they were less often effective in reducing number of sexual partners. All four programs that were evaluated on their effects on sexual initiation worked or had mixed findings<sup>3</sup> three of four programs that were evaluated on their effects on recent or frequent sex worked or had mixed findings.<sup>4</sup> In both of the latter cases, the mixed findings were the result of programs working in one evaluation but not in another evaluation. Only one of three programs that measured number of sexual partners worked (*Health Education Intervention*).
- ➤ Based on the available evaluations, it seems that homework may not work frequently at improving condom use, but this program component warrants further attention for its possible effect on contraceptive use. Only one of three programs that measured condom use worked (*Health Education Intervention*). One of two that measured contraceptive use had mixed findings (but this program, *Reducing the Risk*, was one of only two programs in this review that showed success for this outcome).
- ➤ Research should explore whether homework reduces STD or pregnancy risk. None of these measured STDs; one measured pregnancy (*Reducing the Risk*) and did not work.

## Parent Component

Given the importance of family, or *familismo*, in the Latino culture, the number of programs with a parent component was a surprisingly small – just seven. This also means that these findings should be considered with caution.

- ➤ Programs with parent components, not surprisingly, were found to improve parent-child communication, and they also were found to improve psychosocial skills. Two programs measured communication parent-child communication, specifically and both worked. Three of four that measured psychosocial skills worked or had mixed findings.
- ➤ Just over half the programs with parent components worked at reducing sexual activity. Three of five programs that were evaluated on their effects on sexual initiation worked or had mixed findings; three of five that were evaluated on their effects on recent or frequent sex worked or had mixed findings; and one of two that measured number of sexual partners worked (*Familias Unidas*).

 $<sup>^1</sup>$  ARREST, Families Talking Together, Health Education Intervention, and Reducing the Risk

<sup>&</sup>lt;sup>2</sup> ARREST, Health Education Intervention, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>3</sup> Families Talking Together, Health Education Intervention, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>4</sup> Families Talking Together, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>5</sup> Families Talking Together and Reducing the Risk

<sup>&</sup>lt;sup>6</sup> Baby Think it Over, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>7</sup> Families Talking Together, It's Your Game, and Reducing the Risk

<sup>&</sup>lt;sup>8</sup> Families Talking Together, It's Your Game, and Reducing the Risk

- ➤ Programs with parent components showed promise at improving condom and contraceptive use. Two of three programs that measured condom use worked. Interestingly, these were the same two programs that did not work for delaying sexual initiation or reducing frequent or recent sexual intercourse. One of two programs that measured contraceptive use had mixed findings (*Reducing the Risk*, one of only two programs in this review that showed success for this outcome).
- ➤ More research is needed as to whether or not these programs work for preventing STDs or pregnancy. As was the case above, none of these programs measured STDs, and only one measured pregnancy (*Reducing the Risk*, and it did not work).

<sup>&</sup>lt;sup>1</sup> Condom Availability and Familias Unidas

#### APPENDIX F: PROGRAM CHARACTERISTIC COMBINATIONS

# Successful and Unsuccessful Program Characteristic Combinations

For the following findings, programs were considered successful if they worked or had mixed findings for <u>at least one</u> behavioral outcome (that is, not communication or psychosocial skills). Patterns of characteristics are reported if they were found for at least two programs. It should be noted that, with very limited numbers of program that represent each pattern, these findings should be considered tentative and descriptive, rather than definitive.

# Program Characteristic Combinations, for all Latino Adolescents

Regardless of target population age and program setting, several patterns emerged (Table F.1). For example:

- Programs that included either behavioral skill-building OR technology seemed to be effective<sup>1</sup> (but programs that used both were not successful).
- Programs involving parents<sup>2</sup> OR homework<sup>3</sup> WITHOUT role-play were successful.
- Programs that included counseling and either technology OR psychosocial skillbuilding were successful.<sup>4</sup>
- Programs that included role-playing but did not include the combination of a peer-topeer component and goal-setting were successful.<sup>5</sup>
- Programs that did NOT include homework, psychosocial skill-building and behavioral skill-building components, and parent components were NOT successful.<sup>6</sup>

#### Program Characteristic Combinations, for Latino Adolescents in School Settings

When considering programs in school-based settings only, three patterns emerged (Table F.2):

- Programs that included technology seemed to be effective,<sup>7</sup> as did programs that included behavioral skill-building.<sup>8</sup>
- Programs that involved parents WITHOUT using goal-setting and peer-to-peer components were successful.<sup>9</sup>
- Programs that did NOT include technology, a behavioral skill-building component, and

<sup>&</sup>lt;sup>1</sup> ARREST, ¡Cuídate!, Draw the Line, Poder Latino, Positive Prevention, and Project RESPECT

<sup>&</sup>lt;sup>2</sup> Condom Availability, Familias Unidas, Families Talking Together, and It's Your Game

<sup>&</sup>lt;sup>3</sup> Families Talking Together, Health Education Intervention, and It's Your Game

<sup>&</sup>lt;sup>4</sup> ASPPP, Families Talking Together, Peer Providers, and Project RESPECT

<sup>&</sup>lt;sup>5</sup> Reducing the Risk, Sisters Saving Sisters, and Teen Talk

<sup>&</sup>lt;sup>6</sup> Northeastern Illinois University Dropout Prevention Educational Partnership Program and Twelve Together

<sup>&</sup>lt;sup>7</sup> ¡Cuídate!, It's Your Game, and Teen Talk

<sup>&</sup>lt;sup>8</sup> Draw the Line, It's Your Game, Poder Latino, and Positive Prevention

<sup>&</sup>lt;sup>9</sup> Condom Availability, Families Talking Together, It's Your Game, and Reducing the Risk

# a parent component were NOT successful.1

# Program Characteristic Combinations, for Older/High School Latinos in School Settings

Among the few school-based programs that targeted high school students, no patterns emerged for the unsuccessful programs (Table F.3). Two patterns emerged for successful programs:

