

Science and Success

Sex Education and Other Programs That Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections

Despite recent declines in teen pregnancy, US teen birth and sexually transmitted infection (STI) rates remain among the highest in the western world. Given the need to focus limited prevention resources on effective programs, Advocates for Youth undertook an exhaustive review of existing research to compile a list of the programs proven effective by rigorous evaluation.

Criteria for Inclusion—All programs had evaluations that:

- Were published in peer-reviewed journals (a proxy for quality of evaluation design and analysis).
- Used an experimental or quasi-experimental design, with treatment and control / comparison conditions.
- Included at least 100 young people in treatment and control / comparison groups, combined.
- Collected baseline and post-intervention data from both treatment and control / comparison groups.

Further, the evaluations either:

- Continued to collect data from both groups at three months or later after intervention, and
- Demonstrated that the program led to at least *two beneficial changes in sexual behavior* among program youth, relative to controls. (See Table A.)

Or:

- Showed program effectiveness in reducing pregnancy, STIs, or HIV among intervention youth, relative to controls.

Program Content—Of the 19 programs that fit the criteria above, 16 include information about abstinence *and* contraception within the context of sex education. Of the three that do not include sex education, two are early childhood interventions and one is a service-learning program.

Risk Avoidance through Abstinence—Twelve programs effectively demonstrated a statistically significant delay in the timing of first sex among program adolescents, relative to control youth. One of the 12 programs is an intervention for elementary school children and their parents. The other 11 programs include information about abstinence and contraception within the context of a sex education component.

Risk Reduction for Sexually Active Youth—In addition to the delay of first sex, 17 programs also demonstrated reductions in other sexual risk-taking behaviors among participants, relative to control youth, including increased use of condoms and other contraception (11 and 8 programs, respectively) and reduced number of sexual partners (6), frequency of sex (6), and incidence of unprotected sex (4). (See Table A.)

Reduction in Teen Pregnancy or STIs—Eight programs showed statistically significant declines in teen pregnancy, births, HIV, or other STIs. Seven demonstrated a statistically significant impact on teenage pregnancy / births among program participants, compared to controls, and one, a reduced trend in STIs.

Table A. Effective Programs and Their Impact on Adolescents' Risk for Pregnancy, HIV & STIs

PROGRAMS	BEHAVIORAL OUTCOMES						HEALTH IMPACTS	
	Delayed Initiation of Sex	Reduced Frequency of Sex	Reduced Number of Sex Partners	Reduced Incidence of Unprotected Sex	Increased Use of Condoms	Increased Use of Contraception	Decreased Incidence of STIs	Decreased Number or Rate of Teen Pregnancy/Birth
1. Reducing the Risk	★			★		★		
2. Postponing Sexual Involvement (Augmenting a Five-Session Human Sexuality Curriculum)	★	★				★		
3. Postponing Sexual Involvement, Human Sexuality & Health Screening	★					★		
4. Safer Choices					★	★		
5. Reach for Health Community Youth Service	★	★			★	★		
6. AIDS Prevention for Adolescents in School			★		★		★	
7. Get Real about AIDS			★		★			
8. School / Community Program for Sexual Risk Reduction among Teens	★				★			★
9. Self Center (School-Linked Reproductive Health Center)	★			★		★		★
10. California's Adolescent Sibling Pregnancy Prevention Project	★					★		★
11. Adolescents Living Safely: AIDS Awareness, Attitudes & Actions		★	★		★			
12. Becoming a Responsible Teen	★	★		★	★			
13. Children's Aid Society—Carrera Program	★				★	★		★
14. Be Proud! Be Responsible! A Safer Sex Curriculum		★	★		★			
15. Making Proud Choices!	★	★		★	★			
16. Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth	★		★					
17. Seattle Social Development Project	★		★		★			★
18. Abecedarian Project								★
19. Teen Outreach Program								★

Note: Blank boxes indicate either: 1) the program did not measure, nor aim at, this particular outcome/impact; or 2) the program did not achieve a significant positive outcome in regard to the particular behavior or impact. For more information on each program's aims and outcomes, please see Advocates for Youth's complete report.

