

Group-based Abstinence Education Interventions for Adolescents

Summary Evidence Table

Author(s) & Date (Study period) Location Design suitability Quality of execution	Intervention Description	Study population description and Attrition	Study Results for Index follow-up
<p>Anderson et al., 1999 (study period not reported)</p> <p>Los Angeles County</p> <p>Greatest: RCT - group</p> <p>Fair</p>	<p><i>Setting:</i> School and Community: inner-city youth in summer programs, in-school and after-school classes in a diverse sociocultural community in Los Angeles County</p> <p><i>Intervention Strategy:</i> Abstinence Education</p> <p><i>Intervention Name:</i> Reaching Adolescents and Parents (RAP)</p> <p><i>Dosage:</i> not reported</p> <p><i>Deliverer:</i> teacher</p> <p><i>Additional Components:</i> none</p> <p><i>Comparison Group:</i> untreated</p> <p><i>Tailoring:</i> tailored for race/ethnicity and attempts were made to ensure deliverers are culturally appropriate</p> <p><i>Focus:</i> pregnancy</p>	<p><i>Target population:</i> inner city youth</p> <p><i>Age:</i> Range: 9–14 years</p> <p><i>Gender:</i> Male: 41.1% Female: 58.9%</p> <p><i>Race/Ethnicity:</i> American Indian/Alaska Native: 1.6% Asian: 6.5% Black/African American: 18.4% White: 15.7% Hispanic 47.6% Other: 4.3%</p> <p><i>Virginity at baseline:</i> not reported</p> <p><i>Number of participants analyzed:</i> Intervention: 185 Comparison: 66 Total: 251</p> <p><i>Attrition:</i> 2nd follow up: Total: 14.6%</p>	<p><i>Pregnancy:</i> OR= 0.54, 95% CI (0.13, 2.34)</p>

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Blake et al., 2001 (1998–1999) Rochester, NY Greatest: RCT - group Fair	<i>Setting:</i> School: 8th grade classes in Rochester, NY <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Managing the Pressures Before Marriage Enhanced (MPM Enhanced) <i>Dosage:</i> 5 hours of contact <i>Deliverer:</i> local youth leader (peer) <i>Additional Components:</i> none <i>Comparison Group:</i> treated control <i>Tailoring:</i> none <i>Focus:</i> pregnancy	<i>Target population:</i> middle school students <i>Grade:</i> 8th grade <i>Gender:</i> Total: Male: 52% Female: 48% <i>Race/Ethnicity:</i> Total: White: 85% Unknown: 15% <i>Virginity at baseline:</i> Total: 94.3% <i>Number of participants analyzed:</i> Intervention: 190 Comparison: 161 Total: 351 <i>Attrition Calculated:</i> Posttest: Total: 9.8%	<i>Sexual Activity:</i> OR= 0.70, 95% CI (0.23, 2.11)

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Borawski et al., 2005 (2001–2002) Midwest Greatest non-randomized trial - group Fair	<i>Setting:</i> School: urban and suburban middle schools <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> For Keeps <i>Dosage:</i> 5 hours of contact <i>Deliverer:</i> outside facilitators <i>Additional Components:</i> none <i>Comparison Group:</i> untreated <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> students in urban and suburban middle schools <i>Age:</i> Mean (SD): 12.8 (0.75) years <i>Gender:</i> Male: 48.2% Female: 51.8% <i>Race/Ethnicity:</i> Black/African American: 71.4% White: 20.3% Hispanic 6.3% Other: 1.9% <i>Virginity at baseline:</i> 77.1% <i>Number of participants analyzed:</i> Intervention: 1096 Comparison: 973 Total: 2069 <i>Attrition Calculated:</i> Post test: Intervention: 33% Comparison: 30% Total: 31%	<i>Sexual Activity:</i> Virgins: OR= 0.83, 95% CI (0.52, 1.33) Non-virgins: OR= 0.87, 95% CI (0.58, 1.31) <i>Frequency of Sex:</i> OR = 0.47, 95% CI (0.26, 0.84) <i>Number of Partners:</i> OR= 0.50, 95% CI (0.30, 0.83) <i>Use of Protection (condoms):</i> OR= 1.19, 95% CI (0.71, 1.99)

