



NATIONAL
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Abstinence Works

Sexual Risk Avoidance (SRA) Abstinence Education Programs
Demonstrating Improved Teen Outcomes

A Publication by the National Abstinence Education Association
July 2013 Edition

1701 Pennsylvania Avenue, NW Suite 300
Washington, DC 20006

Phone: (202) 248-5420
Fax: (866) 935-4850

www.AbstinenceWorks.org - the official site of NAEF

www.WhatTheyToldUs.org - results of a national research survey of parents

www.TheNAEA.org - the official site of NAEA

Introduction

We are pleased to offer the current edition of *Abstinence Works*, a compendium of research demonstrating that Sexual Risk Avoidance (SRA) abstinence education works. The 2013 edition adds new independent research that confirms the effectiveness of the SRA approach. It discusses the overriding public health concerns that must be addressed when considering sex education policy. *Abstinence Works 2013* also brings an objective voice to the "evidence-based" debate for sex education curricula and programs and looks at the dubious research currently touted as national curricular models. This edition identifies 23 SRA education programs evaluated by independent researchers that display statistically significant results in reducing teen sex or affecting other important behavioral indicators in teen sexual decision-making. Further, this report outlines 43 additional SRA programs from three US Department of Health and Human Services Abstinence Education Conferences that show early stage positive attitudinal impacts that tend to predict decreased sexual initiation rates. Teen sexual activity has decreased significantly since the advent of federal funding for abstinence education, even as teens are confronted with an increasingly sexualized culture.

When evaluating SRA programs, we must acknowledge that delaying sex is the only behavior that completely protects youth from the possible consequences of sexual experimentation and is completely compatible with a strong risk avoidance public health model. Continued research is necessary to further identify the more effective program practices, facilitating the continuous improvement of SRA abstinence education and ultimately the lives of youth.

But there could be so much more...

Regrettably, on September 30, 2010, more than one hundred and sixty-nine studies underway on the effectiveness of abstinence education were halted. The studies were in various stages of completion along a longitudinal research continuum. Many were showing very promising signs for success, but when Congress ended funding for all community-based abstinence education programs, they also ended all related research - important research that could have greatly informed the public health field. But the effectiveness of SRA *programs* continues to be the topic of many spirited debates in the public square - and on Capitol Hill. This debate may have ended had these many research studies not been prematurely terminated, an action that not only wasted taxpayer dollars, but also greatly curtailed important information on what works to protect the sexual health of youth. It is ironic that those who demand "evidence" stop the attempt to gather that evidence midstream in the research process!

Most would agree that abstinence is the only real solution to the problem of STDs, teen pregnancy, and emotional harm often caused by teen sexual activity. In fact, a recent survey of parents of teens demonstrates broad support for the major themes of SRA programs. Parents support SRA abstinence education, regardless of political party affiliation or race. They want the healthiest approach provided to their children.

Intuitively, we know that "abstinence works every time" but we want to identify the best practices in the provision of SRA information and skills to successfully empower students. Researchers know that it takes about one generation (approximately 10 years) before research begins to emerge on any new program strategy. SRA education, as a federally funded and research-evaluated initiative, has now been in existence for a little more than one generation. And the research? We will never know the research results of the one hundred sixty-nine (169) abstinence programs that lost all federal funding. We will never know the impact such programs had on the one million students whom they served. But despite this unfortunate reality, new studies continue to emerge. The studies contained in *Abstinence Works* confirm that SRA abstinence education is a promising field with a growing body of positive research.

However, while more research and development is needed, the research cited in this report demonstrates that SRA abstinence education IS working and that a continued investment in this approach is essential. The many states and communities that wish to implement SRA programs must continue to be given that option with strong confidence that the approach will both reflect local values and improve youth health outcomes. Recent debate over the content and funding for sex education has created a renewed interest in evidence surrounding the various approaches. NAEF first conducted the research for *Abstinence Works* in 2009. Since then, NAEA has widely distributed copies to inform the policy debate on sex education. We believe that this most recent edition will be an equally important addition.

Valerie Huber
President & CEO

Acknowledgments

Citations for studies of SRA abstinence education programs that have shown statistically significant results in reducing teen sexual behavior can be found on the *Abstinence Works* pages in which the summary results are provided. In addition, some results were obtained from:

2010 Abstinence Education Evaluation Conference, DHHS

Adolescent and Family Health

American Journal of Health Behavior

Archives of Pediatric & Adolescent Medicine

Family Relations

Journal of Health Communications

Journal of School Health

Office of Population Affairs; Administration for Children and Families, DHHS

Office of the Adolescent Pregnancy Prevention Programs, DHHS

SRA abstinence education programs showing early stage attitudinal impacts that tend to predict decreased sexual initiation rates are from:

2010 Abstinence Education Evaluation Conference, April 2010, Arlington, VA. "Evaluating Community-Based Risk Prevention Programs for Youth: Informing Abstinence Education." Sponsored by the Family & Youth Services Bureau and the Center for Research and Evaluation on Abstinence Education at the U.S. Department of Health and Human Services.

2007 Abstinence Education Evaluation Conference, March 2007, Baltimore, MD. "Strengthening Programs Through Scientific Evaluation." Sponsored by the Office of Population Affairs and the Administration for Children and Families at the U.S. Department of Health and Human Services.

2005 Abstinence Education Evaluation Conference, November 2005, Baltimore, MD. "Strengthening Programs Through Scientific Evaluation." Sponsored by the Office of Population Affairs and the Administration for Children and Families at the U.S. Department of Health and Human Services.

About NAEA

The National Abstinence Education Association (NAEA) exists to serve, support, and represent individuals and organizations that empower youth with Sexual Risk Avoidance (SRA) Education.

About NAEF

The National Abstinence Education Foundation (NAEF) is a not-for-profit 501c(3) organization. The National Abstinence Education Foundation (NAEF) seeks to improve the health and future prospects for children and families through Sexual Risk Avoidance (SRA) abstinence education, to reduce teen pregnancies, STDs (sexually transmitted diseases), and any negative emotional consequences from teen sexual activity.

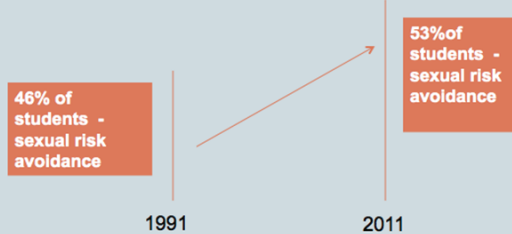
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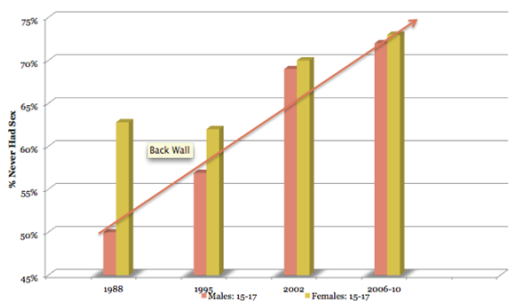
Significant Trends

Sexual Risk Avoidance: Trends ¹

In the US, over the past 20 years, there has been an increase in the number of high school students choosing sexual risk avoidance



Abstinent Behavior Increases Among Teens Aged 15-17 ²



Notable Quotes

Douglas Kirby, the former leading Sexual Risk Reduction (SRR) “comprehensive” sex education researcher stated in his published research of Reducing the Risk, a comprehensive sex education program:

*“Even though the curriculum was designed to reduce unprotected intercourse, and placed considerable emphasis both on abstinence and using birth control, it (the program, Reducing the Risk) clearly had a greater impact on delaying sexual initiation than on increasing birth control... this suggests that it **may actually be easier to delay the onset of intercourse than to increase contraceptive practice.**” ³*

Dr. Miguel A. Martinez-Gonzalez, Professor and Chair, Department of Preventive Medicine, University of Navarra, Pamplona, Spain states:

*“Thailand (experienced) an increase in STI (sexually transmitted infections) among its youth despite extensive promotion of condoms... In Spain STIs are also on the rise, even though the use of condoms among its youth is the highest in Europe. Recent studies in leading science journals show that **condoms have not been effective as a primary prevention strategy** to tackle the AIDS epidemic in Africa.” ⁴*

¹ Centers for Disease Control and Prevention. (2012). *Youth Risk Behavior Surveillance - US, 2011*. MMWR: Author. Retrieved February 9, 2013 from <http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf>

² National Center for Health Statistics. (2011). Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2006-2010. *National Survey of Family Growth. National Health Statistics Reports 23(31)*: 14, 15.

³ Kirby, D., Barth, R. P., Leland, N., & Fetro, J. V. (1991). Reducing the Risk: Impact of a new curriculum on sexual risk-taking. *Family Planning Perspectives*, 23(6), 253-263.

⁴ The challenge of AIDS. (2009, April 8). *The Economist*.

Section A

Understanding Public Health Models That Address Sexual Risk

Understanding Public Health Models That Address Sexual Risk

Abstinence Works explores the basic differences between the two sex education approaches by comparing them to a public health paradigm. In this way, policy-makers can more accurately understand the two approaches, rather than relying on caustic and often inaccurate sound-bites that reveal little about the true nature of the approaches.

The Typical Public Health Model for Addressing Youth Risk

Public health models that respond to health risk typically emphasize optimal health promotion and disease prevention. Their goal is to guide the targeted audience toward the optimal health outcomes through a risk avoidance approach. The risk avoidance strategy is a population-wide approach, communicating the best health messages broadly and in a manner that resonates with a variety of sub-groups of the general population. It seeks to encourage positive decision-making, as well as to inform the conversation surrounding the specific health or safety concern.

Common examples of the risk avoidance approach include campaigns to prevent underage drinking, illicit drug use, smoking, and violence. A model for this approach is summarized in the CDC Guidelines for Effective School Health Education to Prevent the Spread of AIDS. This document directs schools to inspire students to avoid sexual risk:

“School systems should make programs available that will enable and encourage young people who have not engaged in sexual intercourse...to continue to: Abstain from sexual intercourse until they are ready to establish a mutually monogamous relationship within the context of marriage.

For young people who have engaged in sexual intercourse, school programs should enable and encourage them to stop engaging in sexual intercourse until they are ready to establish a mutually monogamous relationship within the context of marriage.”⁵

A *risk reduction* approach is not part of the general messaging, but is reserved for individuals engaged in risk behaviors. However, the risk reduction campaign, while separate from the risk avoidance campaign, still communicates a clear message regarding the health risks of engaging in a given behavior and the overwhelming benefits of discontinuing that behavior. The ultimate goal is helping the individual transition back to a risk-free lifestyle.

Sexual risk to teens is of no less significance than other risk behaviors, yet current public policy gives little emphasis to *sexual* risk avoidance. For the benefit of forming a better understanding of the two approaches, a short description of each follows.

The Sexual Risk Avoidance (SRA) Approach

SRA abstinence education is an approach that gives teens information and skills that are intended to help them avoid all the possible negative consequences of teen sex, including but not limited to, the physical consequences of STDs and pregnancy. Therefore, it is accurately known as a *Sexual Risk Avoidance (SRA) education* approach. Consistent with a risk avoidance public health model, the SRA approach includes a cessation intervention approach for school-aged children who are sexually active, offering encouragement and skills for youth to return to an optimally healthy lifestyle free of all sexual risk.

⁵ CDC (posted on CDC page as ongoing guideline for school health education from 1988-2013). Guidelines for Effective School Health Education to Prevent the Spread of AIDS. MMWR. Morbidity and mortality weekly report. 1988; 37 Suppl 2:1-14. Accessed on April 2, 2013 at <http://www.cdc.gov/healthyyouth/sexualbehaviors/guidelines/index.htm>

SRA abstinence education classes go beyond discussions surrounding only the physical consequences of teen sex, however. The approach is holistic, in that it also provides information on the non-physical consequences that can accompany teen sex, the practical skills associated with healthy decision-making, and requisite skills to develop healthy relationships. These classes also discuss medically accurate information about condoms, as well as the causes, symptoms, and the best way to avoid the transmission of STDs, which of course, is abstinence.

The Sexual Risk Reduction (SRR) Approach

“Comprehensive” Sex Education is almost entirely focused on skills to help teens reduce the physical consequences of sex through the use of contraception. Therefore, it is more accurately known as a *Sexual Risk Reduction (SRR)* approach.

The *sexual* risk reduction model, however, is considerably different from other reduction approaches in the following ways:

1. The SRR model targets the general teen population, rather than focusing on an individual intervention for those who are actually engaged in the risk behavior, a significant difference from the typical risk reduction model.
2. The SRR model does not seek to move individuals who are engaged in sexual activity toward a renewed risk avoidance (abstinent) behavioral choice, as is true for other risk behavior implementing the public health model. In fact, the SRR model claims “success” even when teens are still participating in behaviors that place them at significant risk.

Of even greater concern is the fact that the sexual risk reduction approach is applied to the broader teen population, sending the false impression that “everyone is doing it” which has the negative effect of normalizing teen sex as an expected standard. The explicit demonstrations and themes then set behavioral standards that can easily provoke sexually inexperienced teens to transition into sexual activity.

Current federal sex education policy is almost totally focused on this Sexual Risk Reduction Model, rather than giving adequate emphasis to the Sexual Risk Avoidance approach.

National sex education policy must immediately change to reflect a clear and unambiguous priority on SRA education. This policy change will, for the first time, bring consistency to the way in which federal policy treats all negative youth risk behaviors - one that values optimal health outcomes first and foremost. America’s youth deserve no less.

Why Support Sexual Risk Avoidance (SRA) Abstinence Education?

1. There is Overwhelming Evidence That SRA Abstinence Education Works

Twenty-three research studies of SRA programs show significant behavioral changes in improving teen outcomes. An additional 43 studies from the Department of Health and Human Services (HHS) 2010, 2007, and 2005 Abstinence Education Evaluation Conferences showed early stage positive attitudinal impacts that tend to predict decreased sexual initiation rates.

2. Most Parents and Teens Support SRA Abstinence Education for Their Children

Two significant, recent studies found that parents overwhelmingly support the SRA approach to sex education for their children.

Parents Speak Out Survey: Pulse Opinion Research conducted a nationally representative survey of likely-voter parents of 9-16 year olds on September 16-17, 2012. The study, independently commissioned by NAEF, found that the majority of American parents, regardless of race or political party, support SRA education with similar enthusiasm, endorsing all the major themes presented in an abstinence education class.⁶

The primary findings include the following:

- Nearly 9 out of 10 Republican parents and almost 8 out of 10 Democratic parents support abstinence education.
- Almost 60% of Democrats and more than 70% of Republicans oppose President Obama's efforts to eliminate all federal funding for SRA abstinence education.
- Democrats and Republicans alike support more equality in funding between SRA abstinence education and SRR "Comprehensive" sex education, with Democrats most supportive.
- More than 8 of 10 parents, but especially women and African Americans, support the dominant themes of SRA education.
- Eighty five percent of parents believe that all youth, including homosexual youth, benefit from skills that help them choose to wait for sex.
- Nearly 9 in 10 parents strongly support the way SRA programs share the medically accurate limitations of condoms for preventing pregnancy and disease.

We have long held that support for SRA programs crosses party lines - and that the anti-abstinence policies of the Obama administration are out of step, not only with the best health outcomes for America's youth, but also with what their political base wants for their own children. However, we were surprised at how widespread the support was among all the major demographics that were studied in this survey. Specifically, the answers to the questions posed at the outset of the survey were answered in an astonishing and overwhelming pro-SRA abstinence education manner.

