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AN INVESTIGATION OF THE EFFECT OF AN EDUCATIONAL PROGRAM ON  
STUDENTS' DECISION TO USE BIRTH CONTROL

by  
Christine King

A Thesis

Submitted in partial fulfillment of the requirements of the  
Master of Arts Degree  
of  
The Graduate School  
at  
Rowan University  
May 13, 2004

Approved by

Date Approved 5/17/04  
@2004 Christine King

## ABSTRACT

Christine King

AN INVESTIGATION OF THE EFFECT OF AN EDUCATIONAL PROGRAM ON  
STUDENTS' DECISION TO USE BIRTH CONTROL

2003/2004

Dr. Steve Crites

Master of Arts in Special Education

The purpose of this study was to examine the effect of the "Making Proud Choices Curriculum" on students' knowledge and attitudes on the use of birth control. The students were assigned to an experimental or control group. Students took a pre and post test to measure their knowledge and attitudes on human sexuality issues. The experimental group received eight 1-hour training sessions on the Making Proud Choices Curriculum. Results indicated that after training the experimental group had increases in knowledge and more positive attitudes than the control group.

## ACKNOWLEDGMENTS

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## Chapter I Introduction

Despite a 22 percent decline in the adolescent birth rate from 1991 to 2000 (National Center for Health Statistics, 2002), the United States continues to have the highest rates of adolescent pregnancy and births in the Western industrialized world (Alan Guttmacher Institute, 2001). Teenage pregnancy and parenthood is not a new topic (Lachance). The potential life-long outcomes and risks of the teenage pregnancy/motherhood phenomenon have been well documented. This phenomenon includes live, births, abortions and miscarriages (Olson, Wallace & Miller, 1984). Some of the risks include increased poverty for the mother and child (Morbidity & Mortality Weekly Report, 09/12/97). “The children of teen mothers have lower birth weights, are more likely to perform poorly in school, are at greater risk of abuse and neglect, are more likely to be placed in foster care, are more likely to engage in criminal activity as adolescents and young adults, and are less likely to be economically and socially successful as adults” (Card, 1999, p.2). The teenager who has a child, or is pregnant, retains the right to an education.

Historically, educational services available to pregnant adolescents and mothering adolescents have covered a wide spectrum. Some schools encouraged pregnant teenagers to stay home when they started showing, if the district even allowed the student to come to school. Some schools have been so entrenched in tradition that teenage pregnancy and motherhood have been issues they simply choose not to acknowledge.

More recently, schools in local districts may have nurseries. The student is encouraged to stay in school and graduate. Schools that exclusively serve pregnant and mothering teenagers have developed as well.

In May 1998, the State of New Jersey founded its first Project TEACH. Project TEACH stands for Teen Education and Child Health (<http://www.state.nj.us/humanservices/ooe/teach.html>). The rationale behind this school program is to provide educational and support services that enable an adolescent to move forward in their pursuit of their education. Project TEACH is an alternative, year-round education program for pregnant or parenting teens who have typically dropped out of high school and are at risk of never going back

(<http://www.state.nj.us/humanservices/ooe/teach.html>).

Adolescent mothers face a variety of issues. Teenage mothers who choose to keep the child are at risk for experiencing repeat pregnancies and a life of poverty (Card, 1999). This cycle of poverty can be attributed to dropping out of school and unemployment or underemployment.

These issues can affect society as well. Adolescent mothers may not have finished their education. The adolescent needs child care in order to complete their education. The cost of child care may become part of a societal concern. Adolescent parenting results in a "loss of human potential" (Card, p.2, 1999). There are also economic and social costs to teen childbearing (Card). In 1990, the government spent more than \$25 billion for social, health and welfare services to families begun by teen mothers (Mott Foundation, 1997-1998).