Effective School-Based Sex Education Programs*

1. Reducing the Risk

Reducing the Risk is a sex education curriculum, including information on abstinence and contraception. Given in 16 sessions, each lasting 45 minutes, it offers experiential activities to build skills in refusal, negotiation, and communication, including that between parents and their children. Designed for use with high school students, especially those in grades nine and 10, it is recommended for use with sexually inexperienced, urban, suburban, and rural youth—white, Latino, Asian, and black. **Evaluation** showed that it was more effective with lower risk, than with higher risk, youth. Evaluations—of the original program and of a replication of the program—each found delayed initiation of sexual intercourse, and reduced incidence of unprotected sex / increased use of contraception among participants as well as increased parent-child communication about abstinence and contraception.^{1,2}

2. Postponing Sexual Involvement (Augmenting a Five-Session Human Sexuality Curriculum)

This five-session, peer-led curriculum is designed to augment a five-session human sexuality curriculum led by health professionals, who also refer sexually active youth for nearby reproductive health care. It is recommended for use with eighth grade students, black youth, sexually inexperienced youth, and youth at higher risk due to socioeconomic disadvantage. **Evaluation** showed delayed initiation of sexual intercourse and, among sexually experienced participants, reduced frequency of sex and increased use of contraception.³ When replicated without fidelity (including omission of the five-session human sexuality curriculum), the program led to no changes in sexual behavior among participants relative to comparison youth.^{4,5}

3. Postponing Sexual Involvement, Human Sexuality & Health Screening

This pregnancy prevention program combines the five-session, peer-led *Postponing Sexual Involvement* curriculum with elements drawn from the *Self Center* (described below), which include three classroom sessions on reproductive health, delivered to seventh graders by health professionals and again the next year to eighth graders; group discussions; and a full-time health professional from outside the school, working in the school. Other components of the program include individual health risk screening and an eighth grade assembly and contest. The program is recommended for seventh and eighth grade, urban, African American, economically disadvantaged youth. **Evaluation** found that the program assisted female participants to delay initiation of sexual intercourse and increased the use of contraception by sexually active female participants. Evaluation found no statistically significant impact on the sexual behaviors of male participants.⁶

4. Safer Choices

This is an HIV/STI and teen pregnancy prevention curriculum, given in 20 sessions, evenly divided over two years and designed for use with grades nine through 12. The program includes experiential activities to build skills in communication, delay the initiation of sex, and promote condom use by sexually active participants. Other elements include a school health protection council, a peer team or club to host school-wide activities, educational activities for parents, and HIV-positive speakers. The program is recommended for use with white, Hispanic, African American, and Asian, urban and suburban high school students. **Evaluation** showed that *Safer Choices* effectively assisted sexually experienced youth to increase condom and contraceptive use. Hearing an HIV-positive speaker was also associated with participants' greater likelihood of receiving HIV testing, relative to control youth. The program neither hastened nor delayed the onset of sexual intercourse.^{7,8,9}

5. Reach for Health Community Youth Service

This program combines a health promotion curriculum (40 lessons per year in each of two years), including sexual health information, with three hours per week of community service. Reflection and activities help students learn from their community experience. The program is recommended for use with seventh and eighth grade, urban, black, and Hispanic youth, especially those who are economically disadvantaged. **Evaluation** showed delayed initiation of sexual intercourse, an effect that continued even through 10th grade. The program also assisted sexually active participants in reducing the frequency of sex and increasing use of condoms and contraception.^{10,11}

6. AIDS Prevention for Adolescents in School

This HIV/STI prevention curriculum comprises six sessions, delivered on consecutive days, and includes experiential activities to build skills in refusal, risk assessment, and risk reduction. It is recommended for use with African American, Hispanic, white, and Asian, high school students in urban settings. *Evaluation found that this program assisted sexually experienced participants to increase monogamy, reduce the number of their drug-using sexual partners, and increase condom use. The program had no significant effect on delaying the initiation of sex. Evaluation found the program to be associated with a favorable trend in the incidence of STIs among participants, relative to controls.*¹²

7. Get Real about AIDS

This HIV risk reduction curriculum comprises 15 sessions delivered over consecutive days. It includes experiential activities to build skills in refusal, communication, and condom use. Other components include activities, such as public service announcements, to reach more youth and reinforce educational messages. It is recommended for use with sexually active, white and Hispanic, urban, suburban, and rural, high school students. *Evaluation found that the program assisted sexually active participants to reduce the number of their sexual partners, increase condom use, and increase condom purchase. The program did not affect the timing of sexual initiation. It did not reduce the frequency of sex among sexually active youth nor their use of drugs and alcohol prior to having sex.*¹³