National Survey by HHS: On August 23, 2010, the U.S. Department of Health and Human Services released a report, entitled "National Survey of Adolescents and Their Parents: Attitudes and Opinion About Sex and Abstinence."⁷

⁶ Pulse Opinion Research (2012). Parents Speak Out. Available at www.WhatTheyToldUs.org

⁷ Accessed February 21, 2011 from: http://ac.f.hhs.gov/programs/fysb/content/docs/20090226_abstinence.pdf

This federally funded study sought the views of parents and adolescents regarding sex and abstinence. The report detailed the following survey findings:

- Most parents favor premarital abstinence for their teens:

“Approximately 70 percent of parents surveyed are opposed to premarital sex both in general and for their own adolescents.”

- Most parents favor abstinence education in various community settings:

“The majority of parents surveyed favor their adolescents receiving abstinence messages from multiple sources. Ordered from most preferred to least preferred, parents favored abstinence messages delivered at a place of worship (85 percent), a doctor’s office or health center (85 percent), school (83 percent), a community organization (71 percent), and the internet (55 percent).”

The survey findings were intended to inform public policy priorities and sex education implementation strategies. Based on the findings of this survey, a strong risk-avoidance abstinence message should be the federal priority for sex education.

3. Most Teens Support Abstinence

By both their voices and their actions, teens are supportive of abstinence as a sexual behavioral choice for themselves.

Most teens choose abstinence. Recent data, released by the National Center for Health Statistics, reveals that 72% of boys and 73% of girls between the ages of 15 and 17 have never had sexual intercourse.⁸

Teens between the ages of 15 and 17 are the most frequently-targeted age group to receive sex education, so the data punctuates the fact that abstinence resonates with teens and that it is indeed a realistic approach. The data also begs the questions: “Why doesn’t federal sex education policy prioritize messages that encourage these numbers upwards? Shouldn’t teens receive reinforcement for the healthy decision they are making?”

Most teens support abstinence until marriage. The U.S. Department of Health and Human Services report, “National Survey of Adolescents and Their Parents: Attitudes and Opinions About Sex and Abstinence indicated overwhelming support by teens. The report found:”⁹

- Most adolescents support premarital abstinence in general and for themselves:

62% say that it is against their values to have sex before marriage; 75% believe that having sex would make life difficult; 84% oppose sex at their age; 69% oppose sex while in high school. (p. 61)

In summary, this federally funded study demonstrates strong teen support for the key tenets of the SRA approach.

Most sexually experienced teens wish they had waited. More than two-thirds of sexually experienced teens express regrets about having sex so soon. Broken down by gender, 60% of boys expressed regret and 77% of girls wish they had waited.¹⁰ These statistics indicate that sexually experienced teens are open to a different choice in the future. Renewing an abstinence lifestyle can resonate with sexually experienced teens and research validates this to be the case for many.

⁸ National Center for Health Statistics. (2001). Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2006-2010. National Survey of Family Growth. *National Health Statistics Reports* 23(31): 14,15

⁹ Accessed February 21, 2011 from: http://acf.hhs.gov/programs/f9ysb/content/docs/20090226_abstinence.pdf

¹⁰ Albert, B. (2007). *With One Voice 2007*. Washington, DC: the National Campaign to Prevent Teen Pregnancy.

3. Abstinence is always the healthiest choice for adolescents and as such should be the central focus of any responsible sex education program.

Teens have the right to know the truth. Only abstinence - not condoms - completely eliminates the risks of teen sex.¹¹ No matter what precautions are taken, teens can still get pregnant, contract an STD, or experience negative emotional consequences. Any of these results can jeopardize a teen's health and future. SRA programs provide valuable life and decision-making skills that lay the foundation for personal responsibility and a successful future.

¹¹Centers for Disease Control and Prevention. *Fact sheet for public health personnel: Male latex condoms and sexually transmitted diseases*. Retrieved February 9, 2013 from <http://www.cdc.gov/condomeffectiveness/latex.htm>

How Effective are Sexual Risk Reduction (SRR) “Comprehensive” Sex Education Programs?

The average citizen and policymaker believes that SRR “Comprehensive” sex education programs have an impressive bench of research showing their effectiveness, but a careful look at the evidence and research protocols shows that SRR programs lack proven effectiveness in the classroom. SRR sex education programs have been federally funded since the 1970s - much longer than sexual risk avoidance programs and at a much higher funding level - so one would expect many rigorous and replicated studies of individual curricular programs. If SRR programs were effective, one could also expect to see changes on the cultural level related to typical risk reduction indicators.

Indeed, teen condom use has risen significantly since the CDC began tracking it in 1991¹² yet young people currently have four times the reported chlamydia and gonorrhea rates¹³ of the total population, which calls into question the effectiveness of the risk reduction approach. The premise of the approach, simply put, claims that sex with a condom is “responsible” and “protective”. That same premise ignores the fact that certain STDs are easily transmissible even with the use of a condom,¹⁴ thus questioning the medical accuracy of this risk reduction premise and adding to the explanation of why STD rates increase even as condom rates increase.

The same is true with SRR “Comprehensive” Sex Education empirical research, for although the claim and resulting perception is that these programs are “effective” in the classroom, the evidence does not support this assertion. Rigorous research must follow generally accepted protocols and avoid serious pitfalls that can compromise the results.¹⁵

Unfortunately, research commonly used to support the SRR approach regularly commits these research pitfalls:

- **Inaccurately Generalized Results.** A primary flaw involves the fact that although sex education is most commonly implemented in a school-based setting, most SRR “Comprehensive” Sex Education research takes place outside of the classroom, and often in a clinical-type setting. Research practice cautions against generalizing results captured in one venue (for example, a clinical setting) to a much different venue (for example, a school setting). This practice is reckless because clients at a clinic are typically self-motivated participants who self-referred for services, making them much more driven to complete the treatment and make positive behavioral changes.

However, in a school setting, students are required to attend as a part of their education and they may not be particularly motivated to participate in the process. For example, sex education in school is often inserted as one part of a required school health class. In the school setting, intervention and follow up are a much less precise science and attrition is always a very real concern. Research findings have also been used to generalize success found in narrow populations to the student population at large, another misuse of research.

¹² Centers for Disease Control (2011). Trends in the prevalence of sexual behaviors: National YRBS: 1991-2009. Atlanta: CDC. Accessed at http://www.cdc.gov/healthyyouth/yrbs/pdf/us_sexual_trend_yrbs.pdf

National Health Center for Health Statistics. (2011). Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2006-2010. National Survey of Family Growth. National Health Statistics Reports 23(31) :31ff

¹³ Centers for Disease Control (2011). STD rates by age. Atlanta: CDC. Accessed at: <http://www.cdc.gov/std/health-disparities/age.htm>

¹⁴ Centers for Disease Control (2010) Genital Herpes – CDC fact sheet. Atlanta: CDC. Accessed at <http://www.cdc.gov/std/Herpes/STDFact-Herpes.htm>
Centers for Disease Control (2011) Genital HPV infection - Fact sheet. Atlanta: CDC. Accessed at <http://www.cdc.gov/HPV/STDFact-HPV.htm>

¹⁵ Society for Prevention Research. (2004). Standards of Evidence: Criteria for Efficacy, Effectiveness, and Dissemination. Falls Church,VA:author. Available at <http://www.preventionscience.org/StandardsofEvidencebook.pdf>

- **Conflict of Interest.** Another flaw involves the absence of independent researchers to perform the evaluation study. Much of the research was led and published by researchers who were employed by the curriculum publishing company and/or personally wrote the curriculum being studied, a clear conflict of interest that calls into question the validity and objectivity of the reported positive findings.
- **Measures for “Success” Offer Little Protection.** The measures for success for SRR programs often do not accurately gauge risk reduction, thereby calling into question their claims of protective “effect.” For example, behavioral impact results may show positive outcomes in “condom use at first intercourse” or “condom use at last intercourse” but these measures do not give any indication that the usage is either correct or consistent. The Centers for Disease Control and Prevention (CDC) warns: “Inconsistent [condom] use can lead to STD acquisition because transmission can occur with a single act of intercourse with an infected partner. Similarly, if condoms are not used correctly, the protective effect may be diminished even when they are used consistently.”¹⁶ Some studies indicate that inconsistent condom usage may actually increase an individual’s risk of acquiring¹⁷ certain STDs. This phenomenon is likely due to a concept known as risk disinhibition in which people engage in higher risk behaviors because they believe they are “protected” by even inconsistent condom usage.¹⁸
- **Fails Replication Requirement for “Model” Programs.** Currently, SRR programs are elevated as national models by the U.S. Department of Health and Human Services, yet the standard applied to the programs is inadequate for such a designation. There is a consensus among research organizations that a minimum of two positive replication studies are required before a program can be regarded as a “model” for broad dissemination. HHS ignored this requirement in their determination of sex education models. Some programs they cite as “proven effective” have only one positive study; others have negative findings that serve to confound other positive findings.

Summary. The research evidence used to support the SRR “Comprehensive” Sex Education approach is flawed and inconsistent with established research protocols. Unfortunately, objective research review is not yet a meaningful part of sex education policy formation.¹⁹

¹⁶ Centers for Disease Control and Prevention (2011) Condoms and STDs: Fact sheet for public health personnel. Atlanta: CDC. Accessed at <http://www.cdc.gov/condomeffectiveness/latex.htm>
Centers for Disease Control and Prevention (2011) Condoms and STDs: Fact sheet for public health personnel. Atlanta: CDC. Accessed at <http://www.cdc.gov/condomeffectiveness/latex.htm>

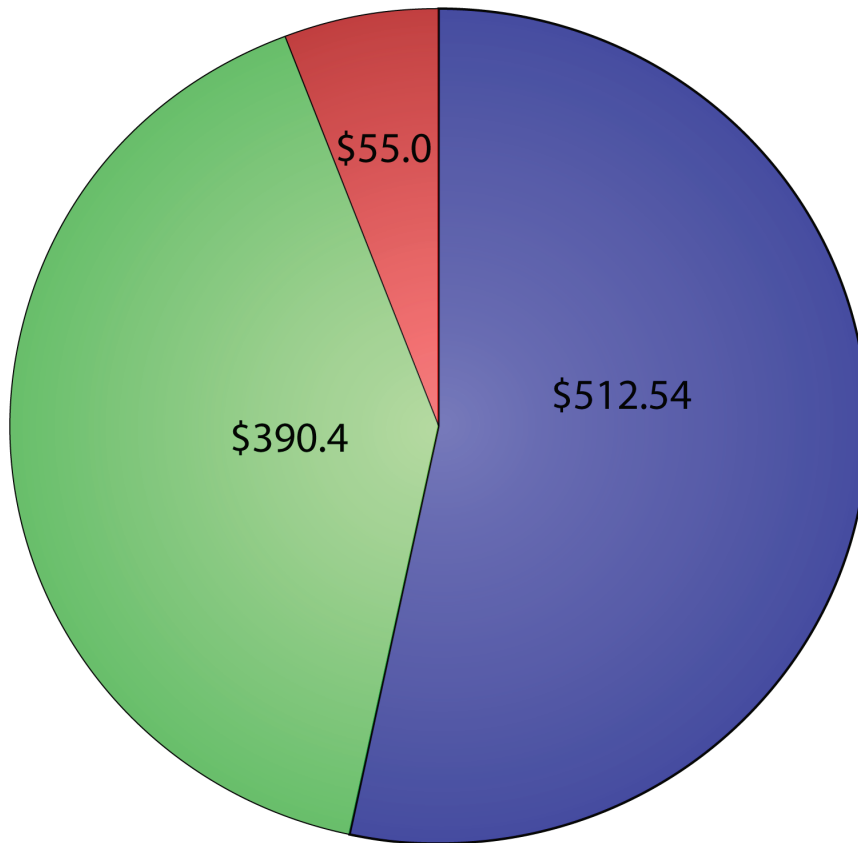
¹⁷ USAID (n.d.). HIV/STI prevention and condoms. Washington, D. C. : Author. Accessed Aug 28, 2011 at http://www.usaid.gov/our_work/global_health/aids/TechAreas/prevention/condomfactsheet.html
Centers for Disease Control and Prevention (2011) Condoms and STDs: Fact sheet for public health personnel. Atlanta: CDC. Accessed at <http://www.cdc.gov/condomeffectiveness/latex.htm>

¹⁸ Cassell, M. M., Halperin, D. T., Shelton, J. D., Stanton, D. (2006). HIV and risk behavior – Risk Compensation: The Achilles’ heel of innovations in HIV prevention. *BMJ*. 332:605-607.

¹⁹ This segment is adapted from a longer and more comprehensive report, entitled, *Sexual Risk Avoidance Education : Considerations for Protecting Teen Health*, available on the NAEA website: www.thenaea.org.

2012 Federal Funding of Programs Addressing Sexual Activity of Adolescents

Funding ratio of Sexual Risk Avoidance abstinence education vs. non-abstinence education: 1:16²⁰



- Abstinence Education, as defined by Title V, Section 10 (b)(2)(A - H)
- Pregnancy/STD/HIV prevention and education programs
- Family Planning Services

²⁰ Estimate based on FY 2012 federal budget figures calculation formulas and ratios as originally detailed in: US Dept of Health and Human Services (2008, December). Health and Human Services Funding for Abstinence Education, Education for Teen Pregnancy and HIV/STD Prevention, and Other Programs that Address Adolescent Sexual Activity. Washington DC.

Section B

Using Research To Inform Public Policy:

Considerations for Congress

Using Research To Instruct Public Policy ²¹

Sex Education Public Policy Recommendations

1. Place primary emphasis on SRA abstinence education programs in federal sex education policy.
2. Provide more equality in funding between SRR and SRA programs.
3. Eliminate the false sense of security that teens acquire in “safe” sex messaging by mandating that medically accurate information be given regarding the limitations on protection offered by condoms and other contraceptive methods.
4. End the censorship and discriminatory practices in sex education against at-risk populations.
5. Provide all youth, including gay teens, with skills to delay sex.
6. Share with teens the advantages of waiting until marriage before engaging in sex, as identified by social science research.

The recent Parents Speak Out survey provided an important perspective from parents, citizens, and voters - on what they favored for sex education for their children. These recent findings are especially instructive as policy-makers craft sex education policy within Congress.

Certainly, a more balanced sex education policy is needed, amending the current 16:1 disparity against SRA abstinence education. Parents - Republican and Democrat, Black, Hispanic, and White - all favor a policy revision that gives priority to SRA. Similarly, more parity in funding between the SRR “Comprehensive” Sex Education and SRA abstinence education approaches should be established. Republican and Democrat parents alike favor this funding approach, with Democrats even slightly more supportive than Republicans.

Parents strongly support their children being given accurate information about the limitations of condoms. They want their children to know “safe” sex is not assured by the use of a condom. Many currently funded SRR “Comprehensive” Sex Education programs provide information that leads students to mistakenly believe that sex when they are “ready” is appropriate and that they are “risk free” so long as they use a condom. Compromising the health of youth by this inaccurate messaging must end. Congress should make HHS accountable for inaccurate and unhealthy messaging and instruct them to correct these inaccuracies.

The current “war on women” campaign ignores a key component of reproductive health, expressly SRA education. Surveyed women support this approach even more than men, yet currently policy ignores the empowerment factor intrinsic within the themes and messages of an abstinence program. Women appear to recognize these elements as supporting of their optimal health and future success. Similarly, African-Americans want their children to receive information and skills that will help them attain success and best sexual health outcomes. They don’t want their children to be subject to a sex education approach that concludes that “low expectations” are the best their children can achieve.

