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**First-Year Impacts of
Four Title V, Section
510 Abstinence
Education Programs**

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EXECUTIVE SUMMARY

Abstinence education rose to prominence on the national public policy agenda in the mid-1990s due to persistent concerns about teen sexual activity and its consequences. In response, in 1996, Congress authorized \$50 million annually to support abstinence education programs through Title V, Section 510 of the Social Security Act. Program funding became available to states in fiscal year 1998 through a grant program administered by the U.S. Department of Health and Human Services. States must match the federal funds at 75 percent, resulting in a total of up to \$87.5 million annually for these programs.

Congress also authorized an evaluation of the Title V, Section 510 Abstinence Education Program (Public Law 105-33). The resulting multiyear evaluation includes both an implementation and process analysis and a rigorous impact evaluation. The implementation and process analysis documents the typical experiences of the organizations and communities applying for and receiving abstinence education funding. The impact evaluation is designed to estimate the effects of a select group of Title V, Section 510 abstinence education programs on behavioral outcomes, including sexual activity, risks of contracting sexually transmitted diseases, and risks of pregnancy. However, in order to understand the mechanism through which the programs cause changes in behavioral outcomes, the study also measures impacts of the interventions on intermediate outcomes that may be related to teen sexual activity, such as the views of youth on abstinence and teen sex and their expectations to abstain.

The impact evaluation relies on an experimental design. Under this design, youth in the study sample were randomly assigned to either a program group that receives the services provided by the Title V, Section 510 abstinence education programs or a control group that receives only the usual services available in absence of the Title V, Section 510 programs. When coupled with sufficiently large sample sizes, this experimental design supports an analysis that yields highly credible estimates of the impacts of the focal programs on the intermediate and behavioral outcomes of interest.

This report presents first-year impact findings of four selected programs that have received Title V, Section 510 Abstinence Education Program funds since 1998. The four programs are *My Choice, My Future!* in Powhatan, Virginia; *ReCapturing the Vision*, in Miami, Florida; *Teens in Control* in Clarksdale, Mississippi; and *Families United to Prevent Teen Pregnancy (FUPTP)* in Milwaukee, Wisconsin (Table 1). The report examines the extent to which the

programs affected the level and nature of health, family life, and sex education services youth received during the first year after enrolling in the program, and it provides estimates of the first-year impacts of the Title V, Section 510 programs on intermediate outcomes that may be related to teen sexual activity and other risk-taking behavior. These intermediate outcomes include measures of views on abstinence, teen sex and marriage; peer influences and relations; self-concept, refusal skills, and communication with parents; perceived consequences of teen and nonmarital sex; and expectations to abstain from sexual intercourse.

This report does not examine behavioral outcomes due to the short duration of the follow-up period and the young ages of the program participants. A future report, drawing on two additional waves of data collection (through 2005) will examine the impacts of these programs on teen sexual activity and other risk-taking behaviors, as well as the relationship between intermediate outcomes and sexual activity.

Findings in this report show that, over the first year following enrollment in the study sample, youth in the abstinence education programs reported significantly higher levels of participation in classes or programs addressing issues such as physical development, risk awareness, and interpersonal skills than did their control group counterparts. The findings also show that, on average, program youth were more likely than their control group counterparts to report having participated in classes or sessions they judged to be helpful in imparting knowledge, helping them relate better to peers, and building skills that could help them avoid risks.

Table 1. Focal Programs for the First-Year Impact Evaluation of the Title V, Section 510 Abstinence Education Programs

<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>Families United to Prevent Teen Pregnancy (FUPTP)</i>
Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
Principal Program Components			
Three years of classroom-based curricula	One year of classroom-based curricula with supplemental components for participants and their families	Two years of classroom-based curricula	Up to four years of classroom-based curricula delivered as part of an after-school program; parenting education and support
Target Population			
Grade 8 at enrollment; full range of students; middle-income to working-class community	Grades 6-8 at enrollment; high-risk girls; poor, urban community	Grade 5 at enrollment; full range of students; poor, rural community	Grades 3-8 at enrollment; voluntary applicants; poor, urban community
Usual Services (Sources Other Than Title V, Section 510 Abstinence Education Programs)			
Limited other sources of health, family life, and sex education; no formal school sex education curricula	Many other sources of health, family life, and sex education; mandated school curricula in grades 6-8	Limited other sources of health, family life, and sex education; limited school-wide curricula in middle schools	Many other sources of health, family life, and sex education; mandatory school health curricula in grades K-12

In turn, the programs affected in intended ways some, but not all, of the intermediate outcomes examined. The programs led youth to report views more supportive of abstinence and less supportive of teen sex than would have been the case had they not had access to the abstinence education programs. In addition, the programs increased perceptions of potential adverse consequences of teen and nonmarital sex. There also is some evidence that the programs increased expectations to abstain from sex and reduced dating. However, program and control group youth reported similarly on the remaining measures examined, including their views on marriage, self-concept, refusal skills, communication with parents, perceptions of peer pressure to have sex, and the extent to which their friends hold views supportive of abstinence.

FOCAL PROGRAMS FOR THIS REPORT

The four focal programs for this report were selected purposefully from among the early recipients of Title V, Section 510 Abstinence Education Program funds. All four programs were judged to be operationally stable, to be replicable, and to have qualities necessary to support a rigorous, experimental design impact evaluation. However, they are not necessarily better than, nor are they representative of, the more than 900 abstinence education programs nationally that have received support through Title V, Section 510.

Like other programs supported under the Title V, Section 510 funding, the focal programs for this report comply with the “A-H definition” of abstinence education (Table 2). The four focal programs also share several other features common to many Title V, Section 510-funded abstinence education programs. Most notably, all four programs deliver their services in school settings, follow published curricula that are consistent with the A-H guidelines, and are focused on prevention. In part because of their prevention focus, all four programs begin serving youth in elementary and/or middle school, when few have become sexually active.

Table 2. A-H Definition of Abstinence Education for Title V, Section 510 Programs

A	Have as its exclusive purpose teaching the social, psychological, and health gains to be realized by abstaining from sexual activity
B	Teach abstinence from sexual activity outside marriage as the expected standard for all school-age children
C	Teach that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems
D	Teach that a mutually faithful, monogamous relationship in the context of marriage is the expected standard of sexual activity
E	Teach that sexual activity outside the context of marriage is likely to have harmful psychological and physical effects
F	Teach that bearing children out-of-wedlock is likely to have harmful consequences for the child, the child's parents, and society
G	Teach young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances
H	Teach the importance of attaining self-sufficiency before engaging in sexual activity

Source: Title V, Section 510 (b)(2)(A-H) of the Social Security Act.

Note: Program guidelines specify that "it is not necessary to place equal emphasis on each element of the definition" (U.S. Department of Health and Human Services 1997).

The focal programs for this study also differ along some important dimensions, each of which influences the generalizability of the study findings. Among these differences are the grade levels they serve, their settings, their outreach and enrollment procedures, and their duration and intensity:

- **Grade Levels Served.** Two programs, *My Choice, My Future!* and *ReCapturing the Vision*, target their services to middle-school youth, primarily seventh and eighth graders, with the average age close to 13 (Figure 1). In contrast, *Teens in Control* and *FUPTP* target their services to upper elementary school youth, primarily fourth and fifth graders who are, on average, 10 and 11 years old, respectively, when they enter the program.
- **Program Setting.** Three programs (*My Choice, My Future!*, *ReCapturing the Vision*, and *Teens in Control*) serve youth as part of the school day, while the fourth program (*FUPTP*) serves youth in a voluntary, after-school setting.
- **Program Eligibility.** *My Choice, My Future!* and *Teens in Control* are designed as universal, nonelective programs beginning in eighth and fifth grades, respectively. (During the enrollment period for the study sample, the programs served roughly half of the students in these grades, while the other half formed the control group.) *ReCapturing the Vision* is a selective program that targets roughly 20 “high-need” girls per school. *FUPTP* is an elective program open to all youth in program schools who are age eight or older on a space-available basis.

Figure 1. Grade Level and Mean Age of Youth Enrolling in the Focal Programs for the Title V, Section 510 Abstinence Education Program Impact Evaluation

Grade at Enrollment	<i>My Choice, My Future!</i> Powhatan, VA	<i>ReCapturing the Vision</i> Miami, FL	<i>Teens in Control</i> Clarksdale, MS	<i>FUPTP</i> Milwaukee, WI
Eighth	Mean age = 13.3			
Seventh		Mean age = 12.8		
Sixth				
Fifth			Mean age = 10.7	
Fourth				Mean age = 10.3
Third or below				

Source: Tabulations of data from *Wave 1 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 1999) administered to youth at or near the time of their enrollment in the Title V, Section 510 Abstinence Education Program evaluation sample.

┆ Denotes middle 50 percent of grade distribution.

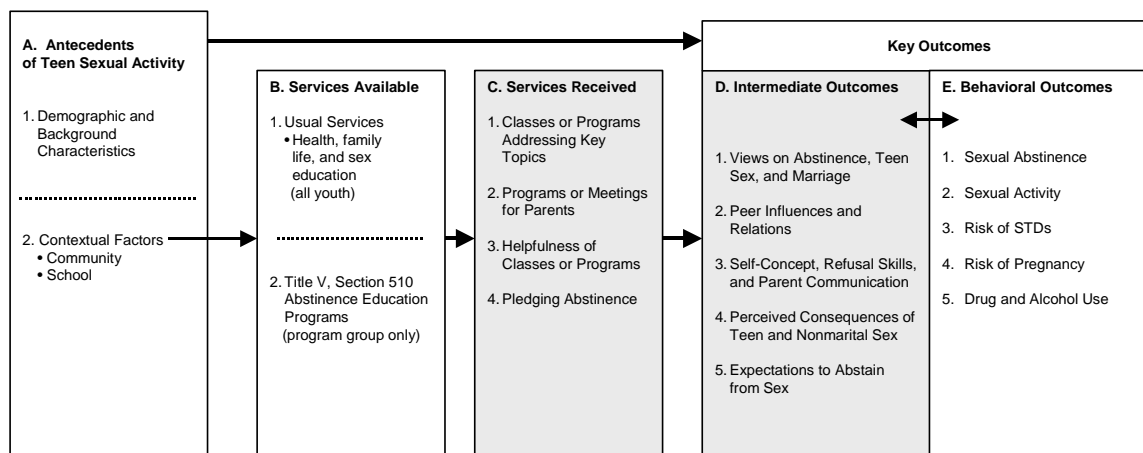
■ Denotes the full grade range.

- **Program Duration and Intensity.** *ReCapturing the Vision* serves students for a single school year, but the program meets every day throughout that time. *My Choice, My Future!* is a three-year intervention, providing between 8 and 18 classes each year. *Teens in Control* is a two-year intervention that entails weekly classes. *FUPTP* meets two and a half hours daily throughout the school year, and youth may participate for up to four years.

THE EVALUATION DESIGN AND METHODS

The design of the impact evaluation was guided by a conceptual framework that reflects the underlying logic of the Title V, Section 510 Abstinence Education Program (Figure 2). Following this general logic, the programs in this study were designed and implemented with attention to the characteristics of the community and the youth they intend to serve (Figure 2, box A), as well as the nature and level of the usual health, family life, and sex education services available through area schools and community service providers (box B, upper panel). The abstinence education programs (box B, lower panel) aim to alter services received (box C) in ways that, in turn, change intermediate outcomes (box D) that relate to future decisions by youth regarding sexual activity and other risk-taking behaviors. In the longer term, changes in these intermediate outcomes are hypothesized to lower rates of engagement in teen and nonmarital sexual activity and the associated risks (box E).

Figure 2. Conceptual Framework for the Impact Evaluation of the Title V, Section 510 Abstinence Education Programs



The Experimental Design

In order to measure reliably the effects of the programs on both the intermediate and behavioral outcomes, the evaluation uses an experimental design. Under this design, youth in the study sample were randomly assigned to either the program group or a control group that receives only the usual health, family life, and sex education services available through the schools or other community service providers. Because of the random assignment, the program and control group youth are similar in all respects, other than their access to the abstinence education program services. Therefore, unbiased estimates of program impacts can be generated by comparing mean values of outcome measures for the program group with those for the control group.

The Study Sample

The sample for this first-year impact analysis includes 2,310 youth who enrolled in the study over three consecutive years, beginning in the 1999-2000 school year (Table 3). This sample constitutes 92 percent of all 2,502 youth who were randomly assigned to the program and control groups across the four sites. The remaining 8 percent of youth in the study sample did not complete the first follow-up survey. Across all four sites, about 60 percent of these youth were assigned to the program group, and the remaining 40 percent were assigned to the control group.

Three of the four programs (*ReCapturing the Vision*, *Teens in Control*, and *FUPTP*) served youth in high-risk communities (Table 4). At the time they enrolled in the study sample, the majority of youth served by these three programs were from single-parent homes, virtually all lived in high-poverty neighborhoods, and relatively high proportions reported experiencing multiple life stressors, such as parents divorcing or separating, losing a job, or going on welfare. In contrast, the majority of youth served by *My Choice, My Future!* had married parents, lived in middle- and working-class neighborhoods, and reported relatively low levels of life stressors.

Table 3. Number Enrolled in the Title V, Section 510 Abstinence Education Program Impact Evaluation Sample and Number Available for the First-Year Impact Analysis

	<i>My Choice, My Future!</i> Powhatan, VA	<i>ReCapturing the Vision</i> Miami, FL	<i>Teens in Control</i> Clarksdale, MS	<i>FUPTP</i> Milwaukee, WI	Total
Number Enrolled in the Study Sample					
Total	551	598	849	504	2,502
Control group	203	260	399	178	1,040
Program group	348	338	450	326	1,462
Number in the Sample for This First-Year Impact Analysis Report					
Total	517	545	809	439	2,310
Control group	185	239	376	152	952
Program group	332	306	433	287	1,358

Source: Tracking system for the *Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc., 1999 and 2000) administered to youth in the Title V, Section 510 Abstinence Education Program evaluation sample.

Table 4. Baseline Characteristics of the Sample for This First-Year Impact Analysis of Four Title V, Section 510 Abstinence Education Programs (Percentages)

	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>	
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI	Total
Gender (% Female)	51.3	100.0	51.7	61.9	64.6
Race/ethnicity					
White, non-Hispanic	83.3	3.2	0.2	2.3	19.9
Black, non-Hispanic	10.6	63.3	86.5	75.7	62.0
Hispanic	3.3	22.5	8.0	7.5	10.3
Other	2.8	10.9	5.3	14.6	7.8
Parents are married	66.2	34.1	31.4	28.8	39.3
Parents have rules about dating	19.1	50.1	47.2	54.1	42.9
Parents divorced or separated in the previous year	7.7	14.9	25.2	28.7	19.2
Highly religious	20.7	28.5	48.0	38.7	35.5
Watches 6 or more hours of TV a day	11.3	48.2	46.5	48.1	39.3
Ever gone on date alone	41.7	23.4	24.5	15.8	26.4
Ever had sexual intercourse	13.7	9.4	n.a.	n.a.	11.5
Uses alcohol more than once a month	11.5	5.0	4.6	2.7	5.9
Sample Size	517	545	809	439	2,310

Source: *Wave 1 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 1999) administered to youth at or near the time of enrollment in the Title V, Section 510 Abstinence Education Program evaluation sample.

Note: Data presented are weighted means.

n.a. = not available. This information was not asked of youth in sixth grade and below.

Data and Analysis Methods

The data for the first-year impact analysis are from supervised, group-administered surveys completed by sample members at the time of their enrollment in the study and near the end of the school year following enrollment. Active parental consent was required for participation in the study.

The analysis uses nine outcome measures to examine the extent to which the programs alter the nature of health, family life, and sex education services youth report receiving through any source, including services the program group may receive as part of the Title V, Section 510 programs under study (see Figure 2, box C). It is through changing services that programs aim to affect behavior. In addition, the analysis examines the impact of 13 intermediate outcomes. These intermediate outcome measures fall into five clusters: (1) views on abstinence, teen sex, and marriage; (2) peer influences and relations; (3) self-concept, refusal skills, and communication with parents; (4) perceived consequences of teen and nonmarital sex; and (5) expectations to abstain from sex (Figure 2, box D).

Program impacts are estimated as the difference in the mean values of the outcome measures for the program group and the control group. Means are regression-adjusted to improve the precision of the estimated impacts and to account for differences between the program group and control group due to chance or differential patterns of nonresponse to the follow-up survey. (The control variables used in the analysis are summarized in Appendix Table A.1 of the full study report.)

FIRST-YEAR FINDINGS ON SERVICES RECEIVED

Each of the Title V, Section 510 programs aimed to alter the health, family life, and sex education services that youth received. In turn, the program-induced changes in the services received were expected to affect various intermediate outcomes associated with sexual activity and other risk-taking behaviors and, ultimately, to reduce the extent of such behaviors. Whether the programs altered services in important ways depends, in part, on the strength of the program's own services. However, it also depends on factors outside the programs, most notably the services youth receive through their schools, churches, and community organizations.

Overall, the programs achieved their initial aim of changing the services youth reported receiving relative to what they would have received had they not been in the program (Table 5). This can be seen by comparing the mean values on the various measures of

Table 5. Health, Family Life, and Sex Education Services Received by Control and Program Group Youth During the First Year After Enrolling in the Study Sample

Outcome Measures	<i>My Choice, My Future!</i>		<i>ReCapturing the Vision</i>		<i>Teen in Control</i>		<i>FUPTP</i>	
	Control Group (1)	Program Group (2)	Control Group (3)	Program Group (4)	Control Group (5)	Program Group (6)	Control Group (7)	Program Group (8)
Participation in a Class or Program on								
Physical Development and								
Reproduction	57%	91%***	87%	91%	66%	83%***	67%	70%
Risk Awareness	74%	93%***	92%	95%	89%	94%**	78%	82%
Interpersonal Skills	65%	95%***	89%	95%*	87%	95%***	80%	83%
Marriage and Relationships	45%	90%***	69%	82%***	71%	75%	68%	66%
Parent Participation in Classes or Meetings								
Parent Involvement	15%	16%	21%	29%	29%	27%	31%	36%
Participation in a Class or Program Perceived as Helpful with (Mean value on scale; range 0-1)								
Knowledge of Pregnancy and								
STD Risks	0.39	0.70***	0.80	0.85	0.65	0.77***	0.58	0.62
Peer Relations	0.09	0.23***	0.45	0.51	0.51	0.53	0.39	0.47
Risk-Avoidance Skills	0.47	0.63***	0.72	0.79*	0.65	0.72***	0.62	0.60
Pledging Abstinence								
Pledged to Abstain from Sex								
Until Marriage	8%	16%**	20%	64%***	10%	14%	24%	33%**
Sample Size	185	332	239	306	376	433	152	287

Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models.

***p-value (of difference in means) <0.01; **p-value <0.05; *p-value <0.10, two-tailed test.

participation in classes or programs reported in Table 5 for the program and control group youth in each of the four sites. For example, during the year following enrollment in the study sample, 57 percent of the control youth in *My Choice, My Future!* reported having participated in a program or class that addressed physical development and reproduction (Table 5, column 1), compared with 91 percent of the program group (Table 5, column 2). The resulting estimate of the program impact (a 34 percentage-point increase) is statistically significant, as indicated by the asterisks following the program group mean.

Findings vary substantially across the four programs. Youth in *My Choice, My Future!* reported significantly higher levels of service receipt than did their control group counterparts across all but one of the nine measures examined. In contrast, youth in *FUPTP* reported significantly higher levels on just one of the nine measures (pledging to abstain from sex until marriage). The other two programs, *Teens in Control* and *ReCapturing the Vision*, fall in between these extremes, with program youth reporting significantly higher levels of service receipt than did control group counterparts on five of the nine measures examined.

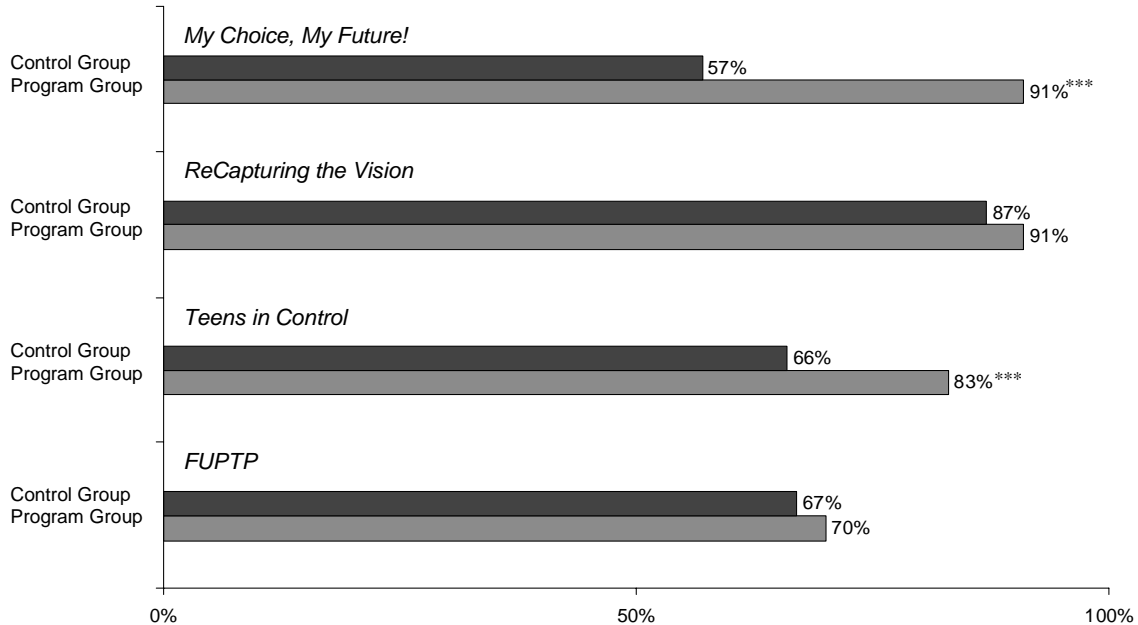
In many instances, this variation parallels differences in the usual services available to youth, as measured by the means for control group youth in each site. For example, control group youth for *My Choice, My Future!* reported relatively low mean levels of service receipt across the nine measures examined (Table 5, column 1), offering more opportunity for program participation to result in measurable gains in the services received. In contrast, youth in the control group for *ReCapturing the Vision* reported relatively high mean levels of service receipt (Table 5, column 3), offering less opportunity for program participation to result in measurable gains.

Specific findings on health, family life, and sex education services received include the following:

- In three of the four programs (all but *FUPTP*), program youth reported significantly higher levels of participation in classes or programs addressing particular topic areas than did their control group counterparts (Table 5). Across all four topic areas examined (physical development and reproduction, risk awareness, interpersonal skills, and marriage and relationships), youth in *My Choice, My Future!* reported significantly higher participation levels than did their control group counterparts. In comparison, youth in *ReCapturing the Vision* reported significantly higher participation in classes addressing two of the four topic areas, while youth in *Teens in Control* reported significantly higher participation in classes addressing three of the four topic areas.

As noted above, some of this variation across sites appears to be linked to the level of service receipt among control group youth. For example, as illustrated in Figure 3, program youth in two sites, *My Choice, My Future!* and *Teens in Control*, reported significantly higher participation in classes or programs addressing physical development and reproduction than did their control group counterparts. In both these sites, the share of control group youth who reported such participation is fairly low (57 and 66 percent, respectively). In contrast, for *ReCapturing the Vision*, 87 percent of the control group youth reported participating in classes or programs that addressed this topic, reducing the opportunity for the program to have a measurable effect on this outcome.

Figure 3. Percent of Youth in the Program and Control Groups Reporting Having Participated in a Class or Program that Addressed Physical Development and Reproduction During the Prior Year

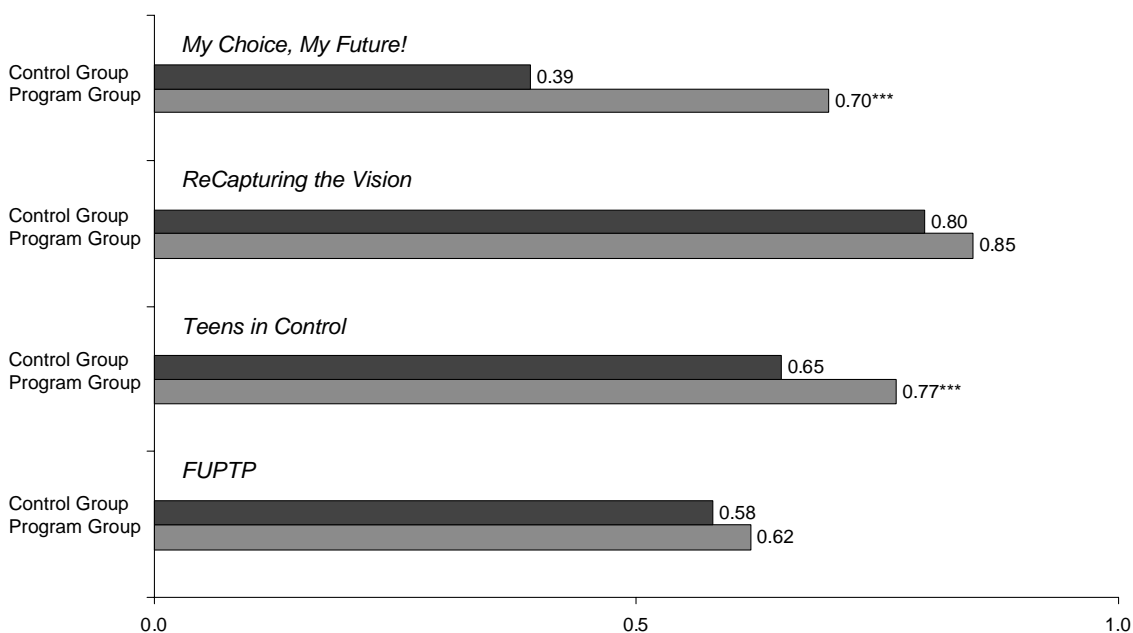


***p-value (of difference between program and control group) < 0.01; **p-value < 0.05; *p-value < 0.10, two-tailed test.

- Only youth in *ReCapturing the Vision* reported significantly higher participation by their parents in classes or meetings related to the four topics of interest than did their control group counterparts (Table 5). This result is consistent with the fact that, of the four programs, *ReCapturing the Vision* offered the most substantial set of services for parents.
- Compared with their control group counterparts, youth in all programs except *FUPTP* reported significantly higher levels of participation in classes that they perceived as helpful in at least one of three measured areas—knowledge of pregnancy and STD risks, improving relations with peers, and developing risk-avoidance skills (Table 5). Differences between program and control group youth vary by site—differences for *My Choice, My Future!* are largest and statistically significant across all three measured areas; differences for *ReCapturing the Vision* are statistically significant for one of the three topic areas; and differences for *Teens in Control* are significant for two of the three areas.

This pattern of results is illustrated by the findings for participation in classes perceived as helpful with knowledge of pregnancy and STDs (Figure 4). In both the *My Choice, My Future!* and *Teens in Control* sites, program youth reported significantly higher levels of participation in classes that they perceived as helpful in this area than did their control group counterparts. In contrast, for *ReCapturing the Vision*, there is no significant difference between program and control group youth on this measure, a result that may be linked to the relatively high mean value of this measure among control group youth (0.86 on a scale ranging from 0 to 1).

Figure 4. Participation in Classes Perceived as Helpful with Knowledge of Pregnancy and STD Risks [Scale Measure: Range 0-1] by Program and Control Group Youth



***p-value (of difference between program and control group) < 0.01; **p-value < 0.05; *p-value < 0.10, two-tailed test.

- Youth in all programs except *Teens in Control* were significantly more likely than their control group counterparts to report having pledged to abstain from sex until marriage (Table 5). The difference in pledge rates between youth in the program and control groups is particularly large (44 percentage points) for *ReCapturing the Vision* (64 percent and 20 percent for the program and control group youth, respectively), a result that is consistent with the program's formal use of abstinence pledging in its curriculum.

FIRST-YEAR FINDINGS ON INTERMEDIATE OUTCOMES

The four programs affected in the intended ways some, but not all, of the intermediate outcomes examined. This can be seen in the results for the full sample of program and control group youth across the four sites (Table 6). Overall there is evidence that the programs affected, in intended ways, youth's views on abstinence and teen sex and their perceptions of potential negative consequences of teen and nonmarital sex. In addition, there is limited evidence of program impacts on both dating and expectations to abstain. However, program and control group youth reported similarly on the remaining measures examined, including their views on marriage, self-concept, refusal skills, communication with parents, perceptions of peer pressure to have sex, and the extent to which their friends hold views supportive of abstinence.

Program impacts on intermediate outcomes vary substantially across the four programs (Table 7). The estimated impacts are most often statistically significant for the two programs that enrolled predominantly seventh and eighth graders—*My Choice, My Future!* and *ReCapturing the Vision* (Table 7, columns 1-4). For example, relative to their control group counterparts, youth in both of these programs reported views that, on average, are significantly less supportive of teen sex. Youth in both these programs also reported significantly higher mean values for the two measures of perceived consequences of teen and nonmarital sex than did their control group counterparts.

Program impacts are larger for youth enrolling in the study sample in the third and final year of sample enrollment than for youth enrolling in the previous two years (not shown). This result may be linked to changes in the program environment and/or to improvements in program delivery (see Chapter V of the full study report for details). For *ReCapturing the Vision*, it may also reflect the higher program participation rate among those enrolled during the third year.

Table 6. Intermediate Outcomes for Control and Program Group Youth Following the First Year of Enrollment in the Study Sample

Outcome Measure [scale range: lowest to highest value]	All Four Program Sites		
	Control Group Mean (1)	Program Group Mean (2)	Program-Control Group Difference (3)
Views on Abstinence, Teen Sex, and Marriage			
Views Supportive of Abstinence [Range: 0-3]	1.78	1.86	0.08 ***
Views Unsupportive of Teen Sex [Range: 0-3]	2.16	2.23	0.07 ***
Views Supportive of Marriage [Range: 0-3]	2.29	2.30	0.01
Peer Influences and Relations			
Friends' Support for Abstinence [Range: 0-5]	3.44	3.50	0.07
Dating [Range: 0-1]	0.33	0.28	-0.04 **
Peer Pressure to Have Sex [Range: 0-3]	0.11	0.16	0.05
Self-Concept, Refusal Skills, and Communication with Parents			
Self-Efficacy, -Esteem, and -Control [Range: 0-3]	1.94	1.95	0.01
Refusal Skills [Range: 0-2]	1.52	1.53	0.01
Communication with Parents [Range: 0-2]	0.90	0.92	0.02
Perceived Consequences of Teen and Nonmarital Sex			
General Consequences [Range: 0-3]	1.89	1.99	0.10 ***
Personal Consequences [Range: 0-2]	1.00	1.09	0.09 ***
Expectations to Abstain			
Expect to Abstain ^a [Range: 0-2]	1.30	1.37	0.07 *
Expect to Abstain As an Unmarried Teen [Range: 0-2]	1.20	1.25	0.05
Sample Size	952	1,358	2,310

Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models.

^aFor youth who reported having had sex, the measure refers to expectations over the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

*** p-value (of difference in means) <0.01; **p-value <0.05; *p-value <0.10, two-tailed test.

Table 7. Means of Intermediate Outcomes for Control and Program Group Youth Following the First Year of Enrollment in the Study Sample

Outcome Measure [scale range: lowest to highest value]	<i>My Choice, My Future!</i>		<i>ReCapturing the Vision</i>		<i>Teens in Control</i>		<i>FUPTP</i>	
	Control Group (1)	Program Group (2)	Control Group (3)	Program Group (4)	Control Group (5)	Program Group (6)	Control Group (7)	Program Group (8)
Views on Abstinence, Teen Sex, and Marriage [Range: 0-3]								
Views Supportive of Abstinence	1.59	1.64	1.93	2.02	1.77	1.87**	1.82	1.92
Views Unsupportive of Teen Sex	2.05	2.15**	2.26	2.38***	2.16	2.23	2.16	2.15
Views Supportive of Marriage	2.43	2.49	2.37	2.42	2.20	2.15	2.18	2.14
Peer Influences and Relations								
Friends' Support for Abstinence [Range: 0-5]	2.94	2.99	3.48	3.64	3.28	3.39	4.06	3.96
Dating [Range: 0-1]	0.44	0.40	0.21	0.17	n.a.	n.a.	n.a.	n.a.
Peer Pressure to Have Sex [Range: 0-3]	0.11	0.14	0.10	0.17	n.a.	n.a.	n.a.	n.a.
Self-Concept, Refusal Skills, and Communication with Parents								
Self-Efficacy, -Esteem, and -Control [Range: 0-3]	1.93	1.91	2.00	2.01	1.90	1.94	1.97	1.95
Refusal Skills [Range: 0-2]	1.33	1.34	1.70	1.73	n.a.	n.a.	n.a.	n.a.
Communication with Parents [Range: 0-2]	0.74	0.72	0.99	1.01	1.00	1.00	0.88	0.96
Perceived Consequences of Teen and Nonmarital Sex								
General Consequences [Range: 0-3]	1.74	1.84*	1.95	2.11***	1.96	2.03	1.92	1.99
Personal Consequences [Range: 0-2]	0.81	0.94***	0.94	1.08***	1.16	1.20	1.10	1.15
Expectations to Abstain [Range 0-2]								
Expect to Abstain ^a	1.15	1.20	1.46	1.55	n.a.	n.a.	n.a.	n.a.
Expect to Abstain As an Unmarried Teen	1.04	1.06	1.37	1.45	n.a.	n.a.	n.a.	n.a.
Sample Size	185	332	239	306	376	433	152	287

Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510, Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models.

^aFor youth who reported having had sex, the measure refers to expectations over the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

n.a. = youth in this site were not asked these questions because of their young ages.

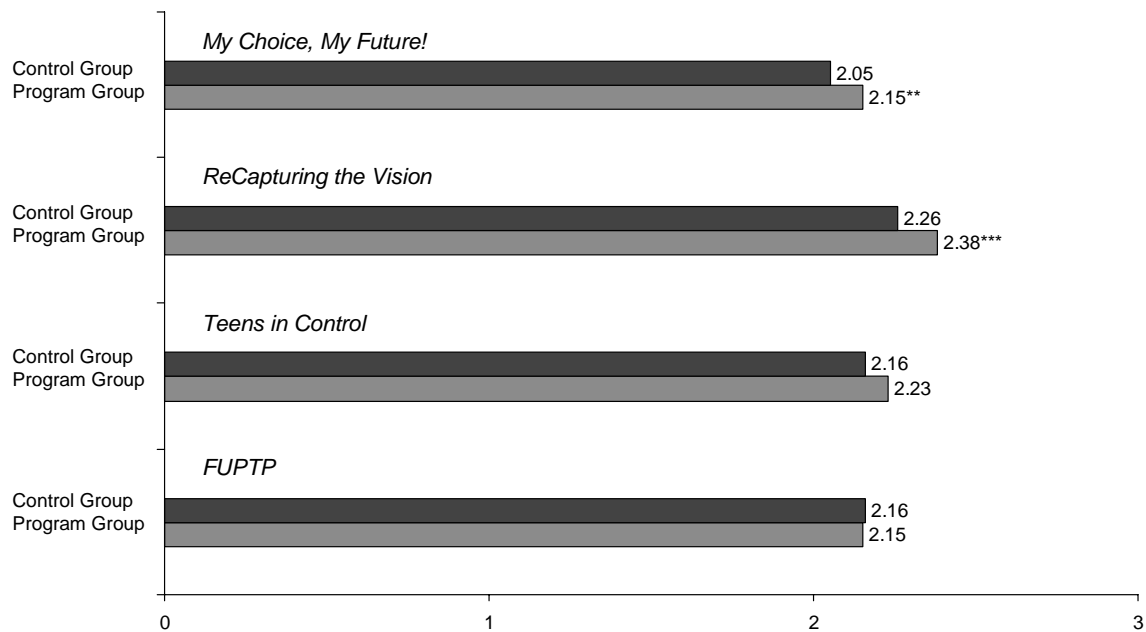
*** p-value (of difference in means) <0.01; **p-value <0.05; *p-value <0.10, two-tailed test.

The two programs that served predominantly upper elementary youth—*Teens in Control* and *FUPTP*—display less evidence of program impacts (Table 7, columns 5-8). Youth in *Teens in Control* reported views that, on average, are significantly more supportive of abstinence than those of their control group counterparts. However, there are no significant differences between the program group youth and their control group counterparts on any of the other outcome measures for either site. The fact that *FUPTP* had the lowest rate of participation and daily attendance among the four programs in the study may have contributed to the program's generally null results.

The following is a more detailed summary of the findings across the full set of 13 outcome measures presented in Table 7:

- Program youth reported views that, on average, are more supportive of abstinence and less supportive of teen sex than did their control group counterparts. Across three of the four programs (all but *FUPTP*), differences between the program and control groups are statistically significant on one of these measures (in the direction consistent with program goals). For example, both *My Choice, My Future!* and *Teens in Control* had statistically significant impacts on views unsupportive of teen sex (Figure 5). In contrast, there is no evidence that any of the four programs led youth to develop views more supportive of marriage than those of their control group counterparts (Table 7).
- There is limited evidence that the programs had impacts on peer influences and relations. In each of the four sites, program and control group youth reported similar levels of support for abstinence among their closest friends. In addition, in the two sites in which youth were old enough to address a wider range of outcomes, *My Choice, My Future!* and *ReCapturing the Vision*, program and control group youth reported similar levels of dating and peer pressure to engage in sex (Table 7). However, impact estimates for the two sites combined indicate that program group youth reported significantly lower levels of dating than those of their control group counterparts (Table 6).

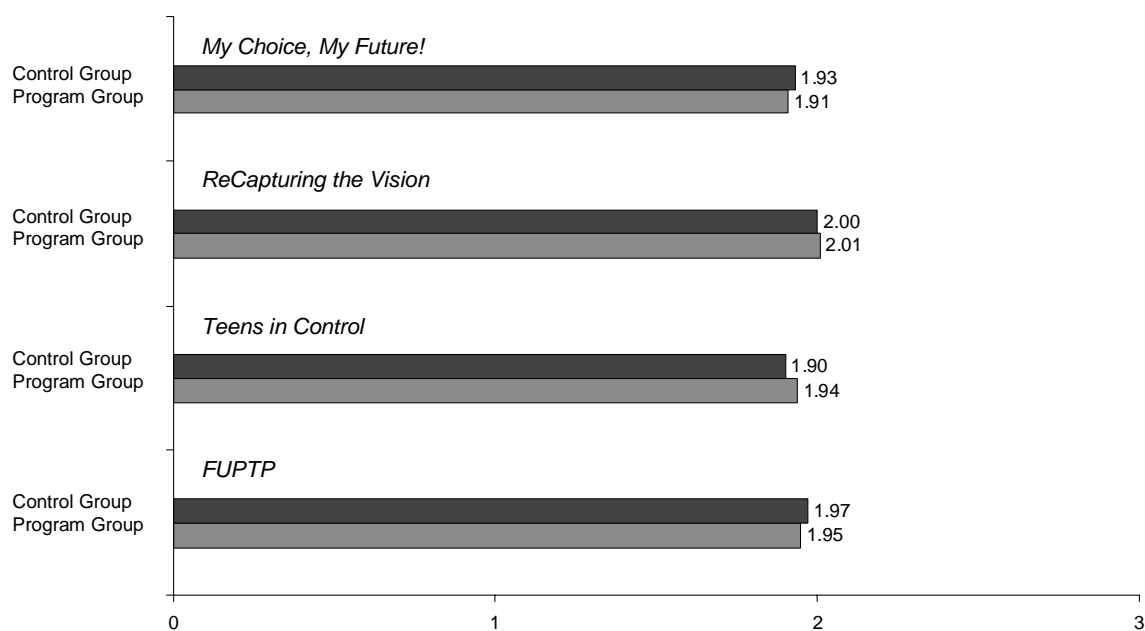
Figure 5. Views Unsupportive of Teen Sex [Scale Measure: Range 0-3], by Program and Control Group Youth



***p-value (of difference between program and control group) < 0.01; p-value < 0.05; p-value < 0.10, two-tailed test.

- Program and control group youth reported no differences in their self-concept, refusal skills, or communication with parents (Table 7). For example, on the measure of self-efficacy, -esteem, and -control (Figure 6), program and control youth reported nearly identical mean levels.
- The programs affected significantly youth’s perceptions of the potential adverse consequences of teen and nonmarital sex (Table 6). Means on two measures of perceived consequences of teen and nonmarital sex are higher for the program group youth than for their control group counterparts in all four sites, and the differences are statistically significant for both *My Choice, My Future!* and *ReCapturing the Vision* (Table 7).
- There is limited evidence that the programs raised expectations to abstain from sex. (Only youth in the two sites serving older students, *My Choice, My Future!* and *ReCapturing the Vision*, were asked about their expectations to abstain.) On two related measures, program youth in both of these sites reported a mean expectation to abstain that is higher than that of their control group counterparts, but only the mean difference for one of the two measures is statistically significant and only for the two sites combined (Table 6).

Figure 6. Self-Efficacy, -Esteem, and -Control [Scale Measure: Range 0-3], by Program and Control Group Youth



***p-value (of difference between program and control group) < 0.01; p-value < 0.05; p-value < 0.10, two-tailed test.

DISCUSSION

This study of first-year impacts finds evidence that the four selected Title V, Section 510 programs affected both the services that youth received and certain intermediate outcomes. However, the evaluation also identifies areas in which the programs did not have impacts during their first year of intervention—particularly in the areas of self-concept, refusal skills, and communication with parents; youth’s perceptions of peer pressure to engage in sex; and support for abstinence among friends.

In judging the significance of these first-year findings, it is important to consider the following three factors:

1. Only youth in *ReCapturing the Vision* had participated in the full set of intended abstinence education services at the time the first-year follow-up data were collected. Youth in the other three programs had received half or less of the intended intervention.
2. Participation in both *My Choice, My Future!* and *Teens in Control* was nearly universal among program group members. In contrast, only 58 percent of the youth assigned to the program group for *ReCapturing the Vision* and 45 percent of those assigned to the program group for *FUPTP* participated in the program. In the case of *ReCapturing the Vision*, nonparticipation resulted primarily from class schedule conflicts. In the case of *FUPTP*, it was due in large part to youth not being offered a program slot until midway through the school year. The result is that program impact estimates for these two programs understate the impacts for those who actually received the intervention, a fact that is discussed in the full study report.
3. The young ages of program participants and the limited duration of the follow-up period for this report preclude reliable estimation of program impacts on the ultimate outcomes of interest—sexual abstinence, sexual activity, risks of contracting sexually transmitted diseases, and risks of pregnancy.

The success of the programs in promoting abstinence, as well as in reducing risks of pregnancy and sexually transmitted diseases, cannot be fully determined without data that measure behaviors in the older teen years. Such data will be available for a large portion of the study sample once the fourth wave of data have been collected in 2005. Then, it will be possible both to estimate program impacts on the behavior-related outcomes of interest and to examine the mechanisms through which programs do or do not affect behavior.

CHAPTER I

INTRODUCTION

Persistent concerns about teen sexual activity and its consequences prompted Congress to authorize \$50 million annually to support abstinence education programs. This funding was established through a program created under Title V, Section 510 of the Social Security Act. Funding for the program was authorized under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 and became available to states in fiscal year 1998 through a grant program administered by the U.S. Department of Health and Human Services. States must match the federal funds at 75 percent, resulting in a total of up to \$87.5 million annually for Title V, Section 510 abstinence education programs.

As part of the Balanced Budget Act of 1997 (Public Law 105-33), Congress authorized an evaluation of the Title V, Section 510 Abstinence Education Program. The resulting multiyear evaluation includes an implementation and process analysis and a rigorous impact evaluation. The implementation and process analysis documents the typical experiences of the organizations and communities applying for and receiving abstinence education funding under the Title V, Section 510 program (Devaney et al. 2002). The impact evaluation is designed to estimate the impacts of a select group of Title V, Section 510 abstinence education programs on behavior and related outcomes, including sexual activity, risks of contracting sexually transmitted diseases, and risks of pregnancy. In addition, the evaluation will estimate program impacts on intermediate outcomes that may be related to teen sexual activity and other risk-taking behavior. These intermediate outcomes include views on abstinence, teen sex, and marriage; peer influences and relations; self-concept, refusal skills, and communication with parents; perceived consequences of teen and nonmarital sex; and expectations to abstain from sex.