- Programs that included behavioral skill-building seemed to be effective.<sup>2</sup>
- Programs that did NOT include counseling AND peer-to-peer components were effective.<sup>3</sup>

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<sup>&</sup>lt;sup>1</sup> Middle School Leadership Program, Northeastern Illinois University Dropout Prevention Educational Partnership Program, Project SNAPP, Success Express, Twelve Together, and Up with Literacy

<sup>&</sup>lt;sup>2</sup> Poder Latino and Positive Prevention

 $<sup>^3</sup>$  ; Cuídate!, Condom Availability, Positive Prevention, Reducing the Risk, and Teen Talk

Program included:  A parent component  A parent component  Role-play Program did not include:  Role-play Program did not include:  Homework  Role-play Program did not include:  Role-play Program did not include:  Role-play Program did not include:  Role-play Program included:  Peer Providers  Project RESPECT  ARREST  I Cuídate!  Poder Latino Poder Latino Poder Latino Positive Prevention Project RESPECT  Teen Talk  Program did not include:  Teen Talk		Characteristics of Successful Programs
• A parent component Program did not include:  • Role-play Program included: • Haulth Education Intervention • Homework  • Role-play Program included: • Role-play Program included: • Role-play Program included: • Role-play Program included: • California's Adolescent Sibling Pregnancy Prevention Program • Families Talking Together • Health Education Intervention • It's Your Game: Keep it REAL!  Program did not include: • California's Adolescent Sibling Pregnancy Prevention Program • Families Talking Together • Peer Providers • Peer Providers • Project RESPECT  • ARREST • ¡Cuídate! • Draw the Line/Respect the Line • Poder Latino • Positive Prevention • Project RESPECT • Teechnology Program did not include: • Teechnology • Technology Program did not include: • Teechnology • Teechnology • Teechnology • Teen Talk	Program included:	Condom Availability
• It's Your Game: Keep it REAL!  • Role-play  Program included: • Health Education Intervention • It's Your Game: Keep it REAL!  • Families Talking Together • Health Education Intervention • It's Your Game: Keep it REAL!  • Program did not include: • Role-play  Program included: • California's Adolescent Sibling Pregnancy Prevention Program • Families Talking Together • Peer Providers • Families Talking Together • Peer Providers • Project RESPECT  • Peer Providers • Project RESPECT  • ARREST • [Cufdate! • Draw the Line/Respect the Line • Poder Latino • Positive Prevention • Project RESPECT • Teen Talk  • Teen Talk		
Program did not include:  Role-play Program included: Health Education Intervention It's Your Game: Keep it REAL!  Program did not include: Role-play Program included: Role-play Program included: The combination of counseling and technology  Program included:  ARREST I (Cuídate! Draw the Line/Respect the Line Poder Latino Positive Prevention Project RESPECT  Teen Talk  Program did not include: Teen nobination of behavioral skill-building Program did not include: Teen nobination of behavioral skill-building Program did not include: Teen nobination of behavioral skill-building Program did not include: Teen nobination of behavioral skill-building and technology	A parent component	
Program included:  Halth Education Intervention  It's Your Game: Keep it REAL!  Program did not include:  Role-play Program included:  California's Adolescent Sibling Pregnancy Prevention Program Families Talking Together  Pamilies Talking Together  California's Adolescent Sibling Pregnancy Prevention Program Families Talking Together  Program included:  Project RESPECT  ARREST  ¡Cuídate!  Draw the Line/Respect the Line  Poder Latino  Positive Prevention  Project RESPECT  Teen Talk  Program did not include:  Teen Talk	rogram did not include:	It's Your Game: Keep it REAL!
Program included:  Homework  Homework  Program did not include:  Role-play Program included:  The combination of counseling and technology  Program included:  ARREST  Culifornia's Adolescent Sibling Pregnancy Prevention Program  Families Talking Together  Pamilies	Role-play	
<ul> <li>Homework</li> <li>It's Your Game: Keep it REAL!</li> </ul> Program did not include: <ul> <li>Role-play</li> <li>Program included:</li> <li>California's Adolescent Sibling Pregnancy Prevention Program</li> <li>Families Talking Together</li> <li>Peer Providers</li> <li>Project RESPECT</li> </ul> OR <ul> <li>ARREST</li> <li>¡Cuídate!</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> </ul> • Technology Program did not include: <ul> <li>Teen Talk</li> </ul> • It's Your Game: Keep it REAL! <ul> <li>California's Adolescent Sibling Pregnancy Prevention Program</li> <li>Families Talking Together</li> <li>Peer Providers</li> <li>Project RESPECT</li> </ul> • ARREST <ul> <li>¡Cuídate!</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> <li>Teen Talk</li> </ul> • Teen Talk <ul> <li>Teen Talk</li> </ul>		Families Talking Together
Program did not include:  Program included:  California's Adolescent Sibling Pregnancy Prevention Program Families Talking Together  Peer Providers Project RESPECT  Project RESPECT  ARREST Cuídate! Draw the Line/Respect the Line Poder Latino Positive Prevention Project RESPECT  Teen Talk		