Current policies that ignore the need to include a clear policy on risk avoidance programs for all teens, regardless of sexual orientation, should be immediately amended. Such amendments can be implemented with confidence knowing that public health protocols demand such a change and that parents overwhelmingly support these messages for their children.

²¹ This section is adapted from the report on the Parents Speak Out Survey. The full report, together with the survey results, are available at WhatTheyToldUs.org

Abstinence until marriage is thoroughly supported by social science research. Policymakers should refuse to be intimidated by special interest groups who are willing and all-too-eager to ignore the benefits of bearing children in marriage to advance an ideological agenda.

The majority of parents - Republican and Democrat - endorse a strong SRA education priority in sex education policy. This support is in good company with a deep bench of research-informed practices, theories, and implementation strategies that offer the best sexual health outcomes for America's youth.

Section C

Sexual Risk Avoidance Abstinence Education Programs Demonstrating Improved Teen Outcomes

SRA education has an impressive and growing body of research pointing to its effectiveness. To date, 23 peer-reviewed studies show statistically significant evidence of positive behavioral impact for students with all levels of sexual experience. Six studies demonstrate significant delay in sexual initiation for one to two years after the program ended. Most research was obtained within the school setting. The results are remarkable and consistently reveal three noteworthy findings.

Compared to their peers, students in SRA abstinence education programs are:

1. Much more likely to delay sexual initiation.
2. If sexually active, much more likely to discontinue or decrease their sexual activity.
3. No less likely to use a condom if they initiate sex.

Programs are included in this section because they have satisfied the following in terms of research rigor:

1. Independent Researcher
2. Peer Reviewed Study
3. Comparison/Control Group
4. Statistically Significant Positive Behavioral Impact on Teens

1. Heritage Keepers: A Replication

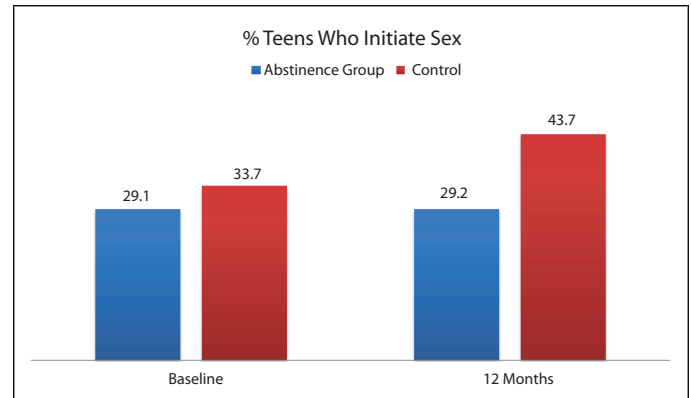
State: South Carolina

Study: Weed, S. E., Birch, P. J., Ericksen, I. H., & Olsen, J.A. (2011). Testing a predictive model of youth sexual intercourse initiation. Submitted for publication.

Program Description: Heritage Keepers Abstinence Education is a 450 minute interactive curriculum that is designed for middle and/or high schools. It is presented in 45 minute class periods over 10 sequential school days or in 90 minute sessions for five consecutive days. It is delivered to youth in required health classes, usually over 8 to 10 consecutive school days. The curriculum articulates benefits of sexual abstinence in terms of immediate risks, such as unwanted pregnancy and STDs, and in terms of helping youth prepare for family formation in the future.

Research Design: Twenty-five hundred and forty 7th to 9th grade students were given pre, post, and 12 month follow-up surveys. Propensity score matching procedures established baseline equivalence between program and comparison students on all key measures of behavior, cognitive constructs, and demographic measures. This resulted in a study sample of 2215 students that had baseline equivalence. The analyses tested the program’s impact on sexual initiation 12 months following the program, and also tested those constructs as mediators using structural equation models for mediation analysis.

Statistically Significant Results: Significant differences were observed between program and comparison groups in levels of sexual behavior one year after the program, and also in the amount of change in sexual activity over that time period. Sexual experience increased from 29.1% to 33.7% for the program participants, and from 29.2% to 43.2% among the comparison group. Further analysis demonstrated that nearly all of these differences were mediated by the effects of the program on the cognitive constructs, further strengthening the causal argument for program effects. A year after Heritage Keepers Abstinence Education, program students initiated sex at a rate 67% lower than well matched comparison students. This program is also included on the HHS “proven effective” list.



2. Choosing the Best

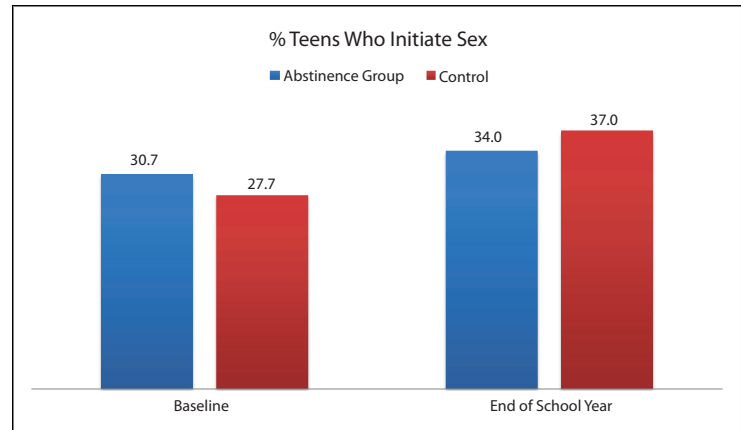
State: Georgia

Study: Lieberman, L., Su. H. (2012). Impact of the Choosing the Best program in communities committed to abstinence education. Sage Open. Available at http://www.choosingthebest.org/docs/CTB_Published_Research-SAGE_Publications.pdf

Program Description: *Choosing the Best*, a classroom-based abstinence education curriculum, offers five age-appropriate programs for grades 6 through 12. CTB has been utilized in schools across 48 states nationwide, and more than 3 million students have participated in a CTB program since 1993. CTB sought to determine if this program had an impact on abstinence attitudes, intentions, and behavior.

Research Design: Six Georgia public schools (1,143 ninth graders) participated in the study in 2009-2010. Four randomly assigned schools received the CTB curriculum, taught by trained CTB staff. Two control schools received their usual textbook-based abstinence lessons. Students received the intervention either in the Spring or Fall of the 9th grade year. Surveys were conducted at the beginning and end of 9th grade, and the beginning of 10th grade.

Statistically Significant Results: Data demonstrated significant impact of CTB at the end of 9th grade on commitment to abstinence, pro-abstinence beliefs and attitudes, intentions to maintain abstinence, and lower onset of sexual intercourse. Virgin students who received the CTB program were nearly 1.5 more likely to delay the onset of sex than virgins in the control group at the posttest measurement at the end of 9th grade. At the beginning of 10th grade, a significant impact was found on pro-abstinence attitudes only.



3. PEERS Project

State: Indiana

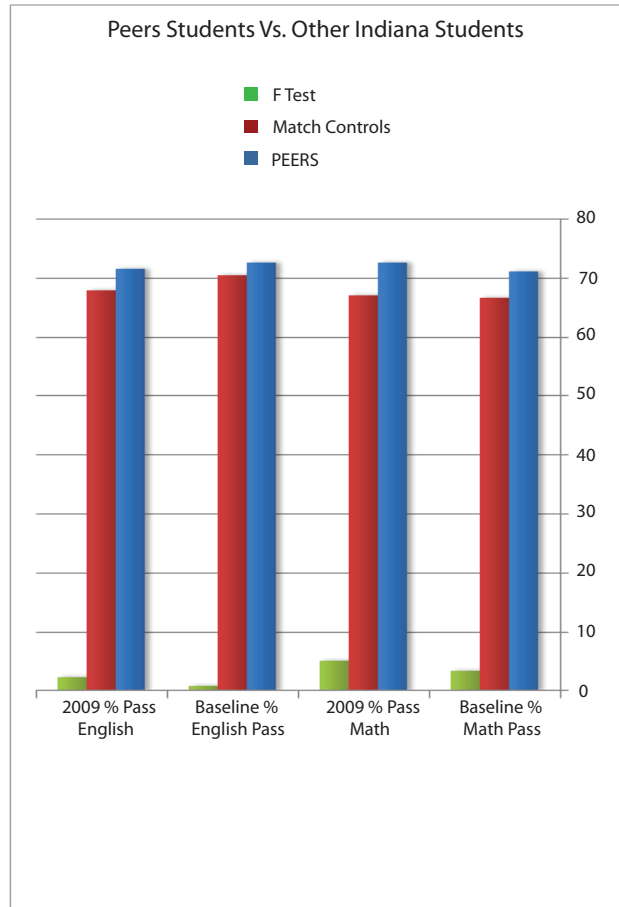
Study: Ferraro, L. F., Pressler, K. A. (2011). Do abstinence education programs influence high school academic performance? *Am. Journal of Health Studies*. 26 (4): 230-235.

Description of Program: The PEERS program is delivered in high schools to students principally in the 9th and 10th grades (via enrollment in health or physical education classes). Each year of the program involves approximately 150 minutes of classroom instruction on topics such as sexually transmitted diseases, sexual responsibility, healthy relationships, “abstain to attain,” and love. Mentors make use of video presentations, role-playing, and testimonials in delivering the program. Mentors represent a wide range of students - male and female, White and non-White - but all receive training regarding the content of the program and ways to effectively present it to fellow students. When delivered in high schools, most mentors are juniors or seniors.

Research Design:

The subjects were high school students at 42 Indiana high schools, but all student information was gathered from school-level (aggregated) sources. Therefore, the unit of analysis was the high school. The study design involved matching 21 Indiana schools that received an abstinence education program with 21 schools in the state that did not receive the program.

Statistically Significant Results: In comparison to matched controls, receiving the program was associated with a higher percentage of sophomores passing the state math achievement test. Among the schools receiving the program, years of program intervention was associated with higher rates of passing both the state math and English achievement exams. Sustained offering of abstinence education programs was associated with improved academic performance, especially on standardized math exams. Each year the SRA abstinence education program was presented, it was associated with almost a 1.5% increase in standard achievement test pass rates.



4. WAIT Training

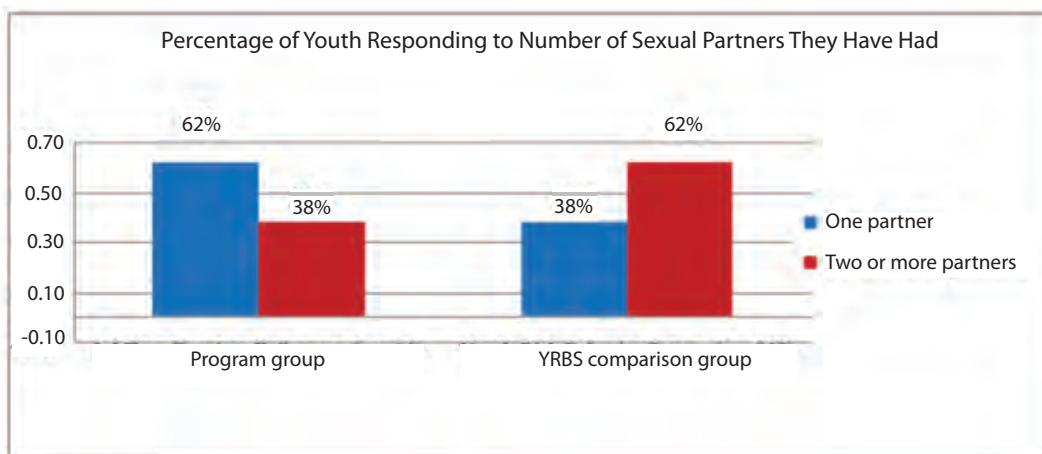
State: New York

Study: Rue, L.A, Chandran, R., Pannu, A., Bruce, D., Singh, R., & Traxler, K. (2012). Evaluation of an abstinence based intervention for middle school students. *Journal of Family and Consumer Sciences* 104, (3), 32-40.

Description of Program: The program implemented a 15 day (i.e., 11.5 hours) curriculum, which supplements WAIT Training with videos, brochures, and other media including a slide presentation about sexually transmitted diseases. The curriculum was taught by a male/female professionally trained team.

Research Design: Single group, pre/post design with 12 month longitudinal follow-up. Follow-up compared behavioral measures to average behaviors from the weighted YRBS data from a neighboring county.

Statistically Significant Results: Middle school students who participated in the program were 3 1/2 times more likely to delay sexual activity and reported fewer multiple partners one year after receiving the program in their health classes as compared to average behaviors from a neighboring community without the program. These initial findings showcase the intended outcome of the curriculum and warrant further research with more rigorous research designs to better understand the benefits of risk avoidance efforts over a longer time period.



5. Jemmott Study of Inner City Youth

State: Pennsylvania

Study: Jemmott, J. B., Jemmott L. S., Fong G. T. (2010). Efficacy of a theory-based abstinence-only intervention over 24 months. *Arch Pediatr Adolesc Med.* 2010;164(2):152-159.

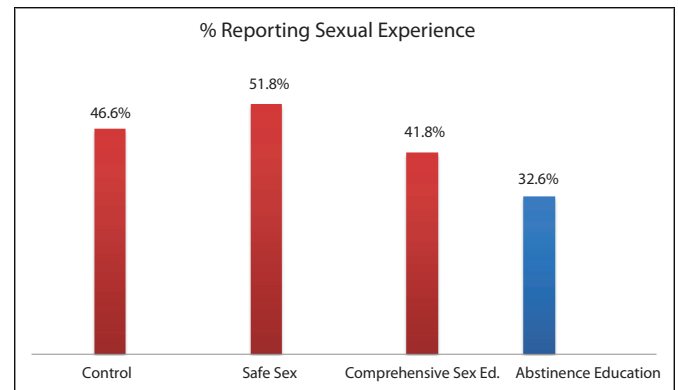
Program Description: Students were recruited from four low-income middle schools and were randomly assigned to one of four interventions. Three distinct sex education interventions were tested:

- An 8-hour abstinence program targeted reduced sex
- An 8-hour safer sex-only program targeted increased condom use
- 8-hour and 12-hour “comprehensive” sex education programs targeted reduced sex and increased condom use
- A fourth health promotion intervention served as a control group.

Research Design: The research employed a randomized control trial of 662 African American sixth and seventh graders. Participants completed follow up questionnaires at baseline, 3 months, 6 months, 12 months, 18 months, and 24 months after receiving the program. Each intervention was compared to the control group, which received general health-promotion information, but not sex education.

Statistically Significant Results: Only the abstinence intervention significantly reduced sexual initiation, when compared with the control group (32.6% that had received the abstinence intervention initiated sex vs. 51.8% that received “safer sex” and 41.8% that received “comprehensive” sex education.) 46.6% of the control group initiated sex. Neither the “safe sex” nor the two “comprehensive” sex education interventions significantly increased condom use. The abstinence intervention did not negatively impact condom use among those participants who became sexually active.

The author cites the value of a **single focused abstinence** approach for encouraging sexual delay, as opposed to a mixed “comprehensive” message. (AP article 2/2/10: “Jemmott said the single focus may have been better at encouraging abstinence than the other approaches in his study. ‘The message was not mixed with any other messages,’ said Jemmott.)