Teenage pregnancy and adolescent mothers are issues that have been around for some time. The birth rate for teenagers continued to decline in 1996, and has now fallen by 12 percent to 54.4 births per 1,000 women aged 15-19 years compared with 62.1 in 1991 (Ventura, Curtin and Mathews, p. 2, 1998). Although there has been a decline in teenage pregnancy, teenage pregnancy remains a topic that causes concern.

There has been an array of programs dealing with teenage pregnancy. Largely as a result of research findings on the negative consequences of teen pregnancy and parenthood, "care" programs for pregnant teens, teen mothers and their infants proliferated in the 1970s (Card, 1999). These programs generally provided comprehensive pre-and postnatal health services for the young mother and her child (Card). Many care programs also helped the teen mother stay in or return to school by providing special classes for these moms, day care for their children or both (Card).

Educational support and job training are often components used in these programs. Educational support includes nurseries in the teenager's school. This encourages the teenager to stay in school by providing easily accessible child care. Job training provides the teenager with job readiness skills. The teenager graduates with viable skills necessary for employment. The teenager is then in a better position to start assuming financial responsibility for herself and her baby, breaking the cycle of poverty.

Such programs have helped many teenagers. However, not every program is for everyone. There needs to be multiple programs from which to choose. There remain the issues of teenage pregnancies and repeated teenage pregnancies. Without programs, adolescents are at a higher risk of repeated pregnancies.

## (B) Statement of Problem

Teenage mothers are at higher risk for conception than their never pregnant peers because even those who do not want more children experience fluctuations in the motivation to remain nonpregnant, stop using contraception briefly and may become pregnant (Stevens-Simon, Kelly, & Kulick, 2001). Teen mothers are less likely to complete high school and more likely to end up on welfare than their classmates (Card, 1999).

The children of teen mothers have lower birth weights, are more likely to perform poorly in school, are at greater risk of abuse and neglect, are more likely to be placed in foster care, are more likely to engage in criminal activity as adolescents and young adults, and are less likely to be economically and socially successful as adults (Card, 1999).

## (C) Rationale or Justification for Study or Need for Study

Adolescent pregnancy is a significant problem. Adolescent pregnancy can result in adolescent motherhood. Now there are two lives affected. Even if the teenager gives her baby up for adoption, there remains the issue of nurturing a teenager through a pregnancy while she is going through normal developmental stages. A pregnancy can have a rippling effect throughout these stages. Therefore, the issue of adolescent pregnancy remains one of significant importance.

The adolescent mother who has a second child has increased demands placed on her. Therefore, the adolescent mother may have to start choosing how to spend her time the best possible way. She may not have as much time to devote to things she would like to. Some of these things may include: personal health, educational attainment and job employment. As a result, both the teenager and the baby will be affected.

If we can teach the adolescent mother to prevent a second pregnancy, the adolescent has a greater chance of achieving her goals. When an adolescent achieves her goals, she is on her way to becoming self-reliant. There needs to be additional study of curriculum designed to provide training and change attitudes toward contraceptive use. This study is intended to measure the change in knowledge and attitude toward contraceptive use after a training program.

### Research Questions

- 1) Do the attitudes of teenage mothers change when they receive 8 week of training on contraceptives and their use?
- 2) What are the students' attitudes before training about contraceptives and their use?
- 3) What are the students' attitudes after training about contraceptives and their use?

### Definition of Terms

Teenage pregnancy	a female between the ages of 13 and 19 who is with child. This includes miscarriages, abortions and with child.
Teenage births	a female between the ages of 13 and 19 who has a baby
Adolescent mother	a female between the ages of 13 and 19 who is raising her child.
Child Study Team	CST consists of a school psychologist, a learning disabilities teacher/consultant, and school social worker who are employees of the school district responsible for conducting evaluations to determine eligibility for special education and related services for students with disabilities.

Free Appropriate  
Public Education

FAPE consists of special education and related services that are provided at public expense under public supervision and direction and without charge; meet state and federal requirements; include preschool, elementary, or secondary school education; and are provided according to an Individualized Education Program.