The impact evaluation relies on an experimental design. Under this design, program-eligible youth are randomly assigned to the program group, which receives the abstinence education services, or to a control group. Youth in the control group receive only the usual health, family life, and sex education services available in their schools and through community service providers other than the Title V, Section 510 programs. Youth in the program group may receive the Title V, Section 510 program services, as well as the usual services in their schools and communities.

This report presents first-year impact findings for four selected Title V, Section 510 abstinence education programs: (1) *My Choice, My Future!* in Powhatan, Virginia; (2) *ReCapturing the Vision* in Miami, Florida; (3) *Teens in Control* in Clarksdale, Mississippi; and (4) *Families United to Prevent Teen Pregnancy (FUPTP)* in Milwaukee, Wisconsin. The report examines the extent to which these programs affected the health, family life, and sex education services youth received during the year following their enrollment in the study sample, and it presents estimates of the first-year impacts of the programs on intermediate outcomes that may be related to teen sexual activity and other risk-taking behaviors.

This report does not examine behavioral outcomes. This is due to both the short duration of the follow-up period and the young ages of the program participants. Program impacts on behavioral outcomes will be examined in a later report that will make use of two additional waves of follow-up surveys covering the period through 2005.

NATIONAL CONTEXT

In 1996, at the time Congress passed legislation establishing the Title V, Section 510 Abstinence Education Program, roughly half of all high school students and nearly two-thirds of graduating seniors reported having had sexual intercourse (Centers for Disease Control and Prevention 2004). Fewer than half of sexually active high school youth reported having used a condom the last time they had sexual intercourse, and nearly one in five high school seniors reported having had sex with four or more partners. The most visible consequence of these behaviors was that nearly 500,000 babies were born to teens in 1995, three-fourths of them out of wedlock (Centers for Disease Control and Prevention 2000).

Over the past eight years, these conditions have improved, but major concerns persist. As recently as 2003, 47 percent of high school students nationwide reported having had sexual intercourse, and one-third reported current sexual activity (Centers for Disease Control and Prevention 2004). More specific sources of concern are the following:

- As recently as 2003, 37 percent of sexually active youth reported not having used a condom the last time they had sexual intercourse (Centers for Disease Control and Prevention 2004).
- Fourteen percent of high school youth reported having had four or more sexual partners (Centers for Disease Control and Prevention 2004).
- Over 145,000 babies were born to teens under age 18 in 2002, and 80 percent of those births were to unwed mothers (Hamilton et al. 2003).

In addition to the well-documented social and economic consequences of teen pregnancies and births (Maynard 1997), there also are major concerns related to the risks of sexually transmitted diseases (STDs) among sexually active teens. More than 25 diseases are spread sexually and may cause such complications as infertility, ectopic pregnancies, miscarriages, stillbirths, intrauterine growth retardation, perinatal infections, and cervical cancer. Compared with other age groups, teenagers are more biologically susceptible to STDs, more likely to have unprotected intercourse, and more likely to have multiple sexual partners. Each year, there are 19 million new STD cases reported in the United States, and an estimated one-quarter of infected individuals are teenagers (Weinstock et al. 2004).

About half of these new STD cases may be lifelong viral infections for which there is no cure.

The Title V, Section 510 Abstinence Education Program is designed to address these concerns associated with teen sexual activity. Programs receiving these Section 510 funds share many features with other programs that either directly or indirectly focus on the same concerns. However, they differ from the previous generation of federally funded abstinence education programs in one important respect—they must be consistent with the “A-H” definition of abstinence education (see Table I.1).

DESIGN OF THE IMPACT ANALYSIS

The design of the impact evaluation was guided by a conceptual framework that reflects the underlying logic of the Title V, Section 510 Abstinence Education Program (Figure I.1). Each program was designed and implemented to reflect the characteristics of the youth and community it serves (Figure I.1, box A), as well as the usual health, family life, and sex education services youth targeted by the program would be expected to receive (box B, top panel). By altering service receipt (box C), the abstinence education programs (box B, lower panel) aim to influence intermediate outcomes (box D) that relate to future decisions about sexual activity and other risk-taking behaviors. In the longer term, favorable changes in these intermediate outcomes are hypothesized to lead to higher rates of sexual abstinence and lower rates of sexual activity and other risk-taking behaviors (box E).

The focus of this report is on the outcomes listed in the two shaded boxes, C and D. These outcomes include the level and nature of the health, family life, and sex education services youth receive (box C) and various intermediate outcomes related to teen sexual activity and other risk-taking behaviors (box D). A future report based on follow-up data

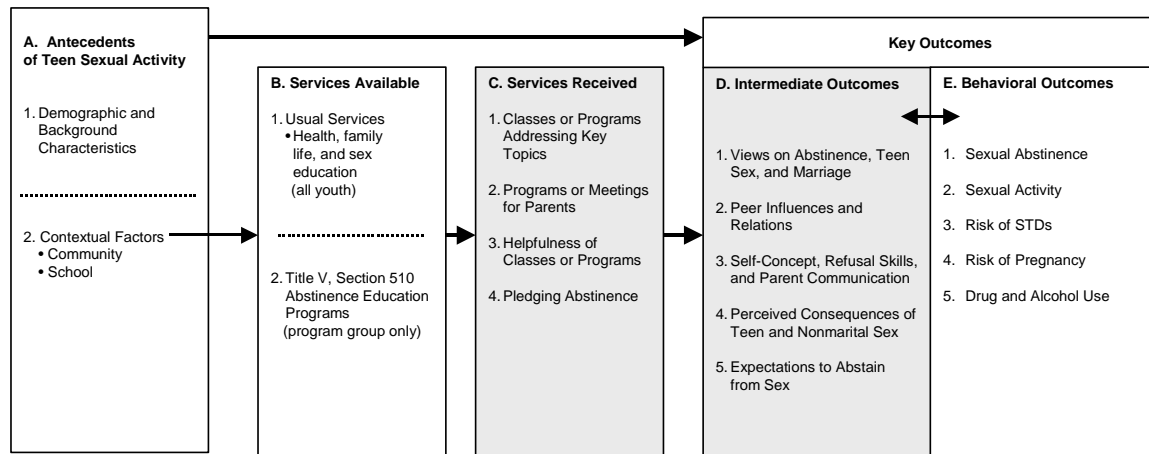
Table I.1. A-H Definition of Abstinence Education for Title V, Section 510 Programs

A	Have as its exclusive purpose teaching the social, psychological, and health gains to be realized by abstaining from sexual activity
B	Teach abstinence from sexual activity outside marriage as the expected standard for all school-age children
C	Teach that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy, sexually transmitted diseases, and other associated health problems
D	Teach that a mutually faithful, monogamous relationship in the context of marriage is the expected standard of sexual activity
E	Teach that sexual activity outside the context of marriage is likely to have harmful psychological and physical effects
F	Teach that bearing children out of wedlock is likely to have harmful consequences for the child, the child's parents, and society
G	Teach young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances
H	Teach the importance of attaining self-sufficiency before engaging in sexual activity

Source: Title V, Section 510 (b)(2)(A-H) of the Social Security Act.

Note: Program guidelines specify that "it is not necessary to place equal emphasis on each element of the definition" (U.S. Department of Health and Human Services 1997).

Figure I.1. Conceptual Framework for the Impact Evaluation of the Title V, Section 510 Abstinence Education Programs



covering the period through spring 2005 will focus on the behavior-related outcomes in box E.

To reliably measure the effects of the abstinence education programs, the impact evaluation uses an experimental design. Under the experimental design, youth in the study sample were randomly assigned to either the program group, which could receive services from the Title V, Section 510-supported abstinence education program, or to a control group. The control group received only the usual health, family life, and sex education services provided through the schools and community service providers other than the Title V, Section 510 programs.

Program impacts are estimated by comparing regression-adjusted mean values of each outcome measure for the program group with those for the control group. As a result of having used the experimental design, youth in the program and control group samples are similar in all respects except for their participation in the Title V, Section 510 abstinence education programs. Therefore, measured differences between the program and control group reflect credible estimates of the impact of the abstinence education programs.

FOCAL PROGRAMS FOR THIS REPORT

The four focal programs for this report were selected purposely from among a large group of candidates for the study. These selections were made because the programs were judged to be reasonably stable and replicable and to have qualities necessary to support a rigorous, experimental design impact evaluation. However, the programs are not necessarily better than, nor representative of, all Title V, Section 510-funded programs.

In addition to following the A-H definition of abstinence education (Table I.1), the focal programs for this report share other features with typical Title V, Section 510-funded programs. The two most notable are that all four programs offer their services in schools, and all have a prevention focus. Their prevention focus means that they begin serving youth in elementary and middle schools, when very few have become sexually active.

The programs also differ from one another in important respects, including the ages of youth served, the setting in which services are delivered, and the duration and intensity of the intervention (see Table I.2). The programs range from a one-year, classroom-based intervention to a three- to four-year daily intervention. Two of the programs mainly begin to serve youth when they are in seventh and/or eighth grade, while the other two predominantly serve youth beginning in grades 3 through 5. And, most notably, all four programs operate in communities where youth have access to a broad range of health, family life, and sex education services through their schools and community providers other than the Title V, Section 510 programs. However, the nature and extent of these services vary across the communities. In general, services are more available to youth in the urban communities served by *ReCapturing the Vision* and *FUPTP*, and much less available in the communities served by *My Choice, My Future!* and *Teens in Control*.

THE STUDY SAMPLE AND DATA

The sample for this first-year impact analysis includes 2,310 youth who enrolled in the study over three successive school years, beginning in 1999-2000. This analysis sample constitutes 92 percent of the 2,502 youth who were randomly assigned to either the program group or to the control group.

Table I.2. Focal Programs for the First-Year Impact Evaluation of the Title V, Section 510 Abstinence Education Program

<i>My Choice, My Future!</i> Powhatan, VA	<i>ReCapturing the Vision</i> Miami, FL	<i>Teens in Control</i> Clarksdale, MS	<i>Families United to Prevent Teen Pregnancy (FUPTP)</i> Milwaukee, WI
Principal Program Components			
Three years of classroom-based curricula	One year of classroom-based curricula with supplemental components for participants and their families	Two years of classroom-based curricula	Up to four years of classroom-based curricula delivered as part of an after-school program; parenting education and support
Target Population			
Grade 8 at enrollment; full range of students; middle-income to working-class community	Grades 6-8 at enrollment; high-risk girls; poor, urban community	Grade 5 at enrollment; full range of students; poor, rural community	Grades 3-8 at enrollment; voluntary applicants; poor, urban community
Usual Services (Sources Other Than Title V, Section 510 Abstinence Education Programs)			
Limited other sources of health, family life, and sex education; no formal school sex education curricula	Many other sources of health, family life, and sex education; mandated school curricula in grades 6-8	Limited other sources of health, family life, and sex education; limited school-wide curricula in middle schools	Many other sources of health, family life, and sex education; mandatory school health curricula in grades K-12

The data for this analysis are drawn from supervised, group-administered surveys completed with sample members at two points in time: (1) at the time of their enrollment in the study sample, and (2) near the end of the school year following their enrollment. Data from the second of these surveys form the basis for the outcome measures examined in this report, while data from the former survey serve as the basis for a series of demographic and baseline measures that are included in the regression models used to estimate program impacts.

FINDINGS IN BRIEF

Each of the four programs shows evidence of having increased the level of health, family life, and sex education services youth received during their first year of program participation relative to that received by the control group. In turn, the programs show evidence of affecting in intended ways some, but not all, of the intermediate outcomes examined.

While the size and significance of the estimated program impacts vary across the four programs, there is evidence that the programs affected, in intended ways, youth's views on abstinence and teen sex and their perceptions of potential negative consequences of teen and nonmarital sex.¹ In addition, there is limited evidence of program impacts on both dating and expectations to abstain. However, program and control group youth reported similarly on the remaining measures examined, including their views on marriage, self-concept, refusal skills, communication with parents, perceptions of peer pressure to have sex, and the extent to which their friends hold views supportive of abstinence.

These findings provide early evidence on the impacts of the programs. However, two factors make it important to defer drawing final conclusions about program effects until longer-term follow-up data are available. First, three of the four programs are multiyear interventions. Thus, most program group youth in these sites are expected to receive services well beyond the first-year period examined in this report (see Table I.2 above). Second, until longer-term follow-up data become available, it is uncertain what these findings suggest for the eventual impacts of the programs on sexual abstinence, sexual activity, and other behavioral outcomes.

REPORT ORGANIZATION

Chapter II of this report describes in greater detail the four programs that are the focus of this report. Chapter III details the evaluation design and analytic methods. Chapter IV presents estimates of how the health, family life, and sex education services received by program youth during their first year of program participation differed from those services received by the control group. Chapter V then presents estimates of resulting program impacts on intermediate outcomes that relate to teen sexual activity and other risk-taking behavior. The final chapter provides a discussion of the findings and outlines future steps in the evaluation.

¹ Throughout this report, the term “sex” refers to sexual intercourse.

CHAPTER II

FOCAL PROGRAMS FOR THE EVALUATION

The four programs that are the focus of this impact evaluation report are typical of many of the programs supported through the Title V, Section 510 abstinence education initiative.¹ These programs comply with the “A-H” guidelines (see Table I.1), deliver their services in school settings, are prevention focused, and rely heavily on published curricula. All four of the programs aim to change the extent and nature of health, family life, and sex education services youth receive in particular ways. Ultimately, those changes are expected to increase sexual abstinence among unmarried teens and to reduce teen sexual activity and other risk-taking behaviors. This common goal is consistent with the high degree of overlap in the curricula topics covered by the programs (Table II.1). In particular, all four programs teach physical development and reproduction,

Table II.1. Common Curricula Topics

<p><i>Physical Development and Reproduction</i></p> <ul style="list-style-type: none"> Understanding human development and anatomy Understanding STDs 	<p><i>Marriage and Relationships Skills</i></p> <ul style="list-style-type: none"> Building healthy relationships Appreciating the benefits of marriage Understanding parenthood
<p><i>Risk Awareness</i></p> <ul style="list-style-type: none"> Formulating personal goals Making good decisions Building self-esteem Risks of drugs and alcohol 	<p><i>Interpersonal Skills</i></p> <ul style="list-style-type: none"> Improving communication skills Avoiding risk Managing social and peer pressure Developing values and character traits

Note: Appendix B includes the topic outlines for the curricula used in each of the four programs.

¹A fifth program in the evaluation—*Heritage Keepers* in South Carolina—is not included in this report. The study sample for the evaluation of *Heritage Keepers* enrolled considerably later than that for the other four sites included in this report. In addition, the evaluation of the *Heritage Keepers* program is designed to measure the impacts of adding an abstinence-focused character club to a classroom-based abstinence education curriculum, rather than to measure the impacts of the overall abstinence education program versus services as usual.

promote risk awareness, teach goal-setting and good decision-making, teach about marriage and healthy relationships, and help develop interpersonal and risk-avoidance skills. However, the programs vary in the levels of emphasis they place on particular topics in ways that are discussed further below.

PROGRAM PROFILES

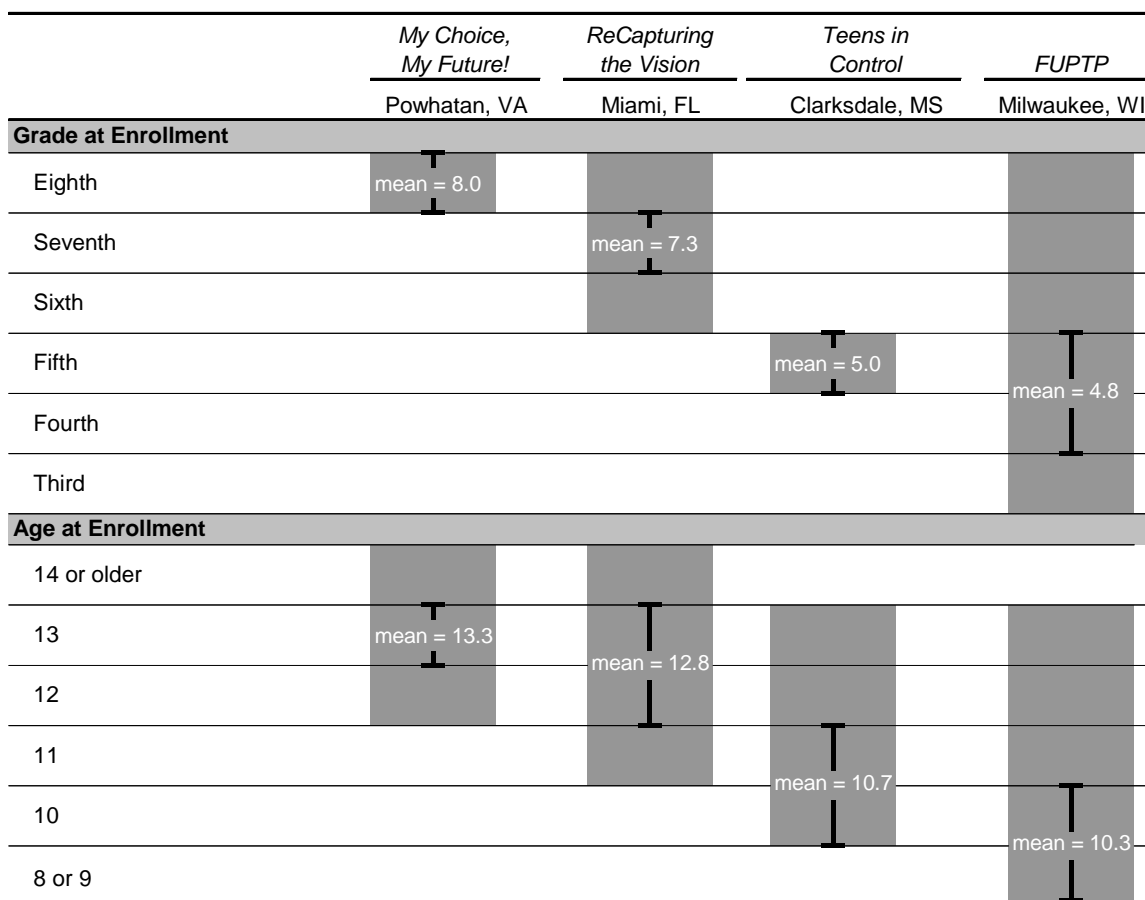
In spite of their many commonalities, the four focal programs for this report differ in terms of their auspices and origins, the target populations they serve, the specific nature of their curricula and curricula supplements, and the planned duration of the intervention (Table II.2). The differences in curricula content and program delivery affect the extent to which the programs are aligned with the various intermediate outcomes examined in this report. Most notably, there is variability in the extent to which programs emphasize the value of marriage, healthy dating behaviors, and improving parent-child communication as vehicles for achieving behavior change (see further discussion below).

Table II.2. Characteristics of the Four Abstinence Education Programs Included in This First-Year Impact Evaluation

<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
Sponsor			
County health department, Powhatan, VA	Community youth service agency, Miami, FL	Community health center, Clarksdale, MS	Social service agency, Milwaukee, WI
Origins			
Initiated in 1997 with Title V, Section 510 support	Initiated in 1994 with private support	Initiated in 1997 with Title V, Section 510 support	Initiated in 1986 through a Title XX abstinence education grant
Target Populations			
Representative group of eighth graders. Parents can "opt out"	Elective class offered to "high-need" girls in grades 6 through 8	Representative group of fifth graders. Parents can "opt out"	Elective after-school program for youth ages 8 through 13
Components			
Class-based curricula; 30 sessions in year one, 8 in year two, and 14 in year three; occasional school assembly and community outreach	Year-long elective class-based curricula; cultural events, including a mock wedding, abstinence rally, and teen-talk symposium; home visits by family social workers; and family retreat	Class-based curricula delivered in weekly pull-out class throughout fifth and sixth grades	Abstinence curricula delivered daily as part of the after-school program; program also offers homework assistance, recreation, and occasional parent workshops and community events
Duration			
Three school years	One school year, with occasional repeaters	Two school years	Up to four school years

In part, the emphasis of the curricula varies due to the differences in the age and grade range of the youth participating in the program at any one time (Figure II.1). During the period of sample intake for the evaluation, *My Choice, My Future!* enrolled new students in eighth grade and continued to provide them with a different set of services each year through tenth grade. Most new enrollees in *ReCapturing the Vision* were seventh graders, but many eighth graders and a few sixth graders also enrolled in the single-year program. Like *My Choice, My Future!*, *Teens in Control* enrolled new students from a single grade. However, in this case, entering students were fifth graders who received different curricula in fifth grade than in sixth grade. *FUPTP* was unique in that it did not target youth in any particular grade or of any particular age. Rather, it accepted applications from any youth age 8 or older who attended one of the elementary or middle schools that offered the program.

Figure II.1. Grade Level and Ages of Youth Enrolling in the Focal Programs for the Impact Evaluation



I Denotes the middle 50 percent of the grade or age distribution.

■ Denotes the full grade or age range.

Source: Tabulations of data from *Wave 1 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 1999) administered to youth at or near the time of their enrollment in the Title V, Section 510 Abstinence Education Program evaluation sample.

Each of the four programs also operates in a unique environment in terms of the services program youth would be expected to receive if they were not participating in the Title V, Section 510 program. These services are what we refer to throughout this report as “usual services.” State school health and sex education policies are important factors in determining the usual services provided (Table II.3, upper panel). *ReCapturing the Vision* operates in a state that requires schools to offer both sex and STD/HIV education; *FUPTP* operates in a state that requires schools to offer STD/HIV education, but not sex education; and the other two programs—*My Choice, My Future!* and *Teens in Control*—operate in states that allow schools to offer one or both types of education, but that require neither. These state policies play out in even greater variability in terms of local district offerings (Table II.3, lower panel), with district offerings ranging from nine weeks of health and physical education classes a year (*My Choice, My Future!*) to a mandatory family life curriculum for students that begins in kindergarten and continues through twelfth grade (*FUPTP*).

The following brief synopses highlight these and other key features of the four programs. The final section of this chapter discusses ways in which particular features of the programs could influence the study findings.

Table II.3. Prevailing State and School District Health and Sex Education Policies and Practices

<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
State Family Life Policies on School Health, Family, and Sex Education^a			
No requirement to offer either sex education or STD/HIV education; if offered, classes must cover both abstinence and contraception	Sex education is mandated and must cover abstinence. STD/HIV education required; no coverage of contraception required	No requirement to offer either sex education or STD/HIV education; if offered, classes must stress abstinence	Schools are required to offer STD/HIV education; no requirements regarding coverage of abstinence or contraception
Usual Services: School Health, Family Life, and Sex Education Services^b			
Nine-week health and physical education class that does not include sex education, STDs, abstinence, or contraceptive use	Mandated school curriculum for sixth through eighth grades, including a week-long unit on human growth and development; sixth-grade curriculum covers STDs, abstinence, and drug and alcohol prevention	Limited district-wide health, family life, and sex education curricula for middle-school youth	Mandatory family life curricula for K through 12; units on abstinence and contraceptive use beginning in fifth grade

^aThis information is based on the Alan Guttmacher Institute (2004).

^bThis information was provided by school principals, counselors, and school health educators, as well as state department of education and school district websites.

My Choice, My Future!

My Choice, My Future! was developed with Title V, Section 510 support and is operated by the Powhatan County Health Department in Powhatan, Virginia. It is a nonelective, school-based program serving boys and girls beginning in grade 8 and continuing through grade 10. Fewer than 10 percent of program-eligible youth did not participate in the program (or the study) due to parental choice. The Powhatan Public Schools serve youth from a semirural community heavily populated by middle- and working-class families. The median income is above the national average, the majority of children live in two-parent families, and the population is largely white, non-Hispanic.

In eighth grade, youth in *My Choice, My Future!* receive the *Reasonable Reasons to Wait: The Keys to Character* curriculum (Duran 1997). *Reasonable Reasons to Wait* includes nine units (delivered over 18 class periods) focused on character development, reasons to wait to engage in sex, peer influences, dating, avoiding STDs, relationship skills, and the benefits and ingredients of a strong marriage. In ninth grade, program youth participate in monthly classes that follow the *Art of Loving Well: A Character Education Curriculum for Today's Teenagers* (Boston University 1993). This curriculum features short stories, poetry, classic fairy tales, and myths that teach about healthy and loving relationships.

In tenth grade, youth in *My Choice, My Future!* participate in 14 classes of 80 minutes apiece that follow the *WAIT Training*TM curriculum, which focuses on relationship skills and risk avoidance. In addition to the targeted classroom-based portion of the program, *My Choice, My Future!* hosts a limited number of community-wide events and occasional school-wide assemblies on the topic of abstinence.

My Choice, My Future! operates in a school district that has little formal health, family life, and sex education—a fact that is consistent with the relatively low levels of usual services received by the control group members (see Appendix Figure A.1). All eighth-grade youth not enrolled in *My Choice, My Future!* participate in a nine-week health and physical education class. This class covers alcohol, drugs, tobacco, personal safety, communicable and noncommunicable diseases, consumerism, mental health, nutrition, and fitness. However, the class does not cover sex education, STDs, contraceptive use, abstinence from sexual activity, or marriage. In addition, the Virginia Department of Health sponsors the *Not Me, Not Now!* media campaign promoting abstinence, which reaches students in Powhatan through the network radio station affiliate in Richmond.

ReCapturing the Vision

ReCapturing the Vision was designed and implemented in 1994 by a local community-based organization in Miami, Florida. During the enrollment period for the evaluation, this elective school-based program for girls operated in six Miami-Dade County public schools and primarily targeted seventh graders who were judged by school guidance staff to be at risk of school failure. However, it also served a reasonably large number of eighth graders and a few sixth graders. Not only were the girls who were recruited for the program judged to be “high need,” they also lived in communities characterized by high

rates of poverty, high levels of single-parent families, and poor educational outcomes. Because of schedule conflicts, only 58 percent of those offered the program could actually enroll (see Appendix Figure A.2). However, attendance was nearly universal among those who did enroll in the class, since it was part of their daily school schedule.

The core of the program is a year-long elective class taught by public school teachers trained by *ReCapturing the Vision* staff in the program's goals and delivery strategies. The program uses two curricula—*ReCapturing the Vision* and *Vessels of Honor*. The six-unit *ReCapturing the Vision* curriculum is designed to identify personal strengths and resources, build critical skills that will facilitate achieving positive goals and resisting negative influences, and teach strategies for fulfilling personal and career goals (DelRosario 2003). The complementary 12-unit *Vessels of Honor* curriculum includes six core curricula: (1) honorable behavior, (2) effective communication for resisting pressure to engage in sex and other high-risk behaviors, (3) development of good relationships and satisfying social needs and emotional feelings through friendships rather than sex, (4) physical development and its implications for changing pressures, (5) sexual abuse and date rape and how to avoid both, and (6) strategies for choosing a mate and the benefits of a committed marital relationship (DelRosario 1999).

The topic of marriage is covered over a period of more than a month of daily classes in which the girls paint their own small hope chests, discuss what makes for a good partner in life, plan for their own mock weddings, and hold the mock wedding. The mock wedding culminates in vows of chastity until marriage. As a means of emphasizing positive personal conduct and developing positive peer relationships, the program uses a class-appointed court system to resolve student conduct problems.

The *ReCapturing the Vision* program also provides an array of complementary services to program youth and their families. Social workers conduct home visits and provide referrals to local services, as needed. Collaborative efforts with local churches offer participants after-school tutoring services to support the program's academic goals. Community service projects, cultural events, local dining experiences, and the donation of tailor-made suits by a local company each year support the program's goals of expanding social skills and building self-esteem.

The program also sponsors a weekend family retreat, an annual Teen Abstinence Rally, and an annual Teen Talk Symposium. The family retreat is designed to help participants and their parents learn communication strategies and other ways to strengthen relationships. The rally offers youth the opportunity to pledge abstinence until marriage, and the symposium offers them an opportunity to hear celebrity panelists address questions on relationships and sexual issues. Program participants have contributed to the writing and production of a CD with abstinence-related music, and the program publishes a widely circulated magazine covering its activities and, more broadly, the topic of abstinence until marriage.

ReCapturing the Vision operates in an environment rich in family life and sex education services—a fact consistent with the relatively high level of usual services reported by the control group members (see Appendix Figure A.3). Miami-Dade County schools have a

mandated health and sex education curriculum for youth in grades 6 through 8, which includes a week-long unit each year on human growth and development taught as part of the science class. The curriculum covers the stages of reproduction and human development, and it includes discussions of contraceptive use. The sixth-grade curriculum also covers drug and alcohol prevention, peer pressure, STDs, and the benefits of abstinence from sexual activity.

Teens in Control

The *Teens in Control* program was designed and is operated by the Aaron E. Henry Community Health Center in Clarksdale, Mississippi. The program serves four elementary schools and one middle school in the rural counties of Coahoma, West Tallahatchie, and Tunica—counties that are characterized by very high rates of poverty, single parenthood, and school failure.

Teens in Control is a two-year, nonelective, classroom-based program that, during the sample enrollment period for the study, served roughly half of the fifth-grade students in each of the five schools. Students who enrolled in the program in fifth grade were expected to receive services for two years. Only a handful of parents did not allow their children to participate in the program and, among those who were offered the program, relatively few transferred out of the program schools during fifth or sixth grade.

In fifth grade, program youth receive the *Postponing Sexual Involvement* curriculum (Howard and Mitchell 1990), and in sixth grade they receive the *Sex Can Wait* curriculum (Young and Young 1994). Both of these curricula are taught by instructors employed by the Aaron E. Henry Community Health Center. *Postponing Sexual Involvement* is designed to increase knowledge and awareness of the risks and pressures associated with early sexual involvement and to develop the skills youth need to confront these issues. The curriculum is divided into five topic areas, and the content of each topic area is delivered over multiple class periods. The first topic area addresses the risks of early sexual involvement and discusses the benefits of waiting until marriage to have sex. The subsequent two topic areas focus on social and peer pressures to have sex, and the final two areas relate to the development of specific skills for resisting peer pressure. These last two areas include extensive practice sessions and reinforcement.

The *Sex Can Wait* curriculum used in sixth grade has three primary components. The first, “Knowing Myself,” focuses on self-concept and self-esteem, the psychological and physical changes associated with puberty, and values. The second, “Relating to Others,” addresses communication skills, provides factual information on the risks of STDs, and teaches skills for resisting social and peer pressures. The third, “Planning My Future,” helps students formulate career goals, plan how to achieve them, and understand how sexual abstinence is an important strategy for achieving personal goals. The program uses active learning methods, including games, cooperative learning groups, role-playing, parent-child activities, and homework.

Teens in Control shares two characteristics with *My Choice, My Future!* This program does not offer supplemental activities or services, and it operates in schools that have a limited, district-wide health, family life, and sex education curriculum for elementary and middle school youth—a fact reflected in the relatively low rates of reported participation in usual services by youth in the control group (see Appendix Figure A.4). Usual services consist of occasional presentations by outside organizations that generally consist of a few sessions over a period of weeks.

Families United to Prevent Teen Pregnancy (FUPTP)

The *FUPTP* program was developed under a Title XX abstinence education grant in 1986 by Rosalie Manor, Inc., a social services agency for families in Milwaukee, Wisconsin.² The program operates in multiple settings. However, the portion of the *FUPTP* program supported through Title V, Section 510 abstinence education funds and included in this impact evaluation is an after-school program. During the first four years of the study period, the after-school program operated in five of the city's elementary and middle schools for two and one-half hours daily throughout the school year.³ These five schools served youth predominantly from African American families characterized by very high rates of poverty and single parenthood. The areas served by these schools are characterized by high rates of poverty, teen pregnancy and crime, and deteriorating housing.

FUPTP is an elective program for youth age 8 or older who attend one of the program schools. However, first-time program enrollment is highest among fourth graders. At the time youth first enroll in the program, they are, on average, 10 years old.

During the enrollment period for the study, a lottery was used to fill program slots from among applicants. Because applications were heavily solicited at the start of the school year and vacancies occurred periodically throughout the year, many youth selected for the program group did not receive their offer to enroll until some months after they had applied. As a result, only 45 percent of those youth in the study sample who were selected at random to fill a program vacancy chose to enroll in the program (see Appendix Figure A.2).

The curriculum used by *FUPTP*—*A Life Options Model Curriculum for Youth* (Rosalie Manor, n.d.)—was developed under a Title XX abstinence education program grant. The curriculum covers 10 topic areas: (1) group-building, (2) self-esteem, (3) values and goal-setting, (4) decision-making skills, (5) risk-taking behavior, (6) communication skills, (7) relationships and sexuality,⁴ (8) adolescent development and anatomy, (9) sexually

²Goldberg and Trenholm (2002) discuss the origins and history of the program.

³In the 2003-2004 school year, Rosalie Manor moved its after-school programs out of all but one of the schools included in this study and began programs in a new set of schools, including a private school and a special needs school.

⁴ This unit also addresses marriage. However, because of the young age of participants, marriage receives relatively little attention in the after-school programs.

transmitted diseases, and (10) social skills. Staff employed, trained, and supervised by Rosalie Manor deliver this curriculum in their after-school programs.

In addition to the after-school program for youth, *FUPTP* offers periodic workshops and meetings for parents of participants. Program youth also may participate in a Saturday program with teen mentors and/or a seven-week intensive summer program, also with teen mentors. However, few youth in the after-school programs also participate in these other programs.

FUPTP operates in a school district that has a mandatory family life curriculum for grades kindergarten through 12, a curriculum that both program and control group youth experience. This curriculum includes what is described as grade-appropriate coverage of comprehensive health education; sexuality and HIV/AIDS; drugs, alcohol, and tobacco; and violence prevention. Abstinence and contraceptive use are covered beginning in fifth grade.

Despite the extensive school district curriculum, self-reporting by youth of their own participation in health, family life, and sex education services is not especially high among control group youth in this site (Figures A.5) relative to those for youth in the *My Choices, My Future!* and *Teens in Control* samples, which do not have district-wide curricula. This likely reflects the fact that *FUPTP* serves youth who are, on average, younger, and the curricula they are being exposed to in school may be less explicitly directed at health, sex, and family life education issues than the curricula they will receive when they are older.

DISTINGUISHING PROGRAM FEATURES

There are five key dimensions on which these four programs vary that affect their likelihood of success and/or the interpretation of study findings: (1) the duration of the planned interventions; (2) the choice of curricula; (3) the environment in which they operate, particularly the usual nature and level of health, family life, and sex education services available to youth; (4) the grade levels and ages of youth at entry into the program; and (5) the targeting, outreach, and level of participation among those enrolled in the programs.

Duration of the Interventions

Variability in the duration of the interventions is especially important, since it means that youth in the various programs under study will have experienced quite different exposures to the intended intervention at the time of the first follow-up survey used for the analysis underlying this report (Figure II.2). At one extreme, youth in *ReCapturing the Vision* had completed their full program by the time of the first follow-up survey, while youth in *My Choice, My Future!* and *FUPTP* had the opportunity to participate in less than half of the intended intervention.⁵ The next planned evaluation report, based on data collected in

⁵All youth in *FUPTP* could participate in the program for two years or more. Those in the second enrollment cohort (the 2000-2001 school year) potentially could participate for three years, and those in the first enrollment cohort (the 1999-2000 school year) had the opportunity to participate for up to four years.

spring 2005, will reflect the impacts of the full intended dose of the intervention for youth in all four programs.

Figure II.2. Program Setting and Curricula, by Year of Program Participation

Program and Setting	Year of Participation			
	First Year	Second Year	Third Year	Fourth Year
<i>My Choice, My Future!</i> Powhatan, VA (Classroom-based)	<i>Reasonable Reasons to Wait</i> 8th Grade	<i>The Art of Loving Well</i> 9th Grade	<i>Wait Training™</i> 10th Grade	
<i>ReCapturing the Vision</i> Miami, FL (Classroom-based)	<i>ReCapturing the Vision & Vessels of Honor</i> 6th-8th Grades			
<i>Teens in Control</i> Clarksdale, MS (Classroom-based)	<i>Postponing Sexual Involvement</i> 5th Grade	<i>Sex Can Wait</i> 6th Grade		
<i>FUPTP</i> Milwaukee, WI (After-school program)	← 3rd-8th Grades	<i>A Life Options Model Curriculum for Youth</i>		→ 6th-8th Grades

Note: Appendix B provides additional detail on each of these curricula.

Choice and Sequencing of Curricula

Another quite important difference among the programs relates to the curricula they use and the manner in which they sequence it (Figure II.2). *My Choice, My Future!* uses multiple published curricula in sequence. The rationale for this is that youth are expected to benefit from repeated exposure to the core material presented in different age-appropriate ways, as well as from having new material presented as they become receptive. *ReCapturing the Vision* uses two curricula concurrently, both of which were developed for the programs under study. *Teens in Control* uses two published curricula in sequence. Like *ReCapturing the Vision*, *FUPTP* uses a curriculum developed specifically for the program and repeats the same curriculum each year.⁶

⁶A major challenge for *FUPTP* is dealing with the wide age range of youth in its programs (see Figure II.1).

Services as Usual Available to Youth in the Program Group

Two of the programs—*ReCapturing the Vision* and *FUPTP*—operate in communities with substantial levels of health, family life, and sex education offered through the public schools (see Table II.3). In contrast, the other two programs operate in communities that have quite limited services as part of their school curriculum. Moreover, *My Choice, My Future!* substitutes for the usual health class offered in the district, rather than supplementing it. Notably, however, the school health class does not address sex education, abstinence, sexually transmitted diseases, or contraceptive use.

Grade Levels and Ages of Youth Targeted

The programs target different age groups of youth (Figure II.1 above). Two programs—*My Choice, My Future!* and *ReCapturing the Vision*—focus their interventions mainly on seventh and eighth graders who, on average, are about 13 years old when they enroll. The other two programs—*Teens in Control* and *FUPTP*—focus their interventions mainly on fourth and fifth graders who, on average, are 10 to 11 years old when they enroll.

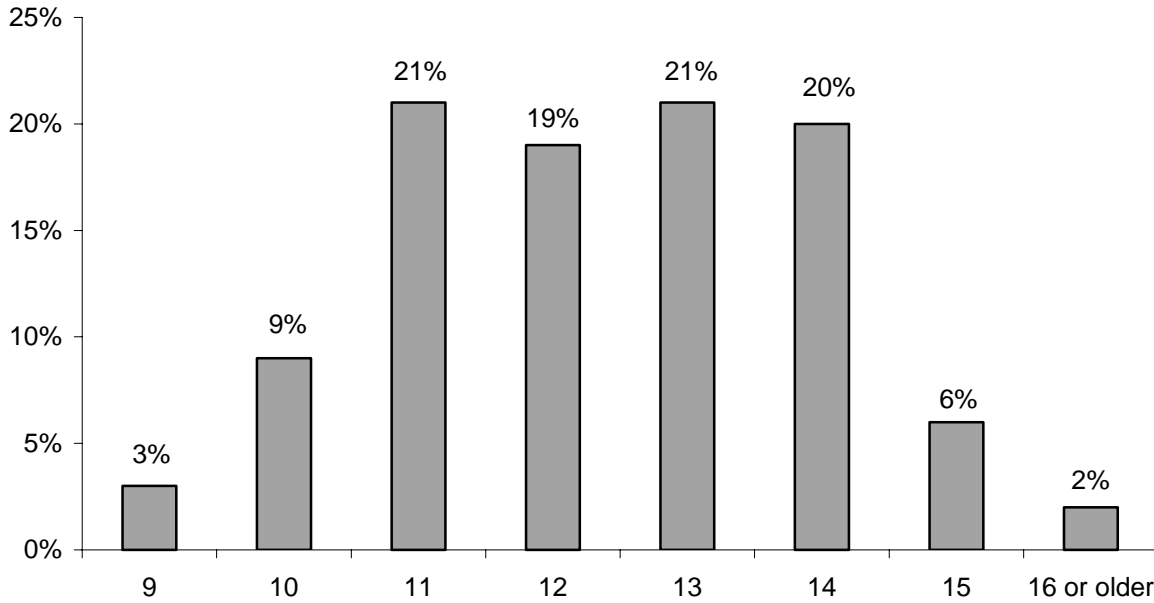
This pattern of targeting has two important implications for the evaluation. First, some of the outcome measures used are appropriate and/or can be reliably measured for the seventh and eighth graders, but not for those in lower grades. For example, any sample member in sixth grade or below is not asked about his or her expectations regarding sexual activity or actual behaviors (see further discussion in Chapter III). Second, the young age of the study sample at enrollment means that the vast majority will not have revealed their decisions regarding whether or not they will engage in teen or nonmarital sex by the time of the first follow-up survey. For example, based on national estimates, only 15 percent of 14-year-olds would be expected to have engaged in sexual intercourse (Centers for Disease Control and Prevention 2004). And, at the time of the first follow-up survey, only 5 percent of youth in the study sample were over age 14 (Figure II.3).

Targeting, Outreach, and Participation

Two of the programs—*My Choice, My Future!* and *Teens in Control*—are nonelective, and attendance is mandatory among those who enroll (as with any typical health course offered in school).⁷ In contrast, both *ReCapturing the Vision* and *FUPTP* are elective programs. For different reasons, both elective programs experienced significant nonparticipation among youth assigned randomly to the program group. In addition, because of *FUPTP*'s voluntary nature, many youth in the program attended only a fraction of the total program hours available. Both sources of variable participation have important implications for the interpretation of the impact estimates, as discussed in Chapter VI.

⁷Any decision for a student offered the program not to participate is made by parents, who may exercise their right to “opt out” on behalf of their child.

Figure II.3. Age Distribution of the Study Sample at the Time of the Follow-Up Survey for the First-Year Impact Analysis



Source: *Wave 1 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 1999) administered at or near the time youth enrolled in the Title V, Section 510 Abstinence Education program evaluation sample.

CHAPTER III

DESIGN AND METHODS FOR THE FIRST-YEAR IMPACT EVALUATION

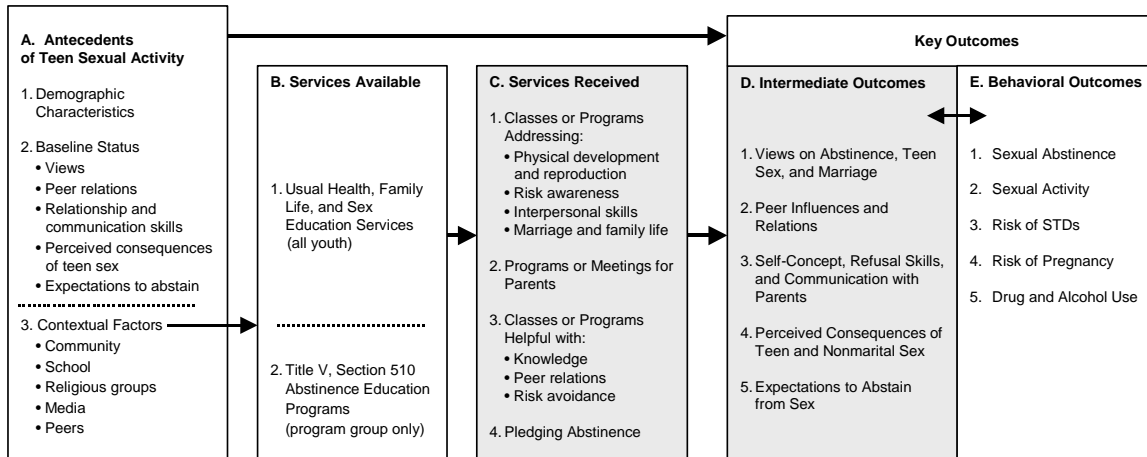
The design and methods for the impact evaluation of the Title V, Section 510 abstinence education programs were developed with the goal of providing reliable, unbiased estimates of program impacts on a range of intermediate and longer-term goals of the programs. To this end, the evaluation relies on an experimental design, includes relatively large sample sizes, involves longitudinal surveys conducted by independent data collectors, and uses appropriate statistical models to generate impact estimates and compute their statistical significance.

THE CONCEPTUAL FRAMEWORK

The conceptual framework for the Title V, Section 510 impact evaluation was guided by the underlying logic of the Title V, Section 510 Abstinence Education Program funding (Figure III.1). Each program was designed and implemented within the context of the backgrounds of the youth it serves (Figure III.1, box A). The programs also were shaped by knowledge of the nature and intensity of other sources of health, family life, and sex education—the “usual services”—youth are expected to receive (box B, upper panel). The programs (box B, lower panel) aim to alter the level and nature of such services youth receive (box C) in ways that may influence intermediate outcomes related to decisions about sexual activity (box D). These include views of youth on abstinence and marriage; their choice and the influence of peers; their self-concept, refusal skills, and communication with parents; their perceptions of the consequences of teen nonmarital sex; and their expectations regarding having sex.¹ Favorable changes in these intermediate outcomes are hypothesized to lead to lower rates of sexual activity and other risk-taking behaviors (box E), although the causal links between these intermediate outcomes and behaviors have not been well documented in the literature.