6. Reasons of the Heart

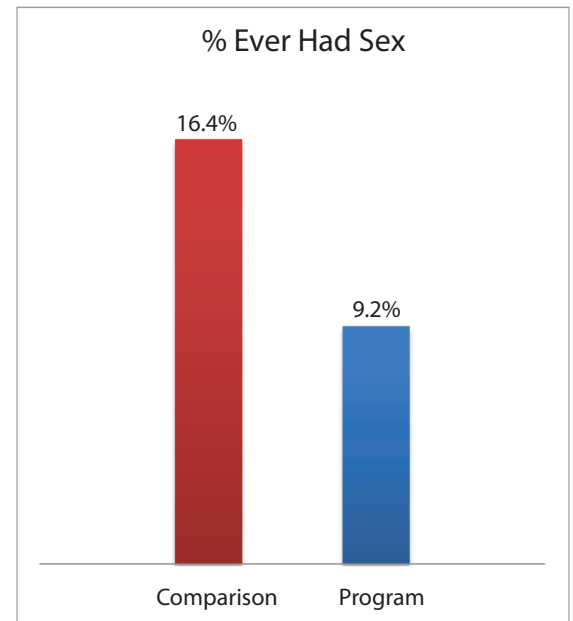
State: New York

Study: Rue, L.A, Chandran, R., Pannu, A., Bruce, D., Singh, R. (2010). Estimate of Program Effects, L.I. Teen Freedom Program.

Description of Program: The principal curriculum used with L.I. Teen Freedom is WAIT Training. The project implements a 15 day (11.5 hour) delivered by a professionally trained team (1 male and 1 female). The curriculum WAIT Training is supplemented with videos, brochures, and other media including a slide presentation about sexually transmitted diseases.

Design: The research employed a single group, longitudinal mixed design, including 12 month follow-up, (N= 427), 26% of the total population of 7th and 8th grade students, 30% Black, 60% Hispanic, 3% White, 2%, Asian, 5% Other, and 56% female. The study retained 60% of the 8th grade sample at follow-up.

Statistically Significant Results: The program group demonstrated statistically significant short-term pre and post test movement in the expected direction on abstinence values, self-efficacy and behavioral intentions. Behavioral intentions and abstinence values were still significant at the 12 month follow-up. In addition, follow-up included a comparison of average behaviors from the Youth Risk Behavior (weighted data). Youth who participated in the L.I. Teen Freedom program, were nearly 3 ½ times (OR) more likely than average to maintain sexual abstinence 12 months after participating in the program. There was a significant difference between the two samples with the L.I. Teen Freedom participants reporting fewer partners ($p = < 0.0001$) than average 12 months after the program.



7. Game Plan / Aspire

State: California

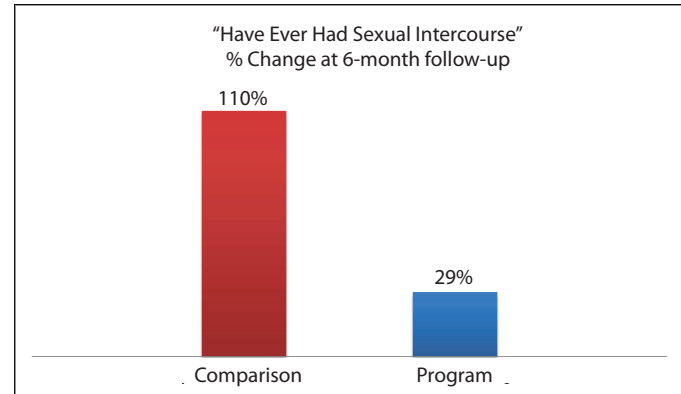
Study: Educational Evaluators, Inc. 2011. *Tesoros de Esperanza* CBAE Evaluation Report during the 2008-2009 project year.

Program Description: *Tesoros de Esperanza* utilized the abstinence education curricula Game Plan and Aspire in a wide variety of schools and community settings. *Tesoros de Esperanza* provided 16 hours of a curriculum-based program targeted to primarily Latino youth in 7th – 12th grades to prevent pre-marital sex and help sexually active youth return to an abstinent lifestyle.

Research Design: *Tesoros de Esperanza* utilized a quasi-experimental design, which employed treatment and control groups involving 745 youth aged 12-18 years old (559 treatment and 186 control). Responses were tracked from pre-test to post-test and at 6-month follow-up. Before program implementation, students voluntarily completed a 52-item pre-test survey instrument measuring the effects of the curriculum according to the following scales: Peer Self-Esteem, Parent-Child Communication, Knowledge, Attitudes about Abstinence, Beliefs that Match A-H Principles, Behavior and Behavioral Intentions. At post-program and 6-month follow-up, participants completed a 53-item post-test survey including all 52 pre-test survey items and an additional question assessing their participation. From pre-test to post-test, 401 (72%) participants responses were matched (322 treatment and 79 control). At 6-month follow-up 108 (19%) youth (88 treatment and 20 control) completed the questionnaire. Gain scores were tested for statistical significance ($p < .05$) using analysis of variance.

Statistically Significant Results: The treatment group (TG) demonstrated greater statistically significant gains than the control group (CG) in behavior. TG showed greater statistically significant gains in behavior than CG from pre-test to post-test and at 6-month follow-up.

Item 48. "Have you ever had sexual intercourse?" TG responding "Yes" increased by 29% at 6-month follow-up, while CG responding "Yes" increased by 110%. **Item 49. "Have you had sexual intercourse in the past 3 months?"** TG responding "Yes" increased by 20% at post-test, while CG responding "Yes" increased by 43% at post-test, more than twice as much as TG. Results indicate program success in demonstrating statistically significant gains for participants who completed the program in the areas of **"Intent to Practice Abstinence"** and **"Practice of Abstinence Behavior."** At 6-months, individuals not going through the program demonstrated a greater than 4 times likelihood of engaging in sexual activity.



8. Choosing the Best

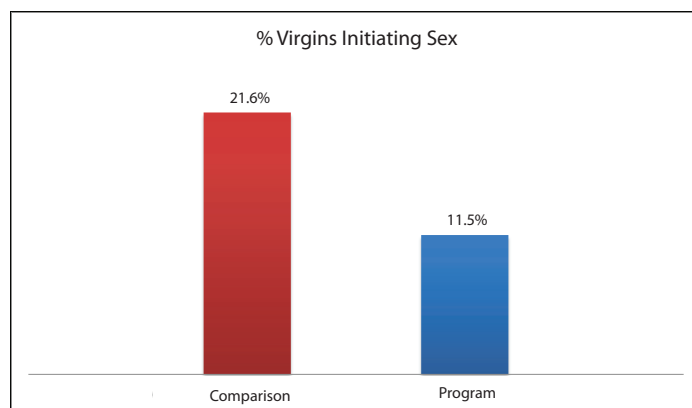
State: Georgia

Study: Weed, S.E., & Ericksen I.H., (2008) What kind of abstinence education works? Comparing outcomes of two approaches. *Submitted for publication.*

Program Description: The CTB curriculum employs teaching techniques derived from learning theory including modeling (video vignettes of adolescents discussing their real life situations and decisions), role playing, use of a student workbook, and regular interactive homework assignment with parents. The core topic areas include: emotional, physical, and health risks for teen sexual activity; rewards of abstinence; refusal skills; relationship education; the negative interaction of alcohol and sex; building self-esteem and character education. CTB provides age-appropriate versions of this core material for lower middle school (CTB WAY), upper middle school (CTB PATH) and high school (CTB LIFE).

Research Design: 7th, 8th and 9th grade students from one high school and its feeder middle school in a suburban area in the South. 361 virgin students were in the program group and 257 were in the comparison group. The evaluation was quasi-experimental with a 12 month interval and included measures of both behavioral outcomes and cognitive mediators. The data collection was over two school years. Physical education/health classes were divided into program and comparison groups. Students received either the program content or school health content over 6-8 consecutive days.

Statistically Significant Results: Of the program students who were virgins at pretest, 11.5% had initiated sex between pretest and follow-up. Of the virgin comparison students, 21.6% initiated sex during the same period. The risk of a CTB participant initiating sexual intercourse was 43% of a non-participant.



9. The RIDGE Project, Inc.

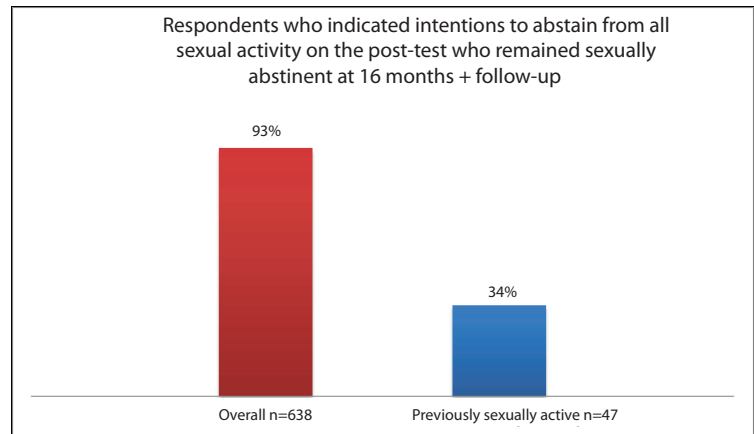
State: Ohio

Study: Seufert, R.L. & Campbell, D.G. (2010) The RIDGE Project Evaluation 2008-2010. (Author plans to complete further analysis of the data and submit a paper for publication).

Program Description: The RIDGE Project used Choosing the Best, Game Plan, Navigator, Relationships Under Construction, and RSVP curricula in a 10-county rural area in Northwest Ohio. The intended impact of programming was to increase commitment to abstinence, improve knowledge of negative consequences of sexual activity before marriage, and develop decision-making and refusal skills.

Research Design: Based on the Integrated Theory of Planned Behavior, the research design involved collecting pre-test, post-test, and follow-up data from middle and high school students. The data collection was over two school years (2008-2010) and included students at 11 middle schools and 10 high schools. Participants received programming over five consecutive days or one time per week over the school year. The follow-up data was collected 6 or more months following programming.

Statistically Significant Results: The statistical analysis was based on complete matched pre-, post-and follow-up data for 791 participants in grades 7 through 12. Through factor analysis and reliability tests, five indexes were identified. The t-test results indicated statistically significant gains ($p \leq .001$) from pre-test to follow-up in behavioral intentions regarding abstinence, and knowledge of the negative consequences of sexual activity before marriage, risk of sexual activity after alcohol/drug use, and perceptions of teen pregnancy. Cohen's d indicated the program had a small effect on the three indexes related to gains in knowledge. Of the post-test respondents who expressed their intentions to abstain from all sexual activity until marriage, 93% of respondents overall and 34% of respondents who reported they had previously been sexually active, indicated on the follow-up survey that they had not been sexually active in the past six months.



10. Earle School District

State: Arkansas

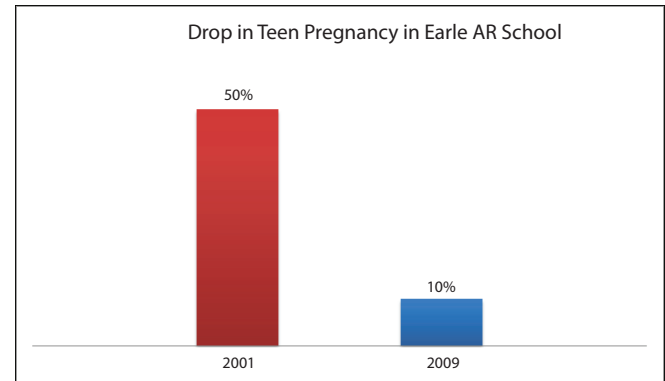
Study: Rue, L. A., Rogers, J., Kinder, E., Bruce, D. (2009). Summative Evaluation: Abstinence Education Program. -Impact Evaluation submitted to Department of Health and Human Services, Grant # 90AE0219. Submitting for publication.

Program Description: Earle School District in Earle, Arkansas has implemented a comprehensive abstinence-centered program for the past 9 years, supplemented most recently with a federally funded CBAE grant. The district offers a variety of abstinence programming by school, across grades 6-12. The current study focuses on the 8th grade students who receive WAIT Training and who then receive subsequent “booster” sessions of Choosing the Best Path, mentoring, or other reinforcement activities. They also receive enrichment activities to encourage parental communication. The curriculum, “booster”, and “enrichment” components of the program are implemented over the course of the school year.

Research Design: The research employs a quasi-experimental design using a matched comparison group of 8th grade students. The independent variable is the abstinence program using the WAIT Training curriculum for 8th grade students in the Earle School District and surrounding school-based partners in Arkansas. 333 13-14 year old students participated in the study with most youth in the sample being African American, and living in single parent homes.

Statistically Significant Preliminary Results: Youth with prior sexual experience at the start of the program reduced their sexual activity and number of partners after participating in the abstinence classes. The pretest was given at the beginning of the school year, with the posttest given at the conclusion of the school year. “Students in the study schools had sex significantly fewer times than students in the comparison school ($Z = -3.26, p = 0.0011$), and also had significantly fewer partners than students in the comparison school ($Z = -2.72, p = 0.0066$) between the pre and posttest.”

In an effort to triangulate the self-reported evaluation findings, school records collected since 2001 indicate, that since the abstinence program began, incidence of teen pregnancy in the senior class has dropped from 1 in 2 girls (2001) to 1 in 10 girls (2009).



11. Arkansas – Title V Funded Programs

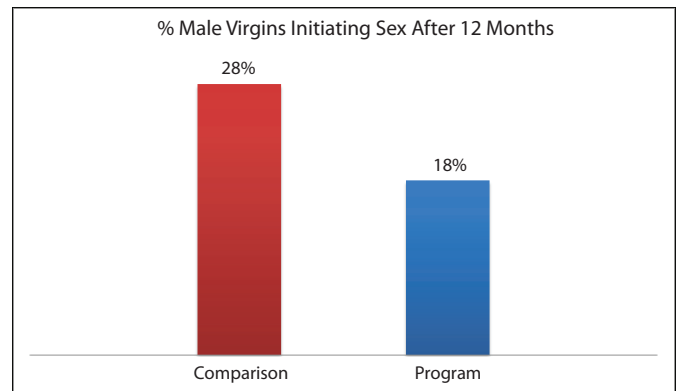
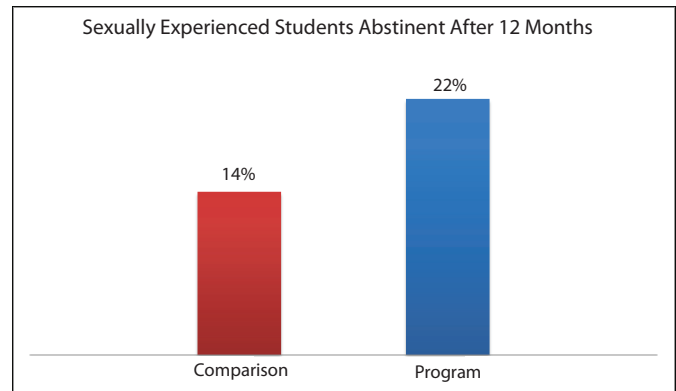
State: Arkansas

Study: Birch P. and Weed S. (2008). Phase V Final Report: Delivered to the Arkansas Department of Health. July 16, 2008. Salt Lake City: The Institute for Research & Evaluation.