<ul> <li>Role-play</li> <li>Program included: <ul> <li>California's Adolescent Sibling Pregnancy Prevention Program</li> <li>Families Talking Together</li> <li>Peer Providers</li> <li>Project RESPECT</li> </ul> </li> <li>The combination of counseling and psychosocial skill-building</li> <li>Program included: <ul> <li>ARREST</li> <li>¡Cuídate!</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> </ul> </li> <li>Technology</li> <li>Program did not include: <ul> <li>The combination of behavioral skill-building and technology</li> </ul> </li> </ul>	Homework	• It's Your Game: Keep it REAL!
Program included:  • California's Adolescent Sibling Pregnancy Prevention Program  • Families Talking Together  • Peer Providers  • Project RESPECT   OR  • The combination of counseling and psychosocial skill-building  Program included:  • Behavioral skill-building  OR  • Technology  Program did not include:  • The combination of behavioral skill-building and technology  Program did not include:  • The combination of behavioral skill-building and technology	rogram did not include:	
<ul> <li>The combination of counseling and technology</li> <li>Families Talking Together</li> <li>Peer Providers</li> <li>Project RESPECT</li> </ul> OR <ul> <li>ARREST</li> <li>¡Cuídate!</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> </ul> Technology Program did not include: <ul> <li>The combination of behavioral skill-building and technology</li> </ul> Families Talking Together <ul> <li>Peer Providers</li> <li>Project RESPECT</li> <li>Teen Talk</li> </ul> Families Talking Together <ul> <li>Peer Providers</li> <li>Project RESPECT</li> <li>Teen Talk</li> </ul>		
<ul> <li>The combination of counseling and technology</li> <li>Peer Providers</li> <li>Project RESPECT</li> </ul> <ul> <li>OR</li> <li>The combination of counseling and psychosocial skill-building</li> <li>Program included: <ul> <li>ARREST</li> <li>¡Cuídate!</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> </ul> </li> <li>Technology</li> <li>Program did not include: <ul> <li>The combination of behavioral skill-building and technology</li> </ul> </li> </ul>	'rogram included:	The state of the s
• Project RESPECT  OR  • The combination of counseling and psychosocial skill-building  Program included: • Behavioral skill-building  OR  • Technology  Program did not include: • The combination of behavioral skill-building and technology  • Project RESPECT  • ARREST • ¡Cuídate! • Draw the Line/Respect the Line • Poder Latino • Positive Prevention • Project RESPECT • Teen Talk		
<ul> <li>The combination of counseling and psychosocial skill-building</li> <li>Program included: <ul> <li>ARREST</li> <li>¡Cuídate!</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> <li>Teen Talk</li> </ul> </li> <li>Teen Talk</li> </ul>		
<ul> <li>The combination of counseling and psychosocial skill-building</li> <li>Program included: <ul> <li>¡Cuídate!</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> <li>Teen Talk</li> </ul> </li> <li>Program did not include: <ul> <li>The combination of behavioral skill-building and technology</li> </ul> </li> </ul>		Project RESPECT
psychosocial skill-building  Program included:  • Behavioral skill-building  • Behavioral skill-building  • Draw the Line/Respect the Line  • Poder Latino  • Positive Prevention  • Project RESPECT  • Teen Talk  Program did not include:  • The combination of behavioral skill-building and technology	)R	
psychosocial skill-building  Program included:  • Behavioral skill-building  • Behavioral skill-building  • Draw the Line/Respect the Line  • Poder Latino  • Positive Prevention  • Project RESPECT  • Technology  Program did not include:  • The combination of behavioral skill-building and technology	The combination of counseling and	
• ¡Cuídate! • Behavioral skill-building • Draw the Line/Respect the Line • Poder Latino • Positive Prevention • Project RESPECT • Teen Talk • The combination of behavioral skill-building and technology		
<ul> <li>Behavioral skill-building</li> <li>Draw the Line/Respect the Line</li> <li>Poder Latino</li> <li>Positive Prevention</li> <li>Project RESPECT</li> <li>Teen Talk</li> <li>The combination of behavioral skill-building and technology</li> </ul>	'rogram included:	
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<ul> <li>OR</li> <li>Positive Prevention</li> <li>Project RESPECT</li> <li>Teen Talk</li> <li>Program did not include:</li> <li>The combination of behavioral skill-building and technology</li> </ul>	Behavioral skill-building	
• Project RESPECT • Technology • Technology • Ten Talk  Program did not include: • The combination of behavioral skill-building and technology	)R	
<ul> <li>Technology</li> <li>Teen Talk</li> <li>Program did not include:</li> <li>The combination of behavioral skill-building and technology</li> </ul>	, A	
Program did not include:  The combination of behavioral skill- building and technology	Technology	
building and technology	'rogram did not include:	100h 1 mil
•		
Program included:  • Reducing the Risk	'rogram included:	
<ul> <li>Sisters Saving Sisters</li> <li>Role-playing</li> <li>Teen Talk</li> </ul>	Role-playing	
Program did not include:	Program did not include:	
• The combination of a peer-to-peer component and goal-setting		
Characteristics of Unsuccessful Programs	component and goar-setting	Characteristics of Unsuccessful Programs