8. School / Community Program for Sexual Risk Reduction among Teens

This intensive, school-based intervention integrates sex education into a broad spectrum of courses throughout public education (kindergarten through 12th grade). It includes teacher training, peer education, school-based health clinic services (including contraceptive provision), referral and transportation to community-based reproductive health care, workshops to develop the role modeling skills of parents and community leaders, and media coverage of a spectrum of health topics. The program is recommended for use with black and white, rural students (kindergarten through 12th grade). *Evaluation found that this program reduced teen pregnancy rates in the participating community relative to comparison counties. Replication in two counties in another state found that it assisted youth in one county to delay the initiation of sexual intercourse and assisted males in another county to increase their use of condoms, relative to youth in comparison counties.*^{14,15,16}

Effective Community-Based Sex Education Programs

9. Self Center (School-Linked Reproductive Health Services)

This model of the school-linked health center (SLHC) offers free reproductive and contraceptive health care to participating youth from nearby junior and senior high schools. SLHC staff works daily in participating schools, providing sex education lessons once or twice a year in each homeroom and offering daily individual and group counseling in the school health suite. Staff is also available daily in the SLHC to provide students with education and counseling and, for those youth registered with the clinic, reproductive and sexual health care. The program is recommended for use with urban, black, and economically disadvantaged, junior and senior high school students. *Evaluation found that the program assisted participants to delay the initiation of sexual intercourse and to use reproductive health services prior to initiating sex. It also assisted sexually active participants to reduce the incidence of unprotected sex and increase their use of contraception. The program resulted in a reduction in teen pregnancy rates among participants, relative to comparison youth.*^{17,18}

10. California's Adolescent Sibling Pregnancy Prevention Program

This teen pregnancy prevention program provides individualized case management and care as well as sex education, including information on abstinence and contraception, to the adolescent siblings of pregnant and parenting teens. The program is recommended for economically disadvantaged, Hispanic youth, ages 11 to 17. *Evaluation found that the program assisted female youth to delay the initiation of sexual intercourse and assisted male youth to increase the consistent use of contraception. The program resulted in reductions in teen pregnancy rates among program youth, relative to comparison youth.*¹⁹

11. Adolescents Living Safely: AIDS Awareness, Attitudes & Actions

This HIV prevention program is designed to augment traditional services available at shelters for runaway youth. The program involves 30 discussion sessions for small groups, each lasting one-and-a-half to two hours and including experiential activities to build cognitive and coping skills. Intensive training of shelter staff and access to health care, including mental health services, are also important components of the program. It is recommended for use with black and Hispanic runaway youth, ages 11 through 18, living in city shelters. **Evaluation** found that the program assisted youth to reduce the frequency of sex and numbers of sexual partners, and increase condom use. The program did not affect the timing of sexual initiation.²⁰

12. Becoming a Responsible Teen

This HIV prevention, sex education, and skills training curriculum comprises eight one-and-a-half- to two-hour sessions. It includes experiential activities to build skills in assertion, refusal, problem solving, risk recognition, and condom use and is designed for use in single-sex groups, each facilitated by both a male and a female leader. It is recommended for use with African American youth, ages 14 through 18. **Evaluation** found the program assisted participants to delay the initiation of sex and assisted sexually active participants to reduce the frequency of sex, decrease the incidence of unprotected sex (including anal sex), and increase condom use.²¹

13. Children's Aid Society—Carrera Program

This multi-component youth development program provides daily after-school activities—including a job club and career exploration, academic tutoring and assistance, sex education that includes information about abstinence and contraception, arts workshops, and individual sports activities. A summer program offers enrichment activities, employment assistance, and tutoring. The program provides year-round comprehensive health care, including primary, mental, dental, and reproductive health services. The program involves youth's families and provides interpersonal skills development and access to a wide range of social services. The program is recommended for use with urban, black and Hispanic, socioeconomically disadvantaged youth, ages 13 through 15. **Evaluation** found that the program assisted female participants to delay the initiation of sexual intercourse and resist sexual pressure. It also assisted sexually experienced female participants to increase their use of dual methods of contraception. The program assisted both male and female participants to increase their receipt of health care. Otherwise, evaluation showed no positive, significant behavioral changes in participating males relative to comparison males. The program resulted in reduced rates of teen pregnancy among participants, relative to comparison youth.²²