Individualized  
Education Program

IEP is a written plan developed at a meeting that includes appropriate school staff and the parent(s). It determines the special education program for a student with disabilities through individually designed instructional activities constructed to meet the goals and objectives established for the student. It establishes the rationale for the students' placement and documents the provision of a free, appropriate public education.

Individualized  
Program Plan

IPP is a written plan developed at a meeting that includes appropriate school staff and the parent(s). It determines the regular education program for a student through individually designed instructional activities constructed to meet the goals and objectives established for the student. A regular education student, in New Jersey, is responsible for all the goals and objectives in the Core Curriculum Content Standards. An IPP establishes the rationale for the students' placement and documents the provision of a free, appropriate public education.

Least Restrictive Environment

LRE sets the standard that, to the maximum extent appropriate, children with disabilities should be educated with children who are not disabled. It means that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment should occur only when the severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

The definitions of Child Study Team (CST), Free Appropriate Public Education (FAPE), Individualized Education Plan (IEP), Individualized Program Plan (IPP) and Least Restrictive Environment (LRE) may be found at New Jersey's Department of Education website (<http://www.state.nj.us/humanservices/ooe/teach.html>)

## Chapter 2 Literature Review

### Pregnancy Rates

Reportedly, teenage pregnancy rates were the lowest they have been in recent time. Between 1990 and 1996, the U.S. teenage pregnancy rate declined 17 percent (Alan Guttmacher Institute, 1999). During the time period of 1990 to 1996, there were 117 pregnancies per 1,000 women aged 15-19 to 97 per 1,000. (Alan Guttmacher Institute,). The decline in teenage pregnancy continued in both the younger and older teenage groups. The birth rate for teens ages 15-17 was 13 percent lower than in 1991 (US HHS, 1998). The birth rate for 18-19 year olds dropped 9 percent between 1991 and 1996 (US HHS, 1998).

Teenage pregnancy rates vary considerably from state to state. Teenage pregnancy rates were highest in Nevada with a rate of 117 per 1,000 teenagers in the 15-19 year olds category (US HHS, 1998). North Dakota had the nation's lowest teenage pregnancy rate of 56 per 1,000 15 to 19 year old adolescents (US HHS, 1998).

Colorado's rate lowered by 11.9 percent for the teenagers aged 15-19 years old (Morbidity & Mortality Weekly Report, 1997). Michigan's teenage pregnancy rate for 15 to 19 year-olds, fell 16.6 percent (Morbidity & Mortality Weekly Report). Additionally, the 15-19 year olds teenage pregnancy rate ranged from 23.4 per 1,000 teenagers in New Hampshire to 72.0 per 1,000 teenagers in Mississippi (Ventura et al., 2002). The teenage pregnancy rate in the 15-19 year old category in New York fell by 4.3 percent (Morbidity & Mortality Weekly Report).

The states with the smallest decline in teenage pregnancy rates were Nebraska and Texas with a 12.3 percent reduction from 1991 to 2000 (Ventura et al., 2002). The states that did not have a statistically significant change (at  $p < 0.05$ ) were Connecticut, Delaware, District of Columbia, Nevada, North Dakota and Rhode Island (Morbidity & Mortality Weekly Report, 1997).

The number of teen pregnancies in New Jersey continues to be an area of concern. There were a total of 23,700 teenage pregnancies in 1996 (Alan Guttmacher Institute, 1999). The 15 to 17 year olds group had 9,420 teenage pregnancies compared to the 18 to 19 year old group with 14,280 teenage pregnancies (Alan Guttmacher Institute).

New Jersey showed a 28.8 percent decline in the teenage pregnancy rate of 15-19 year olds from 1991 to 2000 (Ventura et al., 2002). New Jersey's teenage pregnancy rate among 15-19 year olds ranked 18<sup>th</sup> in the nation at 97 per 1,000 (Alan Guttmacher Institute, 1999). New Jersey's rate was the same as the national average.