¹For a summary of the research on predictors of teen sex and other risk-taking behaviors, see Kirby (1999). See also, Bearman and Bruckner (1999); Miller (1998); Jaccard et al. (1996); Feldman and Brown (1993); Wu and Martinson (1993); Weinstein and Thornton (1989); and Hogan and Kitagawa (1985).

Figure III.1. Conceptual Framework for the Impact Evaluation of the Title V, Section 510 Abstinence Education Program



Note: Boxes C and D reflect the primary focus of this first-year impact analysis report. A future report based on data collected in spring 2005 will examine program impacts on sexual activity and other risk-taking behaviors (box E).

Following this framework, this report addresses three questions: (1) To what extent, and in what ways, did the four Title V, Section 510 programs (box B.2) affect the health, family life, and sex education services that youth receive (box C)? (2) To what extent, and in what ways, did the programs (box B.2) affect intermediate outcomes that will potentially influence the likelihood that youth will engage in sexual activity and other risk-taking behaviors (box D)? and (3) Are there differences in the program impacts between youth who enrolled at different points in time or between youth holding differing views of abstinence at the time they entered the program? The last question builds on the theory-of-change literature, particularly as it relates to risk-taking among youth.²

This report is based on follow-up data collected near the end of the school year in which students were enrolled in the study sample. Since three of the four programs (all but *ReCapturing the Vision*) served youth for multiple years, the first-year impacts reflect half or less of the total services that programs intend to deliver to each participant. A later report will examine impacts on teen sexual activity and other risk-taking behavior (box E) and examine the mechanisms through which these impacts occur (boxes B.2, C, and D). This later report will use data covering the period when all sample members will have received the full intended intervention. Moreover, the study sample for the later report will range in age

²See, for example, Bandura (1986); Fishbein and Ajzen (1980); Rosenstock et al. (1988); and Gilchrist and Schinke (1983).

between 12 and 18, thus making it possible to estimate more reliably program impacts on sexual activity and other behaviors.³

SAMPLE DESIGN

To obtain highly credible, unbiased estimates of program impacts, the evaluation relies on an experimental design. Under this design, eligible youth for each of the four programs were identified by program staff and randomly assigned to program or control group status by the evaluation team.

Random Assignment Methods

During each program enrollment period, lists of eligible youth were sent to the evaluation team for assignment to the program or control group, and a random number generator was used to order the applicant pool. Once programs informed the evaluation team of the number of program slots available, the research team released the names of students with that rank order or less in the assignment hierarchy. For example, in a program with 200 applicants and a capacity to serve 100 youth, the evaluation team released the names of the first 100 youth in the randomly ordered list of eligible applicants for inclusion in the program group. The remaining 100 youth in positions 101 to 200 constituted the “wait list” and control group. In cases where it was necessary to maintain a minimum program enrollment—most notably, in *FUPTP*, where the financial viability of the program hinged on operating at or near capacity—program vacancies due to attrition were filled by releasing youth on the wait list in order of their original random number. The study sample for the evaluation consists of all youth who were offered program entry at any time (the program group) and the eligible applicants who were not offered program entry (the control group).

Beginning in fall 1999 and continuing through fall 2001, three cohorts of youth were enrolled in the study sample, with active parental consent. In total, 2,502 youth were enrolled, with the sample sizes per site ranging from 504 for *FUPTP* to 849 for *Teens in Control* (Table III.1). Just under 60 percent of the sample youth were assigned to the program group, with the proportion ranging between 53 percent for *ReCapturing the Vision* to 65 percent for *FUPTP*.

³Only youth in seventh grade or above at the time they complete a survey are asked if they have engaged in sexual activity. Moreover, the incidence of sexual activity among seventh and eighth graders is so low that any attempt to measure impacts of the programs on sexual activity would be plagued by severe truncation bias. Once the fourth wave of data collection has been completed in 2005, data will be pooled across the three follow-up surveys to conduct a rigorous time-series and cross-sectional analysis assessing the impacts of the programs on sexual abstinence and other behavior-related outcomes.

Table III.1. Study Sample, by Program Status and Survey Response Rates

	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>	Total Sample
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI	
Number Enrolled in the Study Sample					
Total	551	598	849	504	2,502
Control Group	203	260	399	178	1,040
Program Group	348	338	450	326	1,462
Survey Response Rate					
Wave 1 Total	98%	90%	96%	91%	94%
Wave 2 Total	94%	91%	95%	87%	92%
Control Group	91%	92%	94%	85%	92%
Program Group	95%	91%	96%	88%	93%
Number in First-Year Impact Analysis Sample					
Total	517	545	809	439	2,310
Control Group	185	239	376	152	952
Program Group	332	306	433	287	1,360

Source: Tracking system for the *Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 1999 and 2000) administered to youth in the Title V, Section 510 Abstinence Education Program study sample.

Note: These figures pertain to the sample available for the first-year impact analysis. Two additional waves of follow-up surveys are scheduled, extending through spring 2005.

Nonparticipation and Crossovers

There are two issues related to random assignment that warrant special attention in the analysis. One is nonparticipation among the program group sample, and the other is program participation by some youth assigned to the control group—commonly referred to as “crossovers.” Both issues pertain only to the two elective programs, *ReCapturing the Vision* and *FUPTP*.

Forty-two percent of youth assigned to the *ReCapturing the Vision* program group did not participate in the program, primarily because of conflicts in class scheduling. Nonparticipation was even more prevalent for *FUPTP*. Fifty-five (55) percent of youth assigned to the program group did not participate, and roughly 25 percent of youth who did participate attended fewer than half of the program sessions available to them. Three factors contributed to the low participation rate for *FUPTP*. One was the voluntary nature of the program. A second is the fact that it served youth after school. The third, and most significant, factor is that some youth did not receive the offer to enroll until some weeks after they applied for the program. These delays in the offer of program enrollment resulted from the practice of filling vacancies that occurred throughout the school year by offering participation to randomly ordered applicants on the wait list.

Roughly 10 percent of control group youth in each of the elective programs, *ReCapturing the Vision* and *FUPTP*, fall into the category of having participated in the program. (Crossovers were not an issue in either *My Choice*, *My Future!* or *Teens in Control*.) Crossovers generally occurred through unintentional administrative error on the part of the program staff. However, in a very few instances, there were active decisions to enroll youth in the program, despite knowledge by program staff that the youth had been assigned to the control group. An example is a case where the program staff judged that special family circumstances dictated that the youth's need for the service should take precedence over the interests of the evaluation.

Nonparticipation does not bias estimates of program impacts on the full program group, but it does affect the interpretation of the findings. Impact estimates based on the full program group reflect the average effect of *having the opportunity* to participate in the program, whether or not the youth actually chose to participate. These are the estimates featured most prominently throughout this report. However, in light of the high levels of nonparticipation among program group youth for *ReCapturing the Vision* and *FUPTP*, impact estimates are also presented for the subsample of program group youth who participated. To generate unbiased estimates for participants requires the assumption that the programs had no impact on program youth who did not participate—an assumption that is quite reasonable in this case. The estimated impact for participants is equal to the impact estimate for the full program group divided by the participation rate among those assigned to the program group (Bloom 1984; Angrist et al. 1996). The standard errors and statistical significance levels associated with these participant-only estimates are similar to those for the full program group.

Adjusting for crossover is less straightforward, since crossover was most likely nonrandom, and there is no way of accurately measuring the programs' impact on the youth who crossed over. For this reason, the report does not present estimates that account for crossover. To the extent that the programs positively affected the outcomes of the control group youth who crossed over, impact estimates reported for both the program group and for participants only may be understated. However, given the modest share of youth experiencing crossover in any site, any bias of this type is likely to be small.

An additional important implication of nonparticipation and crossover is that the statistical power of the analysis to detect impacts is reduced for any given sample size. For example, in the absence of nonparticipation and crossover, the size and allocation of the full study sample would support detection of average impacts for program participants on the order of .18 standard deviations or larger (for *ReCapturing the Vision*) to .24 standard deviations (for *FUPTP*), with 80 percent power and 90 percent confidence (two-tailed tests). However, in light of the existing nonparticipation, the average impacts on participants would need to be considerably larger—.24 standard deviations for *ReCapturing the Vision* and .36 standard deviations for *FUPTP*—in order to be detectable with the same level of power and confidence.

SURVEY DATA COLLECTION AND RESPONSE RATES

This report relies primarily on data from supervised, self-administered surveys scheduled to be completed with all youth in the study sample at the time of sample enrollment and near the end of the school year in which they enrolled (6 to 12 months following sample enrollment).⁴ Ninety-four percent of the youth enrolled in the study sample completed the Wave 1 survey (baseline) and 92 percent completed the Wave 2 survey (Table III.1 above, panel 2).⁵ Importantly, response rates differed by only one percentage point between the program and control groups. Furthermore, across a wide range of baseline measures derived from the Wave 1 survey, there were no significant differences between the program and control group samples available for this first-year impact analysis (see Appendix Table A.1).

CHARACTERISTICS OF YOUTH IN THE STUDY SAMPLE

There is considerable variation across sites in the demographics of the study sample (Table III.2). Youth ranged in age from 8 to 16 years at the time of enrollment.⁶ However, those in the *My Choice, My Future!* and *ReCapturing the Vision* samples clustered around age 13, while those in *Teens in Control* and *FUPTP* clustered around age 11 and 10, respectively (see Figure II.1). With the exception of *ReCapturing the Vision*, which served only females, the other sites enrolled samples that included between 50 and 60 percent females. Finally, the race/ethnic profiles of the youth mirror those of the programs' host communities. Over 80 percent of the youth in the *My Choice, My Future!* sample are white, non-Hispanic, while correspondingly high proportions of the youth in the other three sites are black and/or Hispanic.

In general, youth in the study sample come from backgrounds that put them at relatively high risk of having sexual intercourse at an early age. With the exception of *My Choice, My Future!*, one-third or fewer of the sample youth in each site reported having parents who were married. They also report relatively high rates of life stressors, such as moving, parents divorcing or separating, a parent losing a job, siblings getting pregnant, or families moving on or off welfare.

⁴See Mathematica Policy Research, Inc. (1999 and 2000) for copies of the survey instruments.

⁵Of those youth completing the Wave 2 survey, 44 had not completed the Wave 1 survey. These 44 youth completed an additional demographic supplement that permitted their inclusion in the analysis of Wave 2 data.

⁶Less than 1 percent of youth in the sample were age 8 or age 16.

Table III.2. Characteristics of the Study Sample Included in the First-Year Impact Analysis

	<i>My Choice, My Future!</i> Powhatan, VA	<i>ReCapturing the Vision</i> Miami, FL	<i>Teens in Control</i> Clarksdale, MS	<i>FUPTP</i> Milwaukee, WI	All Four Sites
Age (Mean)	13.3	12.8	10.7	10.3	11.7
Gender (Percent Female)	51.3%	100.0%	50.7%	61.9%	64.6%
Race/Ethnicity					
White, non-Hispanic	83.3%	3.2%	0.2%	2.3%	19.9%
Black, non-Hispanic	10.6%	63.3%	86.5%	75.7%	62.0%
Hispanic	3.3%	22.5%	8.0%	7.5%	10.3%
Other	2.8%	10.9%	5.3%	14.6%	7.8%
Family Situation and Supervision					
Parents married	66.2%	34.1%	31.4%	28.8%	39.3%
Unsupervised after school	38.6%	13.1%	14.8%	13.4%	19.5%
Parents have rules about dating	19.1%	50.1%	47.2%	54.1%	42.9%
Selected Life Stressors in Past Year					
Family moved	12.8%	24.5%	43.7%	52.1%	33.8%
Parents got divorced or separated	6.8%	14.9%	25.2%	28.7%	19.2%
Parent lost a job	9.2%	12.5%	18.2%	21.5%	15.4%
Unmarried sister got pregnant	1.6%	15.0%	15.0%	15.9%	12.2%
Family went off welfare	0.9%	6.5%	19.1%	16.7%	11.6%
Social and Cultural Influences					
Highly religious	20.7%	28.5%	48.0%	38.7%	35.5%
Watches 6 or more hours of TV a day	11.3%	48.2%	46.5%	48.1%	39.3%
High risk-taking among peers	21.3%	8.4%	6.5%	3.3%	9.7%
Gone on date alone	41.7%	23.4%	24.5%	15.8%	26.4%
School Activities and Performance					
Number of club-type activities	1.5	1.7	3.2	2.9	2.4
Earned D or F in math	15.3%	23.9%	17.2%	10.2%	16.9%
Views on Teen Sex					
Believes sex is OK if teens are in love	21.2%	13.7%	28.7%	24.9%	23.0%
Believes condoms prevent STDs	46.1%	33.3%	36.0%	33.1%	37.3%
Confident could resist sexual advances	58.5%	79.7%	n.a.	n.a.	69.4%
Sexual Activity and Other Risk-Taking Behaviors					
Had sexual intercourse	13.7%	9.4%	n.a.	n.a.	11.5%
Used marijuana	12.2%	4.6%	3.1%	3.6%	5.6%
Uses alcohol more than once a month	11.5%	5.0%	4.6%	2.7%	5.9%
Sample Size	517	545	809	439	2,310

Source: *Wave 1 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 1999) administered at or near the time youth enrolled in the Title V, Section 510 Abstinence Education Program study sample.

Note: Data shown are weighted means.

n.a. = not available. This information was not asked of youth in grade 6 and below.

In contrast, two-thirds of the youth in the *My Choice, My Future!* sample reported that their parents were married, and they reported much lower rates of exposure to life stressors. However, higher proportions of youth in the *My Choice, My Future!* sample reported no adult supervision after school (40 percent versus 8 to 13 percent for the other sites), and a lower proportion reported that their parents had rules about dating (19 percent versus about 50 percent).

The social and cultural influences on youth in the study sample vary considerably across the four sites. For example, the proportion who reported being highly religious ranges from a low of 21 percent for the *My Choice, My Future!* sample to a high of 51 percent for those in the *Teens in Control* sample. Only 11 percent of youth in the *My Choice, My Future!* sample reported watching six or more hours of television a day, compared with nearly 50 percent of the youth in each of the other three sites. Between 17 and 42 percent of youth reported ever having gone on a date alone, with the rate being highest among those in the *My Choice, My Future!* sample, where the average age is highest, and lowest among those in the *FUPTP* sample, where the average age is lowest.

The views on teen and nonmarital sex that youth reported at the time they entered the study sample suggest that many of them are thinking about whether or not teen sex is okay. Just under one-fourth of youth reported feeling that teen sex is okay if the teens are in love. The highest acceptance rate was among youth in the *FUPTP* sample (29 percent) and the lowest was among those youth in the *ReCapturing the Vision* sample (10 percent). Between 60 and 82 percent of the youth in the *ReCapturing the Vision* and *My Choice, My Future!* samples, respectively, reported being confident that they could resist sexual advances. (Youth in the *Teens in Control* and *FUPTP* samples were not asked questions about expectations or sexual activity, because of their young ages.)

The reported rates of sexual activity and other risk-taking behaviors among youth were fairly low at the time of their enrollment in the study sample, consistent with their relatively young ages. Fourteen percent of those in the *My Choice, My Future!* sample and 9 percent of those in the *ReCapturing the Vision* sample reported ever having had sexual intercourse. Reported use of marijuana ranged from 12 percent of youth in the *My Choice, My Future!* sample, to 3 percent of those in the *FUPTP* sample. Reported drinking of alcoholic beverages once a month or more ranged from a high of 11 percent for youth in the *My Choice, My Future!* sample to 4 percent of youth in both the *Teens in Control* and *FUPTP* samples.

ANALYTIC APPROACH

Program impacts have been estimated by comparing regression-adjusted mean values of outcome measures for the program and control groups. The adjusted mean values are based on analytic models that pooled data across sites. Specifically, two separate models were estimated—one that pooled data across the two sites serving primarily preteens (*Teens in Control* and *FUPTP*) and one that pooled data across the two sites serving primarily young

teens (*My Choice, My Future!* and *ReCapturing the Vision*).⁷ Each analytic model includes binary variables reflecting interactions between program status (program or control group) and site. The estimated impact of each program is taken from the coefficient on the corresponding binary variable for that program. Results presented for “all four programs” are computed by estimating a pooled model across all sites and averaging the coefficients from the program status interaction for each site. The models include a large number of variables to control for individual demographic and background characteristics measured at baseline, including influences of family, peers, school, community, religion, and media; prior health and sex education services; factors that are predictive of teen sex; and measures of risk-taking behaviors (Table III.3).

Table III.3. Control Variables Used in the Multivariate Models for the First-Year Program Impact Analysis

Demographics and Background Characteristics	Baseline Measures of Contextual Factors	Baseline Measures of Health and Sex Education and Knowledge
Site	Family Influences	Received sex education
Enrollment cohort	Relationship with mother	Knowledge of STDs
Gender	Relationship with father	Baseline Measures of Predictors of Teen Sex
Age	Activities with mother	Perceived consequences of sex
Race/ethnicity	Activities with father	Views on abstinence
Household structure	Family rules on dating	Locus of control
Presence of mother figure	Other family rules	Risk propensity
Presence of father figure	Argue with parents about rules	Ability to resist pressure for sex
Parents married	After-school supervision	Chance will have sex next year
Mother employed	Parents' view on supervision	
Perceptions of school	Communication with parents	Baseline Measures of Risk-Taking Behaviors
Combined grade in math and reading	Comfortable talking to parents about sex	Smoked cigarettes
Number of after-school activities	Major Life Events	Marijuana use
	Unmarried sister got pregnant	Gone on date alone
	Sibling dropped out of school	Alcohol use
	Other major family event	Involved in petting
	Peer Influences	Had sex
	Peer risk behavior	
	Peer pressure to have sex	
	Cultural and Media Influences	
	Religiosity	
	TV viewing	

Note: Characteristics of and statistics on these variables are presented in Appendix Table A.1.

⁷Pooled models are more restrictive than those estimated for individual sites; however, they typically yield impact estimates that differ little from separate models (because of the underlying experimental design) and have improved statistical power, making them preferred. The single exception is for the outcome variable measuring views supportive of abstinence, which does display some nontrivial differences between the two types of models. Therefore, for this outcome only, findings presented in the report are from models estimated separately for the individual sites.

Multivariate Estimation

The regressions were estimated using weighted least squares models. Both the parameters of the regression models and the standard errors of the impact estimates take account of individual sample weights that reflect the probability of assignment to the program group, which varied modestly by site and over the enrollment years.

The main estimates of program impacts reported throughout this document pertain to youth offered the program, whether or not they actually participated. Another relevant set of impact estimates pertain to youth who actually participated. For *My Choice, My Future!* and *Teens in Control*, the estimated impacts for the full program group and for those who actually participated in the program are essentially the same, since participation was nearly universal. Since nonparticipation was substantial in both *ReCapturing the Vision* and *FUPTP*, however, we present additional estimates of the programs' impacts on participants only. These estimates require the reasonable assumption that the programs had no impact on the youth who did not participate. Estimates for participants in *ReCapturing the Vision* and *FUPTP* have been estimated using weighted two-stage least squares (Angrist et al. 1996), and the corresponding estimates for *My Choice, My Future!* and *Teens in Control* are assumed to be equal to those reported for the full study sample.

Outcome Measures

The first-year impact analysis uses 22 different outcome measures based on sample members' responses to surveys completed near the end of the first year following their enrollment in the study. Nine of these outcome measures pertain to health, family life, and sex education services. The remaining 13 pertain to intermediate outcomes that have been identified in prior studies as correlated with teen sexual activity and other risk-taking behavior and are closely aligned with the conceptual framework for the study (see Figure III.1). Appendix Tables A.2 and A.3, respectively, present descriptive statistics on the two sets of outcome measures.

A small number of the outcome measures are based on responses to a single question on the survey. However, most of them are composite (or scale) measures based on responses to two or more survey questions related to a particular underlying theoretical construct. The survey questions that form the basis for each of the 22 measures are reported in Appendix C.

For several of these measures, factor analysis was conducted to guide decision-making about which individual survey questions to combine. Once these survey questions had been identified for a given measure, they were usually combined using the simple average of the responses to underlying survey questions (see Tables III.4 and III.5 for more detail). For example, responses to a group of survey questions related to the level of support for abstinence that youth report were averaged to form a single scale measure ("views supportive of abstinence"). Because of the small number of survey questions available to create some of the measures, the corresponding alpha scores on the measures are sometimes low (See Appendix Table A.3). Nevertheless, compared with measures based on individual

survey questions, the composite measures provide a more effective and appropriate means of assessing program impacts because they reduce the degree of unexplained variance and thereby improve the statistical power of the analysis.

Service Use Measures. The nine measures of health, family life, and sex education services fall into four clusters: (1) participation in classes or programs that address particular topics—physical development and reproduction, risk awareness, interpersonal skills, and marriage and relationships; (2) parent participation in classes or meetings that address issues related to health, family life, or sex education; (3) participation in classes perceived by youth as helpful in increasing their knowledge of pregnancy and reproduction, peer relations, or risk-avoidance skills; and (4) pledging abstinence (Table III.4).

The four participation measures are intended to determine whether or not the Title V, Section 510 abstinence education programs altered exposure to classes that address physical development and reproduction, risk awareness, interpersonal skills, or marriage and relationships. The expectation is that, particularly in those sites with low levels of health, family life, and sex education services, the introduction of the Title V, Section 510 programs will increase the exposure rate of youth to these topics.

Table III.4. Measures of Health, Family Life, and Sex Education Services

Participation (During the Past Year) in a Class or Program on

1. *Physical development and reproduction.* Any class on physical development, puberty, the menstrual cycle, or how girls get pregnant.
2. *Risk awareness.* Any class on abstinence, alcohol or drug use, STDs, and/or pregnancy.
3. *Interpersonal skills.* Any class that discussed communication with parents, dating, resisting peer pressure, or how to say no to sex.
4. *Marriage and relationships.* Any class that discussed marriage and family life or ways to show someone you care.

Parent Participation in Classes or Meetings (During the Past Year)

5. *Parent involvement.* Any class or workshop on the topics listed above during the past year.

Participation in Class or Program Perceived by the Youth as Helpful with

6. *Knowledge of pregnancy and STD risks.* Scale ranging between 0 and 1 measuring the degree of participation in classes judged helpful for understanding how girls get pregnant and/or how someone gets sexually transmitted diseases. Based on two binary input variables.
7. *Peer relations and concerns about growing up.* Scale ranging between 0 and 1 measuring the degree of participation in classes judged helpful with peer relations. Based on a single input variable.
8. *Risk-avoidance skills.* Scale ranging between 0 and 1 measuring the degree of participation in classes judged helpful in decision-making and risk avoidance. Based on seven binary input variables.

Pledging Abstinence

9. *Pledged to abstain from sex until marriage.* Simple binary variable.

Note: The individual survey questions that underlie each of these measures are presented in Appendix C. Descriptive statistics for each of these measures are presented in Appendix Table A.2. Distributions for control group youth are shown in Appendix Figures A.1 and A.3–A.5.

Two of the four programs that are the focus of this report—*ReCapturing the Vision* and *FUPTP*—targeted parents in their efforts to find ways to affect youth’s behavior. Therefore, the analysis includes a measure of parent participation in any program or meeting dealing with the issues that were central to the goals of the Title V, Section 510 programs. This measure is based on youth reports of parent participation. Thus, it likely will include considerable error. However, there is no reason to expect that response error will differ between program and control group youth.

Three measures capture perceptions of whether youth participated in classes or programs that they judged to be valuable in helping them understand pregnancy and STD risks, in dealing with peer relations, and in developing risk-avoidance skills. These measures are important, since they relate directly to the mechanisms through which programs aim to change behavior (see Figure III.1 above).

The final service use measure relates to pledging to remain abstinent until marriage. Only one of the programs—*ReCapturing the Vision*—included pledging abstinence as a central program element. However, both *My Choice, My Future!* and *FUPTP* sometimes offered youth opportunities to pledge. Furthermore, youth in all sites might be expected to be more aware of and willing to pledge to remain abstinent as a result of their participation in the abstinence education program.

Intermediate Outcomes. The other 13 outcome variables, summarized in Table III.5, measure intermediate outcomes that reflect key avenues through which the programs aimed to change youth behaviors.⁸ These intermediate outcome variables fall into five clusters: (1) views on abstinence, teen sex, and marriage; (2) peer influences and relations; (3) self-concept, refusal skills, and communication with parents; (4) perceptions of the consequences of teen sex; and (5) expectations to abstain from sex. For most of these outcome measures, the direction of potential program impacts is hypothesized to be positive (Table III.6). However, for the measures of dating and peer pressure to have sex, the hypothesized direction differs depending on the age of the youth in the study sample.

The analysis includes three measures of views reported by youth—their views supportive of abstinence, their views unsupportive of teen sex, and their views supportive of marriage.⁹ The rationale for including these measures is that one way to change behavior is to promote views that are more supportive of abstinence and marriage and less supportive of teen sex.

⁸There is a rich literature supporting the particular types of intermediate measures focused on by both the Title V, Section 510 Abstinence Education Program and this evaluation. See, for example, Bearman and Brückner (1999); Bearman et al. (1999); Kirby (1999); Santelli et al. (1999); Miller (1998); Resnick et al. (1997); Costa et al. (1996); and Hogan and Kitagawa (1985).

⁹Throughout this report, the term “sex” refers to sexual intercourse. In the Wave 2 survey, the term “sexual intercourse” is defined as “going all the way. It is the act by which babies are made.” Abstaining is defined as “not having sexual intercourse.”

Table III.5. Measures of Intermediate Outcomes Related to Teen Sexual Activity and Other Risk-Taking Behaviors

Views on Abstinence, Teen Sex, and Marriage

1. Views supportive of abstinence. The average of responses to five survey items, which range from 0 (strongly disagree) to 3 (strongly agree).
2. Views unsupportive of teen sex. The average of responses to four survey items, which range from 0 (not hard/no problem) to 3 very hard/big problem).
3. Views supportive of marriage. The average of responses to two survey items, which range from 0 (strongly disagree) to 3 (strongly agree).

Peer Influences and Relations

4. Friends' support for abstinence. The average of responses to three survey items, which range from 0 (no support) to 5 (full support).
5. Dating.^a Based on response to one survey item. The measure is coded 0 (never dates); 0.5 (dates less than once a month); or 1 (dates once a month or more).
6. Peer pressure to have sex.^a Based on response to a single survey item, coded from 0 (no pressure) to 3 (a lot of pressure).

Self-Concept, Refusal Skills, and Communication with Parents

7. Self-efficacy, -esteem, and -control. The average of four commonly used scales (developed from responses to 15 survey items): (a) self-efficacy, (b) self-esteem, (c) locus of control, and (d) self-control. Range of 0 to 3, where higher values reflect more favorable skill levels.
8. Refusal skills. The average of responses to five survey items, which take on values of 0 (no), 1 (maybe), or 2 (yes).
9. Communication with parents. The average of responses to three survey items, which range from 0 to 2 (where a higher value reflects greater communication).

Perceived Consequences of Teen and Nonmarital Sex

10. General consequences. The average of responses to three survey items, which range from 0 (strongly disagree) to 3 (strongly agree).
11. Personal consequences. The average of responses to four survey items, which range from 0 (not hard/no problem) to 2 (very hard/big problem).

Expectations to Abstain

12. Expect to abstain.^a Combined responses to two survey items. For virgins, the item used focuses on expectations as an unmarried teen; for sexually experienced youth, the item used focuses on expectations in the next year. The measure is coded 0 (will have sex); 1 (might have sex); or 2 (will abstain).
13. Expect to abstain as an unmarried teen.^a Combined responses to two survey items.^a The measure is coded 0 (have had sex or expect to have sex as an unmarried teen); 1 (have not had sex, but might); 2 (have not had sex and will abstain).

Note: The individual survey questions that underlie each of these measures are presented in Appendix C. Descriptive statistics for each of these measures are presented in Appendix Table A.3. Distributions for control group youth are shown in Appendix Figures A.6–A.13.

^aAsked only of youth in grades 7 and above.

The analysis focuses on three measures of peer influences and relations—one that reflects friends' support for abstinence, one that measures dating frequency, and one that reflects perceived peer pressure to have sex. These measures were developed in response to the literature suggesting that peers exert a very strong influence on youth's behavior. Moreover, all four programs had elements directed at helping youth choose friends more wisely, resist peer pressure to engage in sex and other risk-taking behaviors, and, in some cases, help their friends avoid such behaviors.

In general, the programs aim to encourage youth to establish and maintain healthy relationships with peers and to teach them to avoid social situations in which one is pressured to engage in sexual activity or other risky behaviors. To the extent that frequency of dating is related to such situations, especially at young ages, the hypothesized direction of any program impact on dating is negative (Table III.6). However, as youth enter their later teens, the programs also recognize the potential value (and inevitability) of dating to positive peer relationships. As a result, the hypothesized impact of the programs on dating in the longer term is unclear.

Table III.6. Hypothesized Direction of Program Impacts in the First Year After Program Enrollment and in the Longer Term

Outcome Measure	First Year	Longer Term
Views on Abstinence, Teen Sex, and Marriage		
Views Supportive of Abstinence	+	+
Views Unsupportive of Teen Sex	+	+
Views Supportive of Marriage	+	+
Peer Influences and Relations		
Friends' Support for Abstinence	+	+
Dating	-	?
Peer Pressure to Have Sex	?	-
Self-Concept, Refusal Skills, and Communication with Parents		
Self-Efficacy, -Esteem, and -Control	+	+
Refusal Skills	+	+
Communication with Parents	+	+
Perceived Consequences of Teen and Nonmarital Sex		
General Consequences	+	+
Personal Consequences	+	+
Expectations to Abstain		
Expect to Abstain ^a	+	+
Expect to Abstain as an Unmarried Teen	+	+

+ Positive impact hypothesized.

- Negative impact hypothesized.

? No hypothesized direction of impact.

^aFor youth who reported having had sex, the measure refers to the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

Programs also aim to help youth avoid situations that would lead to peer pressure to have sex. As a result, in the longer term, the hypothesized direction of any program impacts on reported peer pressure to have sex is negative. However, because heightening awareness of peer pressure is an important component of the programs' skill-building exercises, program youth might be expected to report an increase in peer pressure in the near term. Thus, the hypothesized direction of any impact on this outcome after the first year of program participation is ambiguous.

The analysis examines three measures of self-concept, refusal skills, and communication with parents. One is a measure of self-efficacy, -esteem, and -control. This measure responds to the fact that all four programs included components intended to promote self-efficacy, -esteem, and/or -control with the expectation that this would lead to fewer risk-taking behaviors. The second measure pertains to refusal skills. A commonly held belief is that refusal skills are necessary, though not sufficient, for avoiding high-risk behavior. The third measure pertains to the level and nature of communication with parents. This measure is in response to the literature suggesting that parents play a very important role in the behavioral decisions of youth.

The fourth category of intermediate outcomes examined in this first-year impact study includes two measures of the perceived consequences of teen and nonmarital sex. One measures the general consequences, such as creating problems, making life difficult, and

negatively affecting overall well-being. The other measures the personal consequences, in terms of educational attainment and personal development. These measures reflect the underlying principles of the health belief model of youth risk behavior.

The fifth and final cluster of intermediate outcome measures examined in this report are two measures of expectations to abstain from sex. The reason for looking at these measures is the belief that expectations are proximate to decisions about whether or not to engage in sex. The reference period for the first measure, expect to abstain, differs for those who have already engaged in sex and those who are still virgins. In the former case, the measure refers to expectations to abstain for at least the next year and, for the latter group, the measure refers to expectations to abstain as an unmarried teen. The second measure pertains to expectations to abstain from sex as an unmarried teen for all youths.

Alignment of Outcome Measures and Program Curricula. These intermediate outcomes are reasonably well aligned with the curricula used by the programs. However, as noted above and summarized in Table III.7, the programs differed in their emphasis on particular topics. Thus, it is reasonable to expect impacts on these measures to vary by site. For example, in comparison with *My Choice, My Future!* and *ReCapturing the Vision*, neither *Teens in Control* nor *FUPTP* emphasized the positive qualities of marriage and what constitutes a good partner, nor did they spend much time on issues related to healthy and unhealthy dating relationships. The other notable area of difference relates to communication with parents. In comparison with *ReCapturing the Vision* and *FUPTP*, neither *My Choice, My Future!* nor *Teens in Control* emphasized parent-child communication or parent involvement.

ESTIMATING IMPACTS FOR PARTICIPANTS ONLY

As noted above, impacts for only those program group youth who participated in the programs have been estimated using weighted two-staged least squares (Angrist et al. 1996). The estimated impacts for participants generated through this procedure equals the average impact for the full study sample divided by the participation rate (any variation is attributable to rounding error).

ESTIMATING IMPACTS FOR SUBGROUPS OF THE STUDY SAMPLE

In addition to the site-level results, this report presents estimated impacts for subgroups within sites defined by enrollment cohort—those enrolled in the 1999-2000 or the 2000-2001 cohorts, versus those enrolled in the 2001-2002 cohort. (This particular division of the sample by enrollment cohort was made after determining that there were no measured differences in the results between the first two cohorts across any of the sites.) For the intermediate outcome measures, the report also presents impact estimates for subgroups defined by the degree to which youth reported views supportive of abstinence at the time they entered the study sample.

Table III.7. Alignment of Program Curricula and Components with the Constructs Underlying the Intermediate Outcome Measures

Descriptor of Measure	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
Views on Abstinence, Teen Sex, and Marriage				
Views Supportive of Abstinence	●	●	●	●
Views Unsupportive of Teen Sex	●	●	●	●
Views Supportive of Marriage	●	●	⊙	⊙
Peer Influences and Relations				
Friends' Support for Abstinence	●	●	●	●
Dating	●	●	⊙	⊙
Peer Pressure to Have Sex	●	●	●	●
Self-Concept, Refusal Skills, and Communication with Parents				
Self-Efficacy, -Esteem, and -Control	●	●	●	●
Refusal Skills	●	●	●	●
Communication with Parents	⊙	●	⊙	●
Perceived Consequences of Teen and Nonmarital Sex				
General Consequences	●	●	●	●
Personal Consequences	●	●	●	●
Expectations to Abstain				
Expect to Abstain ^a	●	●	●	●
Expect to Abstain As an Unmarried Teen	●	●	●	●

Source: Implementation and process analysis data, including reviews of program curricula and classroom observations (Devaney et al. 2002).

^aFor youth who reported having had sex, the measure refers to the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

● Denotes moderate to strong alignment.

⊙ Denotes little to no alignment.

Subgroups Defined by Enrollment Cohort

There are three reasons that program impacts might be expected to differ between the enrollment cohorts. One is that the nature of the youth entering the programs could change over time—a possibility that, based on the characteristics of youth at enrollment, appears not to have occurred. A second reason is that the nature of the usual services available to youth could change in ways that affect the net impacts of the Title V, Section 510 abstinence education programs. Youth in two of the program sites, in particular—Powhatan, Virginia, where *My Choice, My Future!* operates and Miami, Florida, where *ReCapturing the Vision* operates—showed evidence of having substantially lower levels of usual services available to them in the 2001-2002 school year than had been the case in the two prior years (Figure III.2). For *My Choice, My Future!*, the decline in the usual service level is substantial across the four major topic areas examined—classes on physical development, risk awareness, interpersonal skills, and marriage and relationships. For *ReCapturing the Vision*, the lower level of services for the third enrollment cohort is concentrated in those areas that

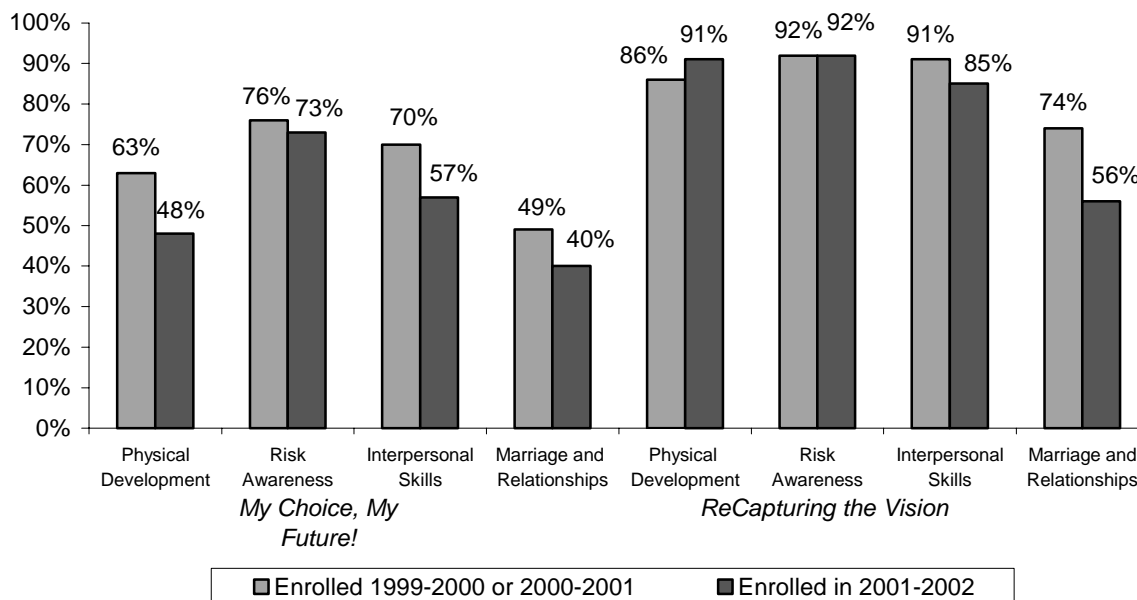
are not part of the school health curriculum—interpersonal skills and marriage and relationships.

The third reason that impacts may vary between enrollment cohorts is the fact that the nature, intensity, and quality of the Title V, Section 510 program services might change over time in ways that alter their effectiveness. On the one hand, it is possible that services would become stronger over time as programs gain experience and stability, especially those programs that were established under the Title V, Section 510 funds. On the other hand, program services might diminish in quality if the provider encounters major disruptions in staffing, funding, or the host environment. Notably, *ReCapturing the Vision* and *Teens in Control* had the same program directors throughout the period of operations covered by this report, while the other two programs both had changes in program directors. All sites experienced transitions in the staff who delivered the curricula.

Subgroups Defined by Views on Abstinence

Examining subgroups defined by the extent to which youth, at enrollment, have views that are more or less supportive of abstinence reflects a general interest in knowing whether these types of programs have different levels or patterns of impacts for youth who are more and less predisposed toward abstinence. While this report on first-year impacts limits its systematic exploration of subgroup results to this one background measure, plans for a subsequent report based on follow-up data through spring 2005 will examine impacts for subgroups defined by a broader range of demographic and background characteristics.

Figure III.2. Participation by Control Group Youth in Health, Family Life, and Sex Education Classes During the First Year Following Enrollment in the Title V, Section 510 Study Sample, by Enrollment Year



REPORTING AND SENSITIVITY TESTING

Throughout this report, the means for the program and control group members are presented alongside the estimated impacts, as points of reference. As noted above, the means reported for both program and control groups are regression-adjusted and weighted. Specifically, they are calculated as the average value predicted from the regression model when assigning all sample members to the control group and to the program group, respectively.

Many of the outcome measures are based on scales with different units of measurement—for example, scales that range from 0 to 1, with a mean of .5 and a standard deviation of .25 versus those that range from 0 to 4, with a mean of 2 and a standard deviation of 1. In order to compare estimated impacts across these scales, it is useful to report them in a standardized form that is unaffected by a given scale’s unit of measurement. The estimated impacts are therefore presented in the report both in their original units (as the difference in regression-adjusted mean values for the program and control group) and in standardized units known as “effect sizes.” These standardized effect sizes simply take the original units of each estimated impact and divide them by the standard deviation of the outcome variable, placing each impact estimate on the same scale. This approach is particularly useful for reporting and interpreting the estimated impacts on the intermediate outcome measures, all of which are based on scales with differing units of measurement.¹⁰

For each impact estimate, a two-tailed *t*-statistic tests the null hypothesis that there is no difference between the regression-adjusted means for the program and control groups. The associated *p*-value, which reflects the probability of obtaining the observed impact estimate when the null hypothesis of no effect is true, is used to judge the likelihood that a program had a measurable (statistically significant) impact.

Impact estimates with *p*-values of .10 or less (on two-tailed tests) are denoted by asterisks and referred to in the text as statistically significant and as evidence of a program impact. The degree of evidence depends on where the *p*-value falls in the range below the 0.10 threshold (see Table III.8). For example, impact estimates with a *p*-value in the range from 0.05 to 0.10 are characterized in the text as limited evidence of a program impact, while those that fall below a 0.01 threshold are characterized as strong evidence of a program impact. In general, the size of these impacts is not interpreted because of the difficulty of establishing the impact size that would be needed on an intermediate outcome to expect an eventual program impact on teen sex or other behaviors, and the lack of literature on this issue.

¹⁰Impacts of equivalent size based on the standardized measure could easily be misinterpreted as impacts of very different size when reported in their original units. For example, consider the two outcome measures described above (the first ranging from 0 to 1, with a mean of .5 and a standard deviation of .25; the second ranging from 0 to 4, with a mean of 2 and a standard deviation of 1). Given an identical program impact on these two outcome measures of 0.1 standard deviations, the reported impact based on the original (scale) units would differ sharply—0.05 and 0.20 scale points, respectively.

Table III.8. Conventions for Describing Evidence of Program Impacts

<i>p</i> -value of the Impact Estimate for a Given Outcome	Symbol in the Report Used to Denote <i>p</i> -value	Strength of Evidence that the Program <i>Caused</i> a Change in the Outcome
$P < 0.01$	***	Strong evidence (of a program impact)
$0.01 \leq P < 0.05$	**	Evidence
$0.05 \leq P < 0.10$	*	Limited evidence
$P \geq 0.10$	[none]	No evidence

A series of additional analyses were conducted to examine the robustness of the main impact estimates. Across these analyses, findings proved consistent with those presented in the report. There is little difference between the magnitude of the adjusted and/or unweighted results and the weighted, regression-adjusted results presented. Furthermore, any differences in statistical significance are modest and isolated. Findings also remained similar when we reestimated program impacts on scale measures that used different combinations of survey items or different ranges on the existing items. Impacts on the individual items that comprised each scale measure (views supportive of abstinence, views unsupportive of teen sex, and so on) displayed consistent patterns of impacts. The associated significance levels on these item-level impacts generally were lower than those for the scale measures that combined them.

CHAPTER IV

HEALTH, FAMILY LIFE, AND SEX EDUCATION SERVICES RECEIVED IN THE FIRST YEAR

Each of the four focal programs for this report—*My Choice, My Future!*, *ReCapturing the Vision*, *Teens in Control*, and *FUPTP*—provides instruction across a range of health, family life, and sex education topics that are directly related to the goals of the Title V, Section 510 Abstinence Education Program. For example, all of the programs teach basic facts about physical development and health risks associated with sex, particularly nonmarital sex and sex with multiple partners, with the goal of allowing youth to make more informed decisions. In addition, they all address interpersonal skills, especially risk-avoidance skills and relationship skills, which are seen by the programs as important for forming healthy relationships. And, to varying degrees, they address the qualities of, and steps designed to prepare youth for, a healthy marriage and family life. Two of the programs, *ReCapturing the Vision* and *FUPTP*, also reach out to parents directly through workshops, home visits, and other means.

This chapter examines the extent to which the health, family life, and sex education services received by youth in these four Title V, Section 510 abstinence education programs differed from those received by their control group counterparts. This includes differences in both the topics covered and their perceived benefits. It is important to examine program-control differences in service receipt since they form the basis for any impacts that the programs might have on intermediate outcomes, such as views on abstinence and teen sex or expectations to remain abstinent that, in turn, may be related to later behaviors. However, program-control differences in service receipt should not be viewed as equivalent to impacts on intermediate outcomes, which are more closely linked with eventual risk-taking behaviors (see Figure III.1). Moreover, since each of the programs provided instruction that departed from and added to the usual services available to youth, some program-control differences in the services youth received were almost certain to occur (whether or not they can be observed statistically). The clearest example is abstinence pledging, which was prominent in two of the four programs and somewhat available in a third.