14. Be Proud! Be Responsible! A Safer Sex Curriculum

This HIV prevention curriculum comprises six sessions, each lasting 50 minutes, and includes experiential activities to build skills in negotiation, refusal, and condom use. It is recommended for use with urban, black, male youth, ages 13 through 18. **Evaluation** found that it assisted young men to reduce their frequency of sex, reduce the number of their sexual partners (especially female partners who were also involved with other men), increase condom use, and reduce the incidence of heterosexual anal intercourse.²³

15. Making Proud Choices!

This HIV prevention curriculum emphasizes safer sex and includes information about both abstinence and condoms. It comprises eight, culturally appropriate sessions, each lasting 60 minutes and includes experiential activities to build skills in delaying the initiation of sex, communicating with partners, and among sexually active youth, using condoms. It is recommended for use with urban, African American youth, ages 11 through 13. **Evaluation** found the program assisted participants to delay initiation of sex and assisted sexually active participants to reduce the frequency of sex, reduce the incidence of unprotected sex, and increase condom use.²⁴

16. Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth

This community-wide, 18-month long program provides peer education workshops on HIV awareness and prevention and peer-led group discussions in various community settings. Peer educators also lead efforts to make condoms available via door-to-door and street canvassing and make presentations at major community events. Radio and television public service announcements, posters in local businesses and public transit, and a newsletter augment the work of the peer educators. The program is designed for use in urban, Latino communities, to reach adolescents ages 14 through 19. **Evaluation** showed that the program assisted the community's male teens to delay the initiation of sexual intercourse and assisted the community's sexually active female teens to reduce the number of their sexual partners. The program did not affect sexually active participants' frequency of sex.^{25,26}

Other Programs to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections

17. Seattle Social Development Project

This is a school-based program to provide developmentally appropriate, social competence training to elementary school children. Components include educator training each year and voluntary parenting classes on encouraging children's developmentally appropriate social skills. The program is recommended for use with urban, socioeconomically disadvantaged children—white, Asian, and Native American, but especially African American—in grades one through six. **Evaluation** when study participants were age 18, and again when they reached 21, found that the program assisted youth who participated in the program as children to significantly delay the initiation of sexual intercourse and, among sexually experienced youth, to reduce the number of sexual partners and increase condom use, relative to comparison youth. By age 21, the program also showed reduced rates of teenage pregnancy and birth in participants, relative to comparison youth. Other long-term positive outcomes for participating youth, relative to comparisons, included increased academic achievement and reduced incidence of delinquency, violence, school misbehavior, and heavy drinking.^{27,28}

18. Abecedarian Project

This full-time educational program consists of high quality childcare from infancy through age five, including individualized games that focus on social, emotional, and cognitive development, with a particular emphasis on language. During the early elementary school years, the program works to involve parents in their children's education, using a Home School Resource Teacher to serve as a liaison between school and families. The program is recommended for use with healthy, African American infants from families that meet federal poverty guidelines. **Evaluation** found long-term impacts, including a reduced number of adolescent births and delayed first births as well as increased rates of skilled employment and college education and reduced rates of marijuana use among former participants, relative to controls.²⁹

19. Teen Outreach Program

This school-based, teen pregnancy and dropout prevention program involves weekly classroom sessions, lasting one hour, that integrate the developmental tasks of adolescence with lessons learned from community service (lasting at least 30 minutes each week). The curriculum focuses on values, human growth and development, relationships, dealing with family stress, and issues related to the social and emotional transition from adolescence to adulthood. The program is recommended for high school youth at risk of teen pregnancy, academic problems, and school dropout, and is most effective with ethnic minority youth, adolescent mothers, and students with academic difficulties, including previous school suspension. **Evaluation** of the original program and evaluations of two replications all found that the program reduced rates of pregnancy, school suspension, and class failure among participants, relative to control/comparison youth.^{30,31,32}

* Throughout, populations are identified using the language of the original evaluation. For example, some programs are recommended for use with African American youth, and others, for use with black youth; some programs are recommended for use with Latino youth, and others, for use with Hispanic youth.