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<p>Christopher et al., 1990 (study period not reported)</p> <p>location not reported</p> <p>Greatest: non-randomized trial - group</p> <p>Fair</p>	<p><i>Setting:</i> School and Community: 5 middle schools and 3 community sites in the same area of the city</p> <p><i>Intervention Strategy:</i> Abstinence Education</p> <p><i>Intervention Name:</i> Success Express Program</p> <p><i>Dosage:</i> 6 hours of contact</p> <p><i>Deliverer:</i> not reported</p> <p><i>Additional Components:</i> none</p> <p><i>Comparison Group:</i> minimal treatment</p> <p><i>Tailoring:</i> none</p> <p><i>Focus:</i> multifocus</p>	<p><i>Target population:</i> low-income, primarily minority early adolescents</p> <p><i>Age:</i> Total Mean: 12.8 years</p> <p><i>Gender:</i> Male: 39% Female: 61%</p> <p><i>Race/Ethnicity:</i> American Indian/Alaska Native: 2% Black/African American: 21% White: 8% Hispanic 69%</p> <p><i>Virginity at baseline:</i> Females: 98.3% Males: 63.6%</p> <p><i>Number of participants at beginning of study:</i> Intervention: 191 Comparison: 129 Total: 320</p> <p><i>Attrition:</i> Post test: Intervention: 41% Comparison : 30%</p>	<p><i>Sexual Activity:</i></p> <p><u>Intervention:</u> Males: pretest mean = 36.4 posttest mean = 36.4 Females: pretest mean = 1.7 posttest mean = 3.3</p> <p><u>Comparison:</u> Males: pretest mean = 16.7 posttest mean = 23.3 Females: pretest mean = 4.2 posttest mean = 2.1</p>

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Clark, Miller et al., 2005 (August–April) Southeast Greatest: RCT - group Fair	<i>Setting:</i> School: suburban middle school <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Adult Identity Mentoring (AIM) <i>Dosage:</i> 10 hours of contact <i>Deliverer:</i> trained college students <i>Additional Components:</i> none <i>Comparison Group:</i> minimal treatment <i>Tailoring:</i> tailored for race/ethnicity and attempts were made to ensure deliverers were culturally appropriate <i>Focus:</i> multifocus	<i>Target population:</i> African American 7th graders in a suburban town <i>Age:</i> Mean (SD): 12.5 (0.64) years <i>Gender:</i> Male: 59% Female: 41% <i>Race/Ethnicity:</i> Black/African American: 100% <i>Virginity at baseline:</i> 64% <i>Number of participants at beginning of study:</i> Intervention: 117 Comparison: 104 Total: 221 <i>Attrition Calculated:</i> Post test: Total: 13% 2nd follow up: Total: 36%	<i>Sexual Activity:</i> OR= 0.61, 95% CI (0.32, 1.16) Female: OR= 2.12, 95% CI (0.68, 6.63) Male: OR= 0.29, 95% CI (0.12, 0.66)

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Clark, Trenholm, et al., 2007 (2001–2005) Edgefield, SC Greatest RCT - individual Fair	<i>Setting:</i> Community: schools (after school/lunchtime) <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Heritage Keepers Life Skills <i>Dosage:</i> 1 contact per week <i>Deliverer:</i> Heritage Community Services staff <i>Additional Components:</i> creation of Family Assets and Character Council, education of media personnel to promote abstinence <i>Comparison Group:</i> treated control <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> 6–12 graders already receiving mandatory abstinence education in school <i>Grade:</i> middle and high school (6–12 grades) <i>Gender:</i> Middle School: Male: 49% Female: 51% High School: Male: 46% Female: 54% <i>Race/Ethnicity:</i> Middle School: Black/African American: 52% White: 37% Hispanic 5% Other: 7% High School: Black/African American: 63% White: 25% Hispanic 5% Other: 7% <i>Virginity at baseline (High School only):</i> 62% <i>Number of participants analyzed:</i> Intervention: 320 Comparison 1: 284 Total: 604 <i>Attrition Calculated:</i> 2nd follow up: Intervention: 13% Comparison: 17% Total: 15%	<i>Sexual Activity:</i> OR= 1.00, 95% CI (0.67, 1.48) <i>Number of Partners:</i> OR= 1.13, 95% CI (0.59, 2.19) <i>Unprotected Sex:</i> OR= 1.35, 95% CI (0.48, 3.76) <i>Use of Protection (condoms):</i> OR= 0.79, 95% CI (0.47, 1.33) <i>Use of Protection (oral contraceptives):</i> OR= 0.76, 95% CI (0.47, 1.24) <i>Pregnancy:</i> OR= 1.31, 95% CI (0.66, 2.63) <i>STI:</i> OR= 1.00, 95%CI (0.39, 2.59)