Aside from the programs' curricula, perhaps the most important factor influencing the degree of their effect on service receipt is the community context in which the programs

operate. As summarized in Chapter II, all youth in the study sample had opportunities to receive health and sex education services from a variety of sources other than the Title V, Section 510 abstinence education programs. These included services offered through other school-based health classes, church groups, and various after-school and extracurricular programs. To the extent that these services were widely attended by both program and control group youth, measured changes in service receipt resulting from the Title V, Section 510 programs would be more modest.

As discussed earlier, the analysis of service receipt focuses on nine measures. These measures are based on responses to questions on a survey that youth completed near the end of the first school year in which they enrolled in the study sample. The first four measures indicate the percentage of youth who reported participating in any classes or programs in the last year that addressed the following topics: (1) physical development and reproduction, (2) risk awareness, (3) interpersonal skills, and (4) marriage and relationships. The fifth measure indicates the percentage of youth who reported their parent(s) participated in a class or session that discussed any of these topics. Three measures estimate the degree to which youth participate in any classes or programs they perceive as helpful in selected areas: (1) knowledge of pregnancy and STD risks, (2) peer relations and concerns about growing up, and (3) risk-avoidance skills. Each of these three measures is based on a scale that ranges in value from 0, denoting no participation in a class or program that was helpful in the selected area, to 3, denoting participation in programs or classes that were very helpful in all three areas. A final measure is the percentage of youth who reported having pledged to abstain from sex until marriage.

RESULTS FOR THE FULL STUDY SAMPLE

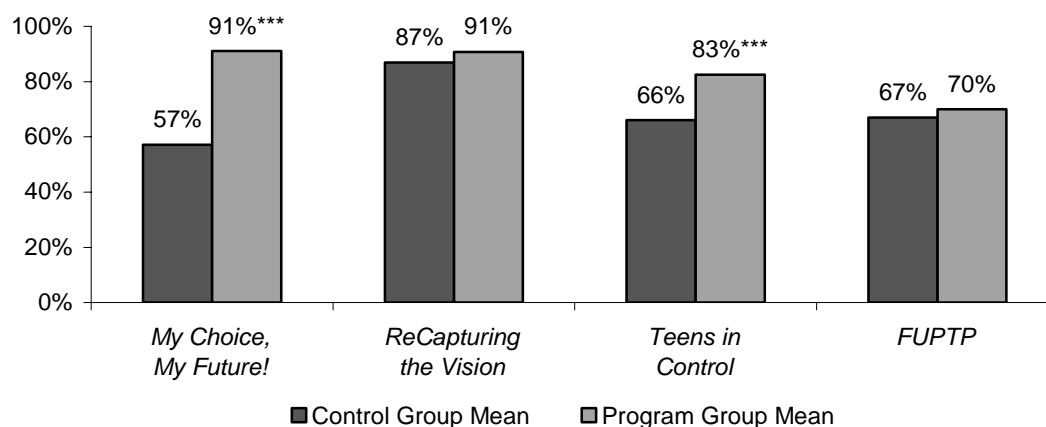
Two major themes emerge from the overall findings on service receipt. First, many youth in the four programs would have received a substantial level of health, family life, and sex education services even in the absence of their participation in the abstinence programs. This conclusion is based on the rates of service receipt reported by control group youth. For example, between 40 and 69 percent of control group youth across the sites reported having participated in a class or program that discussed abstinence, and between 50 and 77 percent reported having participated in a class or program that discussed sexually transmitted diseases (see Appendix Figures A.1 and A.3-A.5 for details). Participation was generally lowest for control group youth in Powhatan, Virginia, the community served by *My Choice, My Future!*, and it was generally highest for control youth in Miami, Florida, the community served by *ReCapturing the Vision*. These results correspond closely with the varying levels of usual services reported to be available in these communities (see Chapter II).

Second, all four programs affected, to varying degrees, the level and nature of health, family life, and sex education services that youth received. *My Choice, My Future!* had the most consistent and extensive effects on services received, a result that is linked to lower levels of reported service receipt among control group youth in this site as compared with the other three sites. *FUPTP* had the least effect on services received. As described previously, many youth selected for the *FUPTP* program group attended few or no program sessions, which likely contributed to these relatively modest program effects.

Participation in Classes or Programs Addressing Physical Development and Reproduction

Youth in all four programs reported higher rates of participation in classes that addressed physical development and reproduction than did their control group counterparts. However, the differences in participation rates are statistically significant only for *My Choice, My Future!* and *Teens in Control* (Figure IV.1). For *My Choice, My Future!*, the estimated difference between the program and control group youth is particularly large. In this site, 91 percent of program youth reported participating in such classes, compared with only 57 percent of control group youth, a difference of 34 percentage points (p-value < 0.01). The estimated difference between program and control groups is also large (17 percentage points) and statistically significant (p-value < 0.01) for youth in *Teens in Control*. In this site, 83 percent of the program group youth, compared with only 66 percent of the control group, reported participating in such classes.

Figure IV.1. Participation in Classes or Programs That Address Physical Development and Reproduction, by Site and Program Status



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively. For estimates underlying figures, see Appendix Table A.6.

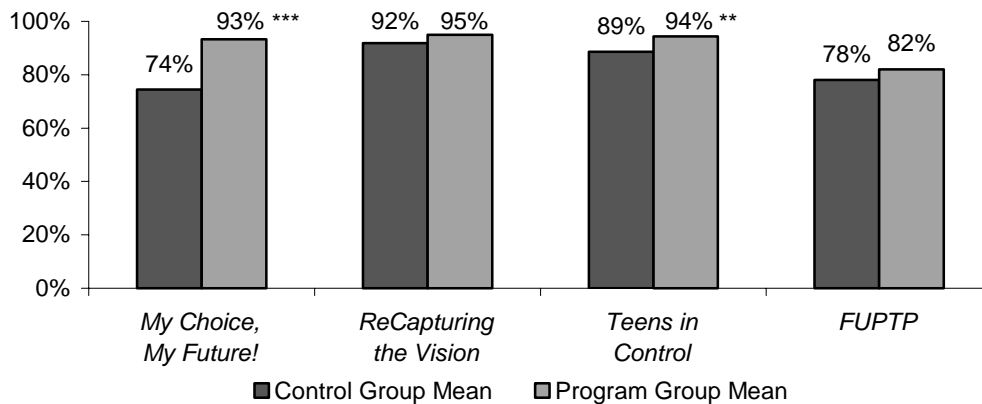
***p-value (of difference between control and program group) <0.01; **p-value<0.05;
*p-value<0.10, two-tailed test.

Differences for the other two programs are much smaller and not statistically significant. For *ReCapturing the Vision*, this smaller impact estimate appears to be related to high levels of service receipt among control group youth (87 percent), which is not significantly lower than the 91 percent participation rate among the program group. Participation rates are modest for both the program and control group youth in the *FUPTP* sample (70 versus 67 percent).

Participation in Classes or Programs Addressing Risk Awareness

Estimated program effects on participation in classes or programs on risk awareness are similar to those above for participation in classes or programs on physical development and puberty (Figure IV.2). Youth in all four programs reported higher rates of participation in classes or programs that addressed risk awareness than did their control group counterparts. However, only the differences for *My Choice, My Future!* and *Teens in Control* are statistically significant. Youth in *My Choice, My Future!* reported a 19 percentage point higher rate of participation than did their control group counterparts (93 percent versus 74 percent; p -value < 0.01), while youth in *Teens in Control* reported a 5 percentage point higher rate (94 percent versus 89 percent; p -value = 0.02).

Figure IV.2. Participation in Classes or Programs That Address Risk Awareness, by Site and Program Status



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively. For estimates underlying figures, see Appendix Table A.6.

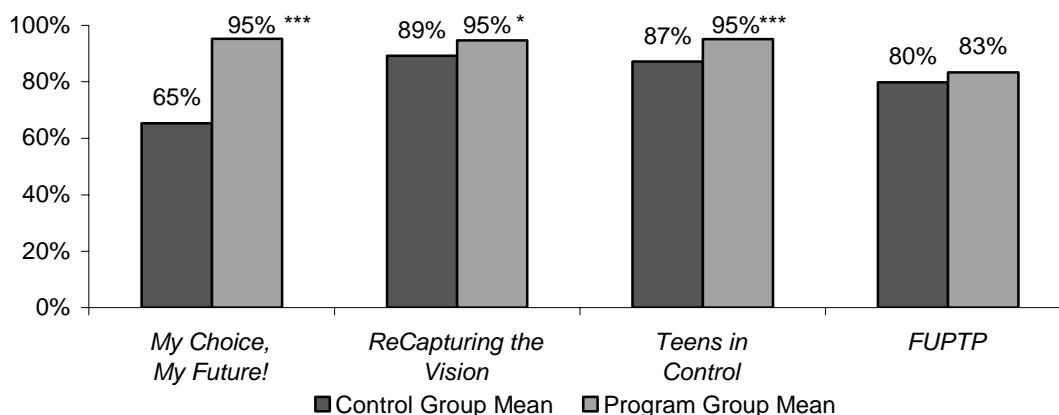
*** p -value (of difference between control and program group) <0.01; ** p -value<0.05; * p -value<0.10, two-tailed test.

Youth in the other two programs also reported higher rates of participation in classes or programs on risk awareness than did their control group counterparts, but these differences are not statistically significant. The participation among youth in *ReCapturing the Vision*, though nearly universal (95 percent), is only slightly higher than participation among control group youth (92 percent), leading to an estimated program effect of just three points (p-value = 0.25). For *FUPTP*, the difference in participation rates between youth in the program and control groups is about 5 percentage points and not statistically significant (82 percent versus 78 percent; p-value = 0.18).

Participation in Classes or Programs Addressing Interpersonal Skills

In all sites, program youth reported higher rates of participation in classes on interpersonal skills than did their control group counterparts (Figure IV.3). For three of the programs, these differences are statistically significant. The largest difference is for youth in *My Choice, My Future!*, who reported a participation rate of 95 percent, compared with a rate of only 65 percent among the control group (p-value < 0.01). For *Teens in Control* and

Figure IV.3. Participation in Classes or Programs That Address Interpersonal Skills, by Site and Program Status



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively. For estimates underlying figures, see Appendix Table A.6.

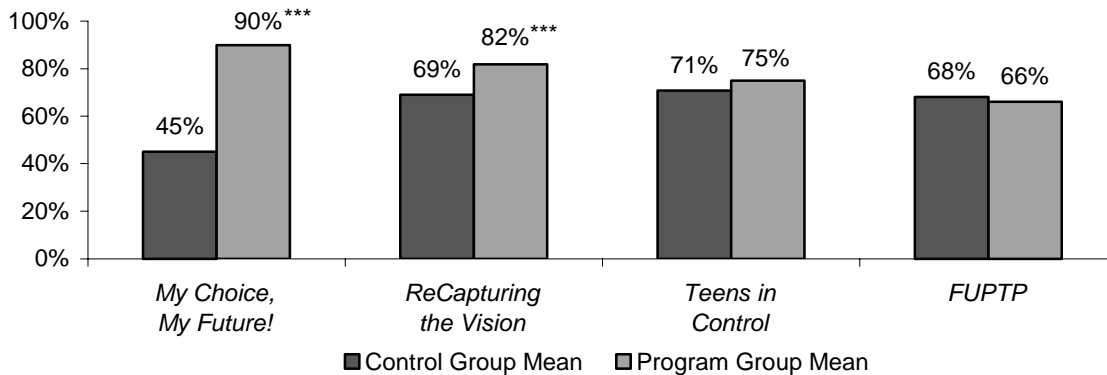
***p-value (of difference between control and program group) <0.01; **p-value<0.05;
*p-value<0.10, two-tailed test.

ReCapturing the Vision, the respective differences between program and control group youth are smaller, but still statistically significant—95 versus 87 percent for *Teens in Control* (p-value < 0.01) and 95 versus 89 percent for *ReCapturing the Vision* (p-value = 0.06). Finally, the difference for *FUPTP* is just 3 percentage points and not statistically significant (83 versus 80 percent; p-value = 0.34).

Participation in Classes or Programs Addressing Marriage and Relationships

Youth in *My Choice, My Future!* and *ReCapturing the Vision* reported significantly higher participation rates in classes or programs on marriage and relationships than did their control group counterparts (Figure IV.4). *My Choice, My Future!* had an especially large effect on participation rates: 90 percent of program youth reported participating in a class or program on marriage and family life compared with only 45 percent of control group youth, a difference of 45 percentage points (p-value < 0.01). The change for *ReCapturing the Vision* is more modest but still statistically significant (82 versus 69 percent; p-value < 0.01). As with the results above, the more modest difference for *ReCapturing the Vision* appears to be due, at least in part, to the higher levels of service receipt among the control group.

Figure IV.4. Participation in Classes or Programs That Address Marriage and Relationships, by Site and Program Status



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively. For estimates underlying figures, see Appendix Table A.6.

Differences for the other two programs, *Teens in Control* and *FUPTP*, are small and not statistically significant. Program youth in *Teens in Control* reported a modestly higher rate of participation than did their control group counterparts—75 versus 71 percent—but the difference is not statistically significant (p-value = 0.24). Program youth in *FUPTP* reported slightly lower rates of participation in such classes than did their control group counterparts—66 versus 68 percent, a difference that also is not statistically significant (p-

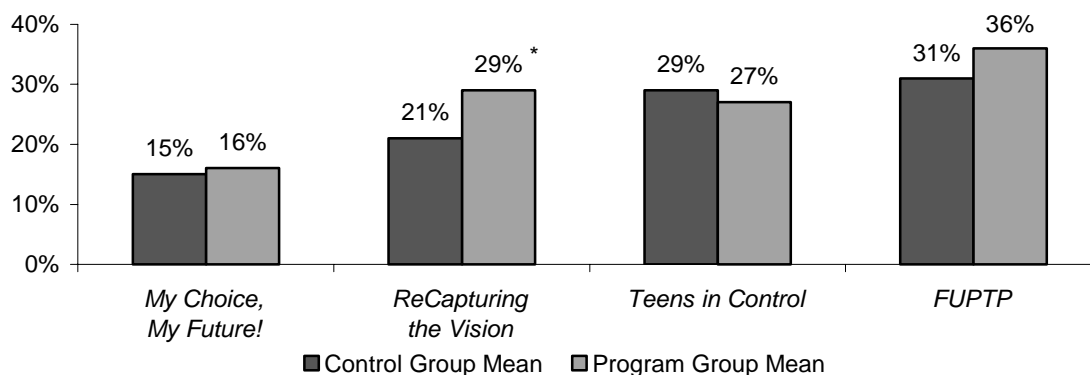
value = 0.58). These findings for *Teens in Control* and *FUPTP* are perhaps not surprising since, given the young age of the participants in these two programs (most are in fourth and fifth grade), neither program emphasized marriage in its curriculum.

Parent Participation in Classes or Meetings

As noted previously, both *ReCapturing the Vision* and *FUPTP* included various activities designed to improve parenting skills and parent-child communication. For example, both programs offered workshops on various aspects of parenting. They also conducted home visits to identify unmet needs for social support services that could increase the quality of parent-child communication and supervision, as well as address more fundamental concerns that might adversely affect youth behaviors. *FUPTP* also used cooperative homework exercises between program youth and their parents to foster good parent-child communication and promote consistency between the messages youth receive through the program and the messages they receive at home.

Despite these efforts, rates of reported parent participation in classes and meetings are low in all sites, with only *ReCapturing the Vision* showing any evidence of increasing parent involvement relative to what would have occurred in the absence of the program (Figure IV.5). Even here, the estimated program effect is fairly modest—

Figure IV.5. Participation of Parents in Classes or Meetings on Health, Family Life, and Sex Education, by Site and Program Status



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

***p-value (of difference between control and program group) <0.01; **p-value<0.05;

*p-value<0.10, two-tailed test.

29 percent of program group youth reported that a parent had participated in a class or meeting covering one of the four areas discussed above, compared with 21 percent of control group youth, a difference of 8 percentage points (p-value = 0.07). The *FUPTP* program group reported a smaller difference of just 5 percentage points that is not statistically significant (36 versus 31 percent; p-value = 0.45).

Participation in Classes or Programs Perceived by Youth as Helpful in Selected Areas

Compared with their control group counterparts, youth in all programs except *FUPTP* reported significantly higher levels of participation in classes that they perceived as helpful in at least one of three measured areas—knowledge of pregnancy and STD risks, improving relations with peers, and developing risk-avoidance skills (Table IV.1).¹ Differences between program and control group youth vary by site—differences for *My Choice, My Future!* are statistically significant across all three measured areas; differences for *ReCapturing the Vision* are significant for one of the three topic areas; and differences for *Teens in Control* are significant for two of the three areas.

Knowledge of Pregnancy and STD Risks. Compared with their control group counterparts, youth in both *My Choice, My Future!* and *Teens in Control* reported significantly higher levels of participation in classes or programs they reported to be helpful in building knowledge of pregnancy and STD risks. For youth in *My Choice, My Future!*, the estimated effect is particularly large—program youth reported a mean of 0.70 on a scale ranging from 0 to 1, indicating that most had participated in a class that was at least somewhat helpful in this area. This compares with a mean of only 0.39 among control group youth, indicating that most had not participated in such a class. As with the measures of service receipt above, this relatively large effect appears to be due at least partly to a lower rate of participation by control group members in classes that are helpful in this area. Specifically, while the control group means for the other three sites range from 0.58 to 0.80, the control group mean for *My Choice, My Future!* is only 0.39, affording the program a more substantial opportunity to affect this outcome.

Peer Relations and Concerns About Growing Up. *My Choice, My Future!* is the only one of the four programs that significantly affected participation of youth in classes or programs they reported as helpful with peer relations and concerns about growing up. The program effect is fairly large. Program youth reported a mean of 0.23 on the scale, indicating a moderate degree of participation in classes or programs helpful in this area. This compares with a mean of 0.09 among the control group, indicating very limited participation within the group.

¹These measures are based on scales that range from 0 to 1, where 1 indicates that the sample member reported participating in classes helpful in each of the subtopics, and 0 reflects no participation in a class that was helpful in any of the subtopics covered by the measure.

Table IV.1. Participation in Classes or Programs Perceived by Youth as Helpful in Particular Ways, by Site and Program Status

Outcome and Site	Control Group Mean	Program Group Mean	Estimated Impacts		P-value
			Mean Difference	Effect Size ^a	
Knowledge of Pregnancy and STD Risks (0 = least participation to 1 = most participation)					
<i>My Choice, My Future!</i>	0.39	0.70	0.31	0.67	0.00***
<i>ReCapturing the Vision</i>	0.80	0.85	0.04	0.09	0.24
<i>Teens in Control</i>	0.65	0.77	0.12	0.28	0.00***
<i>FUPTP</i>	0.58	0.62	0.03	0.08	0.43
Peer Relations and Concerns About Growing Up (0 = least participation to 1 = most participation)					
<i>My Choice, My Future!</i>	0.09	0.23	0.14	0.32	0.00***
<i>ReCapturing the Vision</i>	0.45	0.51	0.06	0.13	0.15
<i>Teens in Control</i>	0.51	0.53	0.02	0.04	0.61
<i>FUPTP</i>	0.39	0.47	0.08	0.15	0.17
Risk Avoidance Skills (0 = least participation to 1 = most participation)					
<i>My Choice, My Future!</i>	0.47	0.63	0.16	0.41	0.00***
<i>ReCapturing the Vision</i>	0.72	0.79	0.06	0.16	0.05*
<i>Teens in Control</i>	0.65	0.72	0.07	0.19	0.01***
<i>FUPTP</i>	0.62	0.62	-0.01	-0.04	0.70

Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

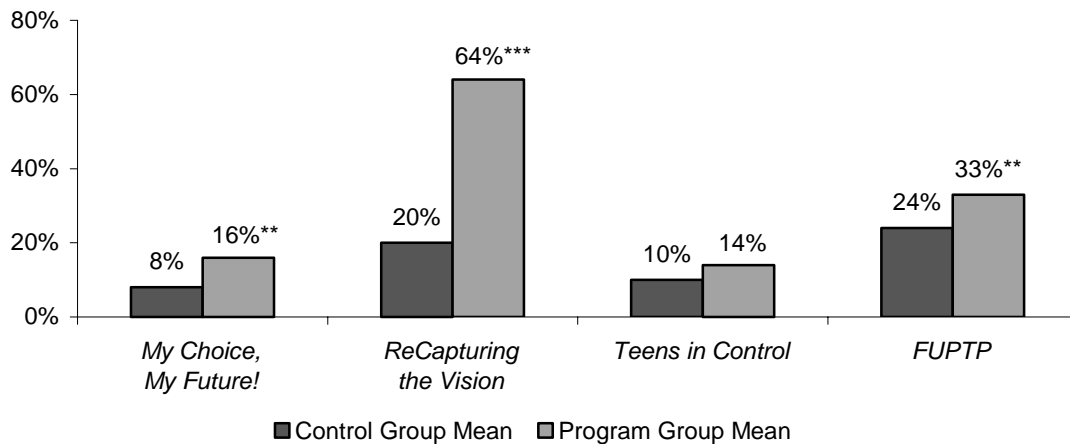
*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Risk-Avoidance Skills. On the final scale, which measures participation in classes helpful in developing risk-avoidance skills, youth in all four programs reported higher participation rates than did their control group counterparts. Differences are statistically significant for three of the four sites. Again, *My Choice, My Future!* displays the largest difference. Program youth in *My Choice, My Future!* reported a mean score of 0.63 on the scale, compared with a mean score of 0.47 among control group youth (p-value < 0.01). Estimated impacts for *ReCapturing the Vision* and *Teens in Control* are modest in size but still statistically significant (p-values = 0.05 and 0.01, respectively).

Pledging Abstinence

Youth in all programs except *Teens in Control* were significantly more likely than their control group counterparts to report having pledged to abstain from sex until marriage (Figure IV.6). The difference in pledge rates is particularly large for *ReCapturing the Vision*. Program group youth in this site were 44 percentage points more likely to have pledged to abstain than their control group counterparts (p-value < 0.01), a result that is consistent with the program's formal use of abstinence pledging in its curriculum. For *My Choice, My Future!* and *FUPTP*, where pledging is encouraged but not a central element of the curricula, the program-control group differences are smaller but still notable: 9 percentage points for both programs (p-value = 0.02 for both programs). Finally, for *Teens in Control*, where pledging is not a part of the program, the difference is only 4 percentage points and not statistically significant (p-value = 0.13).

Figure IV.6. Percentage of Youth Reporting That They Pledged to Abstain from Sex Until Marriage, by Site and Program Status



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

***p-value (of difference between control and program group) <0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

RESULTS FOR PARTICIPANTS ONLY

As noted in Chapter III, only 58 and 45 percent of the program group youth in *ReCapturing the Vision* and *FUPTP*, respectively, actually participated, as compared with nearly all youth assigned to the program group in the other two sites. Under the reasonable assumption that the programs will not affect outcomes for those who do not participate, average impact estimates for the full program group samples will understate impacts for the participant-only group by a substantial amount—72 percent in the case of *ReCapturing the Vision* and 122 percent in the case of *FUPTP* (see Chapter III for additional information). Estimates for the full program group sample are most useful for examining the average effects of the program among all youth the programs attempt to serve. Estimates for the program-only group offer better indicators of the effectiveness of the program among those for whom program resources are actually expended. Therefore, as a complement to the full sample estimates, impacts estimates are presented for only those program group youth who participated. (Findings for all 9 measures are presented in Appendix Table A.7.)

For both programs, the impact estimates for the participant-only sample are larger than those for the full program group sample (by a factor equal to the inverse of the participation rate among program group members), although the significance levels associated with these estimates are almost identical (Table IV.2).² Nevertheless, for many outcomes, the participant-only impacts are still smaller for *ReCapturing the Vision* and *FUPTP* than for the other two sites (particularly *My Choice, My Future!*). As noted previously, some of the relatively small impacts for *ReCapturing the Vision* may be due to a very high level of participation among control group youth in classes across the four topic areas, allowing at most only moderate impacts of the program.

Two outcomes illustrate the notable difference in impacts after adjusting for nonparticipation—the percentage of youth who participated in a class addressing marriage and the percentage of youth who reported publicly pledging to remain abstinent until marriage (Figure IV.7). For *ReCapturing the Vision*, the percentage of youth who participated in a class addressing marriage is 13 points higher among all program group youth compared with their control group counterparts, but it is 22 points higher among participants only. Likewise, the share who reported pledging to abstain is estimated to be 44 percentage points higher among the program group than the control group, but it is estimated to be 73 percentage points higher among participant youth relative to *their* control group counterparts. For *FUPTP*, a sizable difference is also evident in the estimated impacts on pledging between the full program group and participants (9 percentage points compared to 19 percentage points).

²Findings for the full set of service outcomes are shown in Appendix Table A.7.

Table IV.2. Estimated Impacts on Selected Measures of Service Receipt, Full Program Group and Participants Only

Outcome Measure	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
Estimated Impacts for Full Program Group				
Participation in Class or Program on				
Physical development	34.0 ***	3.8	16.5 ***	3.4
Risk awareness	18.9 ***	3.2	5.7 **	4.5
Interpersonal skills	29.9 ***	5.5 *	7.9 ***	3.3
Marriage and relationships	44.9 ***	12.9 ***	4.0	-2.7
Pledging Abstinence				
Pledged to abstain until marriage	8.6 **	44.0 ***	4.3	9.3 **
Estimated Impacts for Participants Only^a				
Participation in Class or Program on				
Physical development	34.0 ***	6.5	16.5 ***	7.0
Risk awareness	18.9 ***	5.3	5.7 **	9.3
Interpersonal skills	29.9 ***	9.2 *	7.9 ***	6.7
Marriage and relationships	44.9 ***	21.6 ***	4.0	-5.5
Pledging Abstinence				
Pledged to abstain until marriage	8.6 **	73.5 ***	4.3	19.7 **
Sample Size Total	517	545	809	439
Control Group	185	239	376	178
Program Group	332	306	433	326
Participants	332	177	433	147

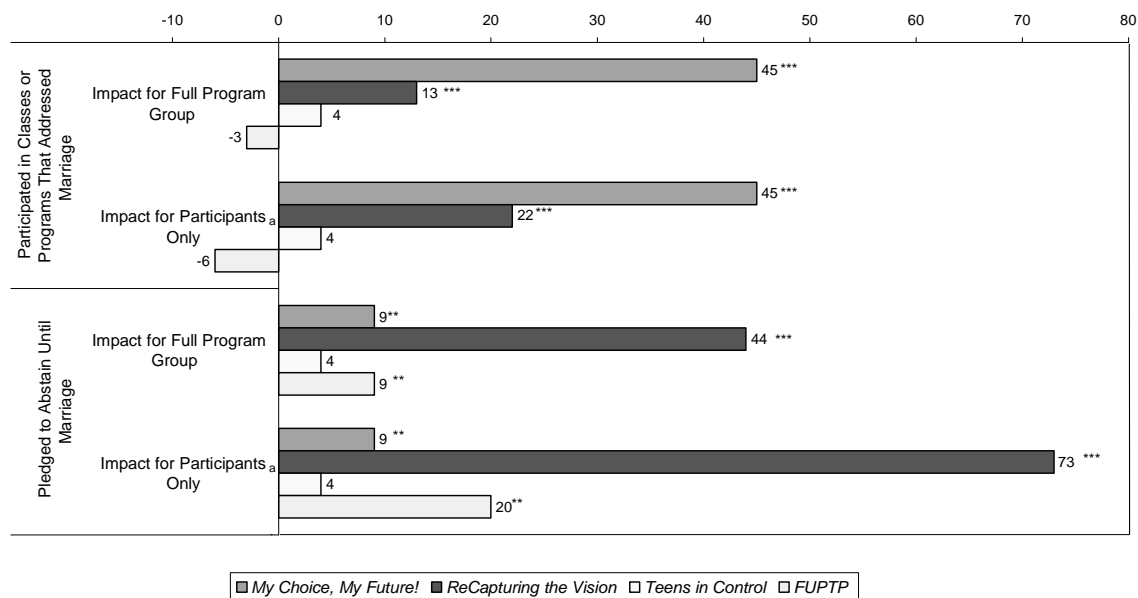
Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Estimates are presented as the mean (percentage point) difference between the program (or participants-only) group and their control group counterparts. All impacts estimates are adjusted, based on regression models described in Chapter III. For details on the covariates used in the regressions, see Appendix Table A.1. For descriptive statistics on the intermediate outcomes analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the main (full program group) models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively. The full results underlying these impact estimates are reported in Appendix Tables A.6 and A.7.

^aSee Chapter III for details on how impacts estimates are derived for the participant-only group. For *ReCapturing the Vision* and *FUPTP*, respectively, 58 and 45 percent of program group youth participated, leading to the notable differences in estimated impacts between the full program group and the participant-only group. In contrast, for *Teens in Control* and *My Choice, My Future!*, participation of the program group was nearly universal, so any differences between the full program group and participants are trivial.

*** p-value (of estimated impact) <0.01; ** p-value<0.05; *p-value <0.10, two-tailed test.

Figure IV.7. Estimated Impacts on Selected Measures of Service Receipt, Full Program Group and Participants Only



Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Estimated impacts are percentage points. All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aSee Chapter III for details on how impacts estimates are derived for the participant-only group. For *ReCapturing the Vision* and *FUPTP*, respectively, 58 and 45 percent of program group youth participated, leading to the notable differences in estimated impacts between the full program group and the participant-only group. In contrast, for *Teens in Control* and *My Choice, My Future!*, participation of the program group was nearly universal so any differences between the full program group and participants are trivial.

***p-value (of difference between control and program group) <0.01; **p-value<0.05;
*p-value<0.10, two-tailed test.

RESULTS BY ENROLLMENT COHORT

All four programs experienced changes in local context and in their own program staffs over the three years during which youth were enrolled in the study sample. As a result, one might expect differences across the enrollment cohorts in the usual services received and/or the effects of the programs on service receipt.

Findings by enrollment cohort are consistent with these expectations (Table IV.3). For three of the four programs, *My Choice, My Future!*, *ReCapturing the Vision*, and *FUPTP*, estimated effects of the programs display a pattern of substantial variation over time. The pattern of differences by cohort is similar for the two programs that served predominantly seventh and eighth graders (*My Choice, My Future!* and *ReCapturing the Vision*). In these sites,

the estimated impacts on service receipt are largest for youth who enrolled in the programs during the third and final year of sample intake (2001-2002). For *My Choice, My Future!*, although the program shows strong evidence of having affected service receipt for youth in all enrollment cohorts, the effects on all four measures of service receipt are much larger for those enrolled in 2001-2002. *ReCapturing the Vision* did not significantly affect the level of participation in the various classes for those in the first two enrollment cohorts. However, it significantly affected participation in classes on interpersonal skills and marriage and relationships (but not the other two areas) among those in the third enrollment cohort.

Notably, for both *My Choice, My Future!* and *ReCapturing the Vision*, the stronger results for the third cohort can be traced to two reinforcing factors. First, control group youth in the third cohort were less likely to report service receipt than were those in the earlier two

Table IV.3. Impacts on Participation in Classes or Programs That Address Particular Topics Related to Health, Family Life, and Sex Education, by Site and Enrollment Cohort

Program and Measure	1999 and 2000 Cohorts		2001 Cohort	
	Estimated Impacts ^a	p-value	Estimated Impacts ^a	p-value
<i>My Choice, My Future!</i>				
Physical development and reproduction	26.7	0.00***	44.1	0.00***
Risk awareness	16.2	0.00***	22.4	0.00***
Interpersonal skills	25.3	0.00***	38.1	0.00***
Marriage and relationships	39.2	0.00***	52.3	0.00***
<i>ReCapturing the Vision</i>				
Physical development and reproduction	3.1	0.43	3.0	0.65
Risk awareness	2.2	0.51	6.2	0.27
Interpersonal skills	2.1	0.54	13.2	0.03**
Marriage and relationships	3.2	0.48	39.1	0.00***
<i>Teens in Control</i>				
Physical development and reproduction	18.0	0.00***	16.7	0.00***
Risk awareness	5.2	0.09*	7.1	0.09*
Interpersonal skills	8.6	0.01***	7.3	0.08*
Marriage and relationships	3.7	0.39	7.7	0.17
<i>FUPTP</i>				
Physical development and reproduction	7.3	0.17	-3.9	0.68
Risk awareness	7.0	0.09*	-0.9	0.89
Interpersonal skills	4.3	0.29	-0.8	0.91
Marriage and relationships	0.0	0.97	-10.0	0.28

Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

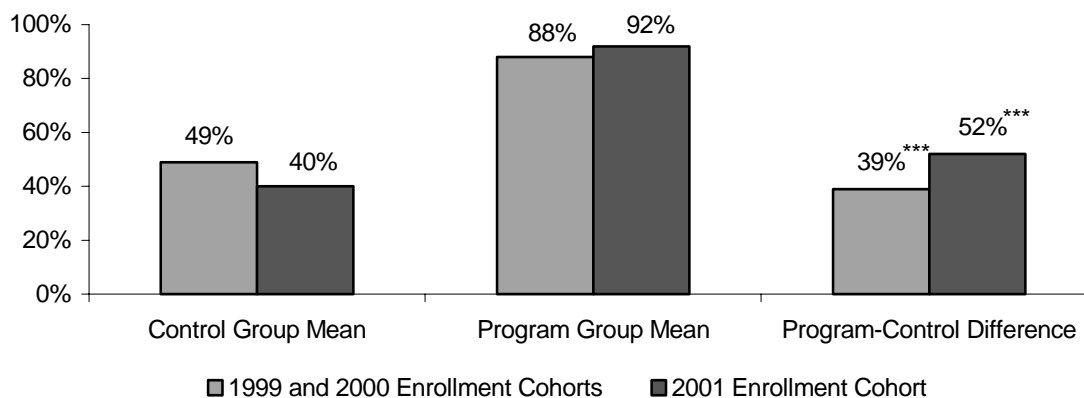
Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively. For additional details on these estimates, see Table A.7.

^aEstimated impacts are measured as the percentage point difference between the program group and control group.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

cohorts. Second, program group youth in the third cohort were more likely to report service receipt than were those in the earlier two cohorts. (Figure IV.8 illustrates this for the marriage and relationships measure, for *My Choice, My Future!*) While many of the differences between the program and control groups are small and not significant, the pattern is evident on nearly every one of the measures for both programs.

Figure IV.8. Decomposition of Program Effects on Participation in Classes on Marriage and Relationships for *My Choice, My Future!*



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.2. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively. For estimates underlying figures, see Appendix Table A.6.

***p-value (of difference between control and program group) <0.01; **p-value<0.05;
*p-value<0.10, two-tailed test.

Multiple factors may have contributed to this pattern, including improvements in the programs' delivery and changes in the school or community context. There is little evidence to support one explanation over another. Nevertheless, the pattern suggests that the programs took on a more prominent role in educating youth in the third cohort, at the same time that services received outside of the programs declined.

For *FUPTP*, the pattern of results moves in the opposite direction. Program youth in the first two cohorts consistently reported higher participation rates than did their control group counterparts. However, these differences are statistically significant for only one of the four measures of youth service receipt—risk awareness. The third and final cohort shows no evidence that the program altered service receipt. In fact, estimated differences between the program and control groups are more often negative than positive, a factor that contributes to the relatively weak findings seen above for the full *FUPTP* sample.

While any number of factors may have contributed to the results for the third cohort of *FUPTP*, perhaps the most notable is a major turnover in the *FUPTP* leadership shortly before the start of the 2001-2002 school year. This change reportedly received a lukewarm reception by some parents and program supporters. The next year (2002-2003), the program was moved out of four of the five schools attended by youth in this study sample and into a new set of schools. The decision to move the program has very important implications for this study, both short- and long-term, since it means a number of youth in *FUPTP* will receive services of shorter duration than initially planned (up to five years).

CHAPTER V

INTERMEDIATE OUTCOMES RELATED TO TEEN SEXUAL ACTIVITY

Each of the four abstinence programs examined in this report—*My Choice, My Future!*, *ReCapturing the Vision*, *Teens in Control*, and *FUPTP*—focuses on changing a number of intermediate outcomes in ways that are hypothesized to lower rates of teen sexual activity and other risk-taking behaviors. The logic underlying the programs is to build a foundation supportive of abstinence and risk avoidance in general. This entails creating an environment that is supportive of abstinence until marriage, helping youth form peer relationships that reinforce this value, promoting communication between youth and their parents that encourages healthy behaviors, and imparting knowledge and understanding of the consequences of risk-taking behaviors.

This chapter examines 13 indicators of the programs' success in achieving these intermediate goals, clustered in five major areas: (1) views on abstinence, teen sex, and marriage; (2) peer influences and relations; (3) self-concept, refusal skills, and communication with parents; (4) perceived consequences of teen and nonmarital sex; and (5) expectations to abstain from sex. The survey questions used to construct these measures are included in Appendix C.

In addition to examining overall impacts on these outcomes, this chapter examines impacts for subgroups of youth defined along two dimensions—the school year in which they enrolled in the program and their views on abstinence at the time they enrolled. As described in Chapter IV, there are some notable differences in the effects of the programs on the services received by youth who enrolled in the study sample during the first two years versus the third year. Therefore, it is valuable to explore whether the differential effects on service receipt extend to impacts on intermediate outcomes. Similarly, it is useful to examine whether impacts differ between youth with views more or less supportive of abstinence at enrollment. This serves as a first step toward exploring whether there are subgroups for whom the programs are more or less successful.

Two different approaches are used to present the impact estimates for the intermediate outcome measures. The first is the difference in the regression-adjusted means between the program and control group youth. The second, and the measure emphasized in the discussion, is the standardized effect size. This is equal to the ratio of the difference in the regression-adjusted means for the two groups to the standard deviation of the measure for the control group. Given that all of the intermediate outcome measures reflect scales, the

standardized effect size makes it easier to gauge the magnitude of the estimated program impacts. It also offers a common metric for comparing estimated impacts across the various measures.

Overall, the findings indicate that the programs affected some, but not all, of the intermediate outcomes examined. There is evidence that the programs affected, in intended ways, youth's views on abstinence and teen sex and their perceptions of the potential negative consequences of teen and nonmarital sex. There is limited evidence that the programs reduced dating and raised expectations to abstain from sex. However, program and control group youth reported similarly on other intermediate outcome measures including youth's views supportive of marriage, self-concept, refusal skills, communication with parents, or perceptions of peer pressure to have sex, or on support for abstinence among their five closest friends.

Subgroup findings indicate important variation in impacts across the different enrollment cohorts. For two of the programs, *My Choice, My Future!* and *ReCapturing the Vision*, impacts are generally larger for youth in the third and final enrollment cohort (2001-2002). This pattern is similar to that observed for service-related outcomes reported in Chapter IV, reinforcing a conclusion that these two programs were most effective in the third year. For one of the four programs, *My Choice, My Future!*, stronger impacts are observed among youth whose views were less supportive of abstinence at enrollment, suggesting that the program may have been most successful with those at greatest risk of engaging in teen sex.

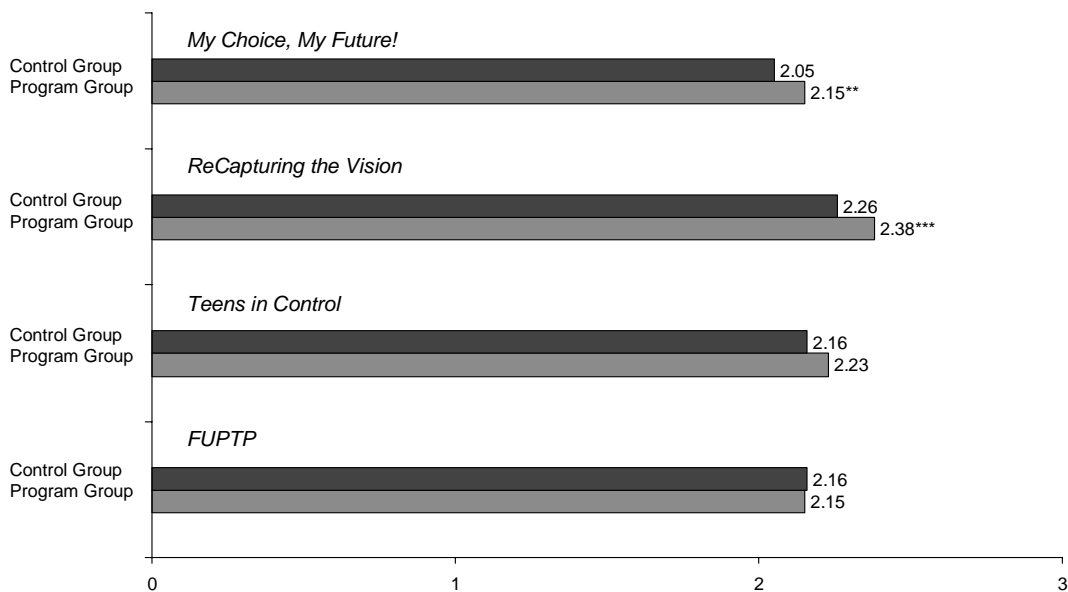
RESULTS FOR THE FULL STUDY SAMPLE

This section details the findings for the overall sample and for each program individually. A brief summary of these findings follows:

- Program youth reported views that, on average, are more supportive of abstinence and less supportive of teen sex than did their control group counterparts. Across three of the four programs (all but *FUPTP*), differences between the program and control groups are statistically significant on one of these measures (in the direction consistent with program goals). For example, both *My Choice, My Future!* and *Teens in Control* had statistically significant impacts on views unsupportive of teen sex (Figure V.1). In contrast, there is no evidence that any of the four programs led youth to develop views more supportive of marriage than those of their control group counterparts.
- There is limited evidence that the programs had impacts on peer influences and relations. In each of the four sites, program and control group youth reported similar levels of support for abstinence among their closest friends. In addition, in the two sites in which youth were old enough to address a wider range of outcomes, *My Choice, My Future!* and *ReCapturing the Vision*, program and control group youth reported similar levels of dating and peer pressure to engage in sex. However, impact estimates for the two sites combined indicate that program group youth reported significantly lower levels of dating than those of their control group counterparts.

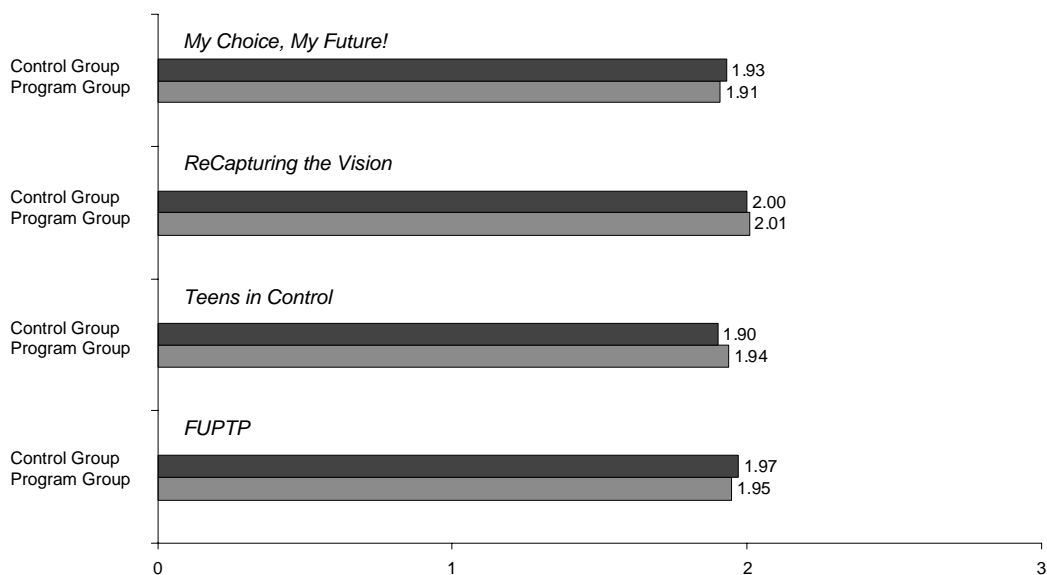
- Program and control group youth displayed no difference in their self-concept, refusal skills, or communication with parents. For example, on the measure of self-efficacy, -esteem, and -control (Figure V.2), program and control youth reported nearly identical mean levels.