# Table F.2: Program Characteristic Combinations, for Latino Adolescents in School Setting

# Characteristics of Successful Programs

psychosocial skill-building, behavioral skill-building, and a parent component

**Program included:** • ¡Cuídate!

• It's Your Game: Keep it REAL!

 Technology • Teen Talk

**Program included:** • Draw the Line/Respect the Line

• It's Your Game: Keep it REAL!

• Behavioral skill-building Poder Latino

• Positive Prevention

Condom Availability

• Families Talking Together

• A parent component • It's Your Game: Keep it REAL!

• Reducing the Risk

Program did not include:

Program included:

• The combination of goal-setting and a peer-to-peer component

• The combination of technology,

component

behavioral skill-building, and a parent

## Characteristics of Unsuccessful Programs

#### Program did not include: • Middle School Leadership Program

- Northeastern Illinois University Dropout Prevention Educational Partnership Program
- Project SNAPP
- Success Express
- Twelve Together
- Up with Literacy

#### Table F.3: Program Characteristic Combinations, for Older/High School Latinos in School Settings

**Program included:** Poder Latino

Positive Prevention

• Behavioral skill-building

Program did not include: ¡Cuídate!

Condom Availability

• The combination of counseling and a peer-to-peer component

Positive Prevention

Reducing the Risk

Teen Talk

# Characteristics of Unsuccessful Programs

No patterns found for 2+ unsuccessful programs

N/A

#### Program Characteristic Combinations, for Young/Middle School Latinos in School Settings.

When considering programs in school-based settings for younger adolescents (middle school and/or ages 10-13), some additional patterns of characteristics among successful and unsuccessful programs emerged (Table F.4). For example:

• Programs that included technology seemed to be effective, as did programs that included behavioral

<sup>1 ¡</sup>Cuídate!, It's Your Game, and Teen Talk Child Trends' Appendices

skill-building.1

- Programs that involved homework WITHOUT using role-playing were successful.<sup>2</sup>
- Programs that did NOT include psychosocial skill-building did not seem to be successful.<sup>3</sup>
- Programs that did NOT include counseling, technology, and a behavioral skill-building component were NOT successful.<sup>4</sup>

Table F.4: Program Characteristic Combinations, for Young/Middle School Latinos in School Settings						
	Characteristics of Successful Programs					
Program included:	<ul><li>¡Cuídate!</li><li>It's Your Game: Keep it REAL!</li></ul>					
• Technology	• Teen Talk					
Program included:	<ul><li>Draw the Line/Respect the Line</li><li>It's Your Game: Keep it REAL!</li></ul>					
<ul> <li>Behavioral skill-building</li> </ul>	100 Tour Game, Neep R REALE.					
Program included:	<ul><li>Families Talking Together</li><li>It's Your Game: Keep it REAL!</li></ul>					
<ul> <li>Homework</li> </ul>	•					

#### Program did not include:

<ul> <li>Role-play activities</li> </ul>	
	Characteristics of Unsuccessful Programs
Program did not include:	Northeastern Illinois University Dropout Prevention Educational Partnership Program
	Twelve Together
<ul> <li>Psychosocial skill-building</li> </ul>	
Program did not include:	Middle School Leadership Program
	Project SNAPP
• The combination of counseling,	• Success Express
technology, and behavioral	Twelve Together
skill-building	Up with Literacy

<sup>2</sup> Families Talking Together and It's Your Game

<sup>&</sup>lt;sup>1</sup> Draw the Line and It's Your Game

<sup>&</sup>lt;sup>3</sup> Northeastern Illinois University Dropout Prevention Educational Partnership Program and Twelve Together <sup>4</sup> Middle School Leadership Program, Project SNAPP, Success Express, Twelve Together, and Up with Literacy Child Trends' Appendices 90

# APPENDIX G: OUTREACH & RECRUITMENT STRATEGIES

		N=18	Recruitment Context	Recruitment Strategy		
	Program Name	Evaluation	Recruitment Sample	Recruitment Location	Program Facilitator(s)	
Sch	nool-Based Imp	lementations				
1	Baby Think It Over (Data from Interview & Evaluation)	De Anada, 2006	All 9th grade students were required to take this course to graduate. The sample included 353 high school students. The sample was 93% Latino.	Los Angeles (Community is one of poorest in U.S. It was designated hot spot for teen pregnancy) High school	Other community members: staff from a local social services agency recruited participants	Not applicable: The evaluation is mandatory.  Institutional recruitment: Schools recruited through presentations made by the Program  Developer to school principles (whom she had worked with in the past).
2	Community Awareness Motivation Partnership (CAMP)	Guzman et al., 2003	The convenience sample included 1,613 adolescents ages 11-18. Within the sample, 79 % were Latino, most native born.	Los Angeles, CA (focusing on one county)  High school classrooms (mainly grades 7 & 8, but some grade 9)	Other community members: Actors recruited from the community.	Word of Mouth: In-school promotion by two actors and one health educator actors (brought a radio and walked around and performed and interacted with the kids; talked about how cool it would be).  Consent Form: The teacher gave out parent consent forms.  Developing Relationships: At some point we had history in the community and they knew from siblings that they wanted to see it.  Recruitment incentive: missing class to participate
3	It's Your Game: Keep it Real	Tortolero et al., 2010	The sample included of 907 seventh grade students (mean age=13; 59% female; 42% of the sample was black, & 44% Latino).	Texas  Ten urban, low-income, middle schools.	Trained facilitators implemented the treatment and trained data collectors conducted assessments.	Consent Form: Parent consent forms were distributed in school  Recruitment incentive: A \$5 incentive was given for returning the parental consent form.  Institutional recruitment: Researchers and school district worked together to identify 13 representative middle schools in 7 feeder patterns across the school district.
4	Draw the Line/Respect the Line	Coyle, Kirby, Marin, Gomez, Gregorich, S.E. (2004).	The sample included 2,898 (returned consent forms; 2829 completed baseline survey) middle school students (59% Latino, 5% black, 16% Asian, 17% white). Approximately 4 % of students reported having had sexual intercourse at baseline.	An urban area of northern California  public middle schools selected for ethnic diversity in 3 "small- to midsized" school districts with 6-8 schools per district	Trained health educators implemented the program; trained data collectors administered initial and follow-up self-report measures.	Consent Form: These were distributed during school (written consent for survey participation and passive consent for program participation).
5	Positive Prevention	LaChausse, 2006	The sample included 287 ninth grade students. Of this group (60%	San Bernadino, CA (1 hour outside Los	School personnel: teachers from	Consent Form: Parent consent forms distributed in physical science classes (program