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<p>Jorgensen et al., 1993 (1998–1999)</p> <p>Delaware and Mississippi</p> <p>Greatest: RCT - group</p> <p>Fair</p>	<p><i>Setting:</i> School: 7th grades in DE and MS</p> <p><i>Intervention Strategy:</i> Abstinence Education</p> <p><i>Intervention Name:</i> Project Taking Charge</p> <p><i>Dosage:</i> 6 weeks in duration</p> <p><i>Deliverer:</i> teacher</p> <p><i>Additional Components:</i> none</p> <p><i>Comparison Group:</i> untreated</p> <p><i>Tailoring:</i> tailored for cultural/subcultural identity</p> <p><i>Focus:</i> pregnancy</p>	<p><i>Target population:</i> low income 7th grade students in schools with high pregnancy rates</p> <p><i>Age:</i> Mean: 14.4 years</p> <p><i>Gender:</i> Male: 46.2% Female: 50%</p> <p><i>Race/Ethnicity:</i> Black/African American: 36.5% White: 48.1% Hispanic 9.6% Other: 5.8%</p> <p><i>Virginity at baseline:</i> not reported</p> <p><i>Number of participants at beginning of study:</i> Intervention: 52 Comparison: 39 Total: 91</p> <p><i>Attrition:</i> Post test: Intervention: 0% Total: 0%</p>	<p><i>Sexual Activity:</i> OR= 0.30, 95% CI (0.12, 0.74)</p>

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Kirby, Korpi, et al., 1997 (1992–1994) California Greatest: RCT - group Fair	<i>Setting:</i> School: middle schools from 31 California counties with high teen birth rates, that received a grant from the California Office of Family Planning <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Postponing Sexual Involvement (PSI) - School & Education Now & Babies Later (ENABL) <i>Dosage:</i> 5 hours of contact <i>Deliverer:</i> adult health educators <i>Additional Components:</i> statewide media campaign, school wide activities in support of the ENABL initiative <i>Comparison Group:</i> minimal treatment <i>Tailoring:</i> none <i>Focus:</i> pregnancy	<i>Target population:</i> middle school students in communities with high teenage birthrates <i>Age:</i> Mean: 12.7 years <i>Gender:</i> Male: 41.5% Female: 58.5% <i>Race/Ethnicity:</i> American Indian/Alaska Native: 5.9% Asian: 9.3% Black/African American: 10.8% White: 47.2% Hispanic 25.2% Other: 7.3% <i>Virginity at baseline:</i> 87.8% <i>Number of participants at beginning of study:</i> Intervention: 1933 Comparison: 1944 Total: 3867 <i>Attrition:</i> not Reported	<i>Sexual Activity:</i> OR= 1.14, 95% CI (0.96, 1.36) Female: OR= 1.12, 95% CI (0.88, 1.41) Male: OR= 1.20, 95% CI (0.91, 1.56) <i>Frequency of Sex:</i> OR = 1.07, 95% CI (0.86, 1.34) <i>Number of Partners:</i> OR= 0.91, 95% CI (0.73, 1.14) <i>Use of Protection (condoms):</i> OR= 0.96, 95% CI (0.74, 1.25) <i>Use of Protection (oral contraceptives):</i> OR= 1.12, 95% CI (0.83, 1.50) <i>Pregnancy:</i> OR= 1.37, 95% CI (0.92, 2.06) Female: OR= 1.28, 95%CI (0.75, 2.20) Male: OR= 1.40, 95%CI (0.76, 2.59) <i>STI:</i> OR= 0.87, 95%CI (0.52, 1.48)