Delaware showed a 15.5 percent decrease in the same time period (Ventura et al., 2002). Delaware ranked 20<sup>th</sup> in the nation in teenage pregnancy rate among 15-19 year olds at 95 per 1,000 teenagers (Alan Guttmacher Institute, 1999).

There was a 24.9 percent drop in teenage pregnancy rates for 15-19 year olds in Pennsylvania from 1991 to 2000 (Ventura et al., 2002). Considerably fewer pregnancies reported than neighboring states, Pennsylvania was 39<sup>th</sup> in the nation in teenage pregnancy rates among the 15-19 year old at 70 per 1,000 teenagers (Alan Guttmacher Institute, 1999).

The rate of teenage pregnancy also varied among the different racial groups. Among black women aged 15-19 years old, the nationwide pregnancy rate fell

20 percent between 1990 and 1996 (Alan Guttmacher Institute, 1999).

Teenage pregnancy rates for Hispanics declined as well. From 1995 to 1996, rates for Hispanics aged 15-19 year olds declined 5 percent after remaining stable for 4 years previous (Morbidity & Mortality Weekly Report, 1997). The overall teenage pregnancy rate among Hispanic teenagers fell 6 percent by 1996 (Alan Guttmacher Institute, 1999).

The teenage pregnancy rate declined 7 percent for non-Hispanic whites, 15-17 year olds from 1991 to 1995. (US HHS, 1998). For White (non-Hispanic) teenagers, the decline in teenage pregnancy rate was 16 percent during 1991 and 1996 (Alan Guttmacher Institute, 1999).

Pregnancy rates are defined by being with child. A pregnant woman has an unborn fetus inside of her. Pregnancy rates may differ from birth rates due to miscarriages and abortions. Birth rates are defined by a woman giving birth to a live child vaginally or by caesarian section.

The birth rate for US teenagers declined steadily throughout the 1990's, falling from 62.1 births per 1,000 for teenagers 15-19 years old in 1991 to 48.5 in 2000, a 22 percent reduction (Ventura, Mathews, and Hamilton, 2002). The rate for young teenagers 15-17 years old dropped 29.9 percent from 38.7 to 27.4 births per 1,000 teenagers (Ventura et al.). The 18-19 year olds subgroup declined 16 percent from 94.4 to 79.2 births per 1,000 teenagers (Ventura et al.). Birth rates for teenagers 15-19 year old declined between 1991 and 1996 in all states (US Department of Health and Human Services Annual Report 1997-1998). The US birth rate for teenagers in 1996 was 54.4



live births per 1,000 for women aged 15-19 years, down 4 percent from 1995 and 12 percent from 1991 ( US HHS, 1998).

Teenage birth rates also vary greatly from state to state. Birth rates in 2000 for 15-19 year olds were significantly lower than in 1991 for every state (Ventura et al., 2002). The highest birthrates (70-75 per 1,000 teenagers aged 15-19 years old) were found in Mississippi, Arkansas, Arizona, Texas (Alan Guttmacher Institute, 1999). The state that showed the greatest decline was Vermont with a 39 percent reduction (Ventura et al., 2002).

New Jersey is statistically among the 10 states in America with the lowest birth rates for teenagers aged 15 to 19 years olds (Ventura et al., 2002). New Jersey's birthrate among 15 to 19 year olds ranked 44<sup>th</sup> in the nation at 35 per 1,000 teenagers (Alan Guttmacher Institute, 1999).

Teenage births in New Jersey vary greatly depending on the age of the mother. The number of teen births for the 15 to 17 year olds was 2,786 in contrast to 5,496 births for teenagers in the 18 to 19 year old category (US HHS, 2001).

The number of teen births in New Jersey also varies among the different racial groups. The group that has the highest number of teen births in New Jersey is the African American group with 3,378 or 41 percent of the 8,282 births to 15 to 19 year old teenagers (US HHS, 2001). This group continues to have the highest birth rate despite a drop of 21 percent between 1991 and 1996 (US HHS, 1998). This is further proof of the overall decline in teenage birth rates. But the gap between racial groups has narrowed (Morbidity & Mortality Weekly Report, 1997).

