

# Re:MIX Shows Promising Short-term Impacts on Pregnancy Prevention for Latinx Youth

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## Introduction

Despite declines in recent decades, the United States still has one of the highest teen birth rates among industrialized nations.<sup>1</sup> The United States also has important disparities in teen birth rates by race/ethnicity: For example, Latinx teens have higher birth rates than the national average.<sup>2</sup> To address these disparities, schools and communities with a large percentage of Latinx youth require teen pregnancy prevention programs that are tailored for, and effective with, this population. One promising approach is to incorporate peer educators (educators of similar age and background as the program's target youth) into teen pregnancy prevention programming; this may be effective with a variety of adolescent populations.<sup>3,4,5,6</sup> Reproductive health messages from peers may be more meaningful to youth, and adolescents may be more likely to approach their peers than adults with sensitive questions.<sup>7,8</sup>

From 2015 to 2020, Child Trends conducted a randomized controlled trial to evaluate the impact of Re:MIX on early sex, unprotected sex, and key mediators. [Re:MIX](#), developed by EngenderHealth, is a comprehensive, in-school teen pregnancy prevention program targeting youth ages 13 to 17. The program is co-facilitated by a professional health educator and a young parent educator, and was piloted in schools with a high percentage of Latinx students. Findings from this random assignment evaluation, recently published in [the Journal of School Health \(JOSH\)](#), expand research on peer education approaches and highlight the feasibility and promise of this method with Latinx students. This research brief summarizes the results from the *JOSH* article.

## Key findings

- **Re:MIX was implemented with high fidelity and quality.** Facilitators covered, on average, 90 percent of planned activities and most students completed at least 8 of 10 sessions. On average, observers rated session quality a 4 out of 5.
- **The Re:MIX curriculum was well-received.** Most students reported liking their young parent and adult health educators (90% and 89%, respectively).
- **Re:MIX improved students' knowledge and self-efficacy.** Immediately after program completion, the evaluation found positive impacts of Re:MIX on students' sexual and reproductive health knowledge, their knowledge of where to go in their community to access contraception, and their ability to ask for and give consent. These impacts were sustained at the long-term follow-up, approximately 12 months later.

- **Re:MIX improved students' intentions to use contraception.** Immediately after the program, Re:MIX had a positive impact on students' intentions to use hormonal or long-acting contraception if they had sex; however, this finding was no longer significant at the long-term follow-up.
- **Re:MIX did not have an impact on students' sexual behaviors.** Despite promising findings on mediating outcomes associated with sexual activity and contraceptive use, the evaluation found no impact of Re:MIX on measured behavioral outcomes—sexual experience and unprotected sex—at long-term follow-up.

## Re:MIX program background

Re:MIX supports youth to “Maximize their strengths, Imagine a healthy future, and eXplore their identities.”<sup>9</sup> The Re:MIX curriculum was developed based on formative research and social influence theories,<sup>10,11</sup> which highlight how peers may influence attitudes and behaviors through modeling. Re:MIX is unique from most existing peer education models in that it incorporates young parent educators. Young parents have the strengths of traditional peer educators—being more similar in age and background to adolescent participants—while also serving as a mentor and sharing stories and experiences of early parenthood. Re:MIX strengthens the peer educator model by pairing young parents with experienced health educators who have more training and classroom management experience.

The Re:MIX program was implemented with students in grades 8–10 in three Austin, TX charter schools across five semesters from 2016 to 2018. Fifty-seven classrooms and 626 students participated. In each semester, classrooms were randomized into the treatment or control condition within school and grade after students completed the baseline survey.<sup>a</sup> From the three schools, 30 classrooms were assigned to receive Re:MIX and 27 classrooms served as controls. Students in Re:MIX received the curriculum in ten 55-minute sessions taught weekly. Students in the control condition received their usual class curriculum or general health programming.

## Methodology

### Data collection

The evaluation team administered the baseline student survey approximately a week before the first session and the post-test survey within a week of the final session's completion. The long-term survey was administered approximately 12 months after the end of the program, although this varied by cohort from 9 to 18 months.

All but five students (621) took the baseline survey, 594 (95%) took the post-test survey, and 533 (85%) took the long-term follow-up survey. We used an intent-to-treat approach. Our analytic post-test sample consisted of 592 students (325 treatment, 267 control) with data for at least one outcome at post-test; our analytic long-term follow-up sample included 532 students (294 treatment, 238 control) with data for at least one outcome at long-term follow-up.

To collect data on implementation, health educators kept attendance records and recorded curriculum fidelity for each session. Additionally, the study team observed 29 percent of sessions to ensure curriculum fidelity and quality. Treatment group students also recorded their perceptions of the program and facilitators on the post-test survey.