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Kirby, Korpi, et al., 1997 (1992–1994) California Greatest: RCT - individual Fair	<i>Setting:</i> Community: community-based agencies in 31 California Counties with high teen birth rates that received a grant from the California Office of Family Planning <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Postponing Sexual Involvement (PSI) - Community and Education Now and Babies Later (ENABL) <i>Dosage:</i> 5 hours of contact <i>Deliverer:</i> health educator (adult) <i>Additional Components:</i> statewide media campaign <i>Comparison Group:</i> minimal treatment <i>Tailoring:</i> none <i>Focus:</i> pregnancy	<i>Target population:</i> middle school students in communities with high teenage birthrates <i>Age:</i> Mean: 13.5 years <i>Gender:</i> Male: 49% Female: 51% <i>Race/Ethnicity:</i> American Indian/Alaska Native: 2% Asian: 47% Black/African American: 3% White: 10.1% Hispanic 21.2% Other: 3% <i>Virginity at baseline:</i> 92.4% <i>Number of participants analyzed:</i> Total: 387 <i>Attrition:</i> not reported	<i>Sexual Activity:</i> OR= 0.91, 95% CI (0.43, 1.94) Female: OR= 0.55, 95% CI (0.16, 1.88) Male: OR= 1.18, 95% CI (0.43, 3.28) <i>Frequency of Sex:</i> OR = 0.97, 95% CI (0.36, 2.62) <i>Number of Partners:</i> OR= 0.77, 95% CI (0.29, 2.05) <i>Use of Protection (condoms):</i> OR= 0.82, 95% CI (0.26, 2.54) <i>Use of Protection (oral contraceptives):</i> OR= 0.63, 95% CI (0.18, 2.23) <i>Pregnancy:</i> OR= 1.00, 95% CI (0.14, 7.04) Female: OR= 1.22, 95%CI (0.08, 19.93) Male: OR= 0.84, 95%CI (0.05, 13.53) <i>STI:</i> OR= 0.29, 95% CI (0.03, 2.91)

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Kirby, Korpi, et al., 1997 (1992–1994) California Greatest: RCT - group Fair	<p><i>Setting:</i> School: middle schools from 31 California counties with high teen birth rates, that received a grant from the California Office of Family Planning</p> <p><i>Intervention Strategy:</i> Abstinence Education</p> <p><i>Intervention Name:</i> Postponing Sexual Involvement (PSI) – Classroom and Education Now and Babies Later (ENABL)</p> <p>Arm 1 - youth-led PSI classroom</p> <p>Arm 2 - adult-led PSI classroom</p> <p><i>Dosage:</i> 5 hours of contact</p> <p><i>Deliverers:</i> Arm 1 - teens (peers) and teachers Arm 2 - health educator and teacher</p> <p><i>Additional Components:</i> statewide media campaign</p> <p><i>Comparison Group:</i> minimal treatment</p> <p><i>Tailoring:</i> none</p> <p><i>Focus:</i> pregnancy</p>	<p><i>Target population:</i> middle school students in communities with high teenage birthrates</p> <p><i>Age:</i> Arm 1: Mean: 12.8 years Arm 2: Mean: 12.9 years</p> <p><i>Gender:</i> Arm 1: Male: 44.6% Female: 55.4% Arm 2: Male: 40.6% Female: 59.4%</p> <p><i>Race/Ethnicity:</i> Arm 1: American Indian/Alaska Native: 4% Asian: 8.4% Black/African American: 9.8% White: 21.2% Hispanic 46.4% Other: 8.1% Arm 2: American Indian/Alaska Native: 4.7% Asian: 9.5% Black/African American: 6.6% White: 28.5% Hispanic 45.5% Other: 7%</p> <p><i>Virginity at baseline:</i> Arm 1- 90.3% Arm 2- 90.6%</p> <p><i>Number of participants at beginning of study:</i> Arm 1: 703 Arm 2: 1110 Comparison 1: 893 Comparison 2: 1273 Total: 5079</p> <p><i>Attrition Calculated:</i> 2nd follow up: Total: 9%</p>	<p><i>Sexual Activity:</i> Arm 1: OR= 1.07, 95% CI (0.81, 1.42) Female: OR= 1.34, 95% CI (0.87, 2.06) Male: OR= 0.88, 95% CI (0.6, 1.29) Arm 2: OR= 0.86, 95% CI (0.68, 1.09) Female: OR= 0.96, 95% CI (0.69, 1.34) Male: OR= 0.78, 95% CI (0.56, 1.09)</p> <p><i>Frequency of Sex:</i> Arm 1: OR = 0.64, 95% CI (0.43, 0.94) Arm 2: OR = 0.76, 95% CI (0.55, 1.06)</p> <p><i>Number of Partners:</i> Arm 1: OR= 1.22, 95% CI (0.85, 1.75) Arm 2: OR= 1.07, 95% CI (0.80, 1.44)</p> <p><i>Use of Protection (condoms):</i> Arm 1: OR= 1.13, 95% CI (0.73, 1.74) Arm 2: OR= 1.50, 95% CI (1.03, 2.19)</p> <p><i>Use of Protection (oral contraceptives):</i> Arm 1: OR= 1.25, 95% CI (0.75, 2.09) Arm 2: OR= 1.60, 95% CI (1.06, 2.41)</p> <p><i>Pregnancy:</i> Arm 1: OR= 2.52, 95% CI (1.28, 4.97) Female: OR= 2.27, 95%CI (0.66, 7.88) Male: OR= 2.60, 95%CI (1.14, 5.89) Arm 2: OR= 1.32, 95% CI</p>

