

Prevention of HIV/AIDS, other STIs and Pregnancy: Youth Development Behavioral Interventions  
Summary Evidence Tables

**Studies Evaluating Youth Development Focused Education Combined with Work or Vocational Training**

Author & year Name of Intervention (study period) Design suitability (design) Quality of execution (# of Limitations) Outcome Measurement	Location  Intervention  Comparison	Study population description  Sample size	Effect measure	Reported baseline	Reported effect	Value used in summary	Follow -up time
Schochet 2000 JobCorps (Not specified) Greatest (Randomized Trial) Good (1 Limitation) Self report	Location: USA  Components: youth development behavioral intervention (residential living participants only) + vocational training + job placement + counseling + residential living  Comparison: Non- JOBCORP programs	US legal residents 16-24 years old from disadvantaged backgrounds  n= 11787  I: 7311 C: 4476	Percentage of participants having new children during 30 month period	NR	I: 24.5 C: 24.7	Rel % Δ (95% CI) -0.8 (-7%, 6%)	30 months
Walker 1992 Summer Education Training Program (STEP) (1985-1988) Greatest (Individual randomized trial) Fair (4 Limitations) Self report	Location: USA  Components: youth development behavioral intervention employment + sex, HIV/STI education  Comparison: Received employment with no education component	14-15 year olds who were one grade level behind in math or reading, and were from families that met the SYETP poverty guidelines  n= 1342 I: 682 C: 660	Percentage of participants ever pregnant or ever caused a pregnancy  Absolute percentage point change in sexual initiation  Absolute percentage point change in sexual activity  Absolute percentage point change in use of birth control	NR  NR  NR  NR	I: 26.4% C: 25.7%  NR  NR  NR	Rel % Δ (95% CI)  1.9% (-16%, 21%)  -3.1 pct pts (ns)  2.5 pct pts (ns)  8.1 (p<0.05)	54 months

Walker 1992 Summer Education Training Program (STEP) (1985-1988) Greatest (Individual randomized trial) Fair (4 Limitations) Self report	Location: USA	14-15 year olds who were one grade level behind in math or reading, and were from families that met the SYETP poverty guidelines  n= 1260 I: 635 C:625	Percentage of participants ever pregnant or ever caused a pregnancy	NR	I: 36% C: 35%	Rel % Δ (95% CI) 3.8% (-11%, 19%)	42 months
	Components: youth development behavioral intervention + employment + sex, HIV/STI education		Absolute percentage point change in sexual initiation	NR	NR	0.7 pct pts (ns)	
	Comparison: Received employment with no education component		Absolute percentage point change in sexual activity	NR	NR	8.3 pct pts (p<0.01)	
			Absolute percentage point change in use of birth control	NR	NR	3.2 pct pts (ns)	

### Studies Evaluating Youth Development Focused Education Combined with Multiple Pro-social Activities

Author & year Name of Intervention (study period) Design suitability (design) Quality of execution (# of Limitations) Outcome Measurement	Location  Intervention  Comparison	Study population description  Sample size	Effect measure	Reported baseline	Reported effect	Value used in summary	Follow-up time
East 2003 Adolescent Sibling Pregnancy Prevention Program (1997) Greatest (Group non-randomized trial) Fair (4 Limitations) Self report	Location: USA, California  Components: youth development behavioral intervention+ community services + sex, HIV/STI education + job placement  Comparison: Did not receive the intervention	Youth ages 11-17 years old who were enrolled in the California Adolescent Family Life Program.  n= 1466 I = 731 C= 735	1. Percentage of participants becoming pregnant  2. Percentage of participants using birth control at last sex  3. Mean number of sexual partners (among sexually active participants)  4. Percentage of participants having first sexual experience during program interval	NR  I: F 71% M 56% C: F 55% M 62%  NR  NR	I :Females 3.7% Males 0.7% C: Females 6.5% Males 1.3 %  I: Females 77.4% Males 59.2% C: Females 55.8% Males 53.3%  I: Females 1.5 Males 2.0 C: Females 1.7 Males 2.0  I: Females 7.4% Males 11.7% C: Females 16% Males 11.5%	Rel % Δ (95% CI) -43% (-68%, 0.23%)  Females: 6.6% (-3.4%, 17.6%) Males: 22.5% (6.4%, 41.0%)  Males: 0% Females: -12%  Males: +2% (p>0.05) Females: -54% (p<0.05)	9 months