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<sup>a</sup> Except for seven classes in one school in the first semester, where classrooms were randomized before baseline due to the school's need to plan alternative classes before the semester began

## Outcomes

Child Trends analyzed mediating outcomes associated with early and unprotected sex across four areas:

1. Students' intentions to have sex in the next year and intentions to use hormonal/long-acting contraception if they have sex
2. Students' knowledge about condoms, STIs, and contraceptive efficacy (percent correct for each topic)
3. Students' attitudes about gender roles and romantic relationships, early sex and contraception, and teen pregnancy and parenting
4. Students' self-efficacy in avoiding unwanted and unprotected sex, confidence in communicating with partners, and positive future orientation

We also analyzed two behavioral outcomes:

1. Whether students ever had vaginal sex
2. Whether students had unprotected sex in the past three months—students were considered to have had unprotected sex if they reported having sex in the past three months without any form of contraception (including condoms)

Details about the survey items and the creation of our evaluation outcome measures can be found on [this Child Trends webpage](#).

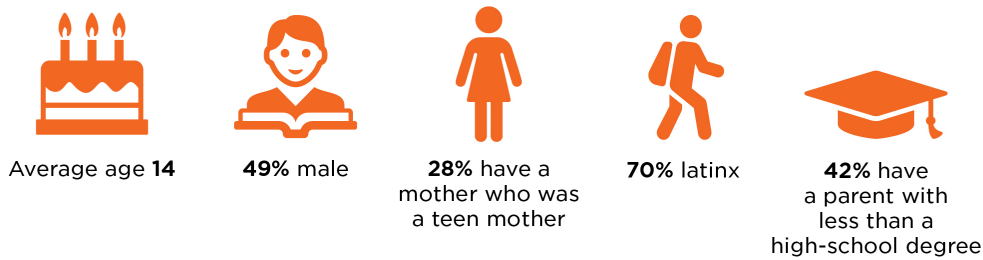
## Analysis

Child Trends researchers used linear regression models with cluster-robust standard errors (to account for classroom clustering) to assess whether student characteristics differed between the intervention and control groups at baseline and to assess the impact of Re:MIX participation on outcomes of interest. Separate models were run to assess program impacts at post-test and at the long-term follow-up, using the analytic sample for each time point. Impacts on mediating outcomes were assessed at both post-test and long-term follow-up to understand whether impacts were sustained beyond the end of the program. The behavioral outcomes were assessed only at the long-term follow-up. The study sample was young, and few students were sexually experienced at post-test; thus, we did not have statistical power to detect impacts on the behavioral outcomes until the long-term follow-up. For more details on the modeling approach and study limitations, see [our recent journal publication](#).

## Participant characteristics

Students in the Re:MIX study were in grades 8 through 10 and were, on average, 14 years old. Almost three-quarters were Latinx and approximately half were male. More than one in four had a mother who was a teen mother herself, and few students had parents with a college degree. There were no statistically significant differences between students in the treatment and control groups on measures of demographics and sexual experience (see [our article](#) for more information).

Figure 1. Characteristics of students in the Re:MIX study



Note: Student characteristics based on the long-term follow-up analytic study sample

## Findings

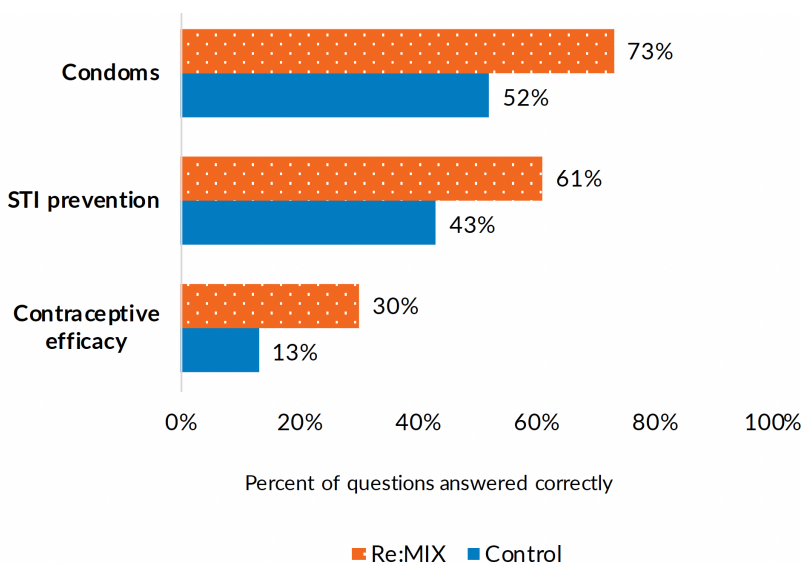
### Implementation

Based on fidelity logs, educators covered, on average, 90 percent of the planned activities and most students (92%) completed at least 8 of the 10 sessions. Observers rated the sessions an average of 4 out of 5 on quality. Immediately following implementation, 78 percent of students who received Re:MIX reported that they would probably or definitely recommend the program to a friend, and the majority of students reported liking the young parent educators (90%) and the health educators (89%).