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<p>St. Pierre et al., 1995 (1998–1998)</p> <p>USA</p> <p>Greatest: non-randomized trial - group</p> <p>Fair</p>	<p><i>Setting:</i> Community: Boys & Girls Clubs from across the US</p> <p><i>Intervention Strategy:</i> Abstinence Education</p> <p><i>Intervention Name:</i> Stay SMART</p> <p>Intervention Arm 1 - Stay SMART only</p> <p>Intervention Arm 2 - Stay SMART plus boosters</p> <p><i>Dosage:</i> 13 weeks in duration, 12 total contacts</p> <p><i>Deliverer:</i> outreach worker</p> <p><i>Additional Components:</i> none</p> <p><i>Comparison Group:</i> untreated</p> <p><i>Tailoring:</i> tailored for cultural/subcultural identity and attempts were made to ensure deliverers were culturally appropriate</p> <p><i>Focus:</i> multifocus</p>	<p><i>Target population:</i> adolescents recruited from Boys and Girls Clubs</p> <p><i>Age:</i> Total: Mean: 13.6 years</p> <p><i>Gender:</i> Total: Male: 75% Female: 25%</p> <p><i>Race/Ethnicity:</i> Total: Black/African American: 42% White: 45% Hispanic/Latino: 14%</p> <p><i>Virginity at baseline:</i> Intervention Arm 1- 43% Intervention Arm 2- 64%</p> <p><i>Number of participants at beginning of study:</i> Intervention Arm 1: 119 Intervention Arm 2: 117 Comparison: 123 Total: 359</p> <p><i>Attrition Calculated:</i> Post test: Intervention Arm 1: 30.3% Intervention Arm 2: 30.8% Comparison: 11.4% Total: 24%</p> <p>2nd follow up: Intervention Arm 1: 49.6% Intervention Arm 2: 49.6% Comparison: 36.6% Total: 45.1%</p> <p>3rd follow up: Intervention Arm 1: 58.8% Intervention Arm 2: 57.3% Comparison: 56.9% Total: 57.7%</p>	<p><i>Sexual Activity (sexual behavior scale):</i> Arm 1: posttest Mean (SD) = 0.326 (0.71) Arm 2: posttest Mean (SD) = 0.124 (0.79) Comparison posttest Mean (SD) = -0.566 (1.09)</p>

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<p>Trenholm et al., 2007 (1999–2006)</p> <p>Milwaukee, WI</p> <p>Greatest: RCT - individual</p> <p>Fair</p>	<p><i>Setting:</i> Community: selected summer and after school programs at elementary and middle schools in Milwaukee, Wisconsin</p> <p><i>Intervention Strategy:</i> Abstinence Education</p> <p><i>Intervention Name:</i> Families United to Prevent Teen Pregnancy (A Life Options Model Curriculum for Youth)</p> <p><i>Dosage:</i> 208 weeks in duration</p> <p><i>Deliverer:</i> not reported</p> <p><i>Additional Components:</i> none</p> <p><i>Comparison Group:</i> untreated</p> <p><i>Tailoring:</i> none</p> <p><i>Focus:</i> multifocus</p>	<p><i>Target population:</i> students from a low income African American single family area</p> <p><i>Age:</i> Range: >13–19+ years</p> <p><i>Gender:</i> Male: 38% Female: 62%</p> <p><i>Race/Ethnicity:</i> Black/African American: 80% White: 2% Hispanic 6% Other: 11%</p> <p><i>Virginity at baseline:</i> not reported</p> <p><i>Number of participants at beginning of study:</i> Intervention: 287 Comparison: 152 Total: 439</p> <p><i>Attrition rate:</i> 3rd follow up: Intervention: 16% Comparison: 21% Total: 18%</p>	<p><i>Sexual Activity:</i> OR= 1.09, 95% CI (0.71, 1.68)</p> <p><i>Number of Partners:</i> OR= 1.00, 95% CI (0.50, 1.99)</p> <p><i>Unprotected Sex:</i> OR= 1.09, 95% CI (0.60, 1.98)</p> <p><i>Use of Protection (condoms):</i> OR= 1.13, 95% CI (0.68, 1.87)</p> <p><i>Use of Protection (oral contraceptives):</i> OR= 1.12, 95% CI (0.69, 1.80)</p> <p><i>Pregnancy:</i> OR= 1.14, 95% CI (0.79, 1.65)</p> <p><i>STI:</i> OR= 1.17, 95%CI (0.81, 1.69)</p>