Program Description: The Arkansas Department of Health funded abstinence education programs throughout the state through federal Title V grants. This study evaluated the combined effects of 9 of these programs on adolescent sexual activity one year after program participation. While there were similarities between these 9 interventions in their approach to abstinence education (e.g., all were curriculum-based and followed the “a through h” guidelines), there were also significant differences between sites in curriculum content, teaching methods, teacher quality, and hours of program “dosage.” For example, the hours of program dosage ranged from 4 to 100, with an average of 27. Furthermore, the demographic characteristics and risk levels of the teen population differed across the 9 sites.

Research Design: The study used a quasi-experimental design with a sample of 1,742 adolescents: 1,511 program youth and 231 comparison youth. Program and comparison students took a pretest at the beginning of the program cycle, a posttest at the end, and a follow-up survey 12 months later. Pretest differences on demographics and measures of risk propensity were controlled for statistically, and several statistical tests were performed to check the validity of the results.

Statistically Significant Results: Adolescents in the program group who were sexually experienced at the pretest were significantly more likely to be sexually abstinent after 12 months than the comparison students (22% vs. 14%, OR_{adjusted}=1.98, p=.026.) Males in the program group who were sexually inexperienced at the pretest were significantly less likely to initiate sexual intercourse after 12 months than males in the comparison group (18% vs. 28%, OR_{adjusted}=.51, p=.04). In other words, after adjusting for pretest differences, sexually experienced teens and sexually inexperienced male teens who received abstinence education were about twice as likely to be sexually abstinent one year later than those who did not.



12. Sex Can Wait

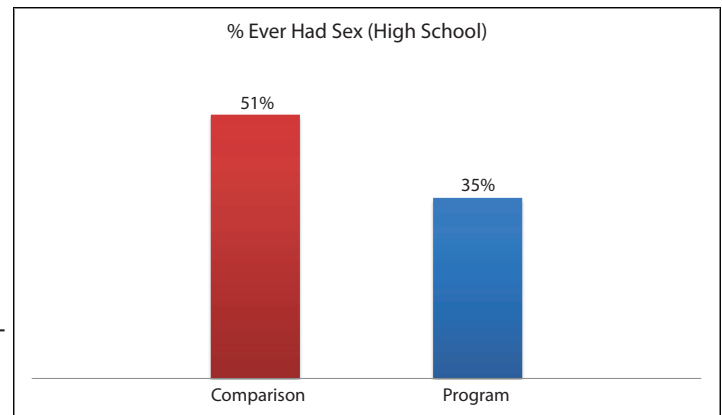
State: Arkansas

Study: Denny, G., & Young, M. (2006). An evaluation of an abstinence-only sex education curriculum: An 18-month follow-up. *Journal of School Health*, 76 (8): 414-422.

Program Description: Sex Can Wait is a 5-week, abstinence education curriculum, consisting of 23 lessons at the upper elementary level and 24 lessons at both the middle and high school levels. The 3 main divisions at each level of the curriculum are: Knowing Myself (self-esteem, reproductive anatomy and physiology, values and decision making), Relating to Others (communication skills) and Planning My Future (goal setting and life planning).

Research Design: Participants for the study were students from 15 school districts recruited to participate in the project. Schools were divided by grade level into treatment and comparison groups. The program was offered at upper elementary (grade 5 or 6), middle school (grade 7 or 8), and high school (grade 9 or above). Across the 3 levels of curriculum, 1421 students took the pretest.

Statistically Significant Results: For the upper elementary age group, at 18-month follow-up, the treatment group was less likely to report participation in sexual intercourse in the last month. At the middle school at 18-month follow-up there were significant differences ($p < .05$) between the treatment group and comparison group with the treatment group less likely to report participation in sexual intercourse ever and in the last month. At the high school level there were statistically significant differences between treatment and comparison groups with students in the Sex Can Wait group less likely to report participation in sexual intercourse, ever and in the last month.



13. Heritage Keepers

State: South Carolina

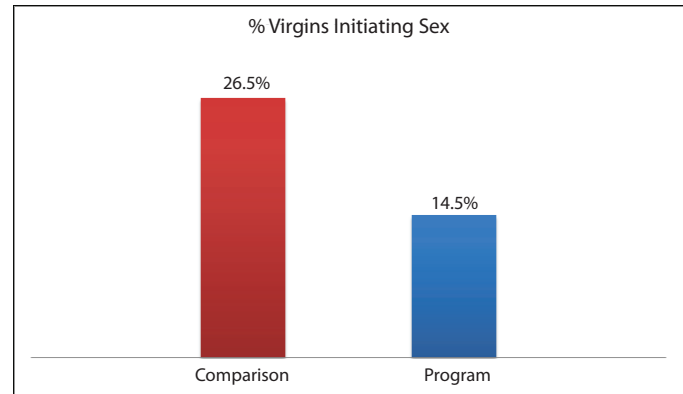
Study: Weed, S.E., Ericksen I.H., & Birch P.J. (2005). An evaluation of the Heritage Keepers Abstinence Education Program. *Evaluating abstinence education programs: Improving implementation and assessing impact*. Washington DC: DHHS, Office of Population Affairs and the Administration for Children and Families.

Program Description: Heritage Keepers Abstinence Education is a 450 minute, interactive curriculum that is designed for middle and /or high schools. It is presented in 45 minute class periods over 10 consecutive school days or in 90 minute sessions for five consecutive days. This level of annual program dosage is intended for presentation to students over three successive years.

Research Design: The evaluation study used a quasi-experimental design with matched comparison schools, repeated measures and one year follow-up. The sample for this study consisted of students in grades 7-9 from 34 program schools and 7 comparison schools in South Carolina. The sample size consisted of 2,529 virgin students in the program schools and 417 in the comparison schools.

Statistically Significant Results: Of the program students who were virgin at the pretest and who also answered the follow-up sex question, 14.5 percent, had sex between the pre and follow-up. Of the virgin comparison students, 26.5 percent initiated sex between pre and follow-up. The results from the study indicate that program virgins were about one-half as likely (odds ratio=.539) as comparison group virgins to initiate sex by the 12 month follow-up, after controlling for pretest differences.

An additional study of the Heritage Keepers® curriculum was done, using the same data as the two studies reported in this document, plus new data from those same sites, as well as data from other sites previously untested. The study added several design features to strengthen causal attributions and also found a significant effect on initiation rates for program youth compared to a no-program comparison group (ORadjusted = 0.676, p = 0.03).



14. Best Friends

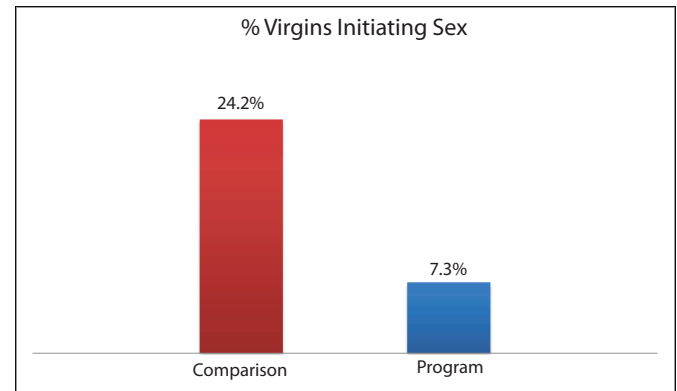
State: Washington, D.C.

Study: Lerner, R., (2004). Can abstinence work? An analysis of the Best Friends Program. *Adolescent and Family Health*, 3(4), 185-192.

Program Description: Best Friends is an extensive year-long curriculum and faculty-training program. BF holds sessions during school hours, uses trained teacher-mentors, provides group discussions and individual mentor sessions each week. The curriculum covers eight units: Friendship, Love and Dating, Self-Respect, Decision Making, Alcohol Abuse, Drug Abuse, Physical Fitness and Nutrition and AIDS and STDs.

Research Design: The effectiveness of the BF program is evaluated by comparing pre and post-program data from girls attending the program with data from non-participants. Non-participant data was provided by the Youth Risk Behavior Surveys (YRBS) for the District of Columbia and served as the comparison group for the study. The study evaluated BF students in 6 middle schools, grades 6-8, in Washington D.C. 1,127 program and comparison students were involved in the evaluation.

Statistically Significant Results: Adjusting for the survey year, students' age, grade, and race and ethnicity, the study reported that Best Friends girls were nearly 6.5 times more likely to abstain from sexual activity than YRBS respondents. They were 2.4 times more likely to abstain from smoking, 8.1 times more likely to abstain from illegal drug use, and 1.9 more likely to abstain from drinking.



15. Pure & Simple Lifestyle (PSL)

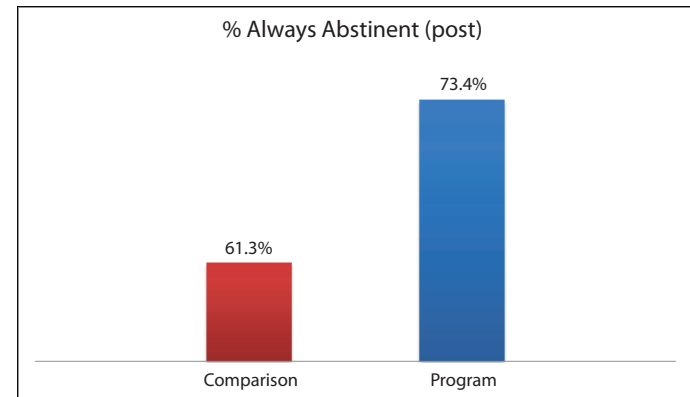
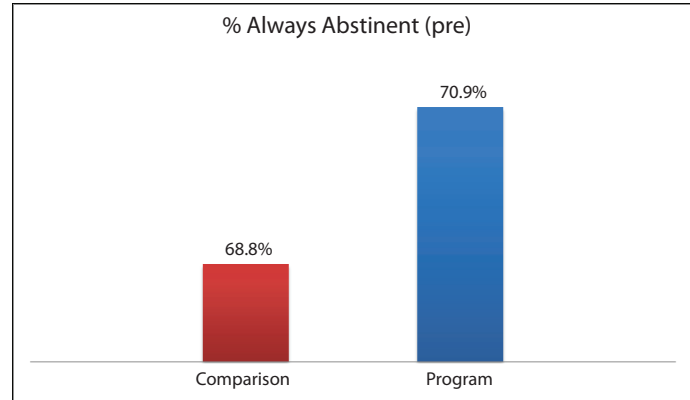
State: Kansas

Study: Pure & Simple Lifestyle (PSL): Evaluation of Teen Participants of the Pure & Simple Choice Curriculum, Year Five

Program Description: The Pure & Simple Choice curriculum²⁴ provides education about the avoidance of sexual activity, pregnancy, and drug and alcohol use, while strengthening relationships between parents and adolescents. Using Ajzen's²⁵ Theory of Planned Behavior, the program evaluation assessed measures associated with knowledge, normative beliefs and attitudes, intentions and behavioral choices.

Research Design: The study included students in an intervention and comparison group using a double-cohort, repeated measures study design (pre-, post-, 6-month post). Participants were aged 12-18 years. The intervention and comparison groups were matched by age based on group (middle school, high school) to ensure similar representation and were compared. The curriculum was implemented in 33 school, faith-based, and community settings. The effectiveness of PSL's curriculum was evaluated by analyzing changes in participants' attitudinal and self-reported behaviors.

Statistically Significant Results: In the intervention group (n = 493), there was a significant increase in self-reported abstinence ($X^2=29.44, p=.000$) from pre- to post-intervention, which may be due to better understanding of what connotes sexual activity. Conversely, participants in the comparison group (n= 541) reported a decrease in the number of always abstinent responses ($X^2=6.525, p=.006$). Six month post survey results are promising, but due to low sample size are not included in this report. A limitation for this study was a loss of follow-up of curriculum participants, which can be addressed with additional funding to support data collection efforts.



²² Pickert, S.E., Wetta-Hall, R., Chesser, A., Hart, T., Crowe, R., Theis, L., *Criteria-Based Development of a Teen-Directed Abstinence-Centered Curriculum*. American Journal of Health Studies, 2009. 24(4): p. 386-400.

²³ Ajzen, I., The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes, 1991. 50: p. 179-211.

16. Not Me, Not Now

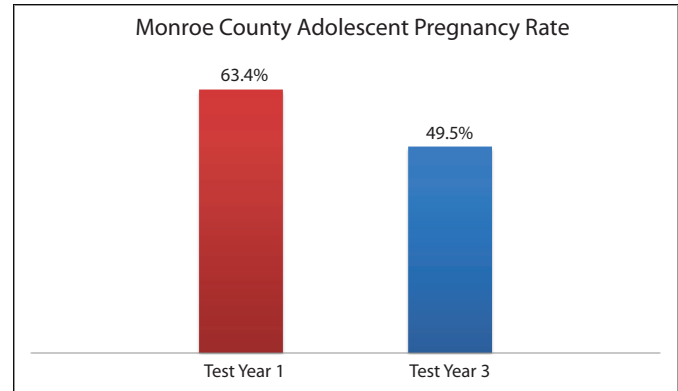
State: New York

Study: Doniger, A., Adams, E., Utter, C. & Riley, J. (2001). Impact evaluation of the “Not Me, Not Now: Abstinence-oriented, adolescent pregnancy prevention communications program, Monroe County, New York. *Journal of Health Communications*. 6,45-60.

Program Description: The Not Me, Not Now program devised a communication strategy built around the need to reduce teen pregnancy rates, using abstinence as a primary prevention method. The strategy involved radio and television spots, billboards and posters. Print education material was distributed to parents. At the same time a middle school-based abstinence educational series was presented by local teachers. In addition an interactive web site was developed and various community events were sponsored.

Research Design: The Not Me, Not Now program targeted youth between the ages of 9 and 14 in Monroe County, New York. The evaluation measured three components: impact on program awareness and beliefs among middle school children; impact on behavior among high school students and impact on adolescent pregnancy rates. A survey was administered at six middle schools in the county. Changes in adolescent pregnancy rates were determined by statistics from the New York State Department of Health. The rates for Monroe County adolescents were then compared with rates from four other comparable areas within the state.

Statistically Significant Results: The percentage of students who self-reported having intercourse by age 15 dropped by a statistically significant amount, from 46.6% to 31.6%. The adolescent pregnancy rate for Monroe County dropped from 63.4% to 49.5%. By comparison, Monroe’s pregnancy rate was higher for the two surrounding counties at the beginning of the Not Me, Not Now campaign and lower than both counties at the end of the campaign.



17. For Keeps

State: Ohio

Study: Borawski, E.A., Trapl E.S., Lovegreen, L.D., Colabianchi, N., & Block T. (2005). Effectiveness of abstinence-only intervention in middle school teens. *American Journal Health Behavior*, 29(5), 423-434.

Program Description: For Keeps is a 5-day (40 minute sessions) classroom-based curriculum that stresses abstinence until marriage and focuses on the benefits of abstinence and the physical, emotional, psychological, and economic consequences of early sexual activity. The curriculum emphasizes character development, how STDs and pregnancy can interfere with life goals, that condoms are not 100% effective in preventing disease and pregnancy and do not protect adolescents from emotional consequences of sexual activity. Finally, the curriculum is designed to address both the sexually experienced and inexperienced by emphasizing the value of renewed abstinence among the sexually experienced.

Research Design: The study population comprised 3017 adolescents in seventh and eighth grades enrolled in 5 urban and 2 suburban middle schools in the Midwest during the 2001-2002 school year. 53% of the students received the abstinence intervention while 47% served as controls. All students were assessed at baseline, 1 to 5 days prior to the intervention. Classrooms within each of the 7 schools were then assigned based upon class scheduling, to either the intervention or control arm of the study. A post intervention survey was completed by all students after a period of time ranging from 16 to 25 weeks after the end of the curriculum.