For	nily Rosad Imp	lomontations	Latino;16% black;10% white; 14% other ethnicity). At baseline, 12% of students reported already having had sexual intercourse.	Angeles) Four Southern California high schools	site schools who received a 2-day curriculum training	voluntary but done as part of mandatory physical science class); students then asked for verbal assent.
rai	nny-Basea Imp	iementations	(Community-Based)			
6	Familias Unidas	Pantin et al, 2009	Family Focus  A total of 213 Latinos 8 <sup>th</sup> grade students (136 boys & 77 girls) were evaluated based on high rankings according to parent reports of behavior problems. The mean age of adolescents was 14 years old.	Low-income area of Miami-Dade County, Florida  Three predominantly Latinos middle schools located within one school district.	Four Hispanic facilitators with Masters or PhDs who were Familias Unidas certified	Word of Mouth: School counselors gave the names of Hispanic 8th graders with mild or more serious problems on at least one of three Revised Behavior Problem Checklist (24) (RBPC) subscales (conduct disorder; socialized aggression; and attention problems).  Consent Form: Parent consent forms were distributed to identify students.
7	Familias Unidas	Prado et al., 2012	Family Focus  The sample 242 adolescents ages 12 to 17 who: self-identified as being of Latino origin (with at least one parent born in a Spanish- speaking Central or Latin American country).	Low-income area of Miami-Dade County, Florida  Juvenile Department, schools.	3 master's level Hispanic facilitators with experience with interventions and target population	Flyer: IRB approved and distributed Developing Relationships:  Standing relationship with juvenile department and getting their assistance with recruitment.
8	Families Talking Together	Guilamos- Ramos et al, 2011	A total of 264 Latino & black mother-adolescent dyads (133 dyads in the experimental group & 131 dyads in the control group) were evaluated. The sample was 84.5 % Latino. While 22.7 % of the mothers were born in the United States, 71.2 % of the youth were born in the United States.	Bronx neighborhood of NYC  Mothers of teens 11-14 were recruited from a community pediatric clinic waiting room, for the program delivered in a health care setting. For the program delivered in a community based setting, resident mothers were recruited randomly through middle schools.	A social work interventionist implemented the program; trained bilingual data collectors conducted assessments Clinic/medical staff: provided an initial endorsement of the program to mothers and adolescents	Word of Mouth: Recruited by project staff member who was bilingual in English and Spanish (described the purpose of the study, and invite eligible dyads to participate); physicians pro- vided a brief endorsement of the program.
9	Families Talking Together	Guilamos- Ramos, Jaccard, Bouris, Gonzalez, Casillas, & Banspach, 2011.	Family Focus The sample included 2,016 mother-teen dyads, with teen in 6th or 7th grade at enrollment (mean age=12.2). 75% of dyads were Latino, and 25% were black. 77% of teens were native-born and half were male.	New York neighborhoods of Harlem and the Bronx.  Five middle schools.	Trained, bilingual facilitators	Word of Mouth: Families randomly chosen from five schools were recruited by phone by bilingual project staff members.

Con	Community-Based Implementations								
10	¡Cuídate! (Data from Interview & Evaluation)	Villarruel et al., 2006	This 100% Latino sample included second-generation students entering the 8th grade, ages 13 to 18, with a mean age of 13 years old.	Philadelphia, PA (Northeast section)  3 high schools & several nearby community- based organizations.	Other community members: Staff from Latino CBOs (community-based organizations) from implementation sites School personnel: School staff from implementation sites	Word of Mouth: School and community-based outreach was conducted by program staff (schools cafeterias and assemblies, neighborhoods and families).  Flyer: briefly describing study and benefits  Recruitment incentive: students were offered a community service credit, which they needed to graduate, for participating			
11	Information- Based HIV/STD Risk Reduction Intervention for Adolescent Girls	Jemmott et al., 2005a	682 sexually-experienced adolescent girls (463 black & 219 Latino who were mostly Puerto Rican). The participants were ages 12 to 19 (mean age of 15.5), & all could read & speak English.	New Jersey and Philadelphia, PA. Community-based organizations	Other community members: current of newly hired employees at CBOs with certain qualifications (program-related skills and experience working with the target population)	Institutional recruitment:    Directories, encyclopedias, and online listings were used to find community-based organizations.			
12	PATH-AT	Bailer et al., 200X	Dual Focus  The sample included 150 Latino middle school students (ages 12-15) who were at risk for teen pregnancy & drug use, due to living in community with high rates of these problems, & their caregivers.	Los Angeles, CA (from high-need communities) recruitment efforts focused on middle schools located in Latino/a neighborhoods in San Fernando Valley, with a high teen birth rate	Peer educators: peer educators with a background in health education (who received training from program developer) Other: Actors for theater arts component	Word of Mouth: A faculty sponsor at each middle school made presentations in all health and science classes (around 7-9 presentations per academic period); personal phone calls to adolescents were also used and "worked best"  Flyer: Flyers were send home to students (but were not as effective as word of mouth recruitment).			
13	PATH-AT	Bailer, Zuniga, Robinson, & Gil- Trejo, 2012	Dual Focus  The sample included 1,580 (150 per school per semester); priority given to 8th graders, but 7th graders also included	communities in north and northeast San Fernando Valley, CA  recruitment efforts focused on middle schools located in Latino/a neighborhoods in San Fernando Valley, with a high teen birth rate	Staff certified in the WAIT Training curriculum and professionals who developed and delivered the theater component  Peer educators: Peer educators Trained in "WAIT Training" curriculum	Word of Mouth: A faculty sponsor at each middle school made presentations in all health and science classes (around 7-9 presentations per academic period); personal phone calls to adolescents were also used and "worked best."  Flyer: Flyers in schools were used.			
14	The SHERO Program	Harper et al., 2009	The sample included 378 Mexican American female adolescents aged 12-21 years (mean = 15.2; mode	Two low-income urban neighborhoods in a large U.S. Midwestern city	Other community members: A young female CBO staff member indigenous to the neighborhood	Word of Mouth: Recruitment outreach was conducted by female CBO staff members native to the neighborhoods.			