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<p>Trenholm et al., 2007 (1999–2006)</p> <p>Rural counties surrounding Clarksdale, Mississippi</p> <p>Greatest: RCT - individual</p> <p>Fair</p>	<p><i>Setting:</i> School: selected elementary schools in the rural counties surrounding Clarksdale, Mississippi</p> <p><i>Intervention Strategy:</i> Abstinence Education</p> <p><i>Intervention Name:</i> Teens in Control: PSI & Sex Can Wait</p> <p><i>Dosage:</i> 91 weeks in duration, 1 contact per week</p> <p><i>Deliverer:</i> not reported</p> <p><i>Additional Components:</i> none</p> <p><i>Comparison Group:</i> minimal treatment</p> <p><i>Tailoring:</i> none</p> <p><i>Focus:</i> multifocus</p>	<p><i>Target population:</i> full range of students from low income, rural, predominantly African American community</p> <p><i>Age:</i> Range: >13–19+ years</p> <p><i>Gender:</i> Male: 47% Female: 53%</p> <p><i>Race/Ethnicity:</i> Black/African American: 87% Hispanic 6% Other: 6%</p> <p><i>Virginity at baseline:</i> not reported</p> <p><i>Number of participants at beginning of study:</i> Intervention: 433 Comparison: 376 Total: 809</p> <p><i>Attrition Calculated:</i> 3rd follow up: Intervention: 17% Comparison: 15%</p>	<p><i>Sexual Activity:</i> OR= 1.09, 95% CI (0.80, 1.50)</p> <p><i>Number of Partners:</i> OR= 1.19, 95% CI (0.74 ,1.93)</p> <p><i>Unprotected Sex:</i> OR= 1.18, 95% CI (0.77, 1.81)</p> <p><i>Use of Protection (condoms):</i> OR= 1.07, 95% CI (0.74, 1.54)</p> <p><i>Use of Protection (oral contraceptives):</i> OR= 1.06, 95% CI (0.74, 1.53)</p> <p><i>Pregnancy:</i> OR= 1.13, 95% CI (0.86, 1.47)</p> <p><i>STI:</i> OR= 0.90, 95%CI (0.69, 1.18)</p>

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Trenholm et al., 2007 (1999–2006) Powhatan, Virginia Greatest: RCT - individual Good	<i>Setting:</i> School: Powhatan, Virginia County Schools <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> My Choice My Future! (Reasonable Reasons to Wait, Art of Living Well, Wait Training) <i>Dosage:</i> 143 weeks in duration, 52 total contacts <i>Deliverer:</i> not reported <i>Additional Components:</i> community outreach <i>Comparison Group:</i> untreated <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> students from middle income to working class White, non-Hispanic community in semirural area <i>Age:</i> Range: 16–19+ years <i>Gender:</i> Male: 46% Female: 54% <i>Race/Ethnicity:</i> Black/African American: 10% White: 80% Hispanic 3% Other: 6% <i>Virginity at baseline:</i> 85% <i>Number of participants at beginning of study:</i> Intervention: 332 Comparison: 185 Total: 517 <i>Attrition Calculated:</i> 3rd follow up: Intervention: 18% Comparison: 20% Total: 19%	<i>Sexual Activity:</i> OR= 0.96, 95% CI (0.65, 1.42) <i>Number of Partners:</i> OR= 0.80, 95% CI (0.47 ,1.39) <i>Unprotected Sex:</i> OR= 1.00, 95% CI (0.66, 1.52) <i>Use of Protection (condoms):</i> OR= 1.00, 95% CI (0.64, 1.56) <i>Use of Protection (oral contraceptives):</i> OR= 1.00, 95% CI (0.67, 1.48) <i>Pregnancy:</i> OR= 1.00, 95% CI (0.71, 1.42) <i>STI:</i> OR= 1.00, 95%CI (0.70, 1.42)