References

1. Kirby D, Barth RP, Leland N *et al.* Reducing the Risk: impact of a new curriculum on sexual risk-taking. *Family Planning Perspectives* 1991; 23:253-263.
2. Hubbard BM, Giese ML, Rainey J. A replication study of Reducing the Risk, a theory-based sexuality curriculum for adolescents. *Journal of School Health* 1998; 68:243-247.
3. Howard M, McCabe JB. Helping teenagers postpone sexual involvement. *Family Planning Perspectives* 1990; 22:21-26.
4. Kirby D, Korpi M, Barth RP *et al.* The impact of the Postponing Sexual Involvement curriculum among youths in California. *Family Planning Perspectives* 1997; 29:100-108.
5. Cagampang HH, Barth RP, Korpi M *et al.* Education Now and Babies Later (ENABL): life history of a campaign to postpone sexual involvement. *Family Planning Perspectives* 1997; 29:109-114.
6. Aarons SJ, Jenkins RR, Raine TR *et al.* Postponing sexual intercourse among urban junior high school students—a randomized controlled evaluation. *Journal of Adolescent Health* 2000; 27:236-247.
7. Coyle K, Basen-Engquist K, Kirby D *et al.* Short-term impact of Safer Choices: a multicomponent, school-based HIV, other STD, and pregnancy prevention program. *Journal of School Health* 1999; 69:181-188.
8. Coyle K, Basen-Engquist K, Kirby D *et al.* Safer Choices: reducing teen pregnancy, HIV, and STDs. *Public Health Reports* 2001; 116 (Supplement 1):82-93.
9. Markham C, Baumler E, Richesson R *et al.* Impact of HIV-positive speakers in a multicomponent, school-based HIV/STD prevention program for inner-city adolescents. *AIDS Education & Prevention* 2000; 12:442-454.
10. O'Donnell L, Stueve A, San Doval, A *et al.* The effectiveness of the Reach for Health Community Youth Service learning program in reducing early and unprotected sex among urban middle school students. *American Journal of Public Health* 1999; 89:176-181.
11. O'Donnell L, Stueve A, O'Donnell C *et al.* Long-term reductions in sexual initiation and sexual activity among urban middle schoolers in the Reach for Health Service learning program. *Journal of Adolescent Health* 2002; 31:93-100.
12. Walter HJ, Vaughan RD. AIDS risk reduction among a multiethnic sample of urban high school students. *JAMA* 1993; 270:725-730.
13. Main DS, Iverson DC, McGloin J *et al.* Preventing HIV infection among adolescents: evaluation of a school-based education program. *Preventive Medicine* 1994; 23:409-417.

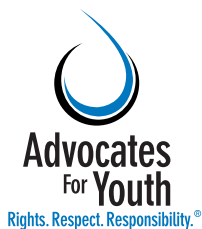
Table B. Successful Programs: Settings & Populations Served

Program	Locale			Range				Populations			
	Urban	Sub-urban	Rural	Pre-School	Elementary	Junior High	Senior High	White	Black	Hispanic	Asian
<i>School-Based Programs</i>											
1. Reducing the Risk	★	★	★				★	★	★	★	★
2. Postponing Sexual Involvement (Augmenting a Five-Session Human Sexuality Curriculum)	★					★			★		
3. Postponing Sexual Involvement, Human Sexuality & Health Screening	★					★			★		
4. Safer Choices	★	★					★	★	★	★	★
5. Reach for Health Community Youth Service	★					★			★	★	
6. AIDS Prevention for Adolescents in School	★						★	★	★	★	★
7. Get Real about AIDS	★	★	★				★	★		★	
8. School / Community Program for Sexual Risk Reduction among Teens			★		★	★	★	★	★		
9. Seattle Social Development Project	★				★			★	★		★
10. Abecedarian Project	★			★	★				★		
11. Teen Outreach Program	★	★	★				★	★	★	★	
<i>Community-Based Programs</i>											
12. Self Center (School-Linked Reproductive Health Center)	★					★	★		★		
13. California’s Adolescent Sibling Pregnancy Prevention Project	★		★			★	★			★	
14. Adolescents Living Safely: AIDS Awareness, Attitudes & Actions	★					★	★	★	★	★	
15. Becoming a Responsible Teen	★						★		★		
16. Children’s Aid Society—Carrera Program	★					★	★		★	★	
17. Be Proud! Be Responsible! A Safer Sex Curriculum	★					★	★		★		
18. Making Proud Choices!	★					★			★		
19. Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth	★						★			★	

For the full document—*Science & Success: Sex Education and Other Programs That Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections*—please visit www.advocatesforyouth.org/programsthatwork/.