			5. Percentage of participants contracting STIs in the last 9 months (among sexually active respondents)	NR	I: Females 6.8% Males 1.4% C: Females 9.3 % Males 0.0%	Females: -27% Males: +831%	
Philliber 2002 Children's Aid Society- Carrera Program (1997-2000) Greatest (Individual Randomized Trial) Good (1 Limitation) Self report	Location: USA; New York, New York  Components: youth development behavioral intervention+ employment + sex, HIV/STI education + academic support + arts + individual sports + mental health and health care services  Comparison: Non-CAS programs	Disadvantaged youth ages 13- 15 years old from 6 of 42 potential sites that were not pregnant (had not caused pregnancy) as of July 1, 1997  n= 484 I = 242 C = 242	1. Percentage of participants that became pregnant or caused a pregnancy	NR	I = 10% C = 17%	Rel % Δ (95% CI) -41% (-63%, -6%)	3 years
			2. Used condoms and hormonal method at last sex	NR	I = 21% C = 20%	Rel % Δ (95% CI) +5% (-26%, 49%)	
			3. Odds ratio of currently having sex comparing intervention to control group at follow up	NR	Males: OR= 0.60 (p > 0.05) Females: OR= 0.52 (p <0.05)	Males: OR= 0.60 (p > 0.05) Females: OR= 0.52 (p <0.05)	

### Studies of Youth Development Focused Education Combined with Community Service

Author & year Name of Intervention (study period) Design suitability (design) Quality of execution (# of Limitations) Outcome Measurement	Location  Intervention  Comparison	Study population description  Sample size	Effect measure	Reported baseline	Reported effect	Value used in summary	Follow -up time
Allen 1997 Teen Outreach Program (1991-1995) Greatest (Other design) Good (1 Limitation) Self Report	Location: USA  Components: youth development behavioral intervention + community services + HIV/STI education  Comparison: Did not receive intervention	Consenting high school students  Schools: 25 Students:588  I: 294 C: 294	1. Percentage of females reporting ever pregnant (n=560) a. Intervention b. Control 2. Odds ratio comparing pregnancy rates of intervention versus controls (for female participants only)	6.1% 10.0% NR	4.2% 9.8% OR = 0.41 p<0.05	1. Rel %Δ (95% CI) -29.7 (-63.2, 34.2)  2. 0.41 p<0.05	6 months