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Trenholm et al., year (1999–2006) Miami, FL Greatest RCT - individual Fair	<i>Setting:</i> School: selected middle schools in Miami, Florida <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Recapturing the Vision (Vessels of Honor) <i>Dosage:</i> 39 weeks in duration, 5 contacts per week <i>Deliverer:</i> teacher <i>Additional Components:</i> community events, community service, home visits and referrals by social worker <i>Comparison Group:</i> comparable treatment <i>Tailoring:</i> tailored for gender <i>Focus:</i> multifocus	<i>Target population:</i> high risk girls from a poor, urban community <i>Age:</i> Range: 16–19+ years <i>Gender:</i> Female: 100% <i>Race/Ethnicity:</i> Black/African American: 67% White: 3% Hispanic 18% Other: 12% <i>Virginity at baseline:</i> 89% <i>Number of participants at beginning of study:</i> Intervention: 306 Comparison: 239 Total: 545 <i>Attrition Calculated:</i> 3rd follow up: Intervention: 19% Comparison: 21% Total: 20%	<i>Sexual Activity:</i> OR= 0.82, 95% CI (0.57, 1.18) <i>Number of Partners:</i> OR= 0.97, 95% CI (0.56, 1.68) <i>Unprotected Sex:</i> OR= 1.00, 95% CI (0.67, 1.50) <i>Use of Protection (condoms):</i> OR= 0.81, 95% CI (0.54, 1.23) <i>Use of Protection (oral contraceptives):</i> OR= 0.91, 95% CI (0.62, 1.34) <i>Pregnancy:</i> OR= 0.96, 95% CI (0.69, 1.34) <i>STI:</i> OR= 1.17, 95%CI (0.85, 1.63)

Author(s) & Date (Study period) Location Design suitability Quality of execution	Intervention Description	Study population description and Attrition	Study Results for Index follow-up
Weed, Ericksen et al., unpublished (1999–2001) Northern Virginia county Greatest: non- randomized trial - group Fair	<i>Setting:</i> School: middle schools in Northern Virginia <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Reasons of the Heart (ROH) <i>Dosage:</i> 20 total contacts <i>Deliverer:</i> public school certified health education teacher <i>Additional Components:</i> none <i>Comparison Group:</i> minimal treatment <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> middle school students <i>Grade:</i> 7th grade <i>Gender:</i> Male: 47.3% Female: 52.7% <i>Race/Ethnicity:</i> Black/African American: 9% White: 73.9% Other: 17.1% <i>Virginity at baseline:</i> 100% <i>Number of participants at beginning of study:</i> Intervention: 421 Comparison: 241 Total: 662 <i>Attrition Calculated:</i> 2nd follow up: Intervention: 15.2% Comparison: 19.9% Total: 16.9%	<i>Sexual Activity:</i> OR= 0.52, 95% CI (0.30, 0.88)

Author(s) & Date (Study period) Location Design suitability Quality of execution	Intervention Description	Study population description and Attrition	Study Results for Index follow-up
Weed, Olsen et al., 1992 (1988–1990) Utah Greatest: non- randomized trial - group Fair	<i>Setting:</i> School: middle and high schools in 3 school districts in Utah <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Names:</i> Teen Aid, Sex Respect and Values and Choices <i>Dosage:</i> not reported <i>Deliverer:</i> teacher <i>Additional Components:</i> none <i>Comparison Group:</i> minimal treatment <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> middle and high school students <i>Age:</i> Mean: 15.51 years <i>Gender:</i> Male: 50.1% Female: 49.9% <i>Race/Ethnicity:</i> White: 90.6% Hispanic 2.7% Other: 6.8% <i>Virginity at baseline:</i> 82.7% <i>Number of participants analyzed:</i> Total: 7000 <i>Attrition calculated:</i> 2nd follow up: Total: 15%	<i>Sexual Activity:</i> OR= 0.94, 95% CI (0.71, 1.24)
Weed, 2005 (2004–2005) Augusta, GA Greatest: non- randomized trial - group Fair	<i>Setting:</i> School: middle and high schools <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Heritage Community Services (Heritage Keepers Abstinence Education - 2 nd year evaluation) <i>Dosage:</i> 8 hours of contact <i>Deliverer:</i> teacher <i>Additional Components:</i> none <i>Comparison Group:</i> minimal treatment <i>Tailoring:</i> tailored for gender <i>Focus:</i> multifocus	<i>Target population:</i> predominantly African American middle and high school students <i>Grade:</i> 6–12th grades <i>Gender:</i> Male: 47% Female: 53% <i>Race/Ethnicity:</i> Black/African American: 88% White: 3% Hispanic 1% Other: 6% <i>Virginity at baseline:</i> 72% <i>Number of participants analyzed:</i> Intervention: 211 Comparison: 153 Total: 364 <i>Attrition:</i> not reported	<i>Sexual Activity:</i> OR= 0.67, 95% CI (0.43, 1.05)