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Clin	ic-Based Implen	gentations.	= 16)	Community-based social venues (e.g. parks, shopping areas, & cultural events) in two low-income urban neighborhoods in a large U.S. Midwestern city.	of site implementation	
15	Peer	Brindis et	The sample included	5 locations	Peer educators:	Not applicable: All adolescent
	Providers of Reproductive Health Services to Teens	al., 2005	1,424 female & 166 male adolescent clients of five California community health clinics, between the ages of 14 & 20. Of the female sample evaluated, 41% were Latina; of the male sample, 37% were Latino.	throughout California (representative of the state's racial, ethnic, social, economic, & geographic diversity)  5 community health clinics implementing the program of interest.	Coed 15- to 19-year- old peer providers who received training and Basic Health Worker certification Clinic/medical staff: Medical professionals (who provided reproductive health care services at clinics)	clients receiving reproductive health services at the 5 clinics between July 1, 1996, and June 30, 1999 were initially included in the study.  For recruitment to clinic:  Flyer: Logos used on stickers, flyers, and posters were used.  Television &/or Radio: Television and radio advertisements; (the outreach health educators work closely with the peer providers to ensure continuity between the outreach and clinic services.
16	Project Respect	Roye et al., 2007	Sexually active, non- pregnant, non-HIV infected Black & Latina females aged 15 to 21 years old. Currently using or planning to use a hormonal method of contraception; able to speak & understand English.	New York City, NY  Planned Parenthood sites who gave IRB consent	Clinic/medical staff: Health care assistants from Planned Parenthood clinics (sites of implementation)	Word of Mouth: Participants were recruited from among adolescents utilizing Planned Parenthood services.
17	Project SAFE & SAFE-2	Shain et al., 2007	947 Latina & African American women were recruited. All participants were positive for a non- viral STI at enrollment to ensure their high-risk status.	San Antonio, TX  Participants were recruited from public health clinics.	Female program facilitators ethnically matched to their group of participants Clinic/medical staff: Medical professionals (who provided screening, testing, and treatment for STIs)	Word of Mouth: Hispanic and African American women diagnosed with gonorrhea, chlamydia, syphilis, or trichomonas were referred by public health clinics for potential participation.
18	Sisters Saving Sisters (HIV/STD Risk Reduction for African American & Latina Adolescent Women)	Jemmott et al., 2005b	A sample of 682 sexually-experienced adolescent girls, 463 black & 219 Latino. Of the Latino participants, 93% Puerto Rican. The participants were ages 12-19, with a mean age of 15.5 years.	An inner-city community in Philadelphia, PA An adolescent medicine clinic	Fourteen female African American facilitators with at least a BA and experience with the target population who received 8 hours of training	Word of Mouth: Clinicians at the adolescent medicine clinic referred participants, who were then contacted by the project coordinator.

# APPENDIX H: RETENTION & ENGAGEMENT STRATEGIES

		N=15	Recruitment (	Context		Retention Strategy
	Progra	Evaluat	Recruitment Sample	Recruitment	Program	
	m Name	ion		Location	Facilitator(s)	
	1 tarrie			School-Based Impl	ementations	
1	Baby Think It Over (Data from Interview & Evaluatio n)	De Anada, 2006	All 9th grade students were required to take this course to graduate. The sample included 353 high school students. The sample was 93% Latino.	Los Angeles (Community is one of poorest in U.S. It was designated hot spot for teen pregnancy)  High school	Other community members: Staff from a local social services agency	Largely not applicable: held over 2 ½ consecutive days
2	Communi ty Awarenes s Motivatio n Partnersh ip (CAMP)	Guzma n et al., 2003	The convenience sample included 1,613 adolescents ages 11-18. Within the sample, 79 % were Latino, most native born.	Los Angeles, CA (focusing on one county)  High school classrooms (mainly grades 7 & 8, but some grade 9)	Other community members: Actors recruited from the community	Incorporation of theater arts: A theater production was used as part of programming.  Other: Programming was a chance for students to get out of class.
3	It's Your Game: Keep it Real	Tortoler o et al., 2010	The sample included of 907 seventh grade students (mean age=13; 59% female; 42% of the sample was black, & 44% Latino).	Texas  Ten urban, low-income, middle schools.	Trained facilitators and data collectors	Stakeholder involvement: Input was obtained from a community advisory group, which included school personnel and a youth advisory group.  Program incentives: Monetary incentives were given for completing the baseline survey (\$5) and follow-up surveys (\$10).
4	Draw the Line/Res pect the Line	Coyle, Kirby, Marin, Gomez, Gregori ch, S.E. (2004).	The sample included 2,898 (returned consent forms; 2829 completed baseline survey) middle school students (59% Latino, 5% black, 16% Asian, 17% white). Approximately 4 % of students reported having had sexual intercourse at baseline.	An urban area of northern California  public middle schools selected for ethnic diversity in 3 "small- to midsized" school districts with 6-8 schools per district	Trained health educators implemented the program; trained data collectors administered initial and follow- up self-report measures	Culturally responsive: Concepts important in the Latino culture (e.g., dichos, or sayings, and respect) were incorporated into curricula; English and Spanish versions of worksheets and activities were furnished. Use of consistent personnel/developing a relationship: A health educator trained by researchers taught the entirety of a course Other: Student feedback was used throughout pilot testing of the programs to make them more appealing to students.
5	Positive Preventio n	LaChau sse, 2006	The sample included 287 ninth grade students. Of this group (60% Latino;16% black;10% white; 14% other ethnicity). At baseline, 12% of students reported already having had sexual intercourse.	San Bernadino, CA (1 hour outside Los Angeles) Four Southern California high schools	School personnel: teachers from site schools who received a 2-day curriculum training	Not applicable: The program was implemented as a [voluntary] part of a mandatory physical science class.