<p>Bayne-Smith 1994 Teen Incentives Program (1989) Greatest (Other design) Fair (4 limitations) Self report</p>	<p>Location: USA, NY, NY</p> <p>Components: youth development behavioral intervention + community service + mentorship + sex, HIV/STI education+ career development</p> <p>Comparison: written materials pertaining to sex and fertility risk taking behaviors</p>	<p>Consenting high school freshmen</p> <p>n= 95 Intervention n=42 Control n= 53</p>	<p>Absolute sexual frequency: self reported instances of completed sexual activity in the preceding 2 months</p>	<p>Mean per month (SD) I: 3.50 (6.69) C: 3.94 (5.51)</p>	<p>Mean per month (SD) I: 1.19 (2.29) C: 2.74 (3.51)</p>	<p>Rel % Δ -52%</p>	<p>14 weeks</p>
<p>Coyle 2006 All 4 You (2000-2001) Greatest (Group randomized trial ) Fair (2 Limitations) Self report</p>	<p>Location: USA, Northern California</p> <p>Components: youth development behavioral intervention+ community service + sex, HIV/STI education</p> <p>Comparison: Usual activities</p>	<p>24 alternative high schools I: 13 schools C: 11 schools</p> <p>Students: n= 988 I: 597 C: 391</p>	<p>Odds ratio comparing intervention to control for:</p> <ol style="list-style-type: none"> <li>1. Pregnancy since baseline (among sexually active at baseline, n=308)</li> <li>2. Sexual initiation (among sexually inexperienced at baseline) <ul style="list-style-type: none"> <li>a. 18 months (n=94)</li> </ul> </li> <li>3. Use of condoms at last intercourse <ul style="list-style-type: none"> <li>a. 6 months (n=469)</li> <li>b. 12 months (n=386)</li> <li>c. 18 months (n=359)</li> </ul> </li> <li>4. Use of effective pregnancy prevention method at last intercourse <ul style="list-style-type: none"> <li>a. 6 months (n=527)</li> <li>b. 12 months (n=460)</li> <li>c. 18 months (n=417)</li> </ul> </li> <li>5. Standardized mean difference in number of sexual partners in the previous 12 months (n=394)</li> </ol>	<p>NR</p> <p>NR</p> <p>NR</p> <p>NR</p> <p>NR</p> <p>NR</p>	<p>Odds Ratio (p-value or 95% CI)</p> <p>a. 0.84 (p&gt;0.05)</p> <p>a. 1.23 (0.51, 2.97)</p> <p>a. 2.12 (1.24, 3.56) b. 0.88 (0.50, 1.55) c. 1.00 (0.49, 2.02)</p> <p>a. 1.15 (0.78, 1.70) b. 1.12 (0.74, 1.66) c. 0.77 (0.49, 1.23)</p> <p>SMD (p-value) -0.18 (p &gt;0.05)</p>	<p>Odds Ratio (p-value or 95% CI)</p> <p>a. 0.84 (p&gt;0.05)</p> <p>a. 1.23 (0.51, 2.97)</p> <p>a. 2.12 (1.24, 3.56) b. 0.88 (0.50, 1.55) c. 1.00 (0.49, 2.02)</p> <p>a. 1.15 (0.78, 1.70) b. 1.12 (0.74, 1.66) c. 0.77 (0.49, 1.23)</p> <p>SMD (p-value) -0.18 (p &gt;0.05)</p>	<p>18 Months</p>