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14. Vincent ML, Clearie AF, Schluchter MD. Reducing adolescent pregnancy through school and community-based education. *JAMA* 1987; 257:3382-3386.
15. Koo HP, Dunteman GH, George C *et al.* Reducing adolescent pregnancy through a school- and community-based intervention: Denmark, South Carolina, revisited. *Family Planning Perspectives* 1994; 26:206-211+.
16. Paine-Andrews A, Harris KJ, Fisher JL *et al.* Effects of a replication of a multicomponent model for preventing adolescent pregnancy in three Kansas communities. *Family Planning Perspectives* 1999; 31:182-189.
17. Zabin LS, Hirsch MB, Smith EA *et al.* Evaluation of a pregnancy prevention program for urban teenagers. *Family Planning Perspectives* 1986; 18:119-126.
18. Frost JJ, Forrest JD. Understanding the impact of effective teenage pregnancy prevention programs. *Family Planning Perspectives* 1995; 27:188-195.
19. East P, Kiernan E, Chavez G. An evaluation of California's Adolescent Sibling Pregnancy Prevention Program. *Perspectives on Sexual & Reproductive Health* 2003; 35:62-70.
20. Rotheram-Borus MJ, Koopman C, Haignere C *et al.* Reducing HIV sexual risk behaviors among runaway adolescents. *JAMA* 1991; 266:1237-1241.
21. St. Lawrence JS, Brasfield TL, Jefferson KW *et al.* Cognitive-behavioral intervention to reduce African American adolescents' risk for HIV infection. *Journal of Consulting and Clinical Psychology* 1995; 63:221-237.
22. Philliber S, Williams Kaye J, Herrling S *et al.* Preventing pregnancy and improving health care access among teenagers: an evaluation of the Children's Aid Society—Carrera Program. *Perspectives on Sexual & Reproductive Health* 2002; 34:244-251.
23. Jemmott JB, Jemmott LS, Fong GT. Reductions in HIV risk-associated sexual behaviors among black male adolescents: effects of an AIDS prevention intervention. *American Journal of Public Health* 1992; 82:372-377.
24. Jemmott JB, Jemmott LS, Fong GT. Abstinence and safer sex HIV risk-reduction interventions for African American adolescents: a randomized controlled trial. *JAMA* 1998; 279:1529-1536.
25. Sellers DE, McGraw SA, McKinlay JB. Does the promotion and distribution of condoms increase teen sexual activity? Evidence from an HIV prevention program for Latino youth. *American Journal of Public Health* 1994; 84:1952-1959.
26. Smith KW, McGraw SA, Crawford SL *et al.* HIV risk among Latino adolescents in two New England cities. *American Journal of Public Health* 1993; 83:1395-1399.
27. Lonczak HS, Abbott RD, Hawkins JD *et al.* Effects of the Seattle Social Development Project on sexual behavior, pregnancy, birth, and sexually transmitted disease outcomes by age 21 years. *Archives of Pediatrics & Adolescent Medicine* 2002; 156:438-447.
28. Hawkins JD, Catalano RF, Kosterman R *et al.* Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics & Adolescent Medicine* 1999; 153:226-234.
29. Campbell FA, Ramey CT, Pungello E *et al.* Early childhood education: young adult outcomes from the Abecedarian Project. *Applied Developmental Science* 2002; 6(1):42-57.
30. Allen JP, Philliber S, Hoggson N. School-based prevention of teen-age pregnancy and school dropout: process evaluation of the national replication of the Teen Outreach Program. *American Journal of Community Psychology* 1990; 18:505-523.
31. Allen JP, Philliber S, Herrling S *et al.* Preventing teen pregnancy and academic failure: experimental evaluation of a developmentally-based approach. *Child Development* 1997; 64:729-742.
32. Allen JP, Philliber S. Who benefits most from a broadly targeted prevention program? Differential efficacy across populations in the Teen Outreach Program. *Journal of Community Psychology* 2001; 29:637-655.



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