### Outcomes

At post-test, Re:MIX had positive impacts on students' sexual and reproductive health knowledge (Figure 2). Re:MIX also had a positive impact on students' self-efficacy—specifically, their knowledge of where to go in their community to access contraception and their ability to ask for and give consent (Figure 3). These impacts were sustained at the long-term follow-up. See [our recent journal publication](#) for the full set of mediating outcome findings at post-test and at long-term follow-up.

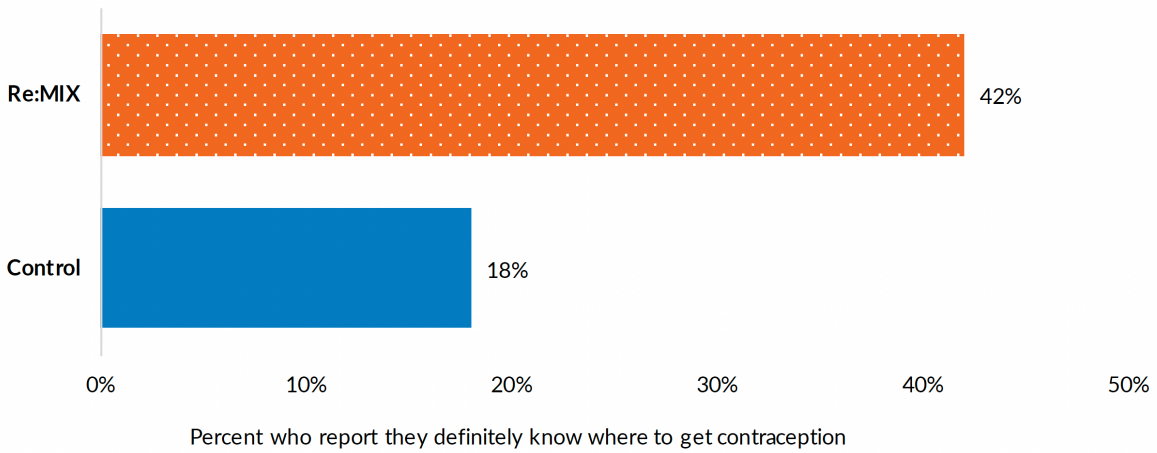
Figure 2. Program impacts on students' reproductive health knowledge at post-test



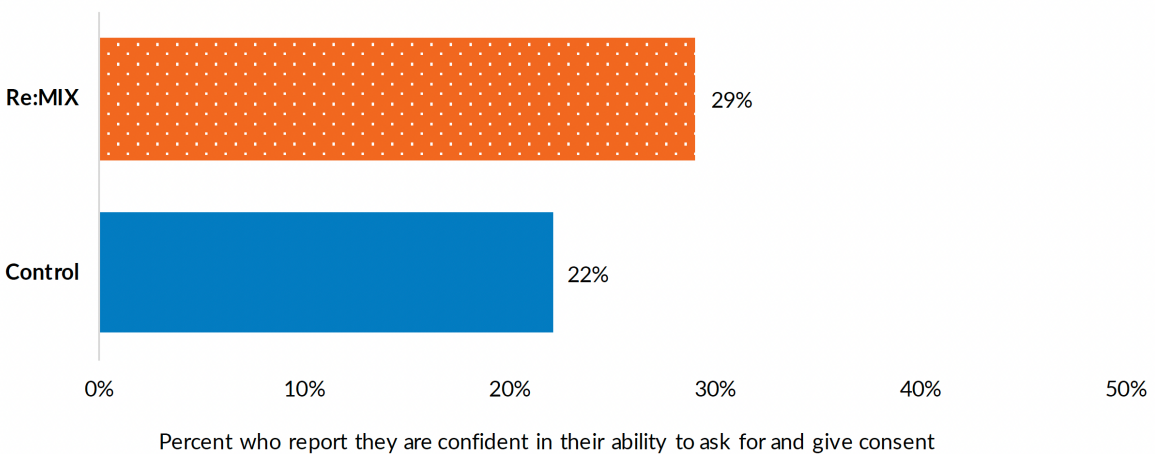
Notes: Results from multivariate linear regression models. Treatment effects shown are significant at  $p < .05$ .