Statistically Significant Results: Sexually active students who were exposed to the intervention reported fewer episodes of sexual intercourse ($P < .05$) and fewer partners ($P < .01$) during the 5 month period than did the control group.

Sexually Experienced Students: Program vs. Control

- Program students reported fewer multiple episodes of sexual intercourse
- Program students reported fewer partners

18. Worth the Wait

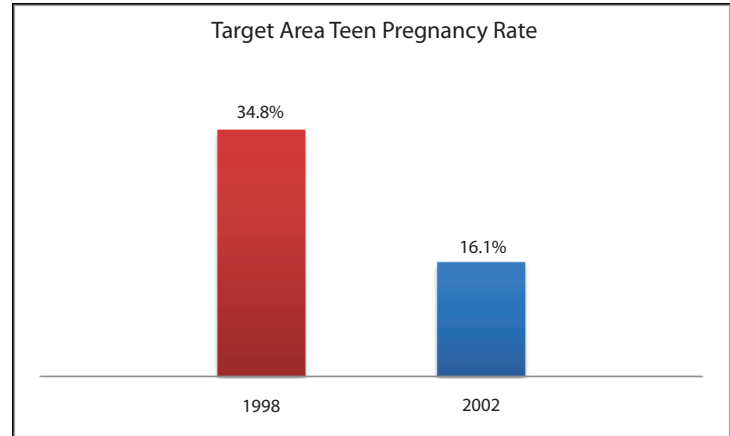
State: Texas

Study: Tanner Jr., J.F., & Ladd, R.N. (2005). Saturation Abstinence Education: An application of social marketing *In Golden A (Ed.) Evaluating Abstinence Education Programs: Improving Implementation and Assessing Impact*. Washington DC: Office of Population Affairs and the Administration for Children and Families. Dept of Health and Human Services.

Program Description: Worth the Wait is a community saturation model operating in the Panhandle region of Texas. The model targets teens using numerous interventions including school curriculum for grades 6,7, and 8 and high school health classes, student assemblies, parent and community involvement, social marketing campaign and professional staff development. The published curricula used included *Me, My World, My Future* in grade 6, *Game Plan* in grade 7, *Choosing the Best LIFE* in grade 8 and *WAIT Training* and *Navigator* in high school health classes. In year-long core academic classes, approximately eight to twelve one-hour lessons per grade were delivered, averaging one lesson per month.

Research Design: The study of program effectiveness was undertaken using two approaches. The first examined state health data regarding teen pregnancy for the program area by county and compared it to other counties. The second approach was to survey teens with measures of teen attitude and beliefs. A total of 2,007 students completed the posttest survey from schools in five school districts.

Statistically Significant Results: As in most of the U.S. the incidence of teen pregnancy declined in the study area for the period under study. The decline, though, was singularly dramatic for the county with the longest period of intervention, the pregnancy rate declined from 34.8 to 16.1. The entire program area dropped from 35.1 to 23.8, a decline of nearly one-third. The state by comparison, declined from 36.2 to 28.5, a 21 percent drop. The region (including a number of counties not served by WTW) experienced a decline of 19 percent, from 39.8 to 32.2.



19. Abstinence By Choice

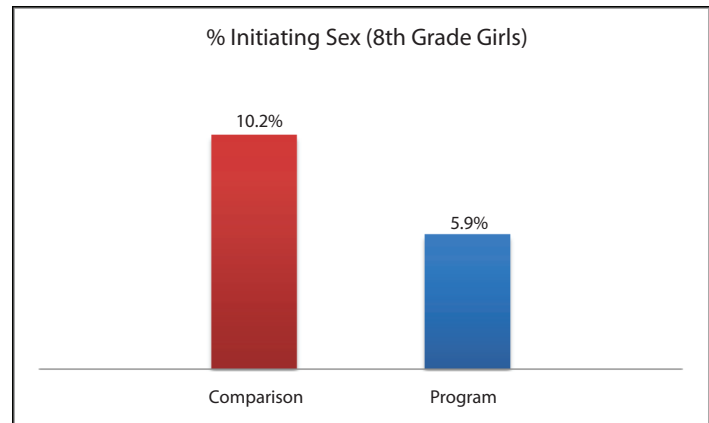
State: Arkansas

Study: Weed, S.E. (2001, October 15). Title V abstinence education programs: *Phase I interim evaluation report to Arkansas Department of Health*. Salt Lake City: Institute for Research and Evaluation.

Program Description: Abstinence By Choice operates in 20 central Arkansas schools, targeting 7th, 8th and 9th grade students reaching approximately 4,000 students each year. Intervention components include 5 days of classroom workshops using speakers, presentations, skits, slides and video to deliver the abstinence message. Adult mentors are used to present the material in classrooms divided into smaller groups. In addition school wide assemblies are provided with A-Club memberships formed after school to support the abstinent life style.

Research Design: Data was collected for 300 seventh grade students and then matched with follow-up data one year later with these same students in the 8th grade. In addition, data was also collected for 9th grade students. 8th grade comparison data was developed by establishing trend lines based upon the 7th and 9th grade data which surround it.

Statistically Significant Results: 5.9 percent of eighth grade program girls had initiated sexual activity compared with a 10.2 comparison rate. Among eighth grade boy participants, 15.8 percent had initiated sexual activity, compared with 22.8 percent for comparison rate boys. Program effects in reducing the onset of sexual activity were significant at the 98 percent confidence level.



20. Stay SMART

State: National

Study: St. Pierre, T.L., Mark, M.M., Kaltreider, D.L., & Aikin, K.J. (1995) A 27-month evaluation of sexual activity prevention program in Boys and Girls Clubs across the Nation. *Family Relations*. 44(1): 69-77.

Program Description: Implemented in Boys and Girls Clubs of America, Stay SMART is a 12-session curriculum that integrates abstinence education with substance-use prevention and life skills. The Stay SMART program employs a postponement approach to sexual activity but also conveys the message to teens that if they have been sexually active, they can still decide to postpone further sexual activity. The design of the Stay SMART program is based on the personal and social competence approach to prevention.

Research Design: Fourteen Boys and Girls Clubs across the U.S. participated in the study. Five clubs offered the Stay SMART program, five clubs offered Stay SMART plus a booster program and four clubs offered no program and served as a control group. A total of 161 youths participated in all four testing occasions over the full 27 months of the study.

Statistically Significant Results: The study found that two years after the program, youth who had engaged in prior sexual activity and participated in the Stay SMART program exhibited reduced levels of recent sexual activity.

Sexually Experienced Teens: Program vs. Control

- Program teens had more favorable attitudes toward sexual activity before the program but significantly less favorable attitudes after program.
- Program teens had significantly less sexual BEHAVIOR at 27 month posttest.

21. FACTS

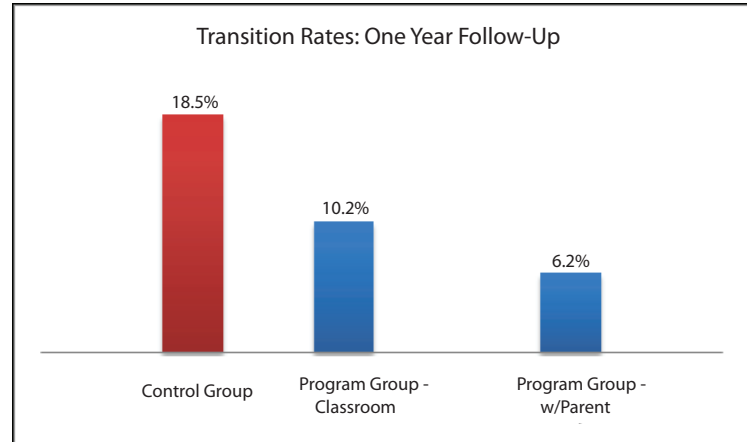
State: Oregon

Study: Weed, S.E. (1994). *FACTS Project: Year end evaluation report, 1993-1994*. Prepared for the Office of the Adolescent Pregnancy Prevention Programs, U.S. Department of Health and Human Services. Salt Lake City: Institute for Research and Evaluation.

Program Description: FACTS (Family Accountability Communicating Teen Sexuality) is a program of Northwest Family Services. The key elements of the program include strong parental involvement, strengthening family dynamics, promotion of family rules, an expectation and rationale for sexual abstinence, communication skills, decision making skills with an understanding of consequences, and an understanding of the influence of peer pressure and the media. One version of the program is delivered in school through fifteen lessons. Another version is taught during four longer evening sessions with an added parent component.

Research Design: Pre-, post-test and twelve month follow-up surveys were conducted for program students. Pre-test and follow-up surveys were conducted with control students. One year follow-up data compared 220 program students with a comparable group of 88 control students who did not participate in the program.

Statistically Significant Results: The evaluation found the FACTS program to be highly effective in delaying the onset of sexual activity. The twelve month transition rates from virgin to non-virgin status was 10.2% for the program classroom students and 6.25% for the evening program students. The comparable transition rate for the control students was 18.5%.



22. Teen Aid/Sex Respect

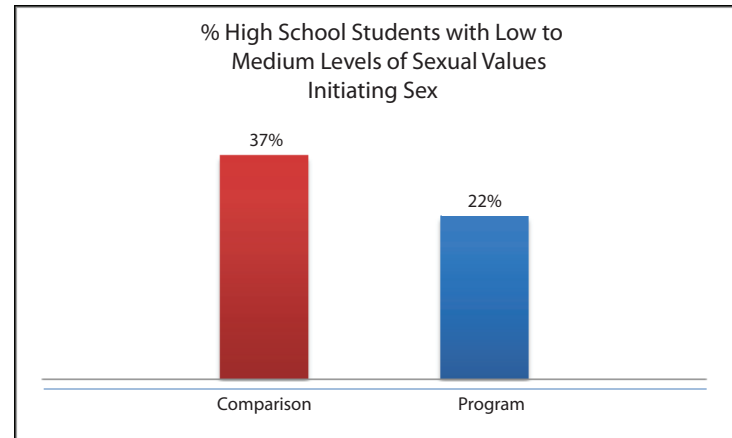
State: Utah

Study: Weed, S.E. (1992, December). *Predicting and changing sexual activity rates: A comparison of three Title XX programs*. Report submitted to OAPP, U.S. DHHS.

Program Description: Sex Respect, Teen-Aid, and Values and Choices are three classroom-based abstinence programs.

Research Design: The 2 year study was conducted in Utah and included two cohorts of 7th, 8th, and 10th graders. The control groups were derived from the same school districts.

Statistically Significant Results: Sexual initiation rates for high school students with “low-to medium-levels of sexual values” was 22% for program vs. 37% for control teens. As a group, HS and JH school students using Sex Respect reduced sexual initiation rates by 25% and Teen Aid by 17% vs. the control group.



23. Teen Aid Family Life Education Project

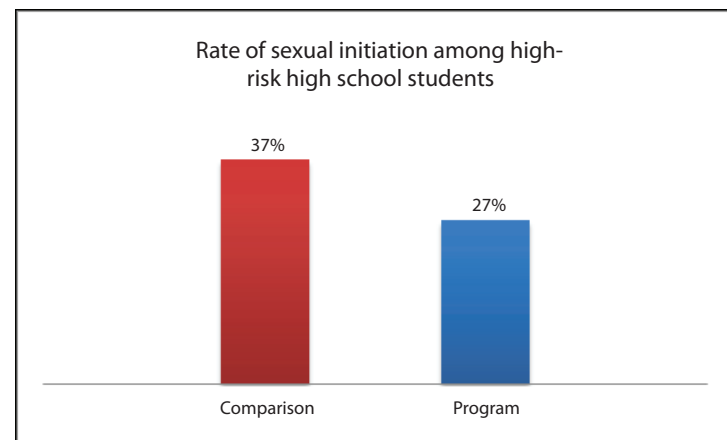
State: Washington

Weed, S.E., Prigmore, J., Tenas, R. (1992). *The Teen Aid FLE Project: 5th year evaluation report*. Salt Lake City: IRE Institute for Research & Evaluation.

Program Description: Teen Aid is an abstinence program that contains 15 units, usually taught in one-hour classroom sessions.

Research Design: Data was analyzed from over 1300 students in 14 schools in CA, ID, OR, MS, and UT. Data was also collected for pre, post, and 1-year follow-up in four program and three control schools in Utah.

Statistically Significant Results: The program showed significant effect in reducing sexual initiation rates among high risk high school students by more than one-fourth: 37% vs. 27% for control group.



Section D

Promising Programs from the 2010 HHS Abstinence Education Evaluation Conference

The following studies and programs were presented at the April 19 & 20, 2010 HHS Conference, *Evaluating Community-Based Risk Prevention Programs for Youth: Informing Abstinence Education*. A summary of all presentations and poster sessions were included in a publication and accompanying CD produced by the Department of Health and Human Services (DHHS). Presentations that demonstrated statistically significant behavioral impact are included in Section C of this publication.

All program evaluation descriptions and research results cited within this section are quoted directly from HHS conference materials, unless indicated otherwise by the insertion of information within brackets []. HHS recognized the following abstinence programs for having demonstrated statistically significant early-stage positive impact on teen attitudes and/or parent/teen communication about delaying sex:

1. Pursue Your Dreams
2. Project SOS
3. Families' Trust
4. Friends First
5. Positive Choices
6. Generation W.A.I.T.
7. Healthy Futures
8. The RIDGE Project
9. Abstinence 'Til Marriage (ATM)
10. Saints Mary and Elizabeth Medical Center (SMEMC)
11. ProjectTruth
12. Right Choices for Youth (RCY)
13. Pure & Simple Lifestyle (PSL)
14. JCCA's RESOLVE Program
15. Lighthouse Outreach
16. Project ThinkSmart
17. Better Family Life
18. Parents Speak Up National Campaign (PSUNC).

1. Pursue Your Dreams (PYD).

State: Missouri

Evaluation Description: PYD (Pursue Your Dreams) classroom curriculum education provided education in the public school setting that built student knowledge about: (1) abstinence until marriage, (2) the potential benefits of abstinence for health and well being, and (3) abstinence as the healthiest choice for a fulfilling life. Content also included information about abstaining from high-risk behaviors such as substance use and abuse, and verbal and physical violence. A quasi-experimental repeated measures design was used and a 27-item Likert type scale survey assessed confidence in decision-making skills, preparation for their future career, educational and personal challenges, peer influence, leadership skills, and the effect of the curricula on attitudes, knowledge, and intentions.

Statistically Significant Results: An independent samples t-test was performed to determine whether aggregate student scores changed from pre- to post-curriculum participation. Statistically significant changes ($p < .05$) occurred in all of the 27 pre/post questions.

2. Project SOS.

State: Florida

Evaluation Description: This study shows how Project SOS' new Envision curriculum and presenters can effectively supplement health education classes with a lively, relevant program of youth development and abstinence education. The study also demonstrates how a multi-method evaluation can be implemented without disruption of program implementation, and how evaluation findings can be used to inform and improve the program. The results show the positive impact of the Envision curriculum in its initial use.

Statistically Significant Results: The 799 Envision completers increased significantly in agreement on 11 of 12 pre/post items, indicating knowledge of strategies to support abstinence. Most (72%) indicated a commitment to abstinence. According to 6 and 12 month follow-up surveys, almost all respondents

agreed that the strategies they learned helped "a lot" or "a little" and most (87%) indicated a continuing commitment to abstinence.