Fan	Family-Based Implementations (Community-Based)								
6	Familias Unidas	Pantin et al, 2009	Family Focus  A total of 213 Latinos 8 <sup>th</sup> grade students (136 boys & 77 girls) were evaluated based on high rankings according to parent reports of behavior problems. The mean age of adolescents was 14 years old.	Low-income area of Miami-Dade County, Florida  Three predominantly Latinos middle schools located within one school district.	4 Hispanic facilitators with Masters or PhDs who were Familias Unidas certified	Culturally responsive: "Hispanic- specific cultural issues" were incorporated into all aspects of the program.  Program incentives: Participants were compensated \$20, \$25, \$30, and \$35 for completing the assessment at baseline, 6, 18, and 30 months post baseline, respectively: families were compensated \$30 for transportation at each assessment point.			
7	Familias Unidas	Prado et al., 2012	Family Focus  The sample 242 adolescents ages 12 to 17 who: self-identified as being of Latino origin (with at least one parent born in a Spanish- speaking Central or Latin American country).	Low-income area of Miami-Dade County, Florida  Juvenile Department, schools.	3 master's level Hispanic facilitators with experience with interventions and target population	Culturally responsive: The program was "influenced by culturally specific models developed for Hispanic populations in the United States"; facilitators were Hispanic with at least 2 years of experience working with Hispanic populations.  Program incentives: Monetary compensation was provided for completing the baseline, 6-, 12-, 24-, and 36-month post-baseline assessments.			
8	Families Talking Together	Guilam os- Ramos et al, 2011	Family Focus A total of 264 Latino & black mother-adolescent dyads (133 dyads in the experimental group & 131 dyads in the control group) were evaluated. The sample was 84.5 % Latino. Of the youth, 71% were born outside the United States. Families resided in a Bronx neighborhood of NYC. The program was delivered in a health care setting and in a community based setting.	Bronx neighborhood of NYC  Mothers of teens 11-14 were recruited from a community pediatric clinic waiting room, for the program delivered in a health care setting. For the program delivered in a community based setting, resident mothers were recruited randomly through middle schools.	A social work interventionist implemented the program; trained bilingual data collectors conducted assessments Clinic/medical staff: provided an initial endorsement of the program to mothers and adolescents	Thorough contact information collected at intake: Telephone contact information for mothers was collected at intake.  Reminders: One-month and 5-month booster calls were made.  Program incentives: Monetary compensation for each survey completed (\$15 for mothers and \$10 for adolescents) was provided.			
9	Families Talking Together	Guilam os- Ramos, Jaccard, Bouris, Gonzal ez, Casillas , & Banspa ch, 2011.	Family Focus  The sample included 2,016 mother-teen dyads, with teen in 6th or 7th grade at enrollment (mean age=12.2). 75% of dyads were Latino, and 25% were black. 77% of teens were native-born and half were male.	New York neighborhoods of Harlem and the Bronx.  Five middle schools.	Trained, bilingual facilitators	Culturally responsive: Bilingual facilitators were used for sessions and booster calls; materials were available in Spanish and English and versions of the manual were tailored to African American and to Latino parents. Thorough contact information collected at intake: Resident mothers' telephone contact information was collected at intake. Reminders: One-month and 6-month booster calls (to ask if had done			

						homework and provide additional support as needed) were made to resident mothers.
						Program incentives: Reimbursements (a maximum \$30 per assessment) were given.
Con	nmunity-Base	ed Impleme	ntations			
10	¡Cuídate! (Data from Interview & Evaluatio n)	Villarru el et al., 2006	This 100% Latino sample included second-generation students entering the 8th grade, ages 13 to 18, with a mean age of 13 years old.	Philadelphia, PA (Northeast section)  3 high schools & several nearby community- based organizations.	Other community members: Staff from Latino CBOs (community-based organizations) from implementation sites School personnel: School staff from implementation sites	Culturally responsive: Students received the intervention in their language of preference (English or Spanish); all materials and communication (including those for parents) were culturally appropriate and offered in both Spanish and English.  Stakeholder involvement: Information meetings about the study were held with key school personnel, allowing community leaders and their staff provided input about the study design and implementation.  Thorough contact information collected at intake: At registration, participants provided their address and phone number and contact information for a responsible adult who did not live with them but who would be able to contact them.  Reminders: Cards were mailed to participants as reminders.  Use of consistent personnel/developing a relationship: "Consistent staff, including a bilingual retention specialist, contacted adolescents or their families over the course of the study and administered questionnaires at the follow-up or straggler sessions. This consistent contact enabled adolescents and their families to make a connection or develop confianza with staff member. It also allowed the study team to understand how to facilitate continued participation in the study for individual adolescents."  Program incentives: Participants were given a T-shirt with the study logo and up to \$100 for participating; additionally, they received \$40 after completing the 2-day interventions; \$20 for each of the 3-, and 6-month follow-ups; and \$30 for the 12-month follow-ups; and \$30 for the 12-month follow-up. 2 days before the follow-up session to remind them of the times and locations of the interventions.
11	Informati on-Based HIV/STD Risk Reductio n Interventi on for Adolesce nt Girls	Jemmot t et al., 2005a	682 sexually- experienced adolescent girls (463 black & 219 Latino who were mostly Puerto Rican). The participants were ages 12 to 19 (mean age of 15.5), & all could read & speak English.	New Jersey and Philadelphia, PA. Community-based organizations	Other community members: Current of newly hired employees at CBOs with certain qualifications (program-related skills and experience working with the	No applicable information available