**Figure 3. Program impacts on students' self-efficacy at post-test**

Program impacts on students' knowledge of where to get contraception



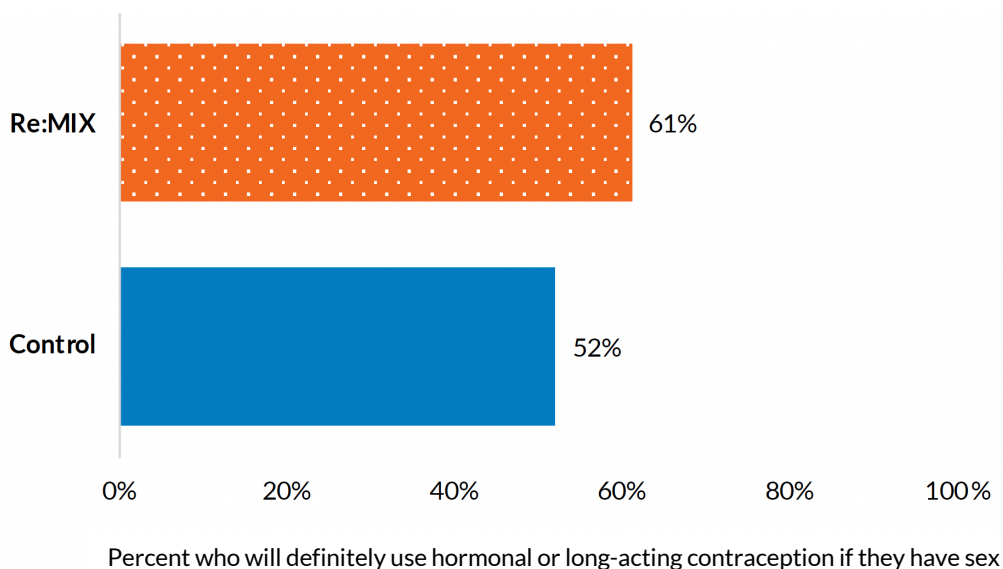
Program impacts on students' ability to ask for and give consent



**Notes:** Results from multivariate linear regression models. Treatment effects shown are significant at  $p < .05$

Additionally, at post-test, Re:MIX students were more likely to report that they would definitely use hormonal or long-acting contraception if they had sex (Figure 4). This finding, however, did not reach the level of significance at the long-term follow-up, although the positive direction of the finding remained.

**Figure 4.** Program impact on students' intentions to use contraception at post-test



**Notes:** Results from multivariate linear regression models. Treatment effects shown are significant at  $p < .05$ .

Re:MIX had no impact on the study's measured behavioral outcomes. The program had no statistically significant impact on whether students ever had sex. Additionally, due to low levels of sexual activity in the student sample at the long-term follow-up, we did not have the statistical power to detect program impacts on whether students had unprotected sex in the past three months.

## Conclusions

Despite the program's lack of impacts on behavioral outcomes, our results suggest that Re:MIX has promise with Latinx students. Students rated both the young parent educators and the adult health educators highly, highlighting the benefits of pairing trained adult health educators (rather than teachers) with educators close in age to participants to deliver the curriculum. The program had short-term impacts on factors associated with a lower likelihood of having unprotected sex, including intentions to use hormonal or long-acting contraception and measures of knowledge and self-efficacy. Analyses of the long-term follow-up survey found that these positive impacts were, for the most part, sustained. The significant and substantial impacts on participants' knowledge about condoms, STIs, and contraceptive efficacy are similar in size to impacts from evaluations of other teen pregnancy prevention programs that also found longer-term impacts (beyond 12 months) on behavioral outcomes.<sup>12</sup>

The Re:MIX curriculum incorporates lessons on sexual consent as a way to reduce unwanted and forced sex, which are associated with unprotected sex<sup>13,14</sup>; the evaluation findings indicate that students felt confident incorporating these lessons. Re:MIX participants were also twice as likely after the program to report knowing where to go to access contraception in their community, providing support for the curriculum's goal of linking students to community resources and services.

The current evaluation was unable to detect statistically significant program impacts on unprotected sex. The Re:MIX sample was fairly young and sexually inexperienced at baseline, meaning that even at the long-

term follow-up, approximately 12 months later, few students were sexually active (10% of control students had had sex in the past three months) and even fewer had engaged in unprotected sex (3.6% of the control students). This low level of sexual activity among the sample made it impossible to detect statistically significant impacts, even with a sample size of over 500. A recent meta-analysis of federally funded adolescent pregnancy prevention programs found that many school-based teen pregnancy evaluations with younger students had similar issues: The follow-up periods were too short for behaviors of interest to occur.<sup>15</sup> Future studies should consider implementing Re:MIX [with older age groups of students, and extending follow-up time periods](#), to better assess impacts on unprotected sex.

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## Endnotes

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