3. Families' Trust.

State: Arizona

Evaluation Description: Families' Trust is an abstinence education program designed to delay the onset of adolescent sexual behavior of sixth grade students attending five middle schools in Tucson, Arizona. This program includes classroom education, parent/family support, and community components. [The evaluation employs a] rigorous group randomized trial evaluation. The evaluation focuses on the parent/family components and is designed to help determine whether the addition of parental education about communication, household rules, and knowledge of abstinence education strategies, improves outcomes for youth participating in a 10-hour Choosing the Best curriculum.

Statistically Significant Results: [At least one of the scales used to measure each of the following youth outcome objectives showed a statistically significant change from pre to post program: knowledge of the physical, social, and emotional consequences of sexual activity; beliefs in abstinence; mastery of prevention skills; and communication with parents about sexual decisions.] Parent components appear to have a statistically significant effect on parent knowledge and communication and less of an effect on household rules and supervision.

4. Friends First

State: Colorado

Evaluation Description: Evaluation Description: The non-profit organization, FRIENDS FIRST, offers two abstinence education programs: the STARS Mentoring Program and The Quinceañera Program. Participants learn about abstinence, relationships, refusal skills, and other relevant topics. The primary evaluation question in this study is the same for both programs – whether there are statistically significant differences between

participants receiving the FRIENDS FIRST programs and those in control groups. Of particular interest are the differences in knowledge, attitude and behavior.

Statistically Significant Results: The design for the quantitative portion of the STARS study was a group-randomized trial, consisting of four middle schools receiving the program, and four middle schools not receiving the program. The design for the Quinceañera Program was a quasi-experimental design consisting of six groups receiving the program and six control groups not receiving the program. T tests showed the program group at post-test was significantly improved from the pretest in the following areas: Abstinence intentions ($p=.006$); Support from parent ($p=.0001$); Parent comfort talking to child about abstinence ($p=.001$); Parent talked to child about abstinence ($p=.016$); and Parent/child quality of communication ($p=.004$). Parent/Child quality of communication significantly improved (η^2 effect size = .31) from being in the program group (vs. the control group) $F(1,67) = 6.92, p = .01$. The qualitative interviews triangulated the quantitative results, which show the ability of the program to improve the quality of parent-child communication.

5. Positive Choices

State: Ohio

Evaluation Description: Positive Choices is an abstinence-until-marriage teen pregnancy prevention program in northwest Ohio. Programming includes intensive in-school, after-school and summer groups for high-risk urban teens. Primary outcomes are changes in behaviors and intentions, before and after programming, using a self-report survey including all core CBAE items. Last year Positive Choices served 385 in-school and 346 after-school/summer students age 12-18 with the abstinence-based curriculum. Over half of the youth reported having sexual intercourse before and after programming.

Statistically Significant Results: Sixteen percent of in-school/after-school students who reported having sexual intercourse before the program were committed to abstinence-until-marriage after the program

(45% summer groups). By comparison, 40% of the youth who said they had not had sex before the program were committed to abstinence (58% summer groups). Females, youth without prior sexual activity, and summer-group participants were more likely to commit to abstinence.

6. Generation W.A.I.T.

State: Missouri

Evaluation Description: Generation W.A.I.T. (Why Abstinence? It's Time) is a multi-dimensional school, community, and faith-based program that targets high-risk pre-adolescent and adolescent Black youth (ages 12 to 18) residing in four rural Mississippi counties (Tallahatchie, Quitman, Coahoma, and Panola). The program is a grass-roots approach to address the highest adolescent rates of pregnancies and sexually transmitted infections within Mississippi. It has found that the Choosing the Best curriculum in nine middle and high schools, an adult and peer mentoring program, and the Why kNOw? curriculum in six faith-based sites has been effective in helping youth develop skills in making healthy choices about pre-marital sex.

Statistically Significant Results: Students reported having a better understanding of their own sexuality and the importance of developing healthy relationships with their peers and adults in their lives. The intervention has contributed to a reduction of the number of teenage pregnancies and reported sexually transmitted infections in the program's target area.

7. Healthy Futures

State: Massachusetts

Evaluation Description: For a variety of health, social, and economic reasons, sexual activity among youth is an issue of widespread national concern. Thus, it is important to equip young people with the skills and knowledge required to make informed and responsible decisions. Healthy Futures (HF) is a school-based educational program that provides age-appropriate lessons and skill-building activities to

7th through 12th grade students living in a number of Massachusetts communities.

Statistically Significant Results: HF has been successful in significantly changing knowledge, attitudes, and behavioral intentions among students, as assessed by pre-and post-test surveys. Results show that the majority of variables improved in the hypothesized direction for all grades. However, for certain questions the difference in response between middle school and high school students was apparent, suggesting that the HF program was more effective for middle school students than for high school students.

8. The RIDGE Project

State: Ohio

Evaluation Description: The evaluation is based on the Integrated Theory of Planned Behavior: Perceived risk, attitudes, perceived norms, and self-efficacy influence individual’s behavioral intentions/subsequent behavior relative to abstinence education. Random sampling in 2007-2009 produced 7,016 matched pre/post surveys of students (12-18) in school-based programs in Northwestern Ohio. Pre- to post-test results show statistically significant increases in the mean for survey indexes. Experimental /comparison group analysis performed on the 2008-2009 data suggests programming had a positive effect in 70%-80% of experimental middle and high schools.

Statistically Significant Results: Data analysis demonstrates the RIDGE Project has a positive impact on participants’ behavioral intentions regarding abstinence, knowledge of the consequences of sexual activity before marriage, and decision-making/refusal skills (over 70% of respondents making a personal pledge to remain abstinent until marriage).

9. Abstinence ‘Til Marriage (ATM)

State: Ohio

Evaluation Description: ATM believes when presented with valid information about teen sexual health issues, most teens and their families will respond positively. The evaluation uses a quasi-experimental design and the Integrated Theory of Planned Behavior.

Statistically Significant Results: Random sampling during 2005 through 2009 produced 23,010 matched pre- and post-surveys from teens age 12-18. Poster results show that ATM has a very positive impact in Ohio during 2005 through 2009. Between 70% and 90% of the respondents agree that:

“It is important to be married before I have sex.”

“The best way to avoid an out-of-wedlock pregnancy is to wait until marriage to have sex.”

“I have made a personal pledge to remain sexually abstinent until marriage.”

“Having sex now will negatively affect my marriage in the future.”

“Even if you have already had sex, you can choose to save sex for marriage only.”

10. Saints Mary and Elizabeth Medical Center (SMEMC)

State: Illinois

Evaluation Description: Saints Mary and Elizabeth Medical Center (SMEMC) has taught and evaluated high school students in diverse, high-risk, economically depressed Chicago communities with the goal of increasing abstinent lifestyle choices and positively impacting adolescent pregnancy and STD rates. Program strengths include: medically accurate information that refrains from moralistic language; experienced, educated, and regularly assessed educators; IRB approval; measurement and evaluation model based on program logic and theoretic model; and a mixed longitudinal cross-sectional design.

Statistically Significant Results: Over the past year with 962 high school students the evaluation has demonstrated robust pre/post change for different subgroups: adolescent boys, girls; Hispanic and non Hispanic; younger and older, with and without prior abstinence education or sex education instruction; sexually active and not sexually active and thus demonstrating primary and secondary treatment effectiveness. Positive changes are also observed for students who perceive their parents as advocates of the abstinent lifestyle as well as students who perceive their parents as accepting sexual activity before marriage or are uncertain what their parents believe.

11. ProjecTruth

State: New York

Evaluation Description: This presentation describes findings for ProjecTruth’s Abstinence Until Marriage program 2007-2009. The evaluation plan included: 1) attendance (dose) and completion; and 2) pre/post/follow-up assessments of knowledge, attitudes, intentions and behaviors. Data were compared with a comparison group of data from the 2001-2006 ProjecTruth participants. Pre-test/post-test data were the focus of analyses. Also, a subset of respondents was included in six and twelve month follow-up. Long-term follow-up was based on a sample of twelfth graders. A total of 89.8% of respondents completed the program..

Statistically Significant Results: Overall, the abstinence education curriculum demonstrated consistently significant and lasting effects on knowledge, attitudes, intentions and parent-teen communication behaviors. There was not a significant effect on current sexual activity. There was a significant dose-response relationship between number of classes and current sexual activity, such that the more classes that were taught, the less likely the student was to report current sexual activity.

12. Right Choices for Youth (RCY)

State: Texas

Evaluation Description: The Right Choices for Youth (RCY) program teaches *Worth the Wait* in middle school and *Choosing the Best* in high school. Schools in the San Angelo, Texas area were divided into two groups: those whose regular classroom teachers delivered the curriculum and those who utilized RCY educators. The sample was divided based on campus requests and convenience. There were nine middle and six high schools in the RCY-taught group and ten middle and five high schools in the teacher-taught group.

Statistically Significant Results: The delivery variable (RCY vs. teacher) was not a significant predictor of intentions or commitment to remain abstinent in a general linear model involving a number of predictors. The delivery variable is associated with important predictors of intentions and commitment. Results indicate a modest positive effect for RCY-educator delivery for refusal skills, attitudes toward abstinence (only for middle school), and knowledge.

13. Pure & Simple Lifestyle (PSL)

State: Kansas

Evaluation Description: The *Pure & Simple Choice* curriculum was developed by Abstinence Education, Inc. as part of its Pure & Simple Lifestyle (PSL) program for the purpose of teaching adolescents, their parents, and other interested community members the value of an abstinence-until-marriage approach to sexual activity.

Statistically Significant Results: Factor analysis was used to demonstrate the dimensions of teen's attitudes and opinions about abstaining from high-risk behaviors when participating in the curriculum provided by the PSL project. Additionally, the evaluators pursued instrument reduction through item correlations and factor analysis methods while maintaining reliability and validity of its core content, which resulted in an increased number of completed surveys over four years. Four factors with extracted variables appear well-defined and yielded the most interpretable results. The four dimensions found in the participant data were teen's attitudes toward abstinence perceptions of abstinence, perceptions of consequences of risky behaviors, parental involvement with teen and the teen's relationship with their parents.

14. JCCA's Resolve Program.

State: New York

Evaluation Description: [RESOLVE is a program designed to teach healthy lifestyles, goal setting, refusal skills, and abstinence education to at-risk youth in both residential and community group settings. Results for the youth who completed the program indicate positive changes in content knowledge, attitudes and intentions regarding sexual behavior.]

Statistically Significant Results: Significant increase in RESOLVE curriculum knowledge ($p < .002$). Youth significantly more likely to agree that abstinence is the best way to avoid getting pregnant ($p < .04$). Significantly less endorsement of the statement "I will probably have sex even if I do not want to have sex" ($p < .002$). 25% increase in self esteem. Six months after completing RESOLVE program: Youth showed no significant decrease in content knowledge. Evidence indicates knowledge gains are maintained over time.

15. Lighthouse Outreach.

State: Virginia

Evaluation Description: [Lighthouse Outreach is located in Hampton Virginia. They provide Choosing the Best curricula in an in-school program. They also provide the Dare to Dream afterschool program that utilizes a variety of curricula. The evaluation included pretest/post-test and comparison results.]

Statistically Significant Results: [Key findings include:] 89% of virgins intend to remain abstinent (+6%); 60% of non-virgins intend to become abstinent (+10%); 96% recognize abstinence is only sure way to avoid negative consequences (+24%); 78% report having refusal skills (+5%); 66% believe they will have a job and be able to provide for a child (+6%). Significant improvement ($p < .0001$) [within] all variables. All [negative] intentions measures [were] significantly reduced.

16. Project ThinkSmart

State: Florida

Evaluation Description: [Catholic Charities of Central Florida implemented a two-tiered abstinence program. All 3,606 youth received Relationships Under Construction (RUC), a five-hour curriculum that teaches youth how to build healthy relationships and marriages. Also, 1,783 youth participated in the Baby Think It Over (BTIO) booster program with infant simulators demonstrating the consequences of teen parenthood. The Integrated Theory of Planned Behavior was the basis of a quasi-experimental evaluation with pretest, posttest, and follow-up data from 7th through 12th grade students in 45 public and private schools.]

Statistically Significant Results: [Factor analysis formed pretest and posttest indices of youths' intent to remain sexually abstinent. When pretest results for a statistically equivalent control group were compared to the posttest results of an experimental group (Figure 1), statistically significant improvements occurred (1a: $p \leq .001$ and $d = .311$; 1b: $p \leq .001$ and $d = .392$). This indicates that, in the short term, the ThinkSmart RUC program is effective, and its effectiveness is enhanced with the BTIO booster. While a relatively small sample of statistically equivalent pairs (52) were available for a separate follow-up analysis, positive results occurred for the joint RUC and BTIO participants.]

17. Better Family Life

State: Missouri

Evaluation Description: [Better Family Life uses a modified version of Choosing the Best to reduce teen pregnancy. The evaluation included a self-report survey that measured the constructs of: (1) Abstinence Knowledge; (2) Abstinence Attitudes & Values; (3) Abstinence Intentions; (4) Parental Communication; and (5) Personal Self-Efficacy. A repeated measures design was used in the evaluation to determine if there were changes in any of these changes upon program completion and if these changes differed for boys and girls and for those that had engaged in sexual intercourse prior to programming versus those that had not.]

Statistically Significant Results: [Statistically significant gains, that did not differ by gender or prior sexual activity, were found on the personal self-efficacy, abstinence knowledge, and parental communication. Specifically, upon completing the program youth were more likely to: (1) Feel confident in the ability to refuse sexual activity; (2) Be aware of the consequences of engaging in sexual activity; and (3) Talk with their parents about engaging in sexual activity. In addition, while all youth were more likely to report that they would not engage in sexual activity in the future after program implementation, there was a greater positive increase for youth that engaged in sexual activity prior to program implementation. Similarly, while all youth were more likely to report that they were more likely to remain abstinent in the future after program implementation, there was a greater positive increase for youth that engaged in sexual activity prior to program implementation. While the gains were higher on these two constructs for youth that had engaged in sexual activity prior to program implementation, upon program completion youth that had not engaged in sexual activity prior to program implementation still scored slightly higher on both of these constructs than did youth that did not engage in sexual activity prior to program implementation.]

18. Parents Speak Up National Campaign (PSUNC)

State: Nationwide media campaign

Evaluation Description: [The campaign] encourages parents to talk “early and often” to their children about delaying sexual activity. [It] uses TV, radio, and print public service announcements (PSAs), promotes a Website www.4parents.gov. Based on PSUNC implementation, 2 primary evaluation studies of parents were fielded:

Efficacy trial to test effect of PSUNC messages on parent-child communication under controlled conditions; national media tracking survey to estimate exposure to campaign and test relationship between campaign awareness and parent-child communication.

Statistically Significant Results: Treatment mothers and fathers both more likely than controls to recommend that their children wait to have sex at 6 months post-baseline; treatment mothers and fathers far more likely than controls to use the www.4parents.gov Web site.

Exposure to PSUNC strongly associated with parent-child communication outcomes among mothers. Findings are robust to both self-reported and market-level measures of PSUNC exposure. For fathers, association is limited to self-reported measures of awareness. Findings also supported in a separate sub-study of children of parents in the efficacy trial – parent exposure to PSUNC associated with child self-reports of parent-child communication.