Author(s) & Date (Study period) Location Design suitability Quality of execution	Intervention Description	Study population description and Attrition	Study Results for Index follow-up
Weed, Ericksen et al., 2005 (study period not reported) South Carolina Greatest: non- randomized trial - group Good	<i>Setting:</i> Schools selected for high fidelity to plan <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Heritage Keepers <i>Dosage:</i> 10 hours of contact <i>Deliverer:</i> teacher <i>Additional Components:</i> media campaign <i>Comparison Group:</i> untreated <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> middle school students <i>Grade:</i> 7–9th grades <i>Gender:</i> Male: 37.8% Female: 62.2% <i>Race/Ethnicity:</i> Black/African American: 45.6% White: 54.4% <i>Virginity at baseline:</i> not reported <i>Number of participants at beginning of study:</i> Intervention: 2529 Comparison: 417 Total: 2946 <i>Attrition Calculated:</i> 2nd follow up: Intervention: 49.3% Comparison: 39.1% Total: 48%	<i>Sexual Activity:</i> OR= 0.47, 95% CI (0.34, 0.65) Female: OR= 0.41, 95% CI (0.27, 0.63) Male: OR= 0.52, 95% CI (0.32, 0.86)

Author(s) & Date (Study period) Location Design suitability Quality of execution	Intervention Description	Study population description and Attrition	Study Results for Index follow-up
Weed, Anderson, 2007 (2002–2004) Georgia Greatest: non- randomized trial - group Fair	<i>Setting:</i> School: one high school and its 2 feeder middle schools <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Choosing the Best <i>Dosage:</i> 2 weeks in duration, 5 contacts per week, 6 total contacts <i>Deliverer:</i> CTB certified instructors <i>Additional Components:</i> none <i>Comparison Group:</i> treated control <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> suburban middle and high school students <i>Grade:</i> 7–9th grades <i>Gender:</i> Male: 49% Female: 51% <i>Race/Ethnicity:</i> Black/African American: 11% White: 84% Other: 5% <i>Virginity at baseline:</i> not reported <i>Number of participants at end of study:</i> Intervention: 239 Comparison: 165 Total: 404 <i>Attrition Calculated:</i> 2nd follow up: Intervention: 34% Comparison: 36% Total: 35%	<i>Sexual Activity:</i> OR= 0.47, 95% CI (0.24, 0.94)

Author(s) & Date (Study period) Location Design suitability Quality of execution	Intervention Description	Study population description and Attrition	Study Results for Index follow-up
Young et al., 1992 (study period not reported) Arkansas Greatest: non-randomized trial - group Fair	<i>Setting:</i> School: junior high school health classes <i>Intervention Strategy:</i> Abstinence Education <i>Intervention Name:</i> Living Smart Curriculum and health class <i>Dosage:</i> 24 total contacts <i>Deliverers:</i> health teachers trained in Living Smart and other classroom teachers <i>Additional Components:</i> none Comparison Group 1: untreated (no health class) Comparison group 2: minimal treatment (health class only) <i>Tailoring:</i> none <i>Focus:</i> multifocus	<i>Target population:</i> 7th and 8th grade students <i>Grade:</i> middle school <i>Gender:</i> not reported <i>Race/Ethnicity:</i> not reported <i>Virginity at baseline:</i> not reported <i>Number of participants at beginning of study:</i> Intervention: 83 Comparison 1: 66 Comparison 2: 60 Total: 209 <i>Attrition Calculated:</i> Post test: Intervention: 0% Comparison 1: 0% Comparison 2: 0%	<i>Sexual Activity:</i> Comparison Group 1: Virgins: OR= 0.11, 95% CI (0.01, 2.16) Non-virgins: OR= 0.70, 95% CI (0.17, 2.81) Comparison Group 2: Virgins: OR= 0.06, 95% CI (0.00, 1.12) Non-virgins: OR= 0.10, 95% CI (0.01, 1.85) <i>Number of Partners:</i> OR= 0.81, 95% CI (0.56, 1.19)

Studies that provided enough information to calculate an OR and 95% CI were included in the analysis