Figure V.1. Views Unsupportive of Teen Sex [Scale Measure: Range 0-3], by Program and Control Group Youth



***p-value (of difference between program and control group) < 0.01; p-value < 0.05; p-value < 0.10, two-tailed test.

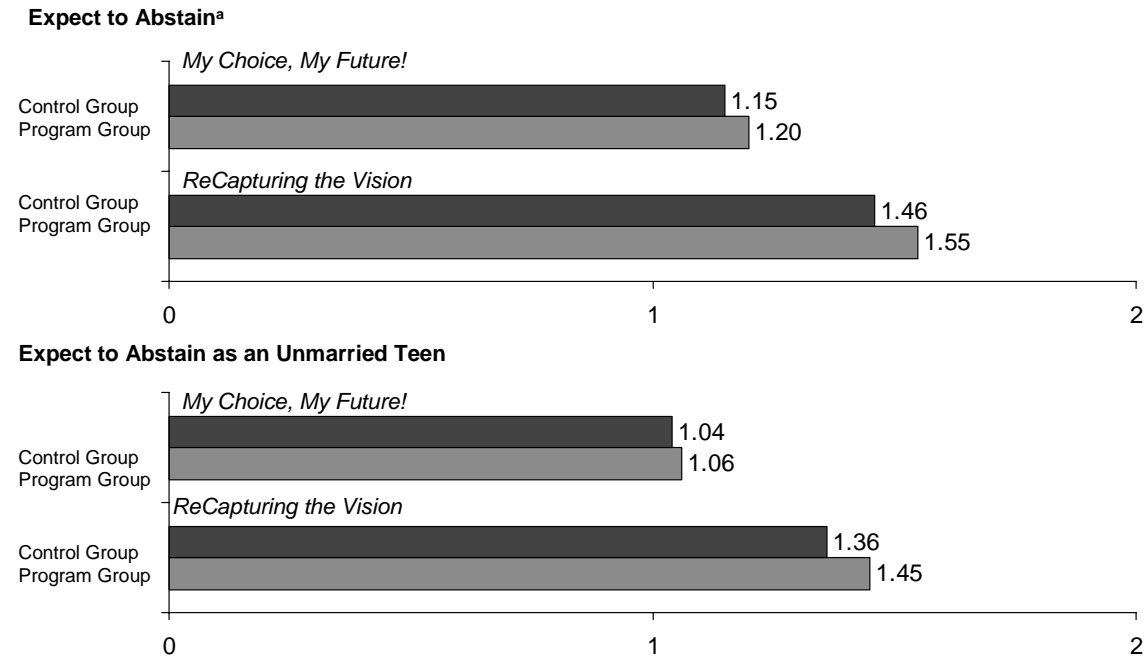
Figure V.2. Self-Efficacy, -Esteem, and -Control [Scale Measure: Range 0-3], by Program and Control Group Youth



***p-value (of difference between program and control group) < 0.01; p-value < 0.05; p-value < 0.10, two-tailed test.

- The programs affected significantly youth's perceptions of the potential adverse consequences of teen and nonmarital sex. Means on two measures of perceived consequences of teen and nonmarital sex are higher for the program group youth than for their control group counterparts in all four sites, and the differences are statistically significant for both *My Choice, My Future!* and *ReCapturing the Vision*.
- There is limited evidence that the programs raised expectations to abstain from sex. (Only youth in the two sites serving older students, *My Choice, My Future!* and *ReCapturing the Vision*, were asked about their expectations to abstain.) On two related measures, program youth in both of these sites reported a mean expectation to abstain that is higher than that of their control group counterparts (Figure V.3), but only the mean difference for one of the two measures is statistically significant and only for the two sites combined.

Figure V.3. Expectations to Abstain from Sex [Scale Measure: Range 0-2] Among Program and Control Group Youth



^aFor youth who reported having sex, the expectation on this measure pertains to the expectations to abstain over the next year. For youth who reported not having had sex, the measure pertains to the expectation to abstain as an unmarried teen.

***p-value (of difference between program and control group) < 0.01; p-value < 0.05; p-value < 0.10, two-tailed test.

Views on Abstinence, Teen Sex, and Marriage

There is evidence that the programs had a positive impact on whether youth had views supportive of abstinence, as reported at the end of the first year following sample enrollment (Table V.1, top panel).¹ Across the four sites, the differences between program and control group youth on this measure are positive and similar in magnitude, with effect sizes ranging from 0.08 standard deviations in *My Choice, My Future!* to 0.14 standard deviations in *Teens in Control* and *FUPTP*. The difference is statistically significant in only one of the four sites, *Teens in Control* (p-value = 0.03; p-values in the other sites range from 0.11 to 0.40). However, when the samples from each site are pooled—to produce an average impact estimate for the four programs—the difference is also statistically significant (effect size = 0.12 standard deviations; p-value < 0.01), providing additional evidence of a program impact.

The programs also displayed evidence of changing views on teen sex (Table V.1, middle panel). In all programs except *FUPTP*, youth reported less support for teen sex than did their control group counterparts. For the two programs serving seventh and eighth graders, *My Choice, My Future!* and *ReCapturing the Vision*, the estimated effect sizes are positive and statistically significant (effect sizes = 0.21 and 0.24 standard deviations, respectively; p-values = 0.01 and <0.01). Impacts for youth in *Teens in Control* are smaller and not significant (effect size = 0.11 standard deviations; p-value = 0.12). Results for all four programs combined are, likewise, positive and significant (effect size = 0.12 standard deviations; p-value < 0.01).

There is no evidence that the programs had impacts on views supportive of marriage (Table V.1, lower panel). Program and control youth in each site reported very similar, and generally high, levels of support for marriage. The lack of an impact for *Teens in Control* and *FUPTP* is not surprising, since neither program made marriage a focus of their curricula given the young ages of participants. However, both *My Choice, My Future!* and *ReCapturing the Vision* do focus on marriage.

¹ The views on abstinence scale ranges from 0 to 3, with 0 reflecting the least support for abstinence and 3 reflecting the most support. As shown in Appendix C, this scale is based on the simple average of responses to five questions that ask youth their level of agreement with statements regarding their views on abstinence. Possible responses are strongly disagree (0), disagree (1), agree (2), or strongly agree (3). An increase from 1.77 to 1.87, or 0.10 points, on the scale could result from 10 percent of the youth in the program group moving an average of one unit up the scale (say, from disagree to agree). A similar logic can be used to interpret the impacts on other scale-based measures.

Table V.1. Views on Abstinence, Teen Sex, and Marriage, by Site and Program Status

	Control Group Mean	Program Group Mean	Estimated Impacts		
			Mean Difference	Effect Size ^a	p-value
Views Supportive of Abstinence (0 = least supportive to 3 = most supportive)					
<i>My Choice, My Future!</i>	1.59	1.64	0.05	0.08	0.40
<i>ReCapturing the Vision</i>	1.93	2.02	0.10	0.13	0.11
<i>Teens in Control</i>	1.77	1.87	0.10	0.14	0.03**
<i>FUPTP</i>	1.82	1.92	0.10	0.14	0.14
<i>All four programs</i>	1.78	1.86	0.08	0.12	0.00***
Views Unsupportive of Teen Sex (0 = least unsupportive to 3 = most unsupportive)					
<i>My Choice, My Future!</i>	2.05	2.15	0.10	0.21	0.01**
<i>ReCapturing the Vision</i>	2.26	2.38	0.12	0.24	0.00***
<i>Teens in Control</i>	2.16	2.23	0.07	0.11	0.12
<i>FUPTP</i>	2.16	2.15	-0.01	-0.02	0.83
<i>All four programs</i>	2.16	2.23	0.07	0.12	0.00***
Views Supportive of Marriage (0 = least supportive to 3 = most supportive)					
<i>My Choice, My Future!</i>	2.43	2.49	0.07	0.12	0.19
<i>ReCapturing the Vision</i>	2.37	2.42	0.05	0.08	0.35
<i>Teens in Control</i>	2.20	2.15	-0.04	-0.07	0.39
<i>FUPTP</i>	2.18	2.14	-0.04	-0.06	0.60
<i>All four programs</i>	2.29	2.30	0.01	0.01	0.79

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after weighted enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Peer Influences and Relations

There is limited evidence that the programs affected peer influences and relations (Table V.2). The analysis focused on three measures: (1) friends' support for abstinence, (2) dating, and (3) reported peer pressure to have sex. As discussed in Chapter III, programs aimed to prevent early dating. Thus, in contrast to other intermediate outcomes, the hypothesized direction of any impact on dating is negative. In addition, programs did not attempt to affect peer pressure directly. Instead, they sought to raise awareness that peer pressure does occur and to help youth develop coping skills. Thus, the hypothesized direction of any program effect on this measure is ambiguous.

Table V.2. Peer Influences and Relations, by Site and Program Status

	Control Group Mean	Program Group Mean	Estimated Effects		P-value
			Mean Difference	Effect Size ^a	
Friends' Support for Abstinence (0 = least supportive of abstinence to 5 = most supportive)					
<i>My Choice, My Future!</i>	2.94	2.99	0.05	0.04	0.61
<i>ReCapturing the Vision</i>	3.48	3.64	0.17	0.11	0.11
<i>Teens in Control</i>	3.28	3.39	0.11	0.08	0.24
<i>FUPTP</i>	4.06	3.96	-0.10	-0.07	0.44
<i>All four programs</i>	3.44	3.50	0.07	0.05	0.23
Dating^b (0 = no dating to 1 = frequent dating)					
<i>My Choice, My Future!</i>	0.44	0.40	-0.04	-0.10	0.16
<i>ReCapturing the Vision</i>	0.21	0.17	-0.04	-0.10	0.15
<i>Both programs</i>	0.33	0.28	-0.04	-0.10	0.04**
Peer Pressure to Have Sex^b (0 = least pressure to 3 = most pressure)					
<i>My Choice, My Future!</i>	0.11	0.14	0.03	0.08	0.47
<i>ReCapturing the Vision</i>	0.10	0.17	0.07	0.17	0.11
<i>Both programs</i>	0.11	0.16	0.05	0.12	0.10

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

^bThe *Teens in Control* and *FUPTP* samples were not asked these questions because of their young ages. In contrast to other outcomes, the hypothesized direction of program impacts on dating is negative and on peer pressure to have sex is ambiguous.

***p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

The first of the measures—friends' support for abstinence—displays no evidence of program effects. This measure is based on a scale ranging from 0 to 5, where a larger number indicates more support for abstinence among the sample members' "five closest friends." Control group means on this measure indicate that friends have views that are generally supportive of abstinence; even the lowest mean score, 2.94 for *My Choice, My Future!*, indicates support for abstinence among a majority of close friends. In three of the four programs, youth reported mean scores that are higher than those for their control group counterparts. However, the differences are small, and none of them, including the pooled estimate, is statistically significant.

There is limited evidence of a small program effect on dating for the two programs for which this measure is examined, *My Choice, My Future!* and *ReCapturing the Vision* (middle panel of Table V.2). Dating was fairly prevalent among youth in these two sites, as evidenced by the control group means. Program youth in both sites reported slightly lower levels of dating than did their control group counterparts. While neither of the site-specific

impact estimates is statistically significant, the pooled estimate is statistically significant (effect size = -0.10; p-value = 0.04).

There is no evidence that the programs affected youth's perceptions of peer pressure to have sex (bottom panel of Table V.2). Program and control group means on this measure are low, ranging from 0.10 to 0.17 on a scale from 0 to 3, suggesting that the vast majority of youth felt no pressure at all to have sex. This is not surprising, given their generally young ages. As noted previously, a positive effect would not be expected in the longer term, since the ultimate aim of the programs is to *reduce* peer pressure by helping youth avoid situations in which it can occur. However, in the shorter term, the main program impact may be to sensitize youth to the various forms such pressure may take.

Self-Concept, Refusal Skills, and Communication with Parents

None of the programs showed evidence of changing youth's self-concept, refusal skills, or communication with parents (Table V.3). As seen in the top panel of Table V.3, youth in all four sites scored relatively high on a measure of self-efficacy, -esteem, and -control (ranging narrowly from 1.90 to 2.01 on a scale of 0 to 3), and differences in mean scores between the program and control group youth are small, decidedly mixed, and never statistically significant. Similarly, on two additional scales, one measuring confidence in refusal skills and the other measuring communication with parents (middle and lower panels of Table V.3, respectively), program and control group youth display similar mean scores. The impact estimates for all four sites combined mirror the null results at the site level.

Perceived Consequences of Teen and Nonmarital Sex

There is strong evidence that the programs increased perceptions of the potential adverse consequences of teen and nonmarital sex (Table V.4, upper two panels). On two measures of this outcome, the first looking at general consequences of teen sex (such as complicating teens' lives) and the second looking at more personal consequences (such as challenges in school), youth in both *My Choice, My Future!* and *ReCapturing the Vision* reported significantly higher mean values than did control group youth. Effect sizes range from 0.15 to 0.24 standard deviations for the two programs (corresponding p-values range from 0.05 to < 0.01). For the other two programs, *Teens in Control* and *FUPTP*, the estimated program effects also are positive, but they are smaller and not statistically significant (effect sizes range from 0.08 to 0.10). Estimated impacts for the four sites combined are significant on both measures (effect sizes = 0.15 and 0.16; both p-values < 0.01).

Table V.3. Self-Concept, Refusal Skills, and Communication with Parents, by Site and Program Status

	Control Group Mean	Program Group Mean	Estimated Impacts		p-value
			Mean Difference	Effect Size ^a	
Self-Efficacy, -Esteem, and -Control (0 = lowest to 3 = highest)					
<i>My Choice, My Future!</i>	1.93	1.91	-0.02	-0.05	0.52
<i>ReCapturing the Vision</i>	2.00	2.01	0.01	0.03	0.71
<i>Teens in Control</i>	1.90	1.94	0.04	0.11	0.13
<i>FUPTP</i>	1.97	1.95	-0.02	-0.05	0.65
<i>All four programs</i>	1.94	1.95	0.01	0.02	0.63
Refusal Skills^b (0 = no confidence to 2 = most confidence)					
<i>My Choice, My Future!</i>	1.33	1.34	0.00	0.00	0.97
<i>ReCapturing the Vision</i>	1.70	1.73	0.03	0.05	0.48
<i>Both programs</i>	1.52	1.53	0.01	0.02	0.60
Communication with Parents (0 = least communication to 2 = most communication)					
<i>My Choice, My Future!</i>	0.74	0.72	-0.02	-0.03	0.70
<i>ReCapturing the Vision</i>	0.99	1.01	0.02	0.03	0.70
<i>Teens in Control</i>	1.00	1.00	0.00	0.00	0.97
<i>FUPTP</i>	0.88	0.96	0.09	0.12	0.21
<i>All four programs</i>	0.90	0.92	0.02	0.03	0.43

Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

^bYouth in the *Teens in Control* and *FUPTP* samples were not asked the questions used to construct this measure because of their young ages.

***p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Expectations to Abstain from Sex

Despite the strong evidence that the programs affected youth's perceptions of potential adverse consequences of engaging in teen and nonmarital sex, there is only limited evidence that they affected expectations to abstain from sex. The report examines two related measures of this outcome in the two sites serving youth old enough to be asked about their

Table V.4. Perceived Consequences of Teen and Nonmarital Sex and Expectations to Abstain, by Site and Program Status

	Control Group Mean	Program Group Mean	Estimated Impacts		P-value
			Mean Difference	Effect Size ^a	
General Consequences of Teen Sex (0 = no adverse consequences to 3 = many adverse consequences)					
<i>My Choice, My Future!</i>	1.74	1.84	0.10	0.15	0.05 *
<i>ReCapturing the Vision</i>	1.95	2.11	0.16	0.24	0.00 ***
<i>Teens in Control</i>	1.96	2.03	0.07	0.10	0.14
<i>FUPTP</i>	1.92	1.99	0.07	0.09	0.34
<i>All four programs</i>	1.89	1.99	0.10	0.15	0.00 ***
Personal Consequences of Teen Sex (0 = no adverse consequences to 2 = many adverse consequences)					
<i>My Choice, My Future!</i>	0.81	0.94	0.13	0.24	0.00 ***
<i>ReCapturing the Vision</i>	0.94	1.08	0.14	0.24	0.00 ***
<i>Teens in Control</i>	1.16	1.20	0.04	0.08	0.30
<i>FUPTP</i>	1.10	1.15	0.04	0.08	0.45
<i>All four programs</i>	1.00	1.09	0.09	0.16	0.00 ***
Expect to Abstain^{b,c} (0 = do not expect to abstain to 2 = definitely will abstain)					
<i>My Choice, My Future!</i>	1.15	1.20	0.05	0.07	0.39
<i>ReCapturing the Vision</i>	1.46	1.55	0.09	0.12	0.12
<i>Both programs</i>	1.30	1.37	0.07	0.10	0.09 *
Expect to Abstain as an Unmarried Teen^b (0 = do not expect to abstain to 2 = definitely will abstain)					
<i>My Choice, My Future!</i>	1.04	1.06	0.02	0.03	0.76
<i>ReCapturing the Vision</i>	1.37	1.45	0.08	0.10	0.19
<i>Both programs</i>	1.20	1.25	0.05	0.06	0.26

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

^bYouth in the *Teens in Control* and *FUPTP* samples were not asked the questions used to construct this measure because of their young ages.

^cFor youth who reported having had sex, the measure refers to the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

***p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

expectations (*My Choice, My Future!* and *ReCapturing the Vision*).² For both measures, a substantial proportion of the control group youth in both sites reported that they will definitely abstain, yielding fairly high control group means of between 1.04 and 1.46 on scales ranging from 0 to 2.³ For both measures in both sites, program youth reported slightly higher average expectation to abstain than did control group youth, but the differences in means are small and not statistically significant. For the two sites combined, the program-control difference on one of the two measures is statistically significant (effect size = 0.10, p-value = 0.09). The difference for the other measure is smaller and not statistically significant.

RESULTS FOR PARTICIPANTS ONLY

As noted in Chapter III, only 58 and 45 percent of the program group youth in *ReCapturing the Vision* and *FUPTP*, respectively, actually participated, as compared with nearly all youth assigned to the program group in the other two sites. Under the reasonable assumption that the programs will not affect outcomes for those who do not participate, average impact estimates for the full program group samples will understate impacts for the participant-only group by a substantial amount—72 percent in the case of *ReCapturing the Vision* and 122 percent in the case of *FUPTP* (see Chapter III for additional information). Estimates for the full program group sample are most useful for examining the average effects of the program among all youth the programs attempt to serve. Estimates for the program-only group offer better indicators of the effectiveness of the program among those for whom program resources are actually expended. Therefore, as a complement to the full sample estimates, impacts estimates are presented for only those program group youth who participated. (Findings for all 13 measures are presented in Appendix Table A.9.)

The participant-only group findings are most relevant for those outcomes for which the impact estimates for the full study sample are meaningful in size and/or statistically significant (Table V.5). This is illustrated by comparing the full program group and participant-only impact estimates for the views-on-teen-sex outcome for *ReCapturing the Vision* and *FUPTP*. The estimated impact for the full program group in *ReCapturing the Vision* (0.24 standard deviations) is only slightly larger than that for *My Choice, My Future!* (0.21 standard deviations). However, when limiting impact estimates to program group

² The first measure, whether youth expect to abstain, reflects whether youth expect to abstain in the future, *whether or not they have previously had sex*. The measure examines a period looking one year ahead for youth who previously had sex, and as an unmarried teen for those who had not yet had sex. The second measure looks at whether youth expect to abstain as an unmarried teen for the full study sample. For this measure, youth who previously had sex are classified as not expecting to abstain as an unmarried teen.

³ For example, the percentage of control group youth who reported that they would definitely abstain from sex until marriage is 37 percent for *My Choice, My Future!* and 53 percent for *ReCapturing the Vision*. As discussed in Chapter VI, these rates might be expected to decline as youth move into their later teens, making it possible to assess more fully any impacts of the programs on this outcome.

Table V.5. Estimated Impacts on Selected Intermediate Outcomes, Full Program Group and Participants Only

Outcome Measure	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee,WI
Estimated Impacts for Full Program Group^a				
Views on Abstinence, Teen Sex, and Marriage				
Views supportive of abstinence	0.08	0.13	0.14 **	0.14
Views unsupportive of teen sex	0.21 ***	0.24 ***	0.11	-0.02
Views supportive of marriage	0.12	0.08	-0.07	-0.06
Perceived Consequences of Teen and Nonmarital Sex and Expectations to Abstain				
General consequences	0.15 **	0.24 ***	0.10	0.09
Personal consequences	0.24 ***	0.24 ***	0.08	0.08
Expect to abstain ^c	0.07	0.12	n.a.	n.a.
Estimated Impacts for Participants Only^{a,b}				
Views on Abstinence, Teen Sex, and Marriage				
Views supportive of abstinence	0.08	0.22	0.14 **	0.31
Views unsupportive of teen sex	0.21 **	0.40 ***	0.11	-0.05
Views supportive of marriage	0.12	0.14	-0.07	-0.13
Perceived Consequences of Teen and Nonmarital Sex and Expectations to Abstain				
General consequences	0.15 *	0.40 ***	0.10	0.20
Personal consequences	0.24 ***	0.41 ***	0.08	0.16
Expect to abstain ^c	0.07	0.21	n.a.	n.a.
Sample Size Total	517	545	809	439
Control Group	185	239	376	178
Program Group	332	306	433	326
Participants	332	177	433	147

Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Notes: All impacts estimates are adjusted, based on regression models described in Chapter III. For details on the covariates used in the regressions, see Appendix Table A.1. For descriptive statistics on the intermediate outcomes analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the main (full program group) models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aImpact estimates are presented as standardized effect sizes, which are computed for each outcome as the ratio of the mean difference between the program (or participant-only) group and their control group counterparts to the standard deviation of the outcome measure for the control group.

^bSee Chapter III for details on how impacts estimates are derived for the participant-only group. For *ReCapturing the Vision* and *FUPTP*, respectively, 58 and 45 percent of program group youth participated, leading to the notable differences in estimated impacts between the full program group and the participant-only group. In contrast, for *Teens in Control* and *My Choice, My Future!*, participation of the program group was nearly universal, so any differences between the full program group and participants are trivial. Full results underlying these impact estimates for participants are presented in Appendix Table A.9.

^cFor youth who had reported having had sex, the measure refers to the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

n.a. = Youth in *Teens in Control* and *FUPTP* were not asked these questions because of their ages.

*** p-value (of estimated impact) <0.01; ** p-value<0.05; *p-value <0.10, two-tailed test.

participants only, the estimated impact of *ReCapturing the Vision* is nearly twice as large as *My Choice, My Future!* (0.40 versus 0.21 standard deviations, respectively). In contrast, the estimated impact for the full program group in *FUPTP* is small and not significant (-0.02 standard deviations). As a result, the estimated impact for the participant-only group (-0.05 standard deviations) is also small and not statistically significant.

The estimated impacts for two outcomes, views supportive of abstinence and perceptions of the personal consequences of teen and nonmarital sex, further illustrate the contrast in the findings between the groups (Figure V.4). Notably, for example, the estimated impacts on views toward abstinence among participants only in *ReCapturing the Vision* and *FUPTP* are far larger than the other two sites, a result that is not evident for the full program group.⁴ Moreover, the estimated impact on perceived personal consequences of sex among participants only in *ReCapturing the Vision* is far larger than the other three programs, a result that is not evident when looking at the full program groups.

RESULTS FOR KEY SUBGROUPS OF YOUTH

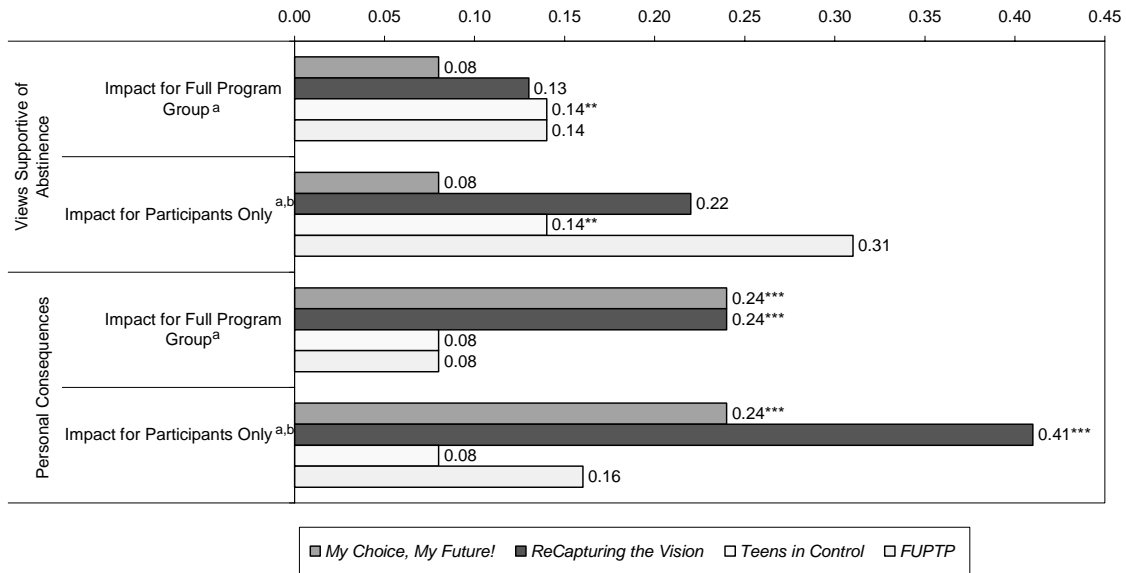
The discussion of subgroup findings focuses on two questions. First, do the differential effects on service receipt between the earlier and later cohorts of youth (reported in Chapter IV) translate into differential impacts on intermediate outcomes? Second, do impacts on intermediate outcomes display any important variation between youth with views more supportive of, versus less supportive of, abstinence at the time they entered the programs?

Results by Enrollment Cohort

Estimated program impacts on intermediate outcomes for youth in the earlier enrollment cohorts (1999-2000, 2000-2001), as compared with those in the later cohort (2001-2002), display a pattern similar to those found in Chapter IV for service receipt (Table V.6). This is especially true for the two programs that enrolled predominantly seventh and eighth graders, *My Choice, My Future!* and *ReCapturing the Vision*. For both programs, estimated impacts tend to be larger and are more likely to be statistically significant for youth in the later cohort than for those in the earlier two cohorts. Moreover, this pattern results from the same two reinforcing factors seen for measures of service use. First, means on intermediate measures are generally lower among control group youth in the third cohort relative to those in the first two cohorts. Second, means on these measures for program group youth in the third cohort are generally higher than means for those in the first two cohorts. See Figure V.5 for an illustration based on *My Choice, My Future!*. This pattern strongly suggests that the two programs had their greatest success among youth in the third cohort in part because of changes taking place outside of the programs.

⁴ As discussed in Chapter III, the statistical significance of impact estimates are similar whether estimates are computed for the full program group sample or for participants only. Of the four programs, *FUPTP* has the smallest study sample and the lowest participation rate among the program group, resulting in relatively low statistical power to detect program impacts.

Figure V.4. Estimated Impacts on Selected Intermediate Outcomes, Full Program Group and Participants Only



Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aImpact estimates are presented as standardized effect sizes, which are computed for each outcome as the ratio of the mean difference between the program (or participant-only) group and their control group counterparts to the standard deviation of the outcome measure for the control group.

^bSee Chapter III for details on how impacts estimates are derived for the participant-only group. For *ReCapturing the Vision* and *FUPTP*, respectively, 58 and 45 percent of program group youth participated, leading to the notable differences in estimated impacts between the full program group and the participant-only group. In contrast, for *Teens in Control* and *My Choice, My Future!*, participation of the program group was nearly universal, so any differences between the full program group and participants are trivial.

n.a. = Youth in *Teens in Control* and *FUPTP* were not asked these questions because of their ages.

*** p-value (of estimated impact) <0.01; ** p-value<0.05; *p-value <0.10, two-tailed test.

Table V.6. Estimated Impacts on Selected Intermediate Outcomes, by Enrollment Cohort

	1999 and 2000 Cohorts		2001 Cohort	
	Estimated Impacts ^a	p-value	Estimated Impacts ^a	p-value
Views on Abstinence, Teen Sex, and Marriage				
<i>My Choice, My Future!</i>				
Views supportive of abstinence	0.01	0.92	0.37	0.02 **
Views unsupportive of teen sex	0.18	0.10 *	0.21	0.17
Views supportive of marriage	-0.01	0.90	0.35	0.03 **
<i>ReCapturing the Vision</i>				
Views supportive of abstinence	0.11	0.28	0.20	0.26
Views unsupportive of teen sex	0.07	0.48	0.46	0.01 ***
Views supportive of marriage	0.02	0.85	0.11	0.54
<i>Teens in Control</i>				
Views supportive of abstinence	0.08	0.34	0.25	0.02 **
Views unsupportive of teen sex	0.18	0.05 *	0.01	0.94
Views supportive of marriage	-0.03	0.77	-0.19	0.16
<i>FUPTP</i>				
Views supportive of abstinence	0.32	0.01 ***	-0.15	0.52
Views unsupportive of teen sex	-0.09	0.45	0.20	0.30
Views supportive of marriage	-0.05	0.74	-0.13	0.56
Perceived Consequences of Teen Sex and Expectations to Abstain^b				
<i>My Choice, My Future!</i>				
General consequences of teen sex	0.02	0.83	0.39	0.01 ***
Personal consequences of teen sex	0.10	0.32	0.52	0.00 ***
Expect to abstain ^c	0.03	0.77	0.04	0.82
<i>ReCapturing the Vision</i>				
General consequences of teen sex	0.12	0.19	0.46	0.00 ***
Personal consequences of teen sex	0.10	0.29	0.66	0.00 ***
Expect to abstain ^c	0.09	0.36	0.09	0.55
<i>Teens in Control</i>				
General consequences of teen sex	0.10	0.29	0.12	0.31
Personal consequences of teen sex	-0.01	0.93	0.23	0.05 *
<i>FUPTP</i>				
General consequences of teen sex	0.08	0.50	-0.06	0.77
Personal consequences of teen sex	0.04	0.75	0.18	0.35

Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Table A.5. For program and control group means and effect sizes, see Appendix Tables A.10 and A.11, respectively.

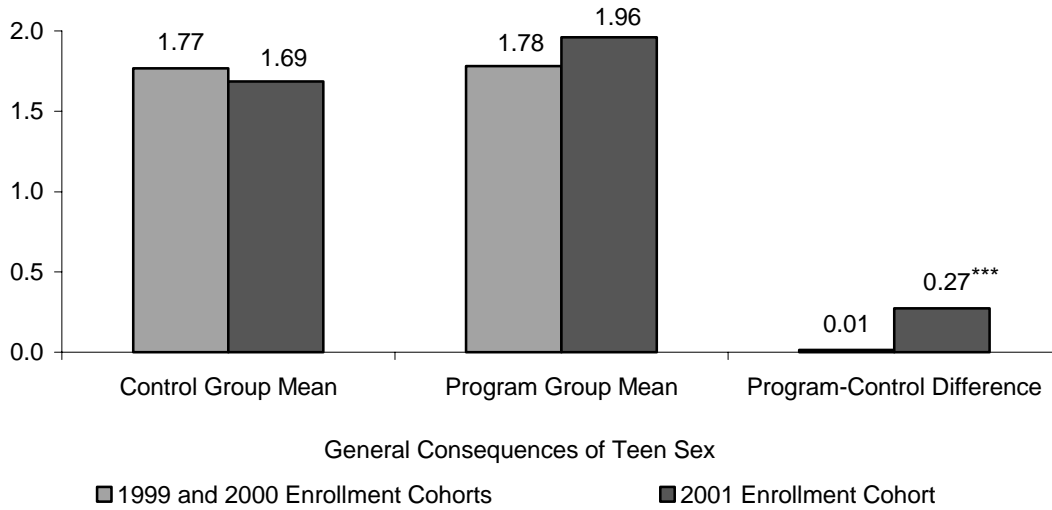
^aCalculated as the effect size, which is the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

^bYouth in the *Teens in Control* and *FUPTP* samples were not asked about expectations to abstain, due to their young ages.

^cFor youth who reported having had sex, the measure refers to the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

***p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Figure V.5. Decomposition of Program Impact on Youth's Perceptions of the General Consequences of Teen Sex for *My Choice, My Future!*



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Table A.5. For program and control group means and effect sizes, see Appendix Tables A.10 and A.11.

*** p-value (of mean difference) <0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

For the two programs that enrolled predominantly seventh and eighth graders, there are three notable differences in the findings for the third enrollment cohort relative to the first two. One is that *My Choice, My Future!* had positive and statistically significant impacts on both views supportive of abstinence and views supportive of marriage for the third cohort, but no significant impacts on those outcomes for youth who enrolled in the first two cohorts. Second, *ReCapturing the Vision* had a positive and statistically significant impact on views on teen sex among those enrolled in the third cohort, but not among those enrolled earlier. Finally, there is strong evidence that both these programs had an impact among the third enrollment cohort on the perceived consequences of teen sex.

For the other two programs, *Teens in Control* and *FUPTP*, there is a much less clear pattern of differences in program impacts between youth enrolled in the first two cohorts and the third cohort. For *FUPTP*, this is perhaps surprising, given that the results on service use (see Chapter IV) showed greater evidence of program effects for the first two cohorts than for the third cohort. The service use findings are consistent, however, with the one significant impact seen for *FUPTP*—a positive impact on views supportive of abstinence among youth in the first two cohorts (p-value < 0.01). Indeed, the estimated size of this

impact, 0.32 standard deviations, is the largest observed for any programs in any cohort, making it difficult to dismiss, despite the mixed pattern of results on other measures.

Results by Views on Abstinence at Enrollment

A second subgroup comparison is between youth who at the time they entered the study sample held views more or less supportive of abstinence. This comparison offers a useful gauge of whether program impacts differed among youth by their predisposition to the programs' messages.

For three of the four programs, there is no clear pattern of differences in the impacts between youth with more or less favorable views on abstinence at enrollment (Table V.7). The exception is *My Choice, My Future!*, which appears to have had greater success influencing outcomes for youth with views less supportive of abstinence when they entered the program. For these youth, the program had positive and statistically significant impacts for views on abstinence and teen sex, as well as on the two measures of the perceived consequences of teen and nonmarital sex. In contrast, *My Choice, My Future!* had no significant impacts on any of these measures among youth who held more supportive views at baseline.

None of the remaining three programs displayed anything like this pattern. Indeed, while the magnitude and direction of impacts across the subgroups are mixed, the only significant impacts are seen among youth with views relatively more supportive of abstinence at enrollment. These results suggest that, of the four programs in the study, *My Choice, My Future!* was unique in its ability during this first year to have a strong impact on those youth who appear to be less predisposed to agree with its messages.

Table V.7. Estimated Impacts on Selected Intermediate Outcomes, by Views on Abstinence at Enrollment

	More Supportive Views		Less Supportive Views	
	Estimated Impacts ^a	p-value	Estimated Impacts ^a	p-value
Views on Abstinence, Teen Sex, and Marriage				
<i>My Choice, My Future!</i>				
Views supportive of abstinence	-0.09	0.42	0.38	0.01 ***
Views unsupportive of teen sex	0.13	0.32	0.25	0.06 *
Views supportive of marriage	0.09	0.49	0.12	0.38
<i>ReCapturing the Vision</i>				
Views supportive of abstinence	-0.02	0.90	0.04	0.76
Views unsupportive of teen sex	0.25	0.04 **	0.16	0.22
Views supportive of marriage	-0.02	0.88	0.09	0.52
<i>Teens in Control</i>				
Views supportive of abstinence	0.18	0.11	0.11	0.21
Views unsupportive of teen sex	0.29	0.01 **	0.04	0.65
Views supportive of marriage	-0.15	0.25	-0.04	0.68
<i>FUPTP</i>				
Views supportive of abstinence	0.2	0.16	0.14	0.28
Views unsupportive of teen sex	-0.36	0.03 **	0.14	0.34
Views supportive of marriage	0.11	0.52	-0.25	0.13
Perceived Consequences of Teen Sex and Expectations to Abstain^b				
<i>My Choice, My Future!</i>				
General consequences of teen sex	0.04	0.73	0.27	0.02 **
Personal consequences of teen sex	0.18	0.14	0.31	0.02 **
Expect to abstain ^c	-0.02	0.89	0.11	0.39
<i>ReCapturing the Vision</i>				
General consequences of teen sex	0.35	0.00 ***	0.17	0.15
Personal consequences of teen sex	0.40	0.00 ***	0.11	0.41
Expect to abstain ^c	0.13	0.24	0.07	0.54
<i>Teens in Control</i>				
General consequences of teen sex	0.09	0.43	0.10	0.27
Personal consequences of teen sex	0.08	0.56	0.10	0.29
<i>FUPTP</i>				
General consequences of teen sex	-0.08	0.61	0.13	0.35
Personal consequences of teen sex	0.22	0.21	-0.05	0.73

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Table A.5. For program and control group means and effect sizes, see Appendix Tables A.12 and A.13.

^aCalculated as the effect size, which is the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

^bYouth in the *Teens in Control* and *FUPTP* samples were not asked about expectations to abstain, due to their young ages.

^cFor youth who reported having had sex, the measure refers to the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

***p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

CHAPTER VI

DISCUSSION

This study of first-year impacts of four Title V, Section 510 abstinence education programs shows evidence that the programs affected the level and nature of health, family life, and sex education services that youth receive. In turn, the programs had significant impacts on some, but not all, of the intermediate outcomes that may be related to teen sexual activity and other risk-taking behaviors. The more specific conclusions from the study can be summarized as follows:

- ***Effects on Service Use.*** To varying degrees, youth in the abstinence education programs reported higher levels of participation in health, family life, and sex education classes during the first year following program enrollment than did their counterparts in the control group. They also reported higher levels of participation in classes that they perceived as helpful in one or more of three domains: (1) understanding how girls get pregnant and STD risks, (2) improving relations with their peers, and (3) developing risk-avoidance skills.

The effects on service use are most pervasive and largest for youth in *My Choice, My Future!*, which operated in a community with the lowest level of usual services available to youth. Impacts were smallest for youth in *FUPTP*, which served the youngest group of youth and experienced high levels of nonparticipation and absenteeism among those assigned to the program group.

- ***Impacts on Intermediate Outcomes.*** Program youth reported views more supportive of abstinence than would have been expected had they not participated in the abstinence education programs. The impacts generally were larger for the two programs that served older youth, predominantly seventh and eighth graders—*My Choice, My Future!* and *ReCapturing the Vision*.

Youth reported a stronger perception of the adverse consequences of teen and nonmarital sex as a result of participation in the programs. Estimated impacts are positive and statistically significant for *My Choice, My Future!* and

ReCapturing the Vision, as well as for the four programs combined. Despite these results, none of the sites individually shows evidence of having increased youth's expectations to remain abstinent. (This outcome was examined only for *My Choice, My Future!* and *ReCapturing the Vision*.) For the two programs combined, the impact is statistically significant for one of the two measures of expectations to abstain.

There is little to no evidence that the first year of participation in these programs changed other intermediate outcomes that may be vehicles for changing behavior. These include views supportive of marriage; the extent to which youth's friends hold views supportive of abstinence; and self-concept, refusal skills, and communication with parents.

- **Subgroup Results.** There are notable differences in program impacts related to enrollment cohort and youth's views on abstinence prior to program entry. For *My Choice, My Future!* and *ReCapturing the Vision*, program impacts on both health, family life, and sex education services and the intermediate outcomes tend to be larger for those youth who enrolled in fall 2001, compared with those who enrolled in the two previous school years. This includes a significant impact on views supportive of marriage for youth in *My Choice, My Future!*, a result that is not evident for any other group in the study. In contrast, *FUPTP* displayed no evidence of program impacts among youth in this third cohort.

One program, *My Choice, My Future!*, had notably larger and more significant impacts for youth with views less supportive of abstinence at the time they enrolled in the program. These include impacts on views on abstinence, views on teen sex, and the perceived consequences of teen and nonmarital sex. Impacts for the other three programs show no clear pattern of differences between those youth with views more or less supportive of abstinence at enrollment. *My Choice, My Future!* thus appears somewhat unique among the four programs in its ability to affect most strongly those youth who are less predisposed to accept its messages during this first year of the interventions.

INTERPRETING THE FINDINGS

Several important factors should be considered in interpreting these first-year findings. These factors underscore both the preliminary nature of the findings and the need for care in generalizing them to other programs or settings.

Study sample is young. All four programs served youth in either upper elementary or middle school grades when the prevalence of sexual activity is low and few youth are contemplating engaging in sex. The decision to intervene in these grades is based on the premise that targeting youth before they start to engage in sexual activity is important for preventing such behaviors in the future. However, an implication of

serving such young students is that reliable measures of whether the programs reduced teen sexual activity cannot be obtained until these youth reach their mid- to late teen years—for the vast majority, several years after they enroll in the programs. Indeed, even the estimated first-year impacts on views and expectations need to be interpreted within the context of the limited maturity many program participants bring to such concepts.

The role of age is reflected in the pattern of study findings. The two programs serving older youth, predominantly seventh and eighth grade students (*ReCapturing the Vision* and *My Choice, My Future!*), had relatively large impacts on two outcomes that may be particularly age-sensitive: (1) views on teen sex, and (2) perceptions about the consequences of teen and nonmarital sex. Once additional follow-up data are available, it will be important to examine whether or not impacts on these measures become more evident for the other two programs as youth enter their teens.

In addition, a substantial proportion of the control group reported that they will definitely abstain from sex, presumably reflecting their young ages. For example, in *ReCapturing the Vision*, more than half of the control group reported the highest value on the scale measuring expectations to abstain. This proportion of the control group at the “ceiling” value of expectations to abstain is higher than for all other intermediate outcomes except peer pressure to have sex. This clustering of control group youth at the ceiling value of expectations limits how much the programs can affect expectations to abstain during the first year of the program. Subsequent data collection in all program sites (during Wave 3 and Wave 4 when the study youth are older) will allow a more definitive analysis of program impacts on expectations to abstain.

Not all youth in the program group participate. Two programs, *ReCapturing the Vision* and *FUPTP*, had high rates of nonparticipation, and *FUPTP* also had high rates of absenteeism. Both factors have implications for the findings. As described in Chapter III, the main impact estimates presented in the report are based on the full program and control groups for the study. Due to the high rate of nonparticipation among youth assigned to the program group for *ReCapturing the Vision* and *FUPTP*, these impact estimates for the full program group understate those for youth who actually participated in the programs. For this reason, in Chapters IV and V, an alternative set of impact estimates are presented for only those youth who actually participated in the two respective programs. While the magnitude of these latter impacts estimates is larger, the power to assess statistical significance is essentially unchanged, and it is considerably weaker than would have been available had all youth assigned to the program group actually participated. These factors are important to consider in comparing the relative magnitudes and significance levels of the results across the sites. For example, *ReCapturing the Vision* displays impacts for the participant-only group that are notably larger than for the full program group (and often the largest of any of the four programs). However, the statistical significance of these impacts is essentially unchanged and therefore offers no greater evidence of whether a true program impact took place.

In addition to nonparticipation, *FUPTP* had a substantial number of youth who attended only a fraction of the services available. In contrast to the other three programs that provided their services during the school day, *FUPTP* provided them as an after-school program that students attended voluntarily on a day-to-day basis. This fact contributed to *FUPTP*'s relatively low attendance and, in turn, may have contributed to its generally modest-to-null effects.

Usual services vary. Programs varied widely in terms of the availability of other health, family life, and sex education services in the schools and communities in which they were based. This fact appears to explain much of the variability across programs in impacts on services received by youth, and it may explain some of the variability in impacts on intermediate outcomes as well. Most notably, the extensive program-related changes in service receipt by youth in *My Choice*, *My Future!* are strongly linked to a relatively low level of such services for students in the control group. In turn, this substantial change in service receipt may be a reason why *My Choice*, *My Future!* displays the broadest evidence of impacts on intermediate outcomes.

Program maturity and stability vary. The variability in maturity and stability of the programs may also have contributed to some of the variation in program effects, particularly over time. This is most evident in the relatively strong impacts of *My Choice*, *My Future!* and *ReCapturing the Vision* among youth in the final enrollment cohort. *My Choice*, *My Future!* had been operational for only one year when the study began. The stronger impacts for the third cohort may therefore be related to improvements in delivery as the program matured. *ReCapturing the Vision*, meanwhile, had been operational for a number of years prior to receiving the Title V, Section 510 funding. However, it did expand into several new schools at the time the first two cohorts were enrolled. So maturation could explain some of the stronger findings among youth in *ReCapturing the Vision*'s third enrollment cohort. At the opposite extreme, the clear null results for the third cohort of youth in *FUPTP* may be linked to a substantial turnover in its leadership and program staff during the time these later students were being served.