Section E

Promising Programs from 2005 & 2007 HHS Abstinence Education Evaluation Conferences

The following studies and programs were presented in a publication produced by the Department of Health and Human Services (DHHS) during the HHS Abstinence Evaluation Conferences of 2005 and 2007. These programs were recognized for having demonstrated statistically significant early-stage positive impact on teen attitudes. Numerous other programs are showing similar effects but are not detailed in this report²⁶:

- | | | |
|---|--|--|
| 1. Why kNOw | 11. Rockdale Medical Center | 19. ATM Education |
| 2. Choosing the Best LIFE | 12. Positive Choices | 20. NiteStar StarLo |
| 3. B-Unique | 13. Scott and White
Worth the Wait | 21. TRAIL |
| 4. Friends First
Quinceanera Program | 14. PEERS | 22. Montgomery County
Abstinence Education
Program |
| 5. Ohio's Abstinence
Education Program | 15. UTHSCSA Sex
Education Program | 23. OUTSPOK'N
"Are You With Us |
| 6. FACTS | 16. New Jersey Best Friends/
Best Men | 24. Too Young for Two |
| 7. F.A.M.E. | 17. McCAP | 25. The Center for Relation-
ship Education – WAIT
Training Curriculum |
| 8. Teens Taking Charge | 18. East Texas Abstinence
Program | |
| 9. The Choice Game | | |
| 10. SC PIE | | |

²⁴ Department of Health and Human Services, Strengthening Programs through Scientific Evaluation, 2005 and 2007.

1. Why kNOw.

State: Tennessee

Evaluation Description: This paper reports the results of the second year evaluation of WhykNOw Abstinence's Core Curriculum and Road to Excellence programs. The core curriculum is offered in Southeast Tennessee and Northwest Georgia area schools to all eligible middle and high school students over a one-week period each year. The Road to Excellence is a voluntary program that meets after school after school throughout the academic years.

Statistically Significant Results: The Core Curriculum evaluation was conducted using a pre-, post and six to nine month post-post survey with approximately 12,000 students. Evaluation results show significant improvement in key attitudes regarding abstinent lifestyle as well as greater retention of core curriculum information.

2. Choosing the Best LIFE.

State: Alabama

Evaluation Description: *Choosing the Best LIFE* curriculum was implemented in 66 seventh- and eighth-grade classrooms in Alabama. Participants (N=1425) were randomly assigned to intervention or comparison condition and assessed via the Youth Survey. Learning modules were presented on 5 consecutive days during the academic year with 1 day being used for either the pretest or posttest and the remaining 4 days being used for the actual delivery of the curricular lessons.

Statistically Significant Results: Comparison and intervention groups were significantly and meaningfully different on the legislative priority scale scores with the intervention group reporting increased agreement with the abstinence message.

3. B-Unique.

State: Arizona

Evaluation Description: The B-Unique abstinence education program implemented in school based settings with 8th-12th grade students in Tucson, Arizona seeks to enable students to remain sexually abstinent.

Statistically Significant Results: Results indicated statistically significant differences in pre-sexual and sexual behaviors of Hispanic male students and their Caucasian peers as assessed from pre test to post test. Important findings include statistically significant improvements in pro abstinence knowledge and refusal skills, attitudes toward abstinence and increased commitment to abstinence until graduation and marriage by Hispanic male students upon program completion.

4. Friends First

State: Colorado

Evaluation Description: The Friends First Quinceanera Program was developed to seek to delay the onset of sexual activity in Mexican-American adolescents by linking a 24-hour curriculum intervention to the popular Quinceanera celebration widely practiced in the United States.

Promising Results: The 3-year pilot and formative evaluation demonstrated that the program was well received by participants and increased protective factors such as parent/child communication about sexuality and sexual boundaries during a key developmental stage of adolescents.

5. Ohio's Abstinence Education Program

State: Ohio

Evaluation Description: Data was collected from 2,199 middle school and 1,507 high school participants affiliated with 11 of the 13 participating Ohio sub-grantees from 2005-2006.

Statistically Significant Results: Preliminary results suggest that participation in abstinence education programs for students in grades six through eight improved short-term outcomes. Of particular importance, participation in sub-grantee programming increased the overall statewide number of students committed to remain sexually abstinent.

6. FACTS

State: Oregon

Evaluation Description: Latino youth in middle and high school and their parents were the target population for community programs using FACTS in English and DATOS in Spanish. 110 youth responded to pre- and post-intervention surveys.

Statistically Significant Results: In the pre-to post-intervention comparisons, changes were in the direction of more agreement with positive and healthy attitudes. Of the 16 items targeted in the area of developing personal and social support for Latino youth, all were identified by a greater increase in the post survey, with eight having statistically significant increases in the 95% confidence range or higher.

7. F.A.M.E.

State: Florida

Evaluation Description: F.A.M.E. (Family Action Model for Empowerment) is a multi-dimensional school and community-based program targeting youth in grades five through nine in rural areas in Florida with high teen pregnancy rates.

Statistically Significant Results: Program participants when compared to a comparison group of students demonstrated the following significant protective factor results: reported self-esteem, ability to resist peer pressure, communication with parents and attachment to parents.

8. Teens Taking Charge

State: Illinois

Evaluation Description: Teens Taking Charge (TTC) promotes adolescent sexual abstinence for youth in grades 6th through 12th. Since 2001, TTC has worked with an average of 400 teens/year. The evaluation used a quasi-experimental design using pre/post testing with a comparison group (Year 04 N=360).

Statistically Significant Results: Analysis of changes between the pre- and post-tests for TTC participants showed significant improvement on all knowledge-based and key attitude questions. By contrast, the comparison group showed limited knowledge improvement and no improvement on attitudes related to abstinence from sexual activity.

9. The Choice Game

State: New Jersey

Evaluation Description: The Choice Game is an interactive, computer-based abstinence education curriculum providing simulated real life situations exploring teen dating, relationships and sexual activity. Participants in the study were students from 17 schools in New Jersey and were placed either in program or comparison groups.

Statistically Significant Results: All five outcomes showed significantly greater gains ($p < .01$) for the treatment group than for the comparison group. The treatment group made greater gains in knowledge, family communication, attitude toward abstinence, and intent to practice abstinence, including remaining abstinent until marriage.

10. SC PIE

State: South Carolina

Evaluation Description: South Carolina Parents Involved in Education (SC PIE) implemented an abstinence program in Marlboro County public schools, grades 6-9. Training was also provided for adults in the community through participating churches. Testing of students was administered before and after the curriculum instruction.

Statistically Significant Results: Knowledge gains were statistically significant for grades 6-8. All grade levels showed significant improvement ($p < .001$) in the behavior index.

11. Rockdale Medical Center

State: Georgia

Evaluation Description: The research evaluation of the Rockdale Medical Center Adolescent Health Education Project used a quasi-experimental design with students from three high schools and three middle schools who participated in a twelve-week Abstinence Education Program.

Statistically Significant Results: The results from the analysis of surveys administered to 1,578 students show that the program as implemented, had the desired impact on the targeted youth as measured on the pre-and post-Student Attitude Survey, with all but one category showing significant differences between the pre-and post-assessment.

12. Positive Choices

State: Ohio.

Evaluation Description: Students from three Toledo schools received eight abstinence education sessions from Positive Choices and were also invited to participate in a summer program. Descriptive information was available from 510 students with an average age of 13.

Statistically Significant Results: There was a significant interaction for norms, attitudes and intentions to abstain from sexual behavior with those receiving abstinence education improving from pre to post-assessment and were better than the controls at post-assessment.

13. Scott and White Worth the Wait

State: Texas

Evaluation Description: This study assessed whether knowledge and attitudes were increased by an abstinence-focused sex education program. Consistency was evaluated using serial paired surveys of 231 middle schools (6th, 7th and 8th grades) and 120 high schools from 2002-2006.

Statistically Significant Results: Knowledge scores increased significantly for 6th, 7th, 8th and high school. The attitude that others should delay sex until marriage increased significantly from before to after the program for all grades.

14. PEERS

State: Indiana

Evaluation Description: PEERS uses high-school age mentors to inform middle and high school students on the risk and consequences of sex before marriage and the value of saving sex for marriage. The intervention was targeted to sixth-grade students from three public schools. Pre- and post-test surveys were analyzed from 731 students.

Statistically Significant Results: Treatment-group students were 10% more likely than control-group students to be committed to abstinence at the post-test. The difference in the percent of respondents who said they were committed to abstinence education between pre- and post-tests increased for both groups, but was greater for the treatment group.

15. UTHSCSA Sex Education Program

State: Texas

Evaluation Description: The University of Texas Health Science Center at San Antonio (UTHSCSA) Sex Education Program is designed to target predominately Mexican-American students aged 12 to 18 in San Antonio classrooms. Participants received 4-10 weekly classroom workshops integrated into regular school curricula.

Statistically Significant Results: Knowledge increased significantly among middle and high school students. Similar shifts in attitudes were observed. Only 54% of middle and 39% of high school participants were committed to abstinence at pre-test, and 67% (middle school, $p < .01$) and 54% (high school, $p < .05$) at post-test. In year 2 abstinence commitment increased from 41.1% at pre-test to 60.1% at post-test ($p < .01$) among middle school teens and from 44.2% at pre-test to 51.4% at post-test ($p < .01$) in high school.

16. New Jersey Best Friends/ Best Men

State: New Jersey

Evaluation Description: This study measures the impact of the Best Friends/Best Men program in Newark on youth 10-15 years old. The sample included students in four treatment schools (N=396) and five comparison schools (N=247), considered high risk youth primarily from African American ethnicity and impoverished environments.

Statistically Significant Results: Preliminary results include a significant increase in protective factors among the treatment group than comparison students: talking with parents about why people their age should not have sex; importance of remaining abstinent until marriage; belief that sex before marriage makes it harder to grow and develop emotionally and remaining abstinent as the only certain way to avoid pregnancy and STDs.

17. McCAP

State: Texas

Evaluation Description: Data was collected five months after students completed Me, My World, My Future and Aim for Success, as delivered by the McLennan County Collaborative Abstinence Program (McCAP) to 7th and 8th grade students during school.

Statistically Significant Results: Significant differences were experienced between program and comparison students with program students reporting fewer had willingly engaged in sexual intercourse and had greater commitments to remain abstinent until marriage.

18. East Texas Abstinence Program

State: Texas

Evaluation Description: ETAP taught an abstinence curriculum, FACTS, in grades 7-12. In addition community activities and a multimedia campaign were utilized to reinforce the abstinence message. Changes in 2,496 matched pre- and post-test intervention surveys were studied.

Statistically Significant Results: When asked: "Whether or not you have ever had sex, in the future do you plan to abstain until marriage," 64% marked "Yes," up from 57%, a statistically significant improvement ($p < .0001$).

19. ATM Education

State: Ohio

Evaluation Description: ATM Education provides abstinence education in 27 Ohio counties. Activities for ATM include assemblies, five to eight classroom presentations using Relationships Under Construction curriculum, teacher in-services, billboards, posters and websites. Random sampling of over 65,000 surveys over a three year period produced 15,110 matched pre- and post-test surveys which serve as the bases of the evaluation.

Statistically Significant Results: Surveys demonstrated statistically significant positive changes in behavior and intentions on five performance measures by increasing the proportion of adolescents who: understand that abstinence from sexual activity is the only certain way to avoid out-of-wedlock pregnancy and STDs; indicate an understanding of the benefits by abstaining from premarital sexual activity; report they have refusal or assertiveness skills necessary to resist sexual urges and advances; commit to abstain from sex until marriage; intend to avoid situations and risky behavior which make them more vulnerable to sexual advances and urges.

20. NiteStar StarLo

State: New York

Evaluation Description: The program is a collaborative effort between St. Luke's-Roosevelt Hospital Center and New York Public Schools using theatre performances within a classroom-based curriculum, which facilitates discussion and clarification of issues with peer educators. The program provided a series of seven theatrical-based sessions targeting fifth and sixth grade students attending eight New York City elementary and middle schools in high teen pregnancy rate neighborhoods. Data was analyzed from 311 program participants and 101 comparison students who completed both pretests and posttests.

Statistically Significant Results: Preliminary analyses show significant changes from pretest to posttest in the desired direction among NiteStar StarLo students compared to the comparison group in a variety of notable areas: knowledge; their ability to resist pressures to become sexually involved in dating situations; attitudes about setting limits; and the likelihood of having sex as a teenager before marriage.

21. TRAIL

State: North Carolina

Evaluation Description: Teaching Responsible Actions in Life (TRAIL) is a five-dimensional middle school program offered in a county with high teen pregnancy rates. 245 students have provided baseline and 3-month data, 155 in TRAIL and 90 others as controls.

Statistically Significant Results: On the posttest intervention students demonstrated significant differences from the control students in knowledge, in more negative attitude toward teen parenting and in more negative attitudes toward teen sex. Significant differences existed between the two groups in terms of intentions to remain sexually abstinent during middle school (70.3 percent for program group vs. 47.8 percent for control group).

22. Montgomery County Abstinence Education Program

State: Alabama

Evaluation Description: The program contains multiple components including Choosing the Best classroom curriculum, parent education, motivational speakers and college student and professional team teaching. The target population is 7th, 9th and 10th graders in 12 schools in Montgomery, Alabama. Two-week, in class curricula are delivered during the health class to improve attitudes regarding sexual abstinence. The survey was administered to a control group of 324 students and 4461 program students over a period of 4 years.

Statistically Significant Results: There was no statistical difference between pretest and posttest in the control group. However, behavioral intentions were found to be significantly changed from pretest to posttest for the program group.

23. OUTSPOK'N "Are You With Us?"

State: Florida

Evaluation Description: The study population consisted of approximately 800 youth and 80 adults in rural Baker County, Florida. A wide range of educational and media-based strategies were used, including WAIT Training and Choosing the Best LIFE.

Statistically Significant Results: Students showed a significant difference between pre and post tests concerning refusal or assertiveness skills to resist sexual urges and advances and on the importance of waiting until marriage to have sex.

24. Too Young for Two

State: South Dakota

Evaluation Description: The Too Young for Two program of the Girls Incorporated of Rapid City, SD provides pre and early adolescent girls with an abstinence education program addressing risk behaviors. Embedded in each program is a character education component intended to improve the moral development of young girls.

Statistically Significant Results: In the three-year study moral cognition was a significant predictor of moral behavior (lying, cheating and destructive action) which was found to be a predictor of the level of sexual activity. The study showed that girls who had the most immature moral competence changed significantly from the pre intervention to post intervention suggesting that the character education program had impacted their decisions about sexual activity and other risk behaviors.

25. The Center for Relationship Education – WAIT Training Curriculum

State: Colorado

Evaluation Description: WAIT Training involved 1,097 matched participants (890 Treatment and 207 control group) between 12-18 years of age from various schools and diverse and high risk communities throughout the metro Denver, Colorado area in a pre and post test (immediately following programming). The same students then completed a 6 month follow up questionnaire. In comparing the gains for the treatment group, 21 items were found to be statistically significant positive changes in knowledge, relationship development skills, attitudes and behavioral intent in the following areas: Peer Resistance, Self-Esteem, Child / Parent Communication, Value of Healthy Family Formation, Future Orientation, and Behavioral Intention to Delay Sex.

Statistically Significant Results: Three scales (affirmation of abstinence, future orientation, and justification for sex) showed a statistically significant difference between program and comparison groups.

1701 Pennsylvania Avenue NW, Suite 300
Washington, DC 20006

Phone: (202) 248-5420
Fax: (866) 935-4850

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