					target population)	
12	PATH- AT	Bailer et al., 200X	Dual Focus  The sample included 150 Latino middle school students (ages 12-15) who were at risk for teen pregnancy & drug use, due to living in community with high rates of these problems, & their caregivers.	Los Angeles, CA (from high-need communities)  recruitment efforts focused on middle schools located in Latino/a neighborhoods in San Fernando Valley, with a high teen birth rate	Actors for theater arts component  Peer educators: peer educators with a background in health education (who received training from program developer)	Culturally responsive: Culturally relevant plays were used Stakeholder involvement: Peer educators were utilized. Program incentives: "Weekly raffle tickets for things like movie tickets, school supplies, hacky sacks, etc. If they came on time they got a ticket, if they participated in class or did assignments with their parents then they got a ticket. We had raffles throughout the program." Incorporation of theater arts: Plays were incorporated.
13	PATH- AT	Bailer, Zuniga, Robins on, & Gil- Trejo, 2012	Dual Focus  The sample included 1,580 (150 per school per semester); priority given to 8th graders, but 7th graders also included	communities in north and northeast San Fernando Valley, CA recruitment efforts focused on middle schools located in Latino/a neighborhoods in San Fernando Valley, with a high teen birth rate	Staff certified in the WAIT Training curriculum and professionals who developed and delivered the theater component Peer educators: peer educators Trained in "WAIT Training" curriculum	Culturally responsive: culturally relevant plays were used Stakeholder involvement: Peer educators (high school students) were utilized under adult supervision; additionally, faculty sponsors assisted with this supervision Program incentives: Raffle tickets were used as rewards for participation and attendance. Incorporation of theater arts: Theater productions involving professional actors were part of programming. Other: Ice-breaking activities were conducted before each session.
14	The SHERO Program	Harper et al., 2009	The sample included 378 Mexican American female adolescents aged 12-21 years (mean = 15.2; mode = 16)	Two low-income urban neighborhoods in a large U.S. Midwestern city  Community-based social venues (e.g. parks, shopping areas, & cultural events) in two low-income urban neighborhoods in a large U.S. Midwestern city.	Other community members: A young female CBO staff member indigenous to the neighborhood of site implementation	Culturally responsive: The program was developed in collaboration with the target population (Mexican American adolescent females from the local community), a process which included the use of narrative ethnographic methods to identify cultural/community barriers to achieving program.  Stakeholder involvement: Sessions were "co facilitated by a young Mexican American female CBO staff member from the community (primary facilitator) along with other young women of color from local organizations (e.g., public health clinic, academic institution, CBOs)."  Program incentives: Bus tokens and snacks were given at every session; various additional incentives (e.g., skin care/beauty products) were given based on attendance.  Other: A quasi-experimental design whereby participants were allowed to attend sessions with their friends was employed.
	ic-Based Imp			£ 14:	Door of the said	Culturally researched C. C. L. F.
15	Peer Providers of Reproduc tive Health Services to Teens	Brindis et al., 2005	The sample included 1,424 female & 166 male adolescent clients of five California community health clinics, between the ages of 14 & 20. Of the female sample evaluated, 41% were	5 locations throughout California (representativ e of the state's racial, ethnic, social, economic, &	Peer educators: coed 15- to 19- year-old peer providers who received training and Basic Health Worker certification	Culturally responsive: Successful clinics hire both male and female peer providers who represent the ethnic composition of the community and of the local schools. Stakeholder involvement: Peer providers were used at the clinic. Other: "Many of the peer provider clinics

16	Project	D	Latina; of the male sample, 37% were Latino.	geographic diversity)  5 community health clinics implementing the program of interest.	Clinic/medical staff: medical professionals (who provided reproductive health care services at clinics)	have their own identified entrance, comfortable waiting room, reception area with posters and a TV showing popular movies and shows, and counseling rooms that are decorated in a "teen-friendly" fashion. (Others share facilities with adult clinics, and designate at least eight hours per week specifically for adolescent peer provider services.)"
16	Project Respect	Roye et al., 2007	Sexually active, non-pregnant, non-HIV infected Black & Latina females aged 15 to 21 years old. Currently using or planning to use a hormonal method of contraception; able to speak & understand English.	New York City, NY  Planned Parenthood sites who gave IRB consent	Clinic/medical staff: Health care assistants from Planned Parenthood clinics (sites of implementation)	Culturally responsive: The program's video was culturally sensitive and "reflected the learning needs of the target population"; additionally, African American and Latino female teens assisted in the final editing of the video  Thorough contact information collected at intake: "Although we had addresses, phone numbers, cell phone numbers, and e-mail addresses for the participants, many were no longer working."  Reminders: Initially, calls were made after 2 months to schedule 3-month follow-ups; later, at initial appointment, participants were given a datebook with 3-month follow-up written in it.  Program incentives: Monetary incentives were provided in return for giving a urine sample for Chlamydia testing (\$30) and for attending 3-month (\$30) and 12-month (\$50) follow-up sessions.
17	Project SAFE & SAFE-2	Shain et al., 2007	947 Latina & African American women were recruited. All participants were positive for a non-viral STI at enrollment to ensure their high-risk status.	San Antonio, TX  Participants were recruited from public health clinics.	Female program facilitators ethnically matched to their group of participants  Clinic/medical staff: Medical professionals (who provided screening, testing, and treatment for STIs)	Culturally responsive: Sessions were led by ethnically-matched female facilitators; in addition, the AIDS Risk Reduction Model was adapted for the target population using ethnographic data.  Program incentives: Monetary incentives (\$25 for the first session, \$15 each for the second two, and \$5 for each support group session) were provided; additionally, "inexpensive meals and gifts" were given at intervention sessions.
18	Sisters Saving Sisters (HIV/ST D Risk Reductio n for African American & Latina Adolesce nt Women)	Jemmot t et al., 2005b	A sample of 682 sexually-experienced adolescent girls, 463 black & 219 Latino. Of the Latino participants, 93% Puerto Rican. The participants were ages 12-19, with a mean age of 15.5 years.	An inner-city community in Philadelphia, PA An adolescent medicine clinic	14 female African American facilitators with at least a BA and experience with the target population who received 8 hours of training	Culturally responsive: Facilitators had experience working with inner-city youth.  Reminders: Calendars were provided to participants for study-related record-keeping; participants who did not show up for their biannual appointment were followed-up on to schedule a different one.