The interventions being studied continue. Finally, it is perhaps most important to note that youth in three of the four programs, all except *ReCapturing the Vision*, had received half or less of the intended intervention at the time of the first follow-up survey, the survey on which the findings in this report are based. Indeed, the program that displays the most limited impacts after this first year—*FUPTP*—could serve some study youth for as long as four years. This timeline underscores the need to suspend final interpretation of impact estimates until longer-term data are available for full analysis of the programs' effects.

LOOKING FORWARD

This study of first-year impacts highlights some success of the four programs in delivering abstinence education services and changing views of youth in ways that are more supportive of abstinence. However, the study also identifies areas in which the

programs' goals were not met during their first year of intervention—particularly in the areas of peer influences and relationships and self-concept, refusal skills, and communication with parents. It is notable that the programs have not yet demonstrated measurable impacts in these areas. Nevertheless, it is equally important to reserve judgment on whether or not the programs ultimately will succeed in these areas, particularly because three of the programs are explicitly intended to work with youth over multiple years. Furthermore, it is possible that impacts in these areas may not become evident until youth are older and are more actively contemplating whether or not to engage in sex or other risk-taking behavior.

Given the relatively young ages of all the program participants, it will be important to evaluate longitudinally the intermediate outcomes included in this report, to see how program impacts evolve. Just as some program impacts might easily dissipate as youth mature, other impacts might reveal themselves only when program youth are older and more actively contemplating whether or not to engage in sex or other risk-taking behavior.

The ultimate success of the programs in promoting abstinence, as well as in reducing risks of nonmarital pregnancy and STDs, cannot be fully determined without data that measure behaviors in the older teen years. Such data will be available for a large fraction of the study sample once the fourth wave of follow-up data have been collected in 2005.

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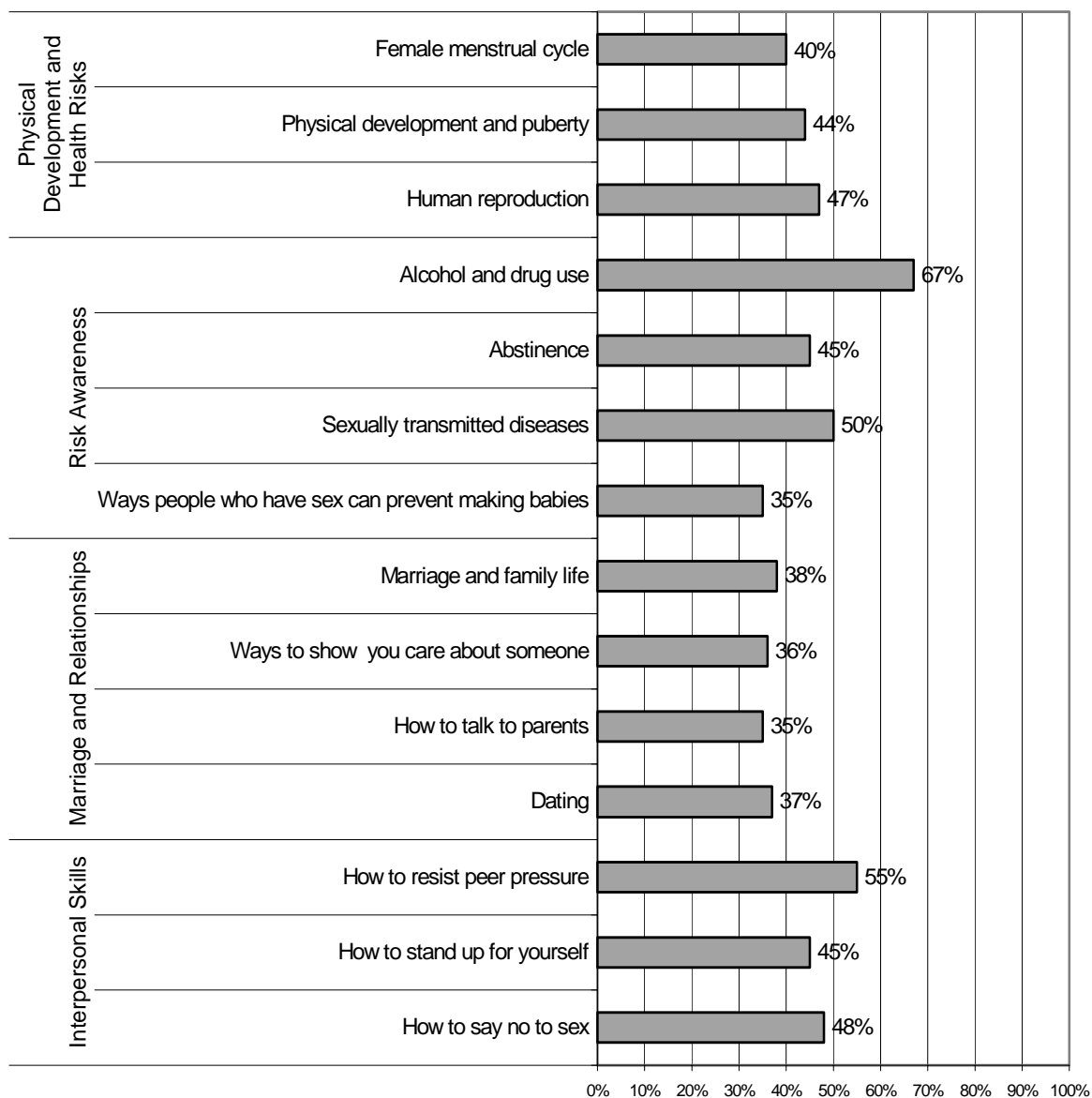
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APPENDIX A

**SUPPORTING FIGURES AND TABLES FOR
THE FIRST-YEAR IMPACT ANALYSIS
OF FOUR TITLE V, SECTION 510
ABSTINENCE EDUCATION
PROGRAMS**

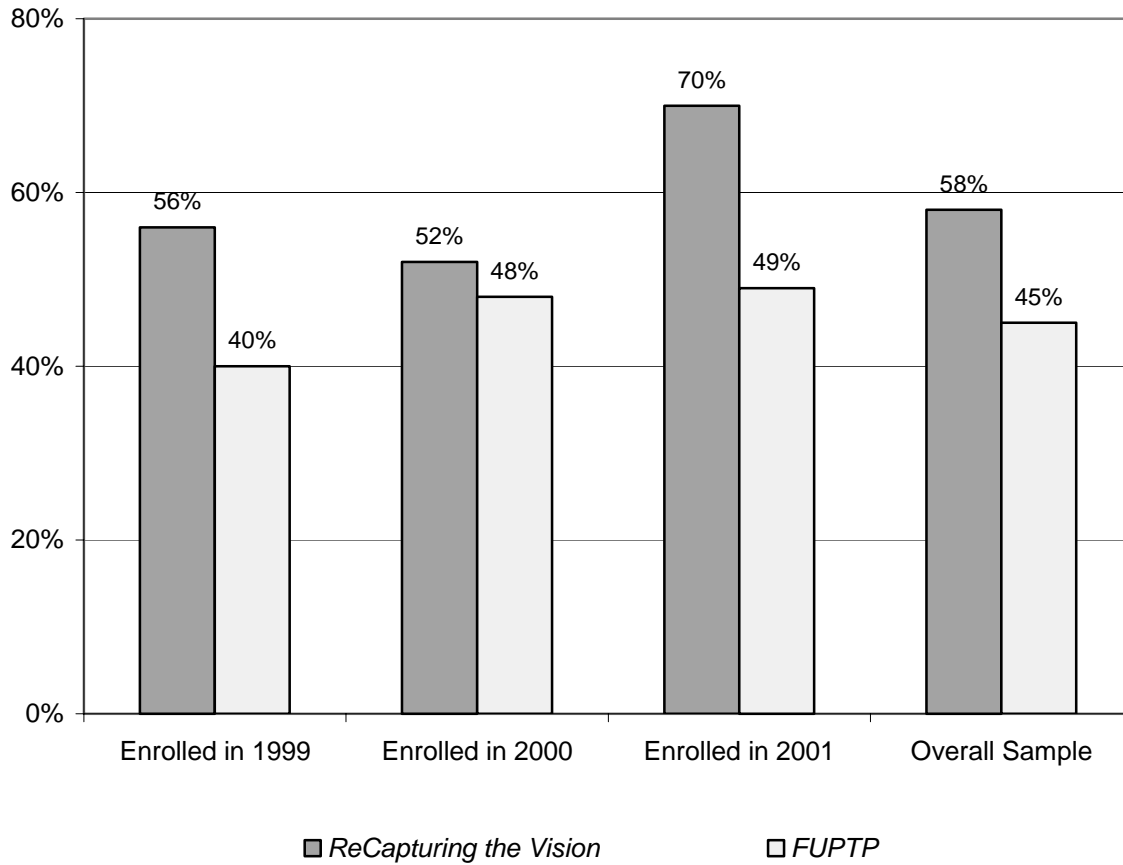
Figure A.1. Reported Participation in Classes or Programs on Various Health, Family Life, and Sex Education Topics During the Past School Year: Control Group for *My Choice, My Future!*



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

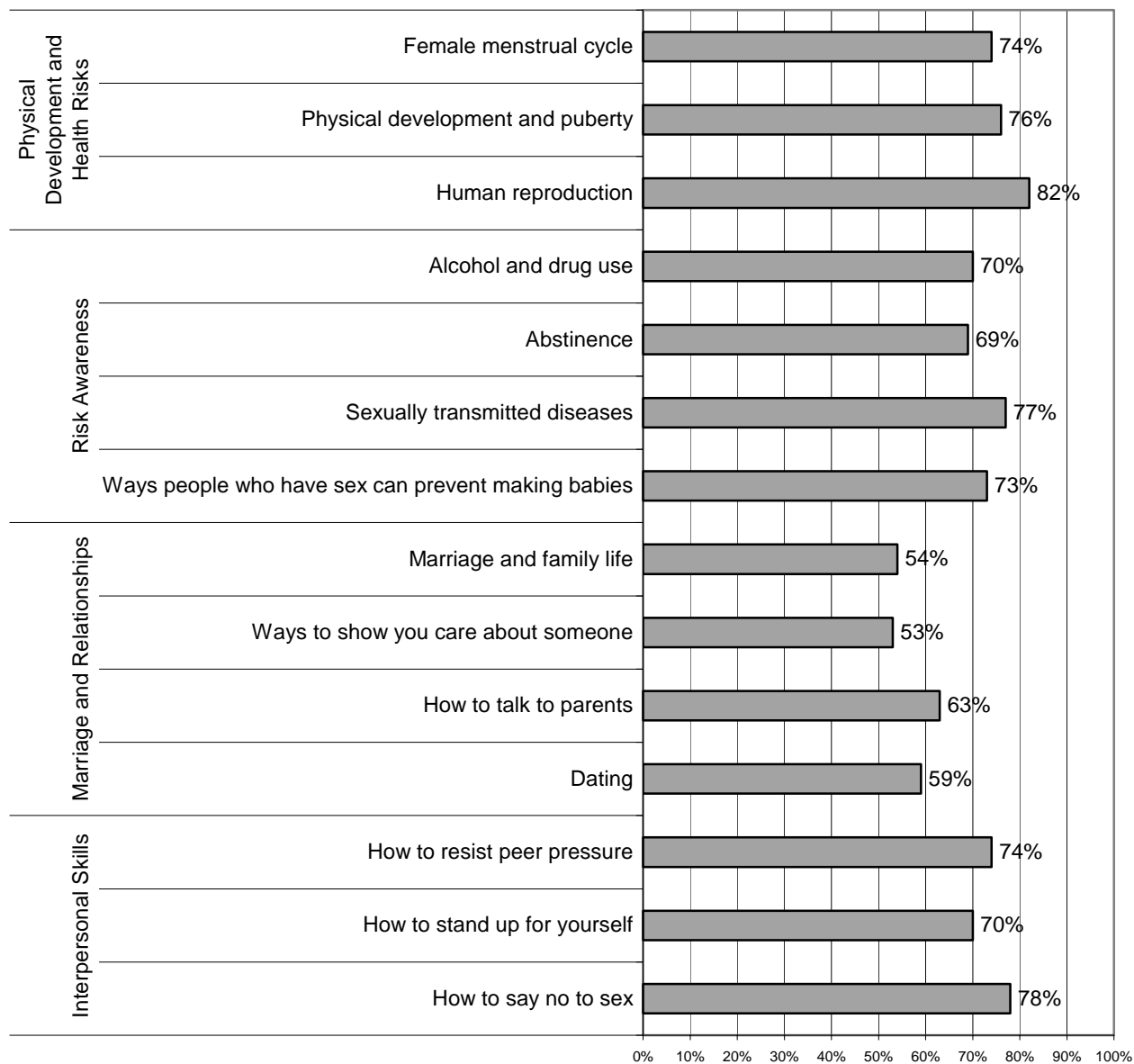
Figure A.2. Participation Rates in the “Elective” Abstinence Education Programs, by Enrollment Year and Overall Sample



Source: Enrollment data, provide by program staff.

Note: Statistics based on unweighted sample.

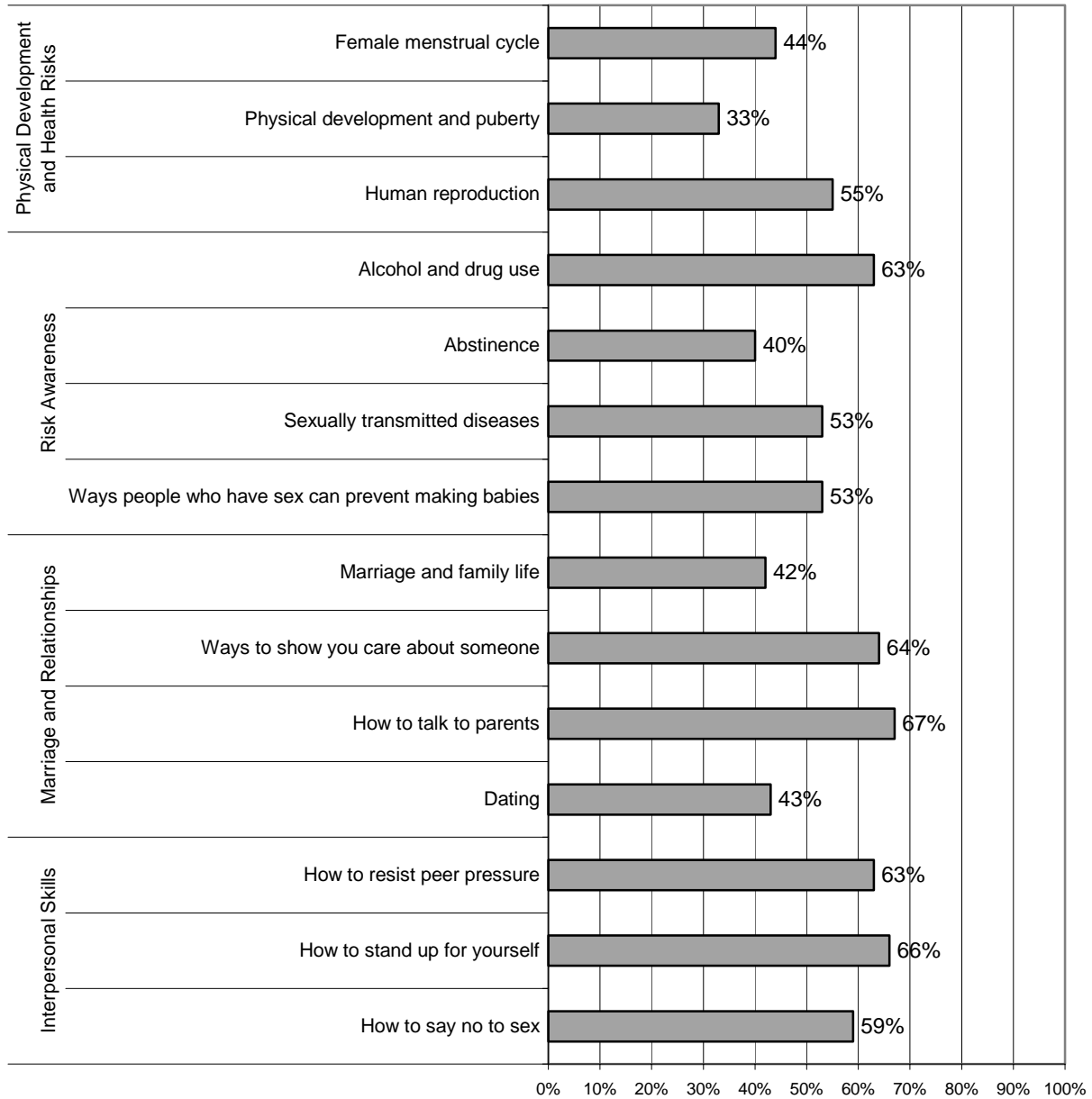
Figure A.3. Reported Participation in Classes or Programs on Various Health, Family Life, and Sex Education Topics During the Past School Year: Control Group for *ReCapturing the Vision*



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

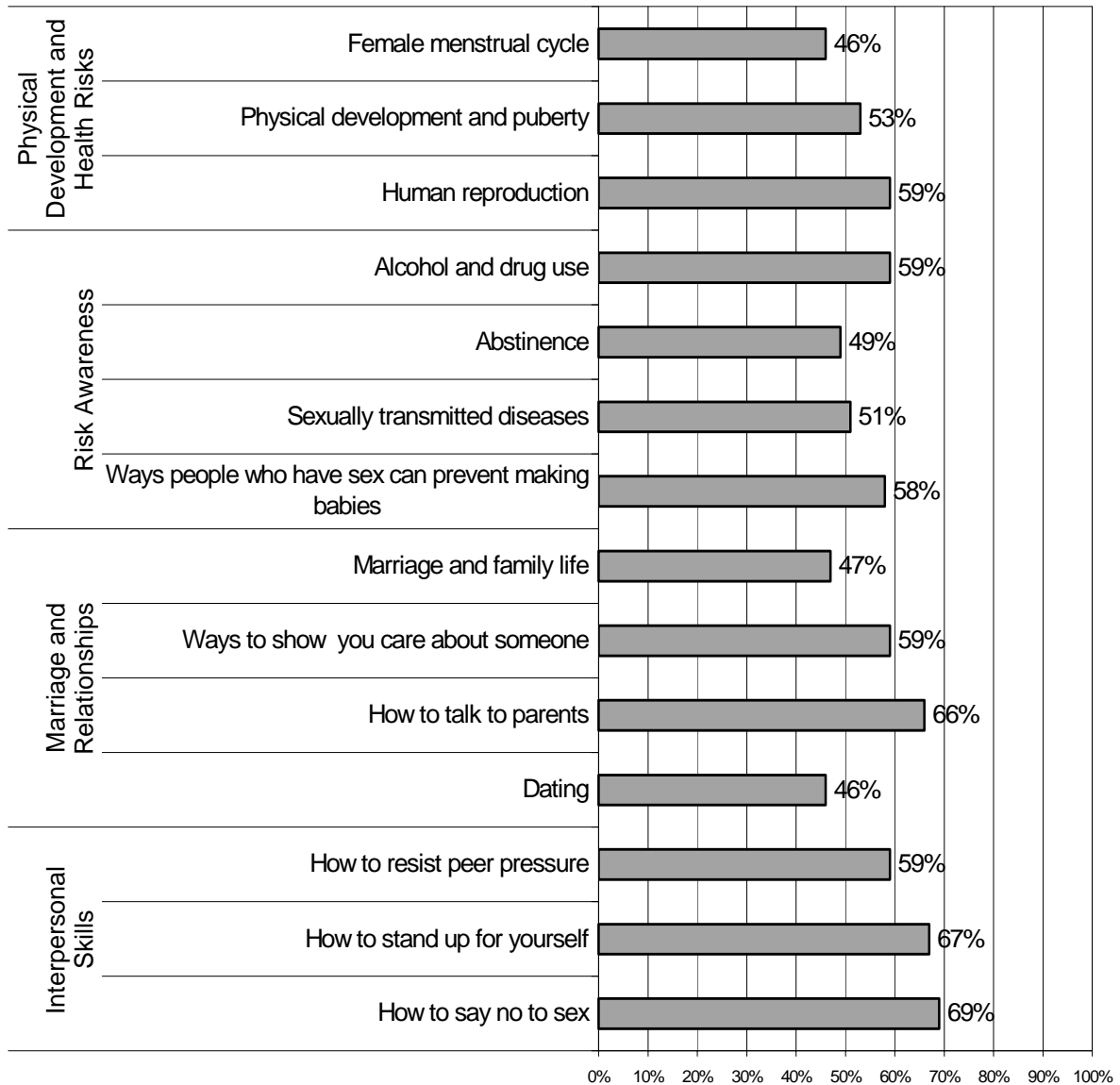
Figure A.4. Reported Participation in Classes or Programs on Various Health, Family Life, and Sex Education Topics During the Past School Year: Control Group for *Teens in Control*



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

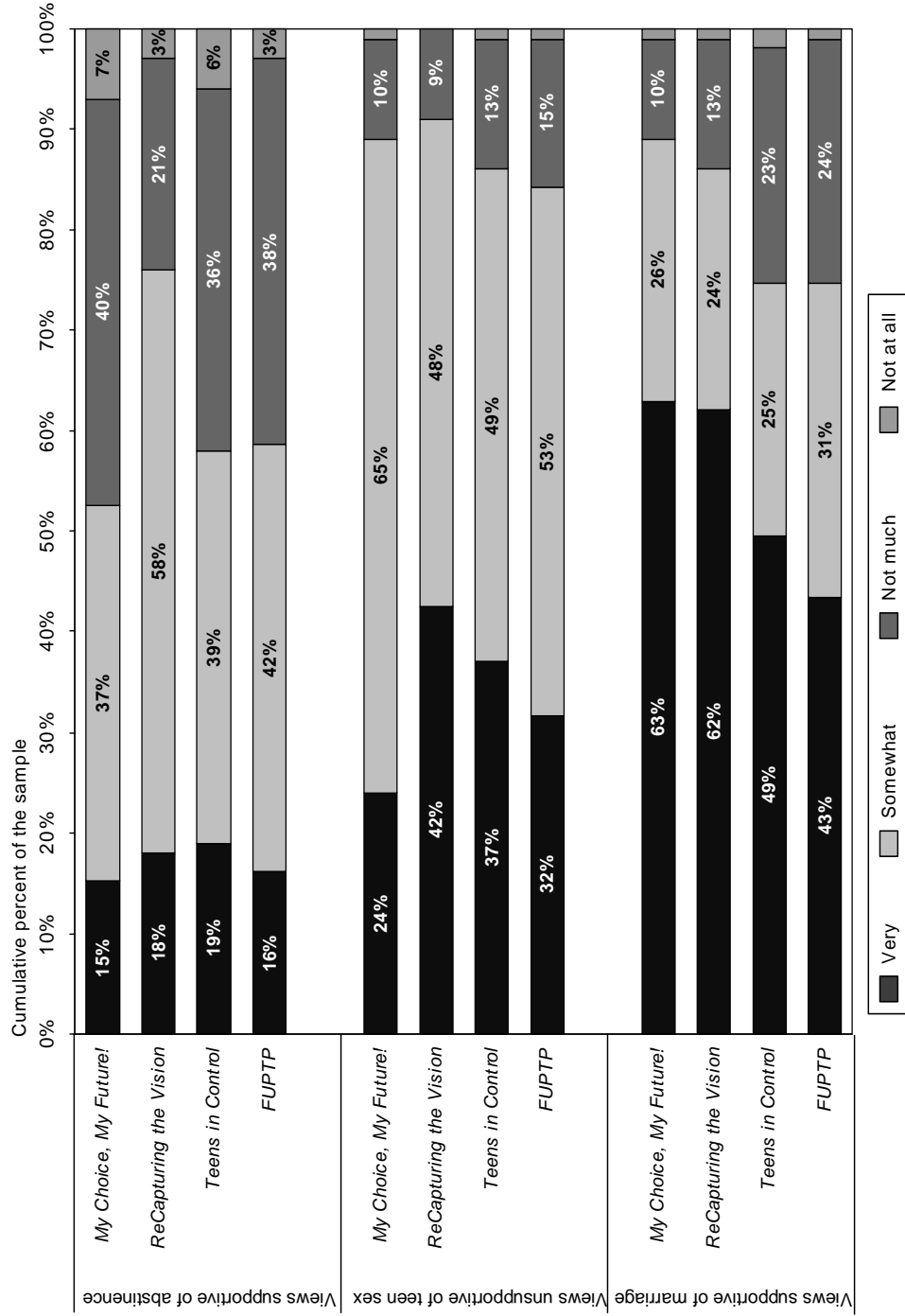
Figure A.5. Reported Participation in Classes or Programs on Various Health, Family Life, and Sex Education Topics During the Past School Year: Control Group for FUPTP



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

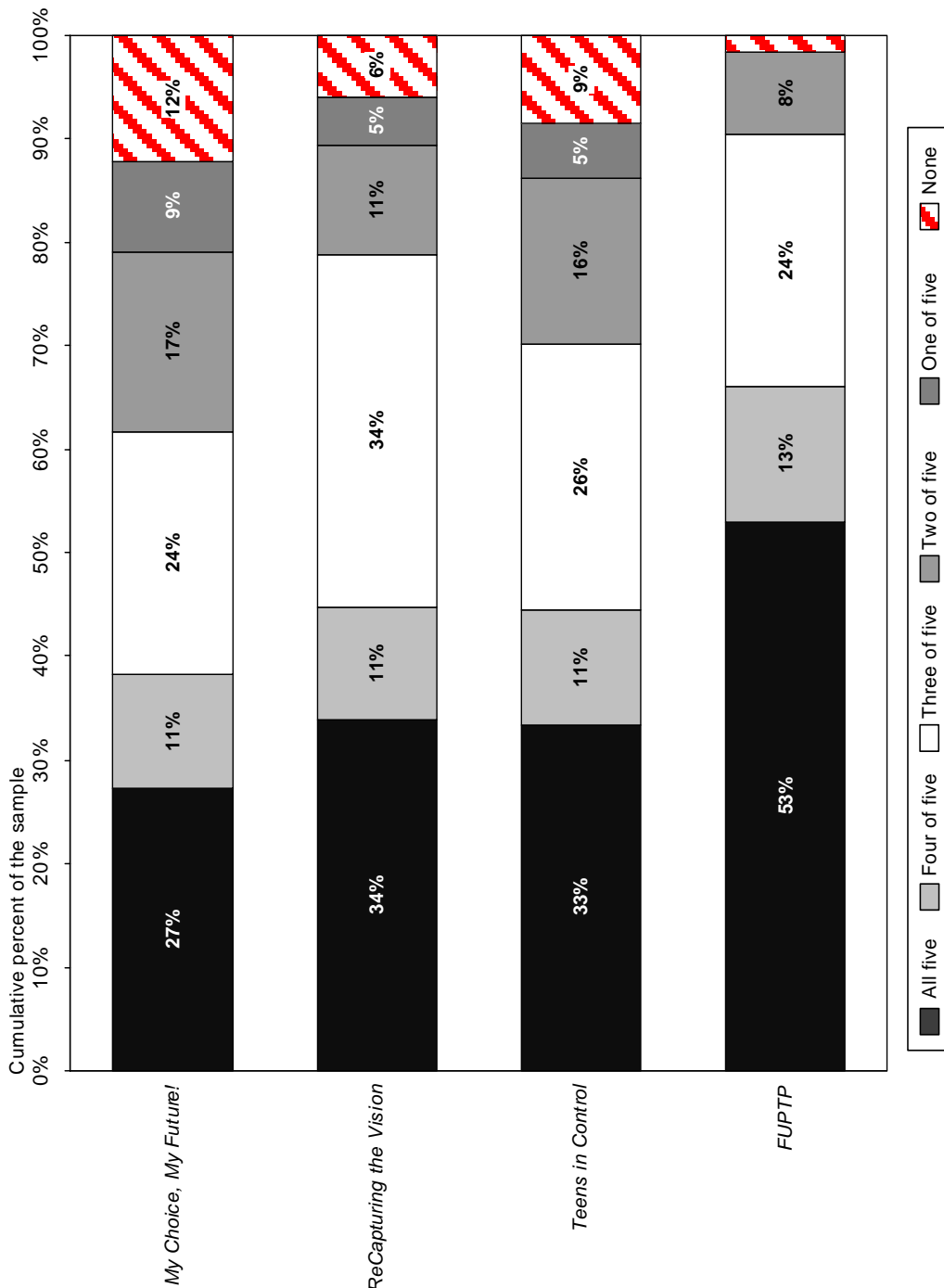
Figure A.6. Percent Distribution of the Control Group by Views on Abstinence, Teen Sex, and Marriage, One Year After Enrollment in the Study Sample



Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

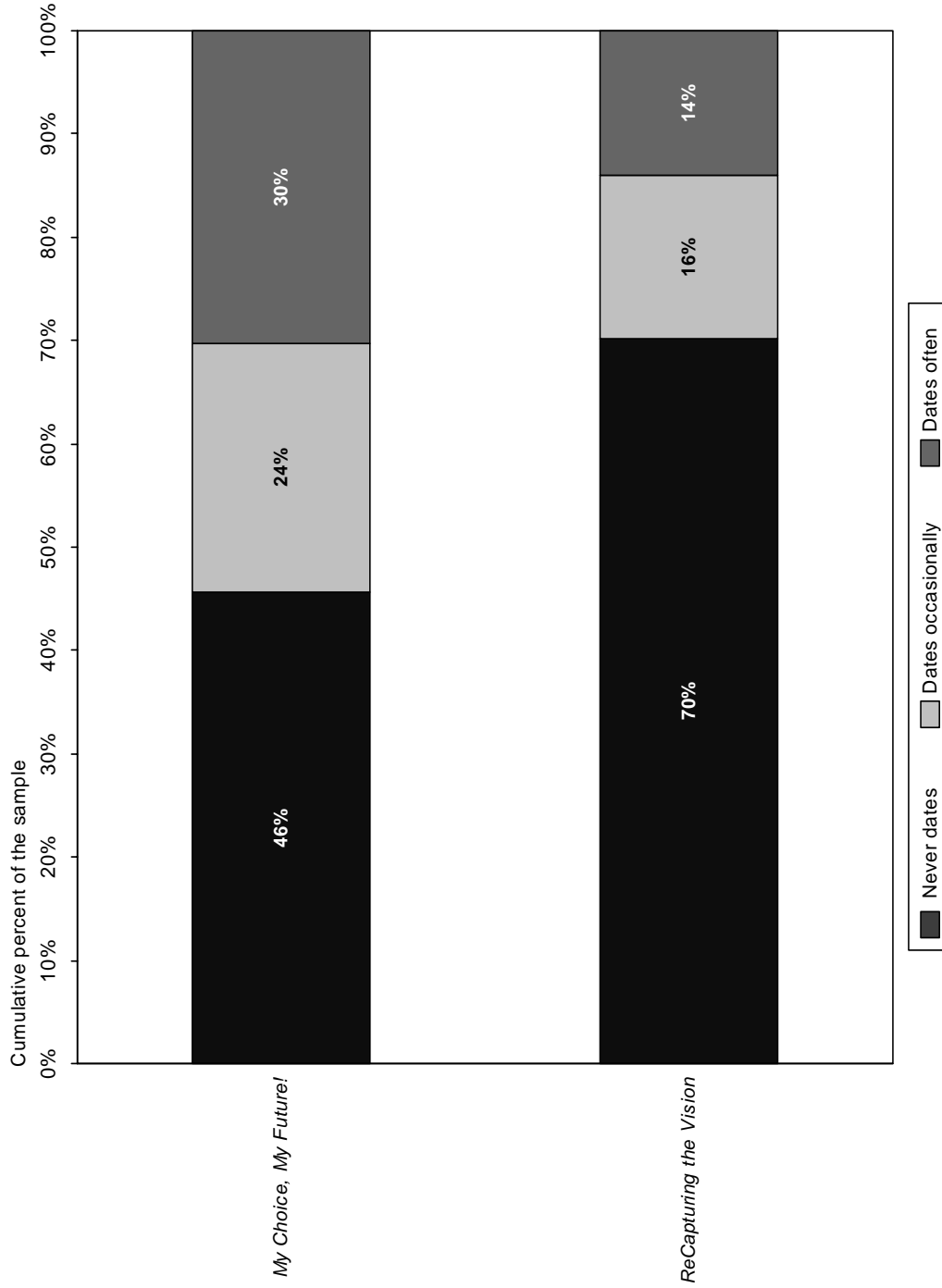
Figure A.7. Percent Distribution of the Control Group by the Number of Their Five Closest Friends Who Have Views Supportive of Abstinence, as Reported One Year After Enrollment in the Study Sample



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

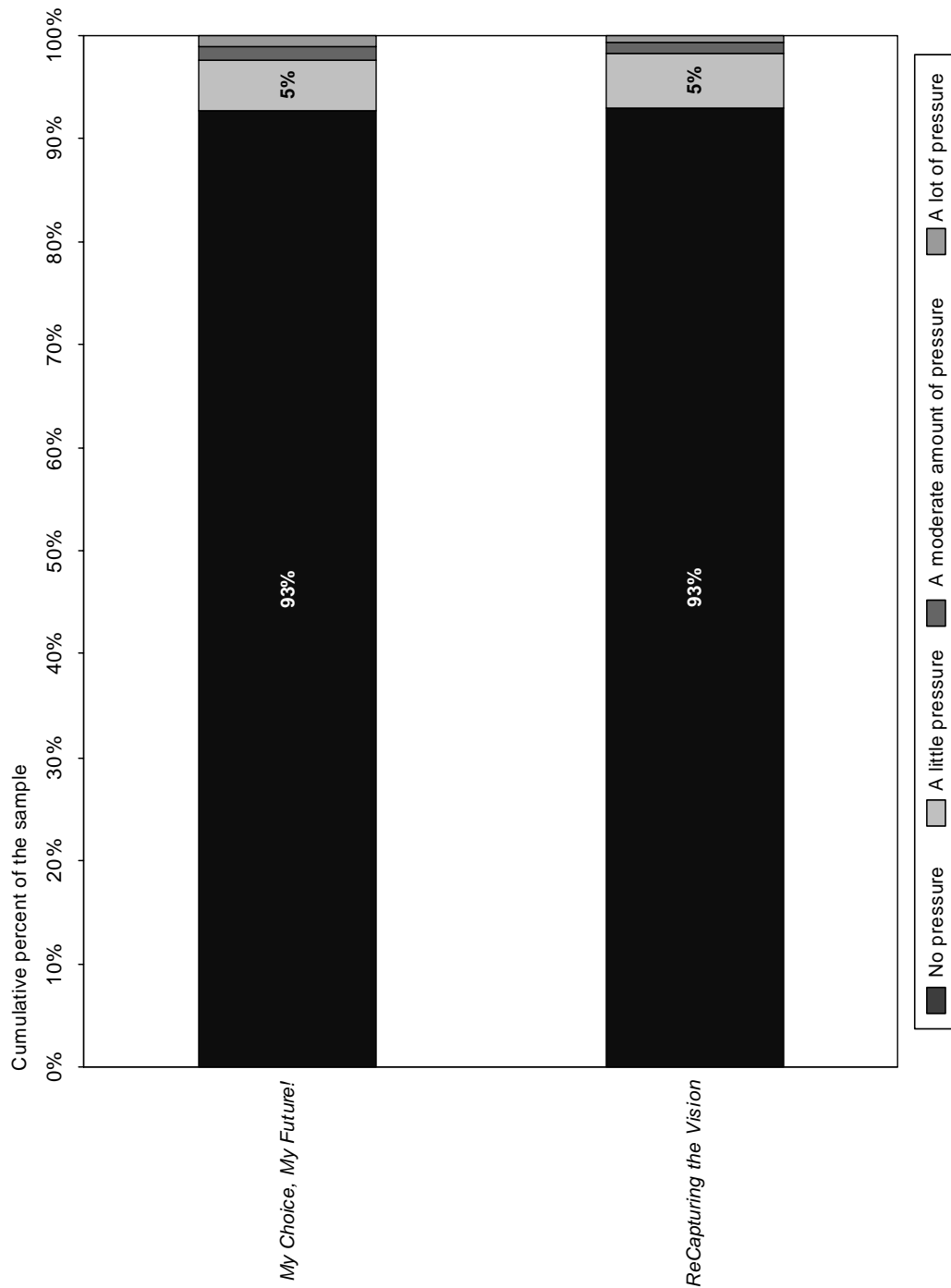
Figure A.8. Percent Distribution of the Control Group by Their Frequency of Dating, One Year After Enrollment in the Study Sample



Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

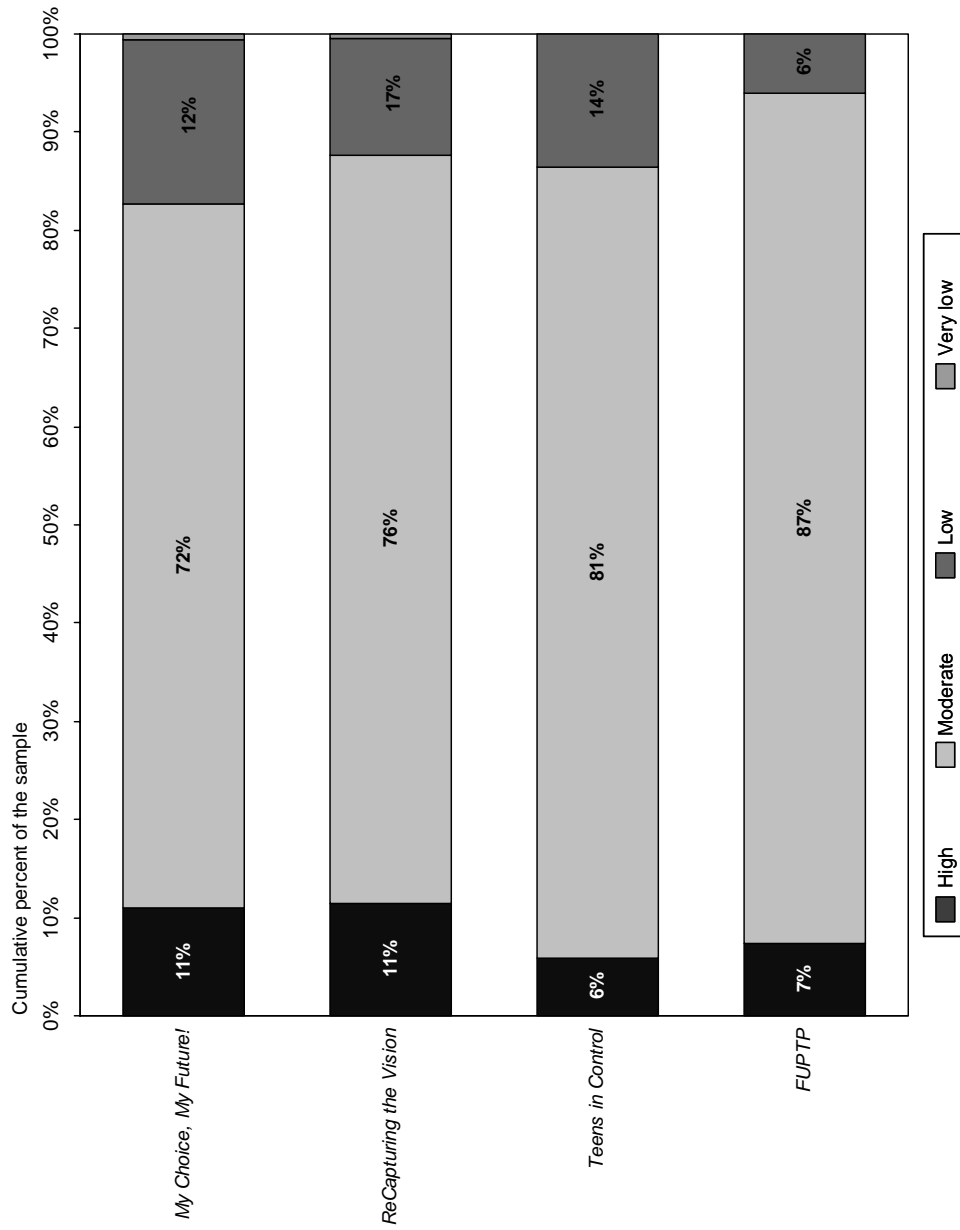
Figure A.9. Percent Distribution of the Control Group by Reported Level of Peer Pressure to Engage in Sex, One Year After Enrollment in the Study Sample



Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

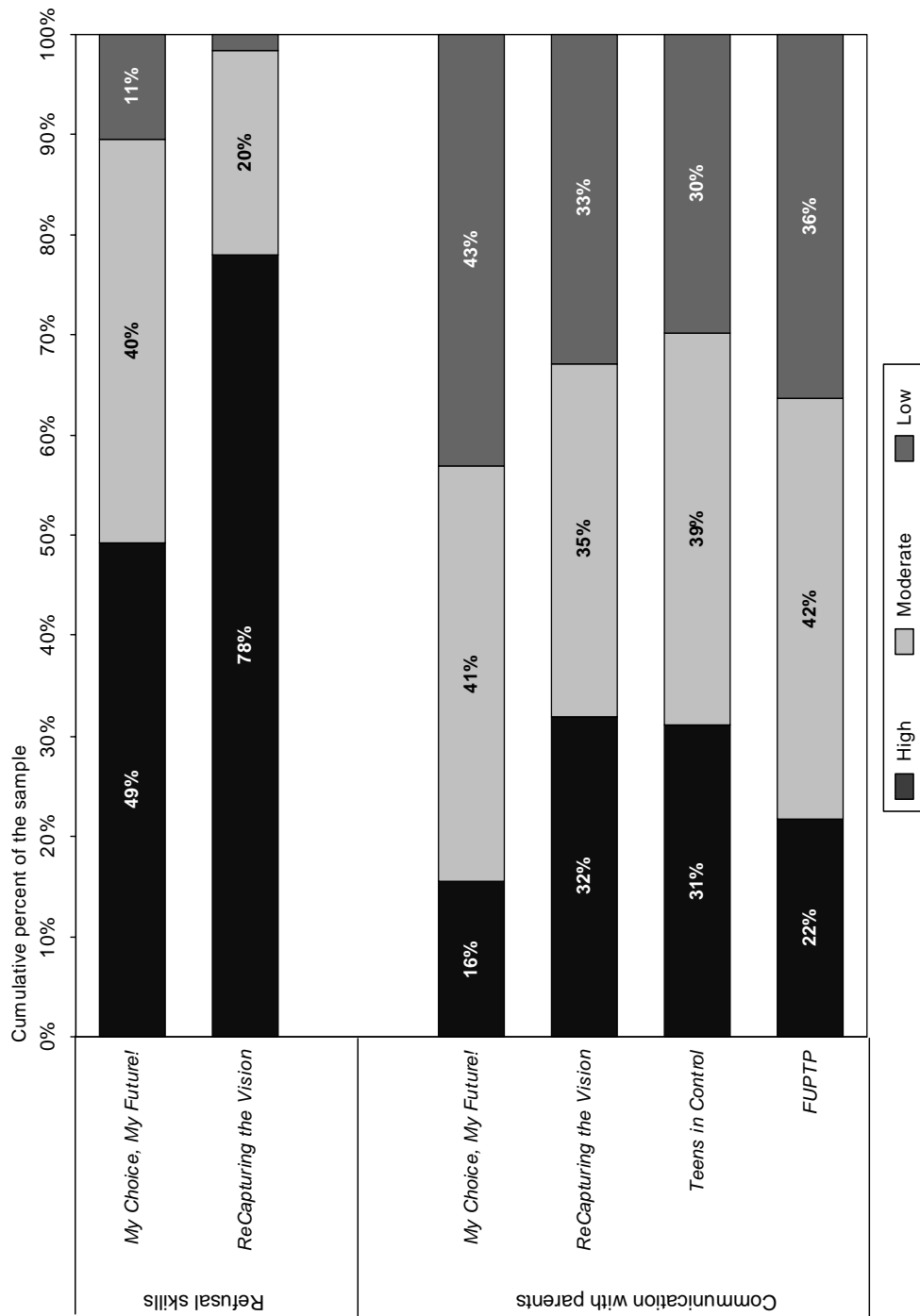
Figure A.10. Percent Distribution of Control Group by Reported Self-Efficacy, -Esteem, and -Control, One Year After Enrollment in the Study Sample



Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

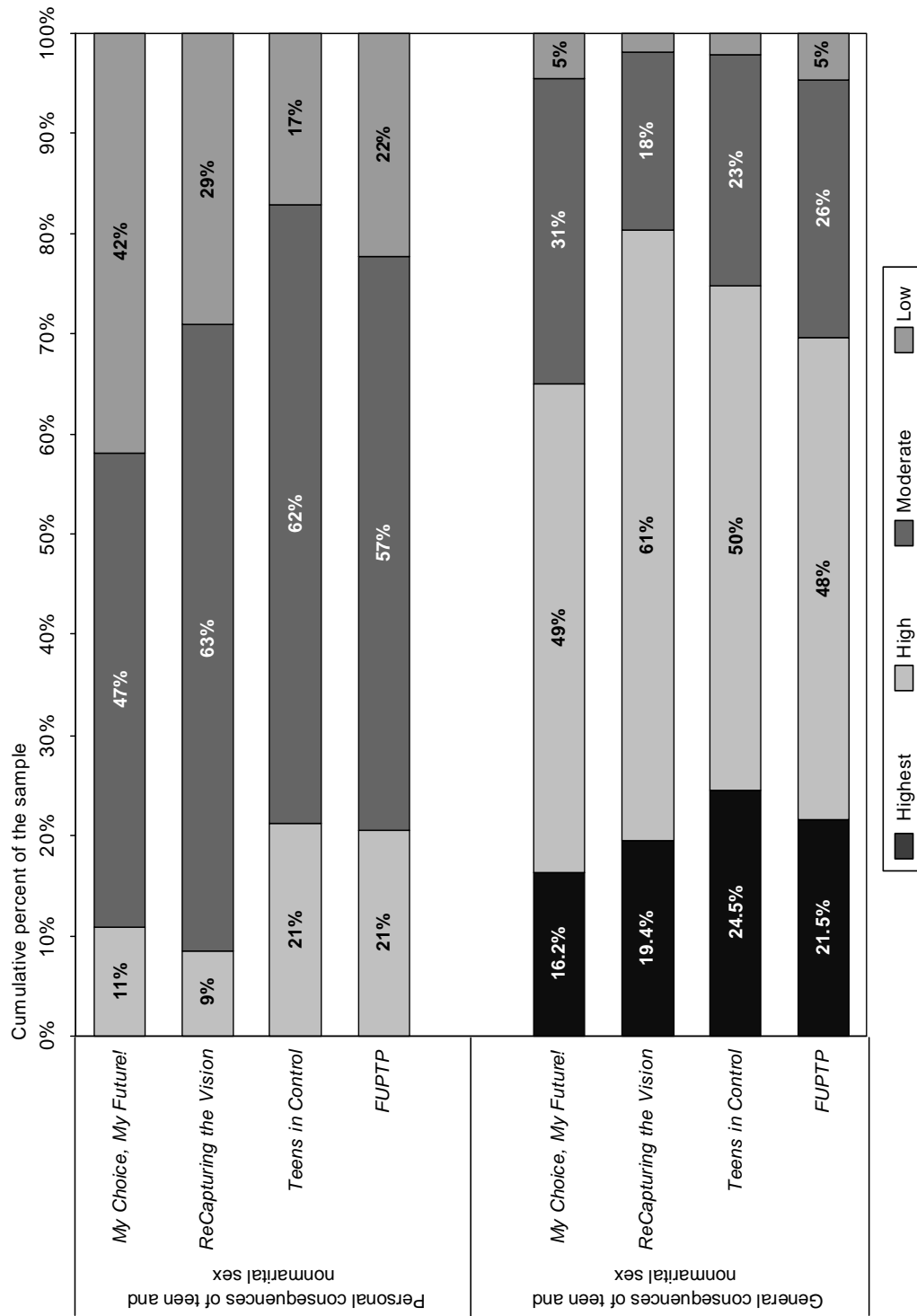
Figure A.11. Percent Distribution of the Control Group by Reported Refusal Skills and Level of Communication with Their Parents, One Year After Enrollment in the Study Sample



Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

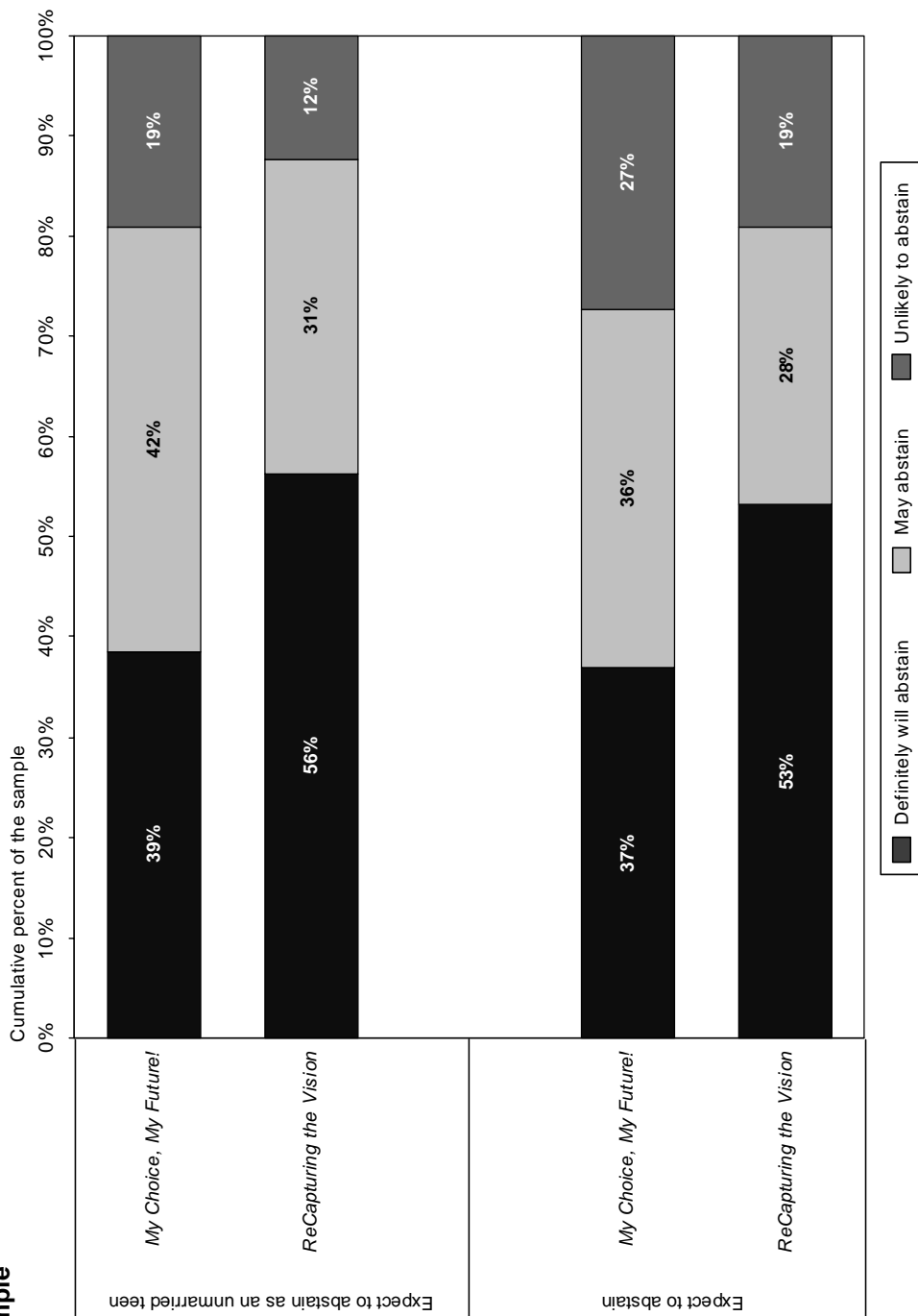
Figure A.12. Percent Distribution of the Control Group by Perceived Consequences of Teen and Nonmarital Sex, One Year After Enrollment in the Study Sample



Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

Figure A.13. Percent Distribution of the Control Group by Expectations to Abstain from Sex, One Year After Enrollment in the Study Sample



Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

Table A.1. Ranges, Means, and Standard Deviations of Control (Baseline) Variables for the Analysis

Variable Descriptor	Range	Means		P-value (Program-Control)	Standard Deviation
		Program Group	Control Group		
Child Demographics					
Enrollment cohort: 1999	[0,1]	0.35	0.33	0.54	--
Enrollment cohort: 2000	[0,1]	0.34	0.33	0.87	--
Gender: Girl	[0,1]	0.52	0.51	0.83	--
Age < 10	[0,1]	0.00	0.00	--	--
Age 10	[0,1]	0.00	0.00	--	--
Age 12	[0,1]	0.02	0.02	0.82	--
Age 13	[0,1]	0.68	0.68	0.97	--
Age 14	[0,1]	0.26	0.27	0.81	--
Age 15	[0,1]	0.02	0.03	0.43	--
Age >15	[0,1]	0.00	0.00	--	--
Age: Don't know	[0,1]	0.02	0.00	0.06	--
Race/ethnicity: White	[0,1]	0.82	0.85	0.42	--
Race/ethnicity: Hispanic	[0,1]	0.03	0.04	0.46	--
Race/ethnicity: Other	[0,1]	0.05	0.01	0.01	--
Household Demographics					
Household structure: Biological/Stepparent	[0,1]	0.12	0.15	0.36	--
Household structure: Single biological parent	[0,1]	0.23	0.20	0.39	--
Household structure: Other	[0,1]	0.03	0.03	0.74	--
Presence of mother figure	[0,1]	0.98	0.98	0.82	--
Presence of mother figure: Don't know	[0,1]	0.02	0.01	0.36	--
Presence of father figure	[0,1]	0.94	0.95	0.61	--
Presence of father figure: Don't know	[0,1]	0.02	0.01	0.58	--
Parents married	[0,1]	0.63	0.69	0.13	--
Parents married: Don't know	[0,1]	0.04	0.01	0.09	--
Mother employed	[0,1]	0.84	0.85	0.91	--
Cultural Influences					
Religiosity: Low	[0,1]	0.18	0.19	0.86	--
Religiosity: High	[0,1]	0.21	0.20	0.77	--
TV Viewing: Low	[0,1]	0.36	0.36	0.99	--
TV Viewing: High	[0,1]	0.11	0.12	0.84	--
Major Life Events					
Unmarried sister got pregnant	[0,1]	0.01	0.02	0.76	--
Sibling dropped out of school	[0,1]	0.01	0.01	0.76	--
Other major family event	[0-1]	0.72	0.72	0.85	0.11
School Influences					
Perceptions of school	[0-1]	0.73	0.74	0.78	0.24
Combined grade in math and reading: Low	[0,1]	0.10	0.10	0.94	--
Combined grade in math and reading: High	[0,1]	0.51	0.52	0.90	--
Combined grade in math and reading: Don't know	[0,1]	0.02	0.01	0.48	--

Table A.1 (continued)

My Choice, My Future!, Powhatan, VA					
Variable Descriptor	Range	Means		P-value (Program-Control)	Standard Deviation
		Program Group	Control Group		
Number of after-school activities	[0-9]	1.50	1.48	0.90	1.36
Peer Influences					
Peer risk behavior: Medium	[0,1]	0.47	0.46	0.86	--
Peer risk behavior: High	[0,1]	0.22	0.20	0.53	--
Peer pressure to have sex: Medium	[0,1]	0.61	0.59	0.57	--
Peer pressure to have sex: High	[0,1]	0.09	0.11	0.54	--
Health and Sex Education					
Received sex education	[0-1]	0.66	0.62	0.14	0.29
Knowledge of STDs	[0-11]	4.61	4.46	0.50	2.46
Familial Influences					
Relationship with mother	[0-3]	2.38	2.41	0.57	0.53
Relationship with father	[0-3]	2.20	2.27	0.27	0.69
Activities with mother	[0-8]	4.17	4.21	0.82	1.80
Activities with father	[0-8]	2.93	3.14	0.21	1.83
Family rules on dating: None	[0,1]	0.29	0.25	0.36	--
Family rules on dating: Strict	[0,1]	0.22	0.17	0.18	--
Other family rules	[0-2]	1.06	1.12	0.13	0.39
Argue with parents about rules	[0,1]	0.47	0.54	0.15	--
After-school supervision: No one	[0,1]	0.37	0.36	0.92	--
After-school supervision: Older sibling	[0,1]	0.09	0.04	0.03	--
Parents' view on supervision	[0,1,2]	0.82	0.79	0.75	0.75
Communication with parents	[0-1]	0.68	0.64	0.34	0.37
Comfortable talking to parents about sex	[0,1]	0.38	0.39	0.90	--
Norms, Values, and Intentions					
Consequences of having sex: Low	[0,1]	0.40	0.37	0.57	--
Consequences of having sex: High	[0,1]	0.10	0.12	0.38	--
Own values toward abstinence	[1-4]	3.06	3.13	0.30	0.68
Normative values toward abstinence	[1-4]	2.95	3.04	0.16	0.65
Locus of control, Self-control	[0-3]	1.78	1.77	0.82	0.50
Ability to resist pressure for sex	[0-2]	1.31	1.32	0.94	0.61
Chance will have sex next year	[0,1,2]	0.52	0.44	0.19	0.65
Chance will have sex before end of high school	[0,1,2]	0.79	0.74	0.45	0.73
Risk-Related Behaviors					
Smoked cigarettes	[0,1]	0.17	0.14	0.53	--
Marijuana use	[0,1]	0.15	0.10	0.11	--
Gone on date alone	[0,1]	0.45	0.39	0.19	--
Alcohol use: Never	[0,1]	0.46	0.55	0.05	--
Alcohol use: Few times ever	[0,1]	0.42	0.35	0.13	--
Alcohol use: More than once a month	[0,1]	0.13	0.10	0.43	--
Involved in petting	[0,1]	0.45	0.40	0.29	--
Had sex	[0,1]	0.15	0.13	0.53	--

Table A.1 (continued)

ReCapturing the Vision, Miami, FL					
Variable Descriptor	Range	Means		P-value (Program-Control)	Standard Deviation
		Program Group	Control Group		
Child Demographics					
Enrollment cohort: 1999	[0,1]	0.39	0.38	0.81	--
Enrollment cohort: 2000	[0,1]	0.33	0.34	0.76	--
Gender: Girl	[0,1]	1.00	1.00	--	--
Age < 10	[0,1]	0.00	0.00	--	--
Age 10	[0,1]	0.00	0.00	--	--
Age 12	[0,1]	0.36	0.37	0.87	--
Age 13	[0,1]	0.43	0.37	0.13	--
Age 14	[0,1]	0.12	0.16	0.21	--
Age 15	[0,1]	0.01	0.01	1.00	--
Age >15	[0,1]	0.00	0.00	0.37	--
Age: Don't know	[0,1]	0.07	0.09	0.31	--
Race/ethnicity: White	[0,1]	0.02	0.04	0.32	--
Race/ethnicity: Hispanic	[0,1]	0.22	0.23	0.70	--
Race/ethnicity: Other	[0,1]	0.10	0.12	0.40	--
Household Demographics					
Household structure: Biological/Stepparent	[0,1]	0.08	0.10	0.44	--
Household structure: Single biological parent	[0,1]	0.46	0.45	0.93	--
Household structure: Other	[0,1]	0.13	0.18	0.14	--
Presence of mother figure	[0,1]	0.94	0.93	0.77	--
Presence of mother figure: Don't know	[0,1]	0.06	0.07	0.75	--
Presence of father figure	[0,1]	0.85	0.84	0.79	--
Presence of father figure: Don't know	[0,1]	0.07	0.08	0.57	--
Parents married	[0,1]	0.33	0.35	0.60	--
Parents married: Don't know	[0,1]	0.17	0.15	0.69	--
Mother employed	[0,1]	0.68	0.70	0.74	--
Cultural Influences					
Religiosity: Low	[0,1]	0.07	0.10	0.24	--
Religiosity: High	[0,1]	0.27	0.30	0.61	--
TV Viewing: Low	[0,1]	0.18	0.19	0.77	--
TV Viewing: High	[0,1]	0.47	0.49	0.69	--
Major Life Events					
Unmarried sister got pregnant	[0,1]	0.13	0.17	0.19	--
Sibling dropped out of school	[0,1]	0.06	0.08	0.22	--
Other major family event	[0-1]	0.68	0.69	0.83	0.14
School Influences					
Perceptions of school	[0-1]	0.71	0.68	0.11	0.23
Combined grade in math and reading: Low	[0,1]	0.09	0.06	0.32	--
Combined grade in math and reading: High	[0,1]	0.31	0.31	0.92	--
Combined grade in math and reading: Don't know	[0,1]	0.15	0.14	0.74	--

Table A.1 (continued)

ReCapturing the Vision, Miami, FL					
Variable Descriptor	Range	Means		P-value (Program- Control)	Standard Deviation
		Program Group	Control Group		
Number of after-school activities	[0-9]	1.60	1.81	0.12	1.51
Peer Influences					
Peer risk behavior: Medium	[0,1]	0.32	0.25	0.09	--
Peer risk behavior: High	[0,1]	0.07	0.10	0.22	--
Peer pressure to have sex: Medium	[0,1]	0.50	0.39	0.01	--
Peer pressure to have sex: High	[0,1]	0.04	0.04	0.93	--
Health and Sex Education					
Received sex education	[0-1]	0.83	0.81	0.37	0.22
Knowledge of STDs	[0-11]	4.98	5.06	0.72	2.56
Familial Influences					
Relationship with mother	[0-3]	2.23	2.20	0.62	0.72
Relationship with father	[0-3]	1.91	1.93	0.83	0.92
Activities with mother	[0-8]	4.21	4.23	0.93	2.12
Activities with father	[0-8]	2.53	2.46	0.68	2.15
Family rules on dating: None	[0,1]	0.10	0.15	0.07	--
Family rules on dating: Strict	[0,1]	0.51	0.49	0.52	--
Other family rules	[0-2]	1.20	1.20	0.86	0.40
Argue with parents about rules	[0,1]	0.53	0.56	0.38	--
After-school supervision: No one	[0,1]	0.13	0.09	0.16	--
After-school supervision: Older sibling	[0,1]	0.16	0.18	0.49	--
Parents' view on supervision	[0,1,2]	0.29	0.34	0.34	0.58
Communication with parents	[0-1]	0.80	0.79	0.72	0.30
Comfortable talking to parents about sex	[0,1]	0.40	0.40	0.98	--
Norms, Values, and Intentions					
Consequences of having sex: Low	[0,1]	0.37	0.43	0.14	--
Consequences of having sex: High	[0,1]	0.11	0.12	0.66	--
Own values toward abstinence	[1-4]	3.22	3.24	0.70	0.68
Normative values toward abstinence	[1-4]	3.25	3.25	0.97	0.61
Locus of control, Self-control	[0-3]	1.86	1.79	0.13	0.48
Ability to resist pressure for sex	[0-2]	1.62	1.58	0.29	0.49
Chance will have sex next year	[0,1,2]	0.25	0.31	0.13	0.52
Chance will have sex before end of high school	[0,1,2]	0.47	0.54	0.19	0.60
Risk-Related Behaviors					
Smoked cigarettes	[0,1]	0.04	0.05	0.54	--
Marijuana use	[0,1]	0.04	0.06	0.27	--
Gone on date alone	[0,1]	0.21	0.26	0.21	--
Alcohol use: Never	[0,1]	0.74	0.68	0.09	--
Alcohol use: Few times ever	[0,1]	0.20	0.29	0.01	--
Alcohol use: More than once a month	[0,1]	0.06	0.04	0.17	--
Involved in petting	[0,1]	0.28	0.28	0.93	--
Had sex	[0,1]	0.11	0.08	0.26	--

Table A.1 (continued)

Teens in Control, Clarksdale, MS					
Variable Descriptor	Range	Means		P-value (Program- Control)	Standard Deviation
		Program Group	Control Group		
Child Demographics					
Enrollment cohort: 1999	[0,1]	0.27	0.27	0.90	--
Enrollment cohort: 2000	[0,1]	0.36	0.38	0.53	--
Gender: Girl	[0,1]	0.51	0.50	0.86	--
Age < 10	[0,1]	0.00	0.00	0.97	--
Age 10	[0,1]	0.46	0.48	0.61	--
Age 12	[0,1]	0.12	0.13	0.93	--
Age 13	[0,1]	0.02	0.02	0.53	--
Age 14	[0,1]	0.00	0.01	0.23	--
Age 15	[0,1]	0.00	0.00	--	--
Age >15	[0,1]	0.00	0.00	--	--
Age: Don't know	[0,1]	0.02	0.01	0.40	--
Race/ethnicity: White	[0,1]	0.00	0.00	0.19	--
Race/ethnicity: Hispanic	[0,1]	0.08	0.08	0.79	--
Race/ethnicity: Other	[0,1]	0.05	0.06	--	--
Household Demographics					
Household structure: Biological/Stepparent	[0,1]	0.08	0.12	0.09	--
Household structure: Single biological parent	[0,1]	0.49	0.45	0.30	--
Household structure: Other	[0,1]	0.07	0.07	0.84	--
Presence of mother figure	[0,1]	0.98	0.98	0.70	--
Presence of mother figure: Don't know	[0,1]	0.02	0.01	0.66	--
Presence of father figure	[0,1]	0.92	0.95	0.17	--
Presence of father figure: Don't know	[0,1]	0.03	0.02	0.50	--
Parents married	[0,1]	0.29	0.34	0.10	--
Parents married: Don't know	[0,1]	0.13	0.12	0.66	--
Mother employed	[0,1]	0.75	0.75	0.96	--
Cultural Influences					
Religiosity: Low	[0,1]	0.04	0.04	0.83	--
Religiosity: High	[0,1]	0.51	0.45	0.08	--
TV Viewing: Low	[0,1]	0.23	0.24	0.64	--
TV Viewing: High	[0,1]	0.48	0.45	0.27	--
Major Life Events					
Unmarried sister got pregnant	[0,1]	0.14	0.16	0.65	--
Sibling dropped out of school	[0,1]	0.11	0.12	0.83	--
Other major family event	[0-1]	0.65	0.65	0.98	0.20
School Influences					
Perceptions of school	[0-1]	0.73	0.75	0.27	0.21
Combined grade in math and reading: Low	[0,1]	0.08	0.08	0.84	--
Combined grade in math and reading: High	[0,1]	0.51	0.53	0.74	--
Combined grade in math and reading: Don't know	[0,1]	0.03	0.03	0.70	--

Table A.1 (continued)

Teens in Control, Clarksdale, MS					
Variable Descriptor	Range	Means		P-value (Program- Control)	Standard Deviation
		Program Group	Control Group		
Number of after-school activities	[0-9]	3.21	3.13	0.60	1.45
Peer Influences					
Peer risk behavior: Medium	[0,1]	0.25	0.31	0.06	--
Peer risk behavior: High	[0,1]	0.08	0.05	0.22	--
Peer pressure to have sex: Medium	[0,1]	0.29	0.29	0.94	--
Peer pressure to have sex: High	[0,1]	0.20	0.22	0.49	--
Health and Sex Education					
Received sex education	[0-1]	0.53	0.49	0.07	0.30
Knowledge of STDs	[0-11]	3.42	2.96	0.01	2.57
Familial Influences					
Relationship with mother	[0-3]	2.38	2.41	0.36	0.49
Relationship with father	[0-3]	2.13	2.24	0.04	0.72
Activities with mother	[0-8]	4.51	4.51	0.98	1.82
Activities with father	[0-8]	3.38	3.54	0.30	2.23
Family rules on dating: None	[0,1]	0.23	0.24	0.64	--
Family rules on dating: Strict	[0,1]	0.49	0.46	0.40	--
Other family rules	[0-2]	1.25	1.22	0.38	0.44
Argue with parents about rules	[0,1]	0.34	0.32	0.55	--
After-school supervision: No one	[0,1]	0.11	0.14	0.21	--
After-school supervision: Older sibling	[0,1]	0.09	0.11	0.48	--
Parents' view on supervision	[0,1,2]	0.47	0.45	0.80	0.71
Communication with parents	[0-1]	0.57	0.57	0.80	0.35
Comfortable talking to parents about sex	[0,1]	0.30	0.27	0.31	--
Norms, Values, and Intentions					
Consequences of having sex: Low	[0,1]	0.21	0.22	0.79	--
Consequences of having sex: High	[0,1]	0.29	0.28	0.72	--
Own values toward abstinence	[1-4]	2.89	2.86	0.58	0.77
Normative values toward abstinence	[1-4]	2.85	2.85	0.93	0.79
Locus of control, Self-control	[0-3]	1.63	1.65	0.62	0.51
Ability to resist pressure for sex	[0-2]	--	--	--	--
Chance will have sex next year	[0,1,2]	--	--	--	--
Chance will have sex before end of high school	[0,1,2]	--	--	--	--
Risk-Related Behaviors					
Smoked cigarettes	[0,1]	0.13	0.09	0.08	--
Marijuana use	[0,1]	0.04	0.03	0.32	--
Gone on date alone	[0,1]	0.23	0.26	0.32	--
Alcohol use: Never	[0,1]	0.81	0.83	0.58	--
Alcohol use: Few times ever	[0,1]	0.14	0.13	0.46	--
Alcohol use: More than once a month	[0,1]	0.04	0.05	0.84	--
Involved in petting	[0,1]	--	--	--	--
Had sex	[0,1]	--	--	--	--

Table A.1 (continued)

FUPTP, Milwaukee, WI					
Variable Descriptor	Range	Means		P-value (Program- Control)	Standard Deviation
		Program Group	Control Group		
Child Demographics					
Enrollment cohort: 1999	[0,1]	0.31	0.31	0.97	--
Enrollment cohort: 2000	[0,1]	0.42	0.42	0.91	--
Gender: Girl	[0,1]	0.62	0.62	0.90	--
Age < 10	[0,1]	0.30	0.33	0.48	--
Age 10	[0,1]	0.30	0.28	0.75	--
Age 12	[0,1]	0.09	0.08	0.57	--
Age 13	[0,1]	0.05	0.03	0.31	--
Age 14	[0,1]	0.01	0.03	0.23	--
Age 15	[0,1]	0.01	0.00	0.70	--
Age >15	[0,1]	0.00	0.00	--	--
Age: Don't know	[0,1]	0.05	0.04	0.50	--
Race/ethnicity: White	[0,1]	0.02	0.03	0.63	--
Race/ethnicity: Hispanic	[0,1]	0.07	0.08	0.50	--
Race/ethnicity: Other	[0,1]	0.14	0.15	--	--
Household Demographics					
Household structure: Biological/Stepparent	[0,1]	0.11	0.09	0.52	--
Household structure: Single biological parent	[0,1]	0.53	0.52	0.84	--
Household structure: Other	[0,1]	0.13	0.13	0.96	--
Presence of mother figure	[0,1]	0.97	0.95	0.42	--
Presence of mother figure: Don't know	[0,1]	0.02	0.05	0.23	--
Presence of father figure	[0,1]	0.82	0.82	0.98	--
Presence of father figure: Don't know	[0,1]	0.05	0.10	0.10	--
Parents married	[0,1]	0.30	0.27	0.49	--
Parents married: Don't know	[0,1]	0.20	0.22	0.63	--
Mother employed	[0,1]	0.75	0.73	0.63	--
Cultural Influences					
Religiosity: Low	[0,1]	0.07	0.04	0.21	--
Religiosity: High	[0,1]	0.39	0.38	0.83	--
TV Viewing: Low	[0,1]	0.21	0.17	0.43	--
TV Viewing: High	[0,1]	0.49	0.47	0.63	--
Major Life Events					
Unmarried sister got pregnant	[0,1]	0.15	0.17	0.73	--
Sibling dropped out of school	[0,1]	0.10	0.10	0.87	--
Other major family event	[0-1]	0.63	0.64	0.69	0.19
School Influences					
Perceptions of school	[0-1]	0.77	0.77	0.89	0.20
Combined grade in math and reading: Low	[0,1]	0.05	0.03	0.27	--
Combined grade in math and reading: High	[0,1]	0.58	0.62	0.40	--
Combined grade in math and reading: Don't know	[0,1]	0.16	0.08	0.03	--

Table A.1 (continued)

FUPTP, Milwaukee, WI					
Variable Descriptor	Range	Means		P-value (Program- Control)	Standard Deviation
		Program Group	Control Group		
Number of after-school activities	[0-9]	2.99	2.90	0.69	2.81
Peer Influences					
Peer risk behavior: Medium	[0,1]	0.17	0.16	0.76	--
Peer risk behavior: High	[0,1]	0.04	0.03	0.49	--
Peer pressure to have sex: Medium	[0,1]	0.31	0.40	0.07	--
Peer pressure to have sex: High	[0,1]	0.08	0.07	0.89	--
Health and Sex Education					
Received sex education	[0-1]	0.60	0.54	0.13	0.32
Knowledge of STDs	[0-11]	3.34	2.89	0.14	2.81
Familial Influences					
Relationship with mother	[0-3]	2.38	2.42	0.52	0.61
Relationship with father	[0-3]	1.96	1.98	0.86	1.01
Activities with mother	[0-8]	4.61	4.83	0.30	1.97
Activities with father	[0-8]	3.48	3.13	0.21	2.55
Family rules on dating: None	[0,1]	0.20	0.19	0.94	--
Family rules on dating: Strict	[0,1]	0.56	0.53	0.57	--
Other family rules	[0-2]	1.28	1.28	0.92	0.42
Argue with parents about rules	[0,1]	0.46	0.39	0.24	--
After-school supervision: No one	[0,1]	0.06	0.16	0.00	--
After-school supervision: Older sibling	[0,1]	0.11	0.09	0.58	--
Parents' view on supervision	[0,1,2]	0.33	0.44	0.12	0.64
Communication with parents	[0-1]	0.61	0.56	0.20	0.34
Comfortable talking to parents about sex	[0,1]	0.43	0.38	0.33	--
Norms, Values, and Intentions					
Consequences of having sex: Low	[0,1]	0.32	0.37	0.28	--
Consequences of having sex: High	[0,1]	0.28	0.23	0.29	--
Own values toward abstinence	[1-4]	2.98	2.90	0.38	0.86
Normative values toward abstinence	[1-4]	3.09	3.02	0.38	0.76
Locus of control, Self-control	[0-3]	1.70	1.73	0.66	0.52
Ability to resist pressure for sex	[0-2]	--	--	--	--
Chance will have sex next year	[0,1,2]	--	--	--	--
Chance will have sex before end of high school	[0,1,2]	--	--	--	--
Risk-Related Behaviors					
Smoked cigarettes	[0,1]	0.07	0.03	0.15	--
Marijuana use	[0,1]	0.03	0.05	0.27	--
Gone on date alone	[0,1]	0.17	0.14	0.49	--
Alcohol use: Never	[0,1]	0.87	0.92	0.09	--
Alcohol use: Few times ever	[0,1]	0.09	0.06	0.28	--
Alcohol use: More than once a month	[0,1]	0.04	0.01	0.17	--
Involved in petting	[0,1]	--	--	--	--
Had sex	[0,1]	--	--	--	--

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

Table A.2. Characteristics of Health, Family Life, and Sex Education Service Measures

Descriptor of Measure	Range	<i>My Choice, My Future!</i>		<i>ReCapturing the Vision</i>		<i>Teens in Control</i>		<i>FUPTP</i>					
		Powhatan, VA	Mean	Standard Deviation	Miami, FL	Mean	Standard Deviation	Clarksdale, MS	Mean	Standard Deviation	Milwaukee, WI	Mean	Standard Deviation
Participation in Class or Program on													
1. Physical development	0/1	0.74	0.44	0.89	0.31	0.74	0.44	0.69	0.46				
2. Risk awareness	0/1	0.84	0.37	0.93	0.25	0.91	0.28	0.80	0.40				
3. Marriage and relationships	0/1	0.67	0.47	0.75	0.43	0.73	0.45	0.67	0.47				
4. Interpersonal skills	0/1	0.80	0.40	0.92	0.27	0.91	0.28	0.82	0.39				
Parent Participation in Classes or Meetings													
5. Parent Involvement	0/1	0.15	0.36	0.25	0.43	0.28	0.45	0.34	0.46				
Participation in Class Perceived by the Youth as Helpful with													
6. Knowledge of pregnancy and STD risks	0-1	0.54	0.47	0.82	0.34	0.71	0.40	0.60	0.45				
7. Peer relations	0-1	0.16	0.37	0.48	0.50	0.52	0.50	0.43	0.49				
8. Risk-avoidance skills	0-1	0.55	0.41	0.76	0.32	0.69	0.31	0.61	0.39				
Pledging Abstinence													
9. Pledged to abstain	0/1	0.12	0.33	0.42	0.49	0.12	0.32	0.28	0.45				
Sample Size		486-511			515-539		785-807		413-429				

Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

Table A.3. Characteristics of Intermediate Outcome Measures Related to Teen Sexual Activity and Other Risk-Taking Behavior Used in the Title V, Section 510 Abstinence Education Evaluation

Descriptor of Measure	My Choice, My Future!		ReCapturing the Vision		Teens in Control		FUJTP		Alpha Coefficient	
	Range	Mean	Standard Deviation	Powhatan, VA		Clarksdale, MS		Milwaukee, WI		
				Mean	Standard Deviation	Mean	Standard Deviation	Mean		Standard Deviation
Views on Abstinence, Teen Sex, and Marriage										
1. Views supportive of abstinence	0-3	1.61	0.78	1.98	0.62	1.82	0.69	1.87	0.63	0.56
2. Views unsupportive of teen sex	0-3	2.10	0.52	2.32	0.48	2.19	0.58	2.16	0.61	0.68
3. Views supportive of marriage	0-3	2.46	0.58	2.39	0.58	2.18	0.65	2.16	0.64	0.19
Peer Influences and Relations										
4. Friends' support for abstinence	0-5	2.96	1.55	3.56	1.30	3.34	1.53	4.01	1.14	0.68
5. Dating	0-1	0.42	0.43	0.19	0.34	n.a.	n.a.	n.a.	n.a.	^a
6. Peer pressure to have sex	0-3	0.13	0.48	0.13	0.49	n.a.	n.a.	n.a.	n.a.	^a
Self-Concept, Refusal Skills, and Communication with Parents										
7. Self-efficacy, -esteem, and -control	0-3	1.92	0.47	2.00	0.42	1.92	0.36	1.96	0.38	0.38
8. Refusal skills	0-2	1.34	0.60	1.72	0.37	n.a.	n.a.	n.a.	n.a.	n.a.
9. Communication with parents	0-2	0.73	0.64	1.00	0.72	1.00	0.71	0.92	0.70	0.72
Perceived Consequences of Teen and Nonmarital Sex										
10. General consequences	0-3	1.79	0.73	2.03	0.60	1.99	0.66	1.95	0.68	0.50
11. Personal consequences	0-2	0.88	0.61	1.01	0.53	1.18	0.53	1.12	0.57	0.60
Expectations to Abstain										
12. Expect to abstain	0-2	1.18	0.71	1.50	0.66	n.a.	n.a.	n.a.	n.a.	^a
13. Expect to abstain as an unmarried teen	0-2	1.05	0.78	1.41	0.75	n.a.	n.a.	n.a.	n.a.	^a
Sample Size		405-506		501-537		756-805		374-429		

Source: Wave 2 Survey of Teen Activities and Attitudes (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: Statistics based on weighted sample.

^aSingle item measure. Thus, there is no alpha coefficient.

n.a. = not available. This information was not asked of youth in these sites due to their young age.

Table A.4. Sample Sizes for Analysis of Particular Outcome Measures and Sample Subgroups

	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
Participation in Classes or Programs				
<u><i>Participation in Class or Program That Addresses</i></u>				
Physical development and reproduction	509	537	807	428
Risk awareness	511	538	808	429
Interpersonal skills	511	539	806	431
Marriage and relationships	510	538	808	432
<u><i>Parent Participation in Classes or Meetings</i></u>				
Parent involvement	339	371	490	255
<u><i>Participation in Class Perceived by the Youth as Helpful with</i></u>				
Knowledge of pregnancy and STD risks	493	516	786	400
Peer relations	480	519	793	410
Risk-avoidance skills	496	520	795	414
<u><i>Pledging Abstinence</i></u>				
Pledged to abstain	486	515	785	413
Mediators of Teen Sexual Activity and Other Risk-Taking Behaviors				
<u><i>Views on Abstinence, Teen Sex, and Marriage</i></u>				
Views supportive of abstinence	487	522	799	420
Views unsupportive of teen sex	494	536	794	412
Views supportive of marriage	494	518	756	374
<u><i>Peer Influences and Relations</i></u>				
Friends' support for abstinence	478	524	787	424
Dating	504	529	n.a.	n.a.
Peer pressure to have sex	490	528	n.a.	n.a.
<u><i>Self-Concept, Refusal Skills, and Communication with Parents</i></u>				
Self-efficacy, -esteem, and -control	500	536	798	420
Refusal skills	496	535		
Communication with parents	497	530	802	429
<u><i>Perceived Consequences of Teen and Nonmarital Sex</i></u>				
General consequences	480	515	795	408
Personal consequences	495	537	805	424
<u><i>Expectations to Abstain</i></u>				
Expect to abstain	405	501	n.a.	n.a.
Expect to abstain as an unmarried teen	405	501	n.a.	n.a.

Table A.4 (continued)

	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
1999 and 2000 Enrollment Cohorts				
<u>Participation in Class or Program That Addresses</u>				
Physical development	344	387	514	311
Risk awareness	347	388	515	312
Interpersonal skills	346	389	513	315
Marriage and relationships	345	388	515	315
<u>Views on Abstinence, Teen Sex, and Marriage</u>				
Views supportive of abstinence	324	374	510	306
Views unsupportive of teen sex	332	373	483	274
Views supportive of marriage	330	386	506	301
<u>Perceived Consequences of Teen and Nonmarital Sex</u>				
General consequences	318	366	508	293
Personal consequences	331	387	514	310
<u>Expectations to Abstain</u>				
Expect to abstain	261	354	n.a.	n.a.
Expect to abstain as an unmarried teen	261	354	n.a.	n.a.
2001 Enrollment Cohort				
<u>Participation in Class or Program That Addresses</u>				
Physical development	165	150	293	117
Risk awareness	164	150	293	117
Interpersonal skills	165	150	293	116
Marriage and relationships	165	150	293	117
<u>Views on Abstinence, Teen Sex, and Marriage</u>				
Views supportive of abstinence	163	148	289	114
Views unsupportive of teen sex	164	150	288	111
Views supportive of marriage	162	145	273	100
<u>Perceived Consequences of Teen and Nonmarital Sex</u>				
General consequences	162	149	287	115
Personal consequences	164	150	291	114
<u>Expectations to Abstain</u>				
Expect to abstain	144	147	n.a.	n.a.
Expect to abstain as an unmarried teen	144	147	n.a.	n.a.

Table A.4 (continued)

	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
Views More Supportive of Abstinence at Enrollment				
<u>Participation in Class or Program That Addresses</u>				
Physical development	252	285	306	184
Risk awareness	253	286	307	186
Interpersonal skills	253	285	305	185
Marriage and relationships	252	284	307	186
<u>Views on Abstinence, Teen Sex, and Marriage</u>				
Views supportive of abstinence	242	278	305	184
Views unsupportive of teen sex	245	283	303	182
Views supportive of marriage	245	273	290	169
<u>Perceived Consequences of Teen and Nonmarital Sex</u>				
General consequences	239	272	304	182
Personal consequences	248	281	306	184
<u>Expectations to Abstain</u>				
Expect to abstain	201	269	n.a.	n.a.
Expect to abstain as an unmarried teen	201	269	n.a.	n.a.
Less Supportive Views on Abstinence at Enrollment				
<u>Participation in Class or Program That Addresses</u>				
Physical development	257	252	501	244
Risk awareness	258	252	501	243
Interpersonal skills	258	254	501	246
Marriage and relationships	258	254	501	246
<u>Views on Abstinence, Teen Sex, and Marriage</u>				
Views supportive of abstinence	245	244	494	236
Views unsupportive of teen sex	249	253	491	230
Views supportive of marriage	249	245	466	205
<u>Perceived Consequences of Teen and Nonmarital Sex</u>				
General consequences	241	243	491	226
Personal consequences	247	256	499	240
<u>Expectations to Abstain</u>				
Expect to abstain	204	232	n.a.	n.a.
Expect to abstain as an unmarried teen	204	232	n.a.	n.a.

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510, Abstinence Education Program study sample.

n.a. = not available. This information was not asked of youth in these sites due to their young age.

Table A.5. R-Squares for Models Used to Estimate First-Year Program Impacts

	<i>My Choice, My Future! and ReCapturing the Vision</i>	<i>Teens in Control and FUPTP</i>
Service Use Outcomes		
<u>Participation in Class or Program on</u>		
development	0.150	0.099
Risk awareness	0.076	0.093
Interpersonal skills	0.137	0.066
Marriage and relationships	0.140	0.036
<u>Parent Participation in Classes or Meetings</u>		
Parent involvement	0.093	0.068
<u>Participation in Class Perceived by the Youth as Helpful with</u>		
Peer relations	0.170	0.043
Knowledge of pregnancy and STD risks	0.197	0.132
Risk-avoidance skills	0.131	0.100
<u>Pledging Abstinence</u>		
Pledged to abstain	0.259	0.077
Mediators of Teen Sexual Activity and Other Risk-Taking Behaviors		
<u>Views on Abstinence, Teen Sex, and Marriage</u>		
Views supportive of abstinence	0.462	0.161
Views unsupportive of teen sex	0.218	0.138
Views supportive of marriage	0.091	0.018
<u>Peer Influences and Relations</u>		
Friends' support for abstinence	0.407	0.293
Dating	0.435	n.a.
Peer pressure to have sex	0.056	n.a.
<u>Self-Concept, Refusal Skills, and Communication with Parents</u>		
Self-efficacy, -esteem, and -control	0.322	0.156
Refusal skills	0.453	n.a.
Communication with parents	0.277	0.166
<u>Perceived Consequences of Teen and Nonmarital Sex</u>		
General consequences	0.286	0.103
Personal consequences	0.321	0.091
<u>Expectations to Abstain</u>		
Expect to abstain	0.276	n.a.
Expect to abstain as an unmarried teen	0.337	n.a.

n.a. = not available. This information was not asked of youth in these sites due to their young age.

Table A.6. Participation in Classes or Programs on Health, Family Life, and Sex Education During the Year Following Enrollment in the Study Sample, All Four Programs by Program Status

	Control Group Mean	Program Group Mean	Estimated Impacts		
			Percentage Point Difference	Effect Size ^a	P-value
Physical Development and Reproduction					
<i>My Choice, My Future!</i>	57.1%	91.1%	34.1	0.76	0.00 ***
<i>ReCapturing the Vision</i>	86.9%	90.7%	3.8	0.09	0.24
<i>Teens in Control</i>	66.1%	82.5%	16.5	0.35	0.00 ***
<i>FUPTP</i>	67.1%	70.5%	3.4	0.09	0.46
Risk Awareness					
<i>My Choice, My Future!</i>	74.5%	93.3%	18.9	0.50	0.00 ***
<i>ReCapturing the Vision</i>	91.8%	95.0%	3.2	0.08	0.25
<i>Teens in Control</i>	88.6%	94.4%	5.7	0.16	0.02 **
<i>FUPTP</i>	77.6%	82.1%	4.5	0.12	0.19
Interpersonal Skills					
<i>My Choice, My Future!</i>	65.3%	95.2%	29.9	0.71	0.00 ***
<i>ReCapturing the Vision</i>	89.2%	94.7%	5.5	0.13	0.06 *
<i>Teens in Control</i>	87.2%	95.1%	7.9	0.22	0.00 ***
<i>FUPTP</i>	79.9%	83.2%	3.3	0.09	0.34
Marriage and Relationships					
<i>My Choice, My Future!</i>	45.0%	89.9%	44.9	0.91	0.00 ***
<i>ReCapturing the Vision</i>	68.9%	81.9%	12.9	0.26	0.00 ***
<i>Teens in Control</i>	70.8%	74.8%	4.0	0.09	0.24
<i>FUPTP</i>	68.3%	65.6%	-2.7	-0.06	0.58

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Table A.7. Estimated Impacts on and Means Levels of Services Received for Only Those Program Group Youth Who Participated

Outcome Measure	<i>My Choice, My Future!</i>	<i>ReCapturing the Vision</i>	<i>Teens in Control</i>	<i>FUPTP</i>
	Powhatan, VA	Miami, FL	Clarksdale, MS	Milwaukee, WI
Estimated Impacts				
Participation in Class or Program on^a				
Physical development and reproduction	34.0***	3.8	16.5***	3.4
Risk awareness	18.9***	3.2	5.7**	4.5
Interpersonal skills	29.9***	5.5*	7.9***	3.3
Marriage and relationships	44.9***	22.9***	4.0	-2.7
Parent Participation in Classes or Meetings^a				
Parent involvement	0.4	14.3*	-2.1	8.3
Participation in Class or Program Perceived by the Youth as Helpful with [mean value on 0-1 scale]				
Knowledge of pregnancy/STD risks	0.31***	0.07	0.12***	0.07
Peer relations	0.14***	0.10	0.02	0.16
Risk-avoidance skills	0.16***	0.11*	0.07***	-0.03
Pledging Abstinence^a				
Pledged to abstain until marriage	8.6**	73.5***	4.3	19.7**
Means for Program Participants				
Participation in a Class or Program on				
Physical development and reproduction	91%	93%	83%	75%
Risk awareness	93%	97%	94%	86%
Interpersonal skills	95%	97%	95%	86%
Marriage and relationships	90%	88%	75%	75%
Parent Participation in Classes or Meetings				
Parent involvement	16%	35%	27%	40%
Participation in a Class or Program Perceived as Helpful with [Mean value on 0-1 scale]				
Knowledge of pregnancy/STD risks	0.70	0.87	0.77	0.70
Peer relations	0.23	0.55	0.53	0.55
Risk-avoidance skills	0.63	0.84	0.72	0.67
Pledging Abstinence				
Pledged to abstain until marriage	16%	78%	14%	40%
Sample Size Total	517	545	809	439
Control Group	185	239	376	178
Program Group	332	306	433	326
Participants	332	177	433	147

Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All impacts estimates are adjusted, based on regression models described in Chapter III. Estimates are presented as the mean difference between the participant-only group and their control group counterparts. For *ReCapturing the Vision* and *FUPTP*, respectively, 58 percent and 45 percent of program group youth participated, leading to the notable differences in estimated impacts between the full program group and the participant-only group. In contrast, for *Teens in*

Table A.7 (continued)

Control and *My Choice, My Future!*, participation of the program group was nearly universal, so any differences between the full program group and participants are trivial.