<p>Hahn 1994 (1989-1993) Quantum Opportunities Program Greatest (Individual randomized trial) Fair (3 Limitations) Self report</p>	<p>Location: USA</p> <p>Components: youth development behavioral intervention + community service + sex, HIV/STI education + academic services + career planning</p> <p>Comparison: Did not receive the intervention</p>	<p>Students in 8<sup>th</sup> grade receiving public assistance</p> <p>n= 170 Intervention n= 88 Control n= 82</p>	<p>Percentage of participants having children at follow-up</p>	<p>NR</p>	<p>I: 24% C: 38%</p>	<p>Rel % Δ (95% CI) -36.8 (-55%, -11%)</p>	<p>4 years</p>
<p>Melchior 1998 Learn and Serve (1995-1996) Greatest (Non-randomized trial) Fair (3 Limitations) Self report</p>	<p>Location: USA</p> <p>Components: youth development behavioral intervention + service learning</p> <p>Comparison: Did not receive the intervention</p>	<p>Students who elected to take service learning classes</p> <p>Schools: n=17 Individuals: n= 1052 I: 608 C: 444</p>	<p>Percentage of participants ever pregnant or ever caused a pregnancy (n=721)</p>	<p>I: 6% C: 5%</p>	<p>Rel % Δ (95% CI) -65% (p&lt;0.10)</p>	<p>Rel % Δ (95% CI) -65% (-100, slightly past zero) (p&lt;0.10)</p>	<p>9 months</p>
<p>O'Donnell 2002 Reach for health service learning (1994-1996) Greatest (Group Randomized Trial) Fair (3 Limitations) Self report</p>	<p>Location: USA</p> <p>Components: youth development behavioral intervention+ community service + sex HIV/STI education</p> <p>Comparison: Standard Health Education</p>	<p>7<sup>th</sup> and 8<sup>th</sup> grade students who completed the baseline survey (7<sup>th</sup> grade), attended the participating school in the 8<sup>th</sup> grade, and continued to reside in the New York metropolitan area</p> <p>n=255</p>	<p>Odds ratio comparing intervention to control for:</p> <ol style="list-style-type: none"> <li>Sexual initiation (among sexually inexperienced at baseline n= 159) <ul style="list-style-type: none"> <li>a. 1 year CYS (95% CI)</li> <li>b. 2 year CYS (95% CI)</li> </ul> </li> <li>Recent sex at 10<sup>th</sup> grade follow-up (n=195) <ul style="list-style-type: none"> <li>a. 1 year CYS (95% CI)</li> <li>b. 2 year CYS (95% CI)</li> </ul> </li> </ol>	<p>NR NR NR NR</p>	<p>Odds ratio (95% CI) 0.49 (0.25, 0.99) 0.32 (0.14, 0.73) 0.48 (0.24, 0.96) 0.39 (0.20, 0.76)</p>	<p>Odds ratio (95% CI) 0.49 (0.25, 0.99) 0.32 (0.14, 0.73) 0.48 (0.24, 0.96) 0.39 (0.20, 0.76)</p>	<p>4 years</p>
<p>O'Donnell 1999 Reach for health service learning (1994-1995) Greatest (Group non-randomized trial) Fair (2 Limitations) Self Report</p>	<p>Location: USA; New York, NY</p> <p>Components: youth development behavioral intervention + service learning + sex, HIV/STI education</p> <p>Comparison: Standard Health Education</p>	<p>Consenting middle school students at 2 participating schools</p> <p>Classrooms: I: 35 C: 33 Individuals: n= 1061 I: 477 C: 584</p>	<p>Percentage of students reporting:</p> <ol style="list-style-type: none"> <li>Recent sex with condoms (n=495) <ul style="list-style-type: none"> <li>a. Curriculum + community svc</li> <li>b. Curriculum only</li> <li>c. Control</li> </ul> </li> <li>Recent sex with birth control (n=475) <ul style="list-style-type: none"> <li>a. Curriculum + community svc</li> <li>b. Curriculum only</li> <li>c. Control</li> </ul> </li> </ol>	<p>57.4% 56.7% 65.6% 51.1% 41.4% 61.9%</p>	<p>73.3% 64.4% 62.3% 59.5% 46.4% 53.9%</p>	<p>Rel % Δ (95% CI) 34% (18.9, 50.6) 34% (14.7, 55.8)</p>	<p>9 months</p>

<p>Philliber 1992 Teen Outreach Program (1988-1989) Greatest (Other design) Fair (2 Limitations) Self report</p>	<p>Location: USA  Components: youth development focused education + community services + sex, HIV/STI education  Comparison: Did not receive intervention</p>	<p>Consenting students aged 11-21 years at schools with Teen Outreach Programs  n=985 I: n= 495 C: n= 490</p>	<p>Percentage of participants ever pregnant or caused a pregnancy</p>	<p>I: 4.5% C: 7.8%</p>	<p>I: 7.0% C: 3.5%</p>	<p>Rel % Δ (95% CI) -50% (-72%, -12%)</p>	<p>9 months</p>
<p>Schirm 2003 (1995-2000) Quantum Opportunities Program Greatest (Individual randomized trial)</p>	<p>Location: USA  Components: youth development behavioral intervention + community service + sex, HIV/STI education + academic services + career planning  Comparison: Did not receive the intervention</p>	<p>Students entering 9<sup>th</sup> grade with below average grade point average  n= 1069 Intervention n= 580 Control n= 489</p>	<p>Percentage of participant ever pregnant or ever caused a pregnancy</p> <p>Percentage of participants ever having sex</p> <p>Percentage of participants using condoms at last intercourse</p>	<p>NR</p> <p>NR</p> <p>NR</p>	<p>I: 33% C: 33%</p> <p>I: 78% C: 83%</p> <p>I: 71% C: 72%</p>	<p>Rel % Δ (95% CI) 0</p> <p>0.06 (-11.4, -0.32)</p> <p>0.014 (-8.6, 6.4)</p>	<p>5 years</p>