^aEstimated impacts are measured as the percentage point difference between those in the program group who participated and their control group counterparts.

*** p-value (of estimated impact) <0.01; ** p-value<0.05; *p-value <.10, two-tailed test.

Table A.8. Participation in Classes or Programs on Health, Family Life, and Sex Education During the Year Following Enrollment in the Study Sample, by Program Status and Enrollment Cohort

	1999 and 2000 Enrollment Cohorts				2001 Enrollment Cohort			
	Estimated Impact				Estimated Impact			
	Control Group Mean	Percentage Point Difference	Effect Size ^a	P-value	Control Group Mean	Percentage Point Difference	Effect Size ^a	P-value
Physical Development								
<i>My Choice, My Future!</i>	63%	27	0.61	0.00 ***	48%	44	0.93	0.00 ***
<i>ReCapturing the Vision</i>	86%	3	0.07	0.43	91%	3	0.07	0.61
<i>Teens in Control</i>	69%	18	0.38	0.00 ***	59%	17	0.35	0.00 ***
<i>FUPTP</i>	66%	7	0.16	0.18	68%	-4	-0.08	0.68
Risk Awareness								
<i>My Choice, My Future!</i>	76%	16	0.44	0.00 ***	73%	22	0.58	0.00 ***
<i>ReCapturing the Vision</i>	92%	2	0.06	0.51	92%	6	0.16	0.26
<i>Teens in Control</i>	90%	5	0.15	0.09 *	86%	7	0.19	0.09 *
<i>FUPTP</i>	77%	7	0.19	0.09 *	78%	-1	-0.02	0.89
Interpersonal Skills								
<i>My Choice, My Future!</i>	70%	25	0.64	0.00 ***	57%	38	0.83	0.00 ***
<i>ReCapturing the Vision</i>	91%	2	0.05	0.54	85%	13	0.29	0.03 **
<i>Teens in Control</i>	87%	9	0.24	0.01 ***	87%	7	0.20	0.08 *
<i>FUPTP</i>	81%	4	0.12	0.29	77%	1	0.02	0.91
Marriage and Relationships								
<i>My Choice, My Future!</i>	49%	39	0.81	0.00 ***	40%	52	1.05	0.00 ***
<i>ReCapturing the Vision</i>	74%	3	0.07	0.48	56%	39	0.78	0.00 ***
<i>Teens in Control</i>	71%	4	0.08	0.39	68%	8	0.17	0.17
<i>FUPTP</i>	68%	0	0.00	0.97	69%	-10	-0.21	0.28

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Table A.9. Estimated Impacts on and Means of Intermediate Outcomes for Only Those Program Group Youth Who Participated

Descriptor of Measure	<i>My Choice, My Future!</i>		<i>ReCapturing the Vision</i>		<i>Teens in Control</i>		<i>FUJTP</i>	
	Powhatan, VA		Miami, FL		Clarksdale, MS		Milwaukee, WI	
	Mean Difference	Effect Size	Mean Difference	Effect Size	Mean Difference	Effect Size	Mean Difference	Effect Size
Estimated Impacts								
Views on Abstinence, Teen Sex, and Marriage								
Views supportive of abstinence	0.05	0.07	0.15	0.22	0.10	0.14**	0.20	0.29
Views unsupportive of teen sex	0.10	0.21**	0.20	0.40***	0.07	0.11	-0.03	-0.05
Views supportive of marriage	0.07	0.12	0.08	0.14	-0.04	-0.07	-0.08	-0.13
Peer Influences and Relations								
Friends' support for abstinence	0.05	0.04	0.28	0.19	0.11	0.08	-0.20	-0.14
Dating	-0.04	-0.10	-0.07	-0.17	n.a.	n.a.	n.a.	n.a.
Peer pressure to have sex	0.03	0.08	0.12	0.29	n.a.	n.a.	n.a.	n.a.
Self-Concept, Refusal Skills, and Communication with Parents								
Self-efficacy, -esteem, and -control	-0.02	-0.05	0.02	0.05	0.04	0.11	-0.04	-0.10
Refusal skills	0.00	0.00	0.04	0.08	n.a.	n.a.	n.a.	n.a.
Communication with parents	-0.02	-0.03	0.04	0.05	0.00	0.00	0.18	0.26
Perceived Consequences of Teen and Nonmarital Sex								
General consequences	0.10	0.15*	0.27	0.40***	0.07	0.10	0.13	0.20
Personal consequences	0.13	0.24***	0.23	0.41***	0.04	0.08	0.09	0.16
Expectations to Abstain								
Expect to abstain ^a	0.05	0.07	0.15	0.21	n.a.	n.a.	n.a.	n.a.
Expect to abstain as an unmarried teen	0.02	0.03	0.14	0.17	n.a.	n.a.	n.a.	n.a.
Means for Participants Only								
<i>My Choice, My Future!</i>		<i>ReCapturing the Vision</i>		<i>Teens in Control</i>		<i>FUJTP</i>		
Powhatan, VA		Miami, FL		Clarksdale, MS		Milwaukee, WI		
Participant Mean		Participant Mean		Participant Mean		Participant Mean		
Views on Abstinence, Teen Sex, and Marriage								
Views supportive of abstinence [Range: 0-3]	1.64	2.09	1.87	2.05				
Views unsupportive of teen sex [Range: 0-3]	2.15	2.41	2.23	2.17				
Views supportive of marriage [Range: 0-3]	2.50	2.49	2.16	2.11				
Peer Influences and Relations								
Friends' support for abstinence [Range: 0-5]	2.99	3.65	3.39	4.15				
Dating [Range: 0-1]	0.40	0.17	n.a.	n.a.				
Peer pressure to have sex [Range: 0-3]	0.14	0.15	n.a.	n.a.				

TABLE A.9 (continued)

	<i>My Choice, My Future!</i>		<i>ReCapturing the Vision</i>		<i>Teens in Control</i>		<i>FUPTP</i>	
	Powhatan, VA	Participant Mean	Miami, FL	Participant Mean	Clarksdale, MS	Participant Mean	Milwaukee, WI	Participant Mean
Self-Concept, Refusal Skills, and Communication with Parents								
Self-efficacy, -esteem, and -control [Range: 0-3]	1.91		2.07		1.94		1.99	
Refusal skills [Range: 0-3]	1.33		1.77		n.a.		n.a.	
Communication with parents [Range: 0-2]	0.72		1.01		1.00		1.09	
Perceived Consequences of Teen and Nonmarital Sex								
General consequences [Range: 0-3]	1.84		2.18		2.03		2.04	
Personal consequences [Range: 0-2]	0.94		1.11		1.20		1.22	
Expectations to Abstain								
Expect to abstain ^a [Range: 0-2]	1.20		1.55		n.a.		n.a.	
Expect to abstain as an unmarried teen [Range: 0-2]	1.06		1.50		n.a.		n.a.	
Sample Size	517		545		809		439	
Control Group	185		239		376		178	
Program Group	332		306		433		326	
Participants	332		177		433		147	

Source: *Wave 2 Teen Activities and Attitudes Survey* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All impacts estimates are adjusted, based on regression models described in Chapter III. Estimates are presented both as the mean difference between the program (participant) group and control groups and as effect sizes, which are calculated as the ratio of the mean difference divided by the standard error for the control group. For *ReCapturing the Vision* and *FUPTP*, respectively, only 58 percent and 45 percent of program group youth participated, leading to the notable differences in estimated impacts between the full program group and the participant-only group. In contrast, for *Teens in Control* and *My Choice, My Future!*, participation of the program group was nearly universal, so any differences between the full program group and participants are trivial.

^aFor youth who had reported having had sex, the measure refers to the next year. For youth who reported not having had sex, the measure refers to the expectation to abstain as an unmarried teen.

n.a. = not available. This information was not asked of youth in these sites due to their young age.

*** p-value (of estimated impact) <0.01; ** p-value<0.05; * p-value <.10, two-tailed test.

Table A.10. Views on Abstinence, Teen Sex, and Marriage, by Program Status and Enrollment Cohort

	1999 and 2000 Enrollment Cohorts				2001 Enrollment Cohort			
	Control Group Mean	Estimated Impact			Control Group Mean	Estimated Impact		
		Program-Control Difference	Effect Size ^a	P-value		Program-Control Difference	Effect Size ^a	P-value
Views Supportive of Abstinence								
<i>My Choice, My Future!</i>	1.61	0.01	0.01	0.92	1.48	0.25	0.37	0.02 **
<i>ReCapturing the Vision</i>	1.91	0.07	0.11	0.28	1.96	0.14	0.20	0.26
<i>Teens in Control</i>	1.75	0.06	0.08	0.34	1.81	0.18	0.25	0.02 **
<i>FUPTP</i>	1.73	0.22	0.32	0.01 ***	1.98	-0.11	-0.15	0.52
Views Unsupportive of Teen Sex								
<i>My Choice, My Future!</i>	2.05	0.09	0.18	0.10	2.06	0.11	0.21	0.17
<i>ReCapturing the Vision</i>	2.30	0.04	0.07	0.48	2.20	0.24	0.47	0.01 ***
<i>Teens in Control</i>	2.11	0.10	0.18	0.05 **	2.24	0.01	0.01	0.92
<i>FUPTP</i>	2.20	-0.06	-0.09	0.45	2.06	0.12	0.20	0.30
Views Supportive of Marriage								
<i>My Choice, My Future!</i>	2.45	-0.01	-0.01	0.90	2.39	0.21	0.35	0.03 **
<i>ReCapturing the Vision</i>	2.36	0.01	0.02	0.85	2.42	0.06	0.10	0.56
<i>Teens in Control</i>	2.20	-0.02	-0.03	0.77	2.21	-0.12	-0.19	0.16
<i>FUPTP</i>	2.21	-0.02	-0.02	0.74	2.14	-0.09	-0.13	0.56

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Table A.11. Perceived Consequences of Teen and Nonmarital Sex and Expectations to Abstain, by Program Status and Enrollment Cohort

	1999 and 2000 Enrollment Cohorts				2001 Enrollment Cohort			
	Estimated Impact			P-value	Estimated Impact			P-value
	Control Group Mean	Program-Control Difference	Effect Size ^a		Control Group Mean	Program-Control Difference	Effect Size ^a	
General Consequences of Teen Sex								
<i>My Choice, My Future!</i>	1.77	0.01	0.02	0.83	1.69	0.27	0.38	0.01 ***
<i>ReCapturing the Vision</i>	1.98	0.08	0.12	0.19	1.87	0.34	0.47	0.00 ***
<i>Teens in Control</i>	1.95	0.07	0.10	0.29	1.97	0.08	0.12	0.31
<i>FUPTP</i>	1.91	0.06	0.08	0.50	2.01	-0.04	-0.06	0.77
Personal Consequences of Teen Sex								
<i>My Choice, My Future!</i>	0.82	0.06	0.10	0.32	0.80	0.28	0.51	0.00 ***
<i>ReCapturing the Vision</i>	0.99	0.06	0.10	0.29	0.82	0.37	0.67	0.00 ***
<i>Teens in Control</i>	1.13	0.00	-0.01	0.93	1.19	0.13	0.23	0.05 **
<i>FUPTP</i>	1.12	0.02	0.04	0.75	1.06	0.10	0.18	0.35
Expectations to Abstain^b								
<i>My Choice, My Future!</i>	1.16	0.06	0.09	0.43	1.13	0.03	0.04	0.83
<i>ReCapturing the Vision</i>	1.49	0.09	0.12	0.21	1.39	0.08	0.11	0.48

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

^bYouth in the *Teens in Control* and *FUPTP* samples were not asked the questions about expectations to remain abstinent, due to their young ages.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Table A.12. Views on Abstinence, Teen Sex, and Marriage, by Program Status and Support for Abstinence at Enrollment

	More Supportive Views on Abstinence				Less Supportive Views on Abstinence			
	Estimated Impacts				Estimated Impacts			
	Control Group Mean	Program-Control Difference	Effect Size ^a	P-value	Control Group Mean	Program-Control Difference	Effect Size ^a	P-value
Views Supportive of Abstinence								
<i>My Choice, My Future!</i>	2.05	-0.09	-0.13	0.33	1.07	0.26	0.38	0.01 ***
<i>ReCapturing the Vision</i>	2.08	0.10	0.16	0.19	1.79	0.03	0.04	0.76
<i>Teens in Control</i>	1.91	0.12	0.19	0.11	1.69	0.07	0.11	0.21
<i>FUPTP</i>	1.96	0.13	0.20	0.26	1.76	-0.03	-0.05	0.72
Views Unsupportive of Teen Sex								
<i>My Choice, My Future!</i>	2.24	0.06	0.13	0.32	1.86	0.13	0.25	0.06 *
<i>ReCapturing the Vision</i>	2.35	0.11	0.26	0.04 **	2.18	0.08	0.16	0.22
<i>Teens in Control</i>	2.28	0.15	0.29	0.01 **	2.08	0.02	0.04	0.67
<i>FUPTP</i>	2.42	-0.19	-0.36	0.03 **	2.00	0.08	0.13	0.34
Views Supportive of Marriage								
<i>My Choice, My Future!</i>	2.55	0.05	0.09	0.49	2.31	0.07	0.12	0.52
<i>ReCapturing the Vision</i>	2.49	-0.01	-0.02	0.87	2.27	0.05	0.09	0.38
<i>Teens in Control</i>	2.29	-0.09	-0.15	0.25	2.14	-0.03	-0.04	0.66
<i>FUPTP</i>	2.14	0.08	0.11	0.52	2.23	-0.16	-0.25	0.11

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

Table A.13. Perceived Consequences of Teen and Nonmarital Sex and Expectations to Abstain, by Program Status and Support for Abstinence at Enrollment

	More Supportive Views on Abstinence				Less Supportive Views on Abstinence			
	Estimated Impacts				Estimated Impacts			
	Control Group Mean	Program-Control Difference	Effect Size ^a	P-value	Control Group Mean	Program-Control Difference	Effect Size ^a	P-value
General Consequences of Teen Sex								
<i>My Choice, My Future!</i>	2.11	0.03	0.04	0.72	1.34	0.19	0.27	0.02 **
<i>ReCapturing the Vision</i>	2.06	0.21	0.36	0.00 ***	1.83	0.12	0.17	0.15
<i>Teens in Control</i>	2.11	0.06	0.09	0.43	1.87	0.07	0.11	0.22
<i>FUPTP</i>	2.16	-0.05	-0.08	0.61	1.77	0.10	0.15	0.27
Personal Consequences of Teen Sex								
<i>My Choice, My Future!</i>	1.07	0.10	0.19	0.13	0.53	0.17	0.31	0.02 **
<i>ReCapturing the Vision</i>	0.97	0.22	0.40	0.00 ***	0.91	0.06	0.11	0.41
<i>Teens in Control</i>	1.22	0.04	0.08	0.56	1.11	0.06	0.11	0.22
<i>FUPTP</i>	1.14	0.11	0.22	0.21	1.07	-0.01	-0.01	0.93
Expectations to Abstain^b								
<i>My Choice, My Future!</i>	1.41	-0.01	-0.02	0.90	0.89	0.08	0.11	0.39
<i>ReCapturing the Vision</i>	1.54	0.09	0.14	0.25	1.38	0.06	0.07	0.54

Source: *Wave 2 Survey of Teen Activities and Attitudes* (Mathematica Policy Research, Inc. 2000) administered to youth 6 to 12 months after enrollment in the Title V, Section 510 Abstinence Education Program study sample.

Note: All estimates are adjusted, based on weighted regression models described in Chapter III. For details on the covariates used in these regressions, see Appendix Table A.1. For descriptive statistics on the outcome measures analyzed, see Appendix Table A.3. For information on the sample sizes and R-Square statistics from the models estimated on each outcome, see Appendix Tables A.4 and A.5, respectively.

^aThe effect size measure is calculated as the ratio of the mean difference to the standard deviation of the outcome measure for the control group.

^bYouth in the *Teens in Control* and *FUPTP* samples were not asked the questions about expectations to remain abstinent, due to their young ages.

*** p-value (of mean difference)<0.01; **p-value<0.05; *p-value<0.10, two-tailed test.

APPENDIX B

OUTLINES OF CURRICULA USED BY THE FOUR TITLE V, SECTION 510 ABSTINENCE EDUCATION PROGRAMS INCLUDED IN THIS REPORT

My Choice, My Future! Curricula

Duran, Maureen Gallagher. *Reasonable Reasons to Wait: The Keys to Character.* Chantilly, VA: A Better Choice in Education, 1997.

Unit and Description

- 1. Character Counts (5 lessons).** This section is designed to help students define good character traits and ways to practice them.
- 2. Reasonable Reasons to Wait (2 lessons).** This section is designed to help students with their personal development and to understand the “bridges to adulthood,” the advantages of premarital abstinence, the outcomes and consequences of the sexual decision-making process, positive ways to stop unhealthy habits, how premarital sex can jeopardize the future, and the benefits of ceasing any premarital sex and regaining self-control.
- 3. Moving with the Crowd (3 lessons).** This section is designed to raise students’ awareness of the influences that affect their decisions about sexual behavior, especially peer pressure. It is intended to help them develop methods of coping with negative peer pressure and to distinguish between needs and desires.
- 4. Dynamics of Dating (4 lessons).** This section is designed to help students understand the purposes and responsibilities of dating by identifying ways to develop friendships, pursue non-dating activities, and avoid dating situations that could lead to acquaintance rape.
- 5. STD Free (2 lessons).** This section teaches the facts about STDs and how STDs affect relationships and the future.
- 6. Foundations of Relationships (1 lesson).** This section is designed to help students understand the differences between healthy and unhealthy relationships, emotional immaturity, and the qualities needed for a long-lasting relationship.
- 7. Marvelous Marriages (1 lesson).** This section teaches students the ingredients needed for a lifelong marital commitment, with emphasis on effective communication, self-control, and how to resolve marital mishaps.
- 8. Parenthood Prerequisites (1 lesson).** This section is designed to teach students the responsibilities and requirements of being a good parent and why parenthood may not be the best thing for a teenager. It also discusses the benefits of adoption for those who have children as teens.
- 9. Human Development (2 lessons).** This section teaches students about human and fetal development, the choices that affect the development of their potential, and how drugs and alcohol will affect their lives.

Note: The *Reasonable Reasons to Wait* curriculum includes a parent manual, as well as worksheets for parents and students to do together. *My Choice, My Future!* does not cover the final two units in the *Reasonable Reasons to Wait* curriculum, on parenthood and human development.

Boston University, College of Communication and School of Education. *The Art of Loving Well: A Character Education Curriculum for Today's Teenagers.* Boston, MA: The Loving Well Project, 1993.

The Art of Loving Well is an anthology of short stories, poetry, classic fairy tales, and myths that have been collected in one book to facilitate learning about relationships.

Unit and Description

- 1. Early Loves and Losses**
- 2. Romance**
- 3. Commitment and Marriage**

Family Life Pregnancy Care Center. *WAIT Training Workshop.* Effingham, Illinois (n.d.).

Unit and Description

- 1. Building the Classroom Climate.** This unit focuses on developing communication skills and a sense of oneself.
- 2. Defining Love.** This unit focuses on how to define love in terms of one's own feelings; the differences between love, lust, and infatuation; and the qualities of teenage relationships.
- 3. What About Sexuality?** This unit discusses the benefits of sex within the context of marriage, the definition of sexuality, differences between men and women and needs and desires, and attaining hopes and dreams.
- 4. The Media and Their Influence.** This unit examines advertising and sexuality, and the motivations behind approaches used in advertising.
- 5. To Wait or Not to Wait.** This unit explores questions related to the timing and choice of having sex and sources of advice about these questions.
- 6. Bonding and Intimacy.** This unit examines how teens can misuse sex and get into a "relationship roller-coaster," how to make connections between teens and parents, and activities targeting the sexually active teen.
- 7. The Consequences of Teen Sex and the Freedoms of Waiting.** This unit examines the building blocks of healthy relationships, the risks of AIDS, and the acceptance of virginity.
- 8. Sexual Refusal Skills and Assertiveness Training.** This unit explores ways to say "no" to sex and alternatives to sexual activity.
- 9. Commitment and Marriage.** This unit focuses on the benefits of marriage and on understanding what it means to have a life partner.
- 10. Worth the Wait.** This unit focuses on a summary of the curriculum and provides students with information on additional resources.

ReCapturing the Vision Curricula

DelRosario, Jacqueline, *ReCapturing the Vision*. Miami, FL: Empowerment Concepts, Inc., 2003.

Chapter and Description

- 1. Positively You.** This unit works with girls to help them see themselves and their bodies as beautiful and to accept who they are.
- 2. First Impressions.** This unit teaches girls to become aware of the image they portray through their behaviors and communication. It helps girls develop their own image, including determining their best appearance and learning manners and table etiquette.
- 3. Knowing What I Believe.** This unit helps girls to define their morals and values and learn how to resist negative influences and pressures.
- 4. Working Things Out—Conflict Resolution.** This unit focuses on critical thinking skills, making choices, and approaches to conflict resolution, including identifying solutions and effectively communicating. It helps girls to understand their own emotions and the perspectives of others.
- 5. Harnessing Your Dreams.** This unit helps girls to define and determine how to achieve their future short-term and long-term goals in personal, academic, professional, and financial areas.
- 6. Getting the Job Done.** This unit helps girls to assess how ready they are for transition to adulthood, by combining their communication skills, morals and values, and goals for the future. They explore the world of work through mock interviews, job searches, and writing their resumes.

DelRosario, Jacqueline, *Vessels of Honor*. Miami, FL: Empowerment Concepts, Inc., 1999.

Chapter and Description

- 1. Honor.** This section is designed to teach students to value themselves and to understand which behaviors are honorable.
- 2. Just Say No.** This section is designed to teach students effective communication to support their choice to abstain from premarital sex, including voice, facial expression, and body language.
- 3. Refusal—Ending Mixed Messages.** This section centers on developing a skit that includes a “refusal situation” and is designed to help students become comfortable with conveying such messages.

4. Consequences. This section examines the consequences of premarital sexual activity and teen pregnancy—for children, for the mother, for society, and for the future husband.

5. Sexual Conflict Resolution. This section is designed to help students strengthen their resolve to remain abstinent—to develop the tools and strategies to resolve sexual conflicts. It teaches a four-step process: identify the problem that is creating pressure to engage in sexual activity, develop alternatives, choose the best plan, and implement and evaluate an alternative.

6. Dealing with Peer Pressure. This section is designed to help students deal with pressure from their peers to engage in premarital sexual activity.

7. Relationships. This section examines the choices involved in choosing good relationships. It is designed to help students postpone serious dating that can threaten their decision to remain abstinent, to learn appropriate conduct for dating, to develop a plan to deal with feelings of love and the decision to remain abstinent, and to satisfy social needs through friends rather than through relationships with the opposite sex.

8. Your Changing Body. This section teaches students about reproduction and male and female body parts.

9. Sexual Abuse. This section is designed to familiarize students with the issue of sexual abuse and to identify and avoid possible danger in this area.

10. Date Rape. This section is designed to teach students the definition of date rape and to identify behaviors that put them at risk.

11. Choosing a Mate. This section is designed to teach students what it takes to make a commitment to a partner and to resolve problems that arise in marriages.

12. Marriage. This section is designed to instill in students the value of marriage. Students make their own wedding plans.

Teens in Control Curricula

Howard, Marion, and Marie Mitchell. *Postponing Sexual Involvement: An Educational Series for Young Teens.* Atlanta, GA: Adolescent Reproductive Health Center, 1990.

Note: The curriculum includes video segments and a separate workbook/education series for parents, consisting of two sessions (Social and Peer Pressures; Learning Assertiveness Techniques). This parent series is not currently being used.

Chapter and Description

1. The Risks of Early Sexual Involvement. This section covers the reasons why teens become sexually involved and why to wait, alternative ways to meet their needs, factual information about sexual involvement (including a short video on facts of reproduction and STDs), and tools for analyzing and solving a problem regarding sexual involvement.

2. Social Pressures. This section covers social pressures confronting youth, especially from media images. It is designed to give them experience resisting pressures, to identify and understand internal pressures, and to learn to resist these by “talking inside your head.”

3. Peer Pressures. This section is designed to increase students’ awareness of peer pressures, teach ways to respond to pressures (provide support for saying “no”), understand different kinds of relationships, and determine appropriate limits on physical expressions of affection.

4. Learning Assertiveness Techniques. This section is designed to help students set limits in a relationship through the use of some common assertiveness techniques and to give them practice in assertively responding to pressure.

5. Reinforcing Skills. This session uses a series of skits and games to reinforce the skills learned in the previous sessions—primarily the assertiveness techniques to deal with pressure.

6. Annex: Additional Skills Practice

Young, Michael, and T. Young. *Sex Can Wait.* Los Altos, CA: ETR Associates, 1994.

Chapter and Description

1. Knowing Myself: Self-Concept/Self-Esteem (6 lessons). This section provides activities to help students understand their sense of self and to combat negative feelings and increase positive feelings about themselves. It includes “positive self-talk and affirmations,” praise for one other, and activities to bridge the gap between the “perceived and ideal self.”

2. Knowing Myself: Puberty (4 lessons). This section is designed to help students understand the psychological, emotional, hormonal, and physical changes taking place within them.

3. Knowing Myself: Values and Decision-Making (2 lessons). This section is designed to help students judge the worth of a value, identify and internalize family values, understand the importance of values in life and the relationship between values and decision-making, and provide decision-making structure to guide them.

4. Relating to Others: Communication (5 lessons). This section is designed to teach students different styles of communication and the benefits of assertive communication, negotiation skills, how to repeat back what they hear, how nonverbal messages affect communication, listening skills, the qualities of good friends, and how to deal with negative peer pressure.

5. Relating to Others: My Sexual Self (2 lessons). This section is designed to teach students to accept the normalcy of sexual thoughts and feelings, why they should chose abstinence as the best option rather than a sexual relationship, an awareness of the risks associated with sexual involvement, an understanding of sexual pressures, and the risks of STDs.

6. Planning My Future: Goal Setting and Life Planning (4 lessons). This section helps students develop skills to formulate goals and achieve them, to visualize a positive future, and to understand that sexual abstinence can be an important strategy for reaching their goals.

Families United to Prevent Teen Pregnancy (FUPTP) Curriculum

Rosalie Manor. *Families United to Prevent Teen Pregnancy. A Life Options Model Curriculum for Youth*. Milwaukee, WI: Rosalie Manor, Inc., n.d.

Chapter and Description

1. Group Building. This section includes a series of exercises to help program participants get to know one another better.

2. Self-Esteem. This section is designed to help participants recognize their own special abilities and qualities. Good self-esteem will help them behave according to their values and make choices in their best interest.

3. Values. This section is designed to help participants understand their own values, to understand how their activities and behaviors reflect these values, and to communicate their values to others. This is particularly important in the context of intimate relationships. It teaches that abstinence can help improve the quality of life, health, and relationships, as well as help participants meet their future goals.

4. Goal-Setting. This section is designed to help participants understand their dreams and talents and translate them into obtainable goals. Participants are taught how to break goals down into practical steps. They are also helped to identify steps toward the goal of abstinence.

5. Decision-Making. This section is designed to teach participants decision-making skills by looking at options and consequences of particular actions before choosing them. Abstinence is a decision; the influences affecting this decision, as well as the consequences and responsibilities, are covered.

6. Risk-Taking Behavior. This section is designed to look at the consequences of certain risk-taking behaviors, including using alcohol and drugs, suicide, violence, and premarital sexual activity. The consequences of these are discussed, as well as how to make good choices in each area.

7. Communication Skills. This section focuses on developing communication skills in order to establish meaningful, effective relationships. It emphasizes that sexual intimacy, often confused as a way to have a meaningful relationship, should be saved for marriage.

8. Relationships and Sexuality. This section focuses on the need to belong and be loved, parental relationships, the importance and influence of friends, the special nature of male-female relationships, and the role of the community. It focuses on how to develop positive relationships that will help self-concept, reinforce values, enhance family, expand friendships, and strengthen community. This section is designed to provide missing pieces of belonging and support for those with unmet needs. It also discusses the history and importance of marriage.

9. Adolescent Development and Anatomy. This section focuses on providing participants with a basic understanding of the human reproductive system and on how physical changes during adolescence can affect relationships with peers and parents. It also covers how to deal with pressure to have sex.

10. Sexually Transmitted Diseases. This section focuses on the signs, symptoms, and treatment of the common sexually transmitted diseases, based on the acknowledgment that this information could be a greater deterrent to sexual activity for some teens than anything else.

11. Social Skills. This section focuses on teaching participants essential survival and life skills to facilitate positive interaction with family, peers, and school staff. It includes discussion of dining skills, safety issues, nutrition, and employment skills.

APPENDIX C

**SURVEY QUESTIONS UNDERLYING THE
OUTCOME MEASURES USED IN THE
TITLE V, SECTION 510 ABSTINENCE
EDUCATION PROGRAM IMPACT
EVALUATION**

A. Survey Items Included in Measures of Health, Family Life, and Sex Education Services¹

Measure 1: Class or Program Addressing Physical Development and Reproduction

4.1 In the past year, did you take a class or participate in a special program that talked about any of the following things? These could be classes that you took in school or someplace else.

MARK (X) ONE ANSWER FOR EACH	Yes	No
a. The female menstrual cycle—that is, the monthly cycle or period?	1	0
b. Physical development and puberty?	1	0
c. The human body/reproduction/how girls get pregnant?	1	0

Measure 2: Class or Program Addressing Risk Awareness

4.1 In the past year, did you take a class or participate in a special program that talked about any of the following things? These could be classes that you took in school or someplace else.

MARK (X) ONE ANSWER FOR EACH	Yes	No
g. Abstinence—that is, <u>not</u> having sexual intercourse?	1	0
f. Ways people who have sex can prevent making babies?	1	0
i. Sexually transmitted diseases (STDs)?	1	0
o. Alcohol and/or drug use?	1	0

Measure 3: Class or Program Addressing Interpersonal Skills

4.1 In the past year, did you take a class or participate in a special program that talked about any of the following things? These could be classes that you took in school or someplace else.

MARK (X) ONE ANSWER FOR EACH	Yes	No
c. Dating?	1	0
h. How to say “no” to sex?	1	0
k. How to talk with parents?	1	0
l. How to stand up for yourself/assertiveness skills?	1	0
m. How to resist peer pressure to do things you don’t want to do?	1	0

¹ The coding for each item reflects the value used when creating the respective measure. For example, on measure 1, a study participant who reports “yes” on the survey item “[Did you take a class in] physical development and puberty” is assigned a value of 1 for that item. For information on how the value for each item is then combined to construct the measure, see Chapter III.

Measure 4: Class or Program Addressing Marriage and Relationships

- 4.1 In the past year, did you take a class or participate in a special program that talked about any of the following things? These could be classes that you took in school or someplace else.

MARK (X) ONE ANSWER FOR EACH		YES	NO
d.	Marriage and family life	1	0
j.	Ways to show someone you care about them	1	0

Measure 5: Parents Participated in Any Classes or Sessions on Health, Family Life, or Sex Education

- 4.4 Has either of your parents ever gone to a class or session that discussed any of the topics we just talked about?

- 0 No
 1 Yes, with me
 1 Yes, not with me

Measure 6: Participation in a Class that Youth Perceived as Helpful with Knowledge of Pregnancy and STDs

- 4.3 During the past year, how much did these classes or special programs help you in the following areas?²

MARK (X) ONE ANSWER FOR EACH		A LOT	SOME	A LITTLE	NOT AT ALL
f.	Understanding how girls get pregnant	1	1	0	0
g.	Understanding how someone gets AIDS or other sexually transmitted diseases (STDs)	1	1	0	0

Measure 7: Participation in a Class that Youth Perceived as Helpful with Peer Relations

- 4.5 In general, how much did any of these classes or special programs help you deal better with your friends and your concerns about growing up?²

- 0 Not at all
 0 A little
 1 Some
 1 A lot

² Any sample member who reports no participation at all (based on measures 1 through 4) is coded as 0 on this measure.

Measure 8: Participation in a Class that Youth Perceived as Helpful with Risk Avoidance Skills

4.3 During the past year, how much did these classes or special programs help you in the following areas?³

MARK (X) ONE ANSWER FOR EACH	A LOT	SOME	A LITTLE	NOT AT ALL
a. Learning how to handle problems and pressures that come up in life	1	1	0	0
b. Learning how to stay away from things that could cause you problems later in life	1	1	0	0
c. Helping you and your parents talk about important things	1	1	0	0
d. Feeling more confident in your ability to resist peer pressure to have sexual intercourse	1	1	0	0
e. Resisting pressure to drink alcohol or do drugs	1	1	0	0
h. Thinking about or planning your future	1	1	0	0
i. Learning how to make good decisions and choices	1	1	0	0

Measure 9: Signed Pledge to Abstain

2.11 Have you taken a public or written pledge to remain a virgin until marriage?

- 0 No
1 Yes

³ Any sample member who reports no participation at all (based on measures 1 through 4) is coded as 0 on this measure

B. Survey Items Included in Measures of Intermediate Outcomes⁴

Measure 1: Views Supportive of Abstinence

2.5 For each of the following statements, please tell us if you strongly agree, agree, disagree, or strongly disagree.

MARK (X) ONE ANSWER FOR EACH	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
j. Having sexual intercourse is something only married people should do	3	2	1	0
k. It is against my values for me to have sexual intercourse as an unmarried teen	3	2	1	0
m. It would be OK for teens who have been dating for a long time to have sexual intercourse	0	1	2	3
n. It is OK for teenagers to have sexual intercourse before marriage if they plan to get married	0	1	2	3
v. It is OK for unmarried <u>teens</u> to have sexual intercourse if they use birth control	0	1	2	3

Measure 2: Views Unsupportive of Teen Sex

2.5 For each of the following statements, please tell us if you strongly agree, agree, disagree, or strongly disagree.

MARK (X) ONE ANSWER FOR EACH	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
f. “Petting” (heavy kissing and touching) can lead to sexual intercourse	3	2	1	0
g. In a relationship between a boy and a girl, there are many more important things than sexual intercourse	3	2	1	0
h. It is OK to say “NO” when someone wants to touch me or wants me to touch them	3	2	1	0
q. The best way for young people to avoid an unwanted pregnancy or a sexually transmitted disease is to wait until they are married to have sexual intercourse	3	2	1	0
t. It is likely that unmarried teens will get AIDS or other sexually transmitted	3	2	1	0

⁴ “Sexual intercourse” is defined in the Wave 2 survey as “going all the way. It is the act by which babies are made.” Abstaining is defined as “*not* having sexual intercourse.”

MARK (X) ONE ANSWER FOR EACH	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
diseases if they have sexual intercourse				
u. It is likely that teens who have sexual intercourse before they are married will get pregnant	3	2	1	0

Measure 3: Views Supportive of Marriage

2.5 For each of the following statements, please tell us if you strongly agree, agree, disagree, or strongly disagree.

MARK (X) ONE ANSWER FOR EACH	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
o. Having a good marriage is important to me	3	2	1	0
p. Having a good marriage does not seem realistic for me	0	1	2	3

Measure 4: Friends' Support for Abstinence

2.6 and 2.6a How many of your 5 closest friends think it is okay for young people your age to have sexual intercourse?³

- 0 None
- 1 One or two of them
- 3 Three or four of them
- 5 All of them

2.7 and 2.7a How many of your 5 closest friends think someone should wait until marriage before having sexual intercourse?³

- 0 None
- 1 One or two of them
- 3 Three or four of them
- 5 All of them

2.8 and 2.8a How many of your 5 closest friends have had sexual intercourse?³

- 0 None
- 1 One or two of them
- 3 Three or four of them
- 5 All of them

Measure 5: Dating

3.9 and 3.9a How many times have you gone out alone on a date with a boyfriend?

- 0 Never
- 0.5 Once or twice in my life
- 0.5 Less than once a month
- 1 1 or 2 times a month
- 1 3 or more times a month

Measure 6: Peer Pressure to Have Sex

2.9 and 2.9a How much pressure do you feel from your friends to have sexual intercourse?

- 0 No pressure at all
- 1 A little pressure
- 2 Some pressure
- 3 A lot of pressure

Measure 7: Self-Efficacy, -Esteem, and -Control**Self-Efficacy**

3.1 Here are some opinions that students sometimes have about themselves. Please tell us how much you agree or disagree with each one.

MARK (X) ONE ANSWER FOR EACH	AGREE A LOT	AGREE A LITTLE	DISAGREE A LITTLE	DISAGREE A LOT
c. I can't do things as well as most other people	0	1	2	3

3.2 Please tell us how much you agree or disagree with each of the following.

MARK (X) ONE ANSWER FOR EACH	AGREE A LOT	AGREE A LITTLE	DISAGREE A LITTLE	DISAGREE A LOT
c. When I have a problem to solve, one of the first things I do is get as many facts about the problem as possible	3	2	1	0
d. When I attempt to solve a problem, I usually try to think of as many different approaches as possible	3	2	1	0

Self-Esteem

3.2 Please tell us how much you agree or disagree with each of the following.

MARK (X) ONE ANSWER FOR EACH	AGREE A LOT	AGREE A LITTLE	DISAGREE A LITTLE	DISAGREE A LOT
e. I have a lot to be proud of	3	2	1	0
f. I like myself just the way I am	3	2	1	0
g. I feel like I am doing everything just about right	3	2	1	0
h. I feel loved and wanted	3	2	1	0

Self-Control

The following questions are about things that some young people do. Please remember that all of your answers will be kept private and will not be shared with anyone.

3.2 Please tell us how much you agree or disagree with each of the following.

MARK (X) ONE ANSWER FOR EACH	DEFINITELY TRUE	SOMEWHAT TRUE	A LITTLE TRUE	NOT TRUE
a. Difficult problems make me very upset	0	1	2	3
b. When making decisions, I usually go with my “gut feeling.” I don’t think too much about the consequences of each choice	0	1	2	3

3.3 After reading each sentence, mark the one answer that tells us how true the sentence is for you.

MARK (X) ONE ANSWER FOR EACH	DEFINITELY TRUE	SOMEWHAT TRUE	A LITTLE TRUE	NOT TRUE
a. I would do almost anything on a dare	0	1	2	3
b. I like to test myself sometimes by doing something a little risky	0	1	2	3
c. I keep out of trouble at all costs	3	2	1	0
d. I often act before I think	0	1	2	3
e. Before I do something, I think about what my friends would think about it	3	2	1	0

Locus of Control

3.1 Here are some opinions that students sometimes have about themselves. Please tell us how much you agree or disagree with each one.

MARK (X) ONE ANSWER FOR EACH	AGREE A LOT	AGREE A LITTLE	DISAGREE A LITTLE	DISAGREE A LOT
a. I don't have enough control over the way my life is going	0	1	2	3
b. For me, good luck is more important than hard work for success	0	1	2	3
d. My plans hardly ever work out	0	1	2	3
e. When I make plans, I know I can make them work	3	2	1	0
f. Chance and luck are important for what happens in my life	0	1	2	3

Measure 8: Refusal Skills

2.10 Imagine you had been going out with someone you really liked and this person decided he wanted to have sexual intercourse with you, but you didn't want to have sexual intercourse. Could you do each of the following?

MARK (X) ONE ANSWER FOR EACH	YES	MAYBE	NO
a. Stick with your decision not to have sexual intercourse	2	1	0
b. Talk to your boyfriend about your decision not to have sexual intercourse	2	1	0
c. Avoid getting into a situation that might lead to sexual intercourse (like going to a bedroom, drinking, doing drugs)	2	1	0
d. Say "NO" to having sexual intercourse, and explain your reasons	2	1	0
e. Stop seeing your boyfriend if he keeps pushing you to have sexual intercourse	2	1	0

Measure 9: Communication with Parents

4.6 During the past year, have you asked your parents questions about sex?

- 0 No
- 2 Yes

4.7 How often during the past year have you and your parents talked about what's right and wrong or good and bad about having sex?

- 0 Never
- 1 1 or 2 times
- 2 More than 2 times

4.8 How comfortable are you talking to your parents about sex?

- 0 Not at all comfortable
- 1 A little comfortable
- 2 Very comfortable

Measure 10: Perceived General Consequences of Teen and Nonmarital Sex

2.5 For each of the following statements, please tell us if you strongly agree, agree, disagree, or strongly disagree.

MARK (X) ONE ANSWER FOR EACH	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE
a. Sexual relationships create more problems than they're worth for teens	3	2	1	0
b. Sexual relationships make life too difficult for teens	3	2	1	0
c. A teen who has had sexual intercourse outside of marriage would be better off to stop having sex and wait until marriage to have sexual intercourse again	3	2	1	0

Measure 11: Perceived Personal Consequences of Teen and Nonmarital Sex

2.1 Does having sexual intercourse as a teenager make it harder for someone to study and stay in school in the future?

- 0 No, not harder at all
- 1 Yes, somewhat harder
- 2 Yes, much harder

2.2 Does having sexual intercourse before marriage make it harder for someone to have a good marriage and a good family life in the future?²

- 0 No, not harder at all
- 1 Yes, somewhat harder
- 2 Yes, much harder

2.3 Does having sexual intercourse as a teenager make it harder for a teen to grow and develop emotionally and morally?

- 0 No, not harder at all
- 1 Yes, somewhat harder
- 2 Yes, much harder

2.4 Is there a problem with unmarried teens having sexual intercourse if no pregnancy results from it?

- 0 No problem at all
- 1 Some problem
- 2 A big problem

Measure 12: Expect to Abstain

5.4 What is the chance you will have sexual intercourse as an unmarried teen? [Asked of non-sexually active youth only]

- 0 I definitely will do it
- 1 I might do it
- 2 I definitely will remain abstinent--will not have sexual intercourse

6.8 Do you think you will have sexual intercourse during the next year? [Asked of sexually active youth only]

- 0 I definitely will have sexual intercourse during the next year
- 1 I might have sexual intercourse during the next year
- 2 I definitely will not have sexual intercourse during the next year

Measure 13: Expect to Abstain As an Unmarried Teen

5.4 What is the chance you will have sexual intercourse as an unmarried teen? [Asked of non-sexually active youth only]

- 0 I definitely will do it
- 1 I might do it
- 2 I definitely will remain abstinent--will not have sexual intercourse

6.8 Do you think you will have sexual intercourse during the next year? [Asked of sexually active youth only]

- 0 I definitely will have sexual intercourse during the next year
- 0 I might have sexual intercourse during the next year
- 0 I definitely will not have sexual intercourse during the next year