The racial group with the second highest number of teen births was the Hispanic/Latino group with 2,977 or 36 percent of the 8,282 births by 15 to 19 year olds (US HHS, 2001). Additionally, the racial group with the third highest number of teen births in New Jersey is the White (non-Hispanic) with 2,068 or 25 percent of the 8,282 births by 15 to 19 year old teenagers (US HHS, 2001).

Birth rates in states in close geographic proximity to New Jersey vary greatly. Delaware's birthrate among 15 to 19 year olds ranked 18<sup>th</sup> in the nation at 57 per 1,000 teenagers (Alan Guttmacher Institute, 1999). Pennsylvania ranked 38<sup>th</sup> in the teenage birthrate in the country at 39 per 1,000 teenagers (Alan Guttmacher Institute,).

Abortions are one reason for the discrepancy between pregnancy rates and birthrates. New Jersey ranked 3<sup>rd</sup> in the abortion rate among 15-19 year olds at 50 per 1,000 teenagers (Alan Guttmacher Institute, 1999). Delaware ranked 20<sup>th</sup> in the nation on abortion rate among 15-19 year olds at 24 per 1,000 teenagers (Alan Guttmacher Institute,). Pennsylvania was 26<sup>th</sup> in the nation at the abortion rate for 15-19 year olds at the rate of 20 per 1,000 teenagers (Alan Guttmacher Institute,). This is evidence that the 15-19 year olds teenage pregnancy rates can vary greatly from neighboring states.

In 1999, the percentage of teen births that were second or higher order births for the 18 to 19 year olds was 25 percent of all births in that category (US Department Of Health and Human Services, 2001). The percentage of teen births in New Jersey that are repeat births varies by age of mother. In 1999, 11 percent of the teen births to 15 to 17 year olds were second or higher order births (US HHS, 2001). New Jersey ranked 10<sup>th</sup> for the 15 to 17 year old category (US HHS, 2001).

The racial group that had the highest percentage of repeat teen births in New Jersey was Native Americans with 27 percent of the births to 15 to 19 year old girls (US HHS, 2001). The racial group with the second highest percentage of repeat births in New Jersey was African Americans with 24 percent of the births to 15 to 19 year old girls (US HHS, 2001).

#### Governmental Initiatives to Reduce Teenage Pregnancy

The teenage pregnancy rate in the United States is still among the highest in the industrialized nations. This is continued evidence of the need for teenage pregnancy programs. Many teenage pregnancy prevention programs help the student continue their education after the birth of their child. Therefore, there needs to be full use of the judicial system to ensure teenager's right to a public education.

Title X of the Public Health service Act was first authorized in 1970 and serves as the backbone of family planning services and reproductive health services for many women in the United States (<http://opa.osophs.dhhs.gov/titlex/ofp.html>). Federal money is provided directly to state and local family planning providers, and state matching funds are not required (<http://opa.osophs.dhhs.gov/titlex/ofp.html>). Title X authorizes project grants to public and private nonprofit organizations to serve all who need and want family planning services, including sexually active adolescents. Priority given to those living on low incomes (<http://opa.osophs.dhhs.gov/titlex/ofp.html>). Title X provides prenatal care, breast and cervical cancer screening, screenings and treatment for sexually transmitted infections, and other screenings (<http://opa.osophs.dhhs.gov/titlex/ofp.html>).

In 1981, federal policy began to focus on preventing out of wedlock pregnancies. Congress took a step back to look at the underlying roots of the problem, focused on the

family as the cornerstone of the solution , and endorsed strategies that affirm sexuality in the context of marriage while encouraging teens to postpone sexual activity

[\(<http://opa.osophs.dhhs.gov/titlex/ofp.html>\)](http://opa.osophs.dhhs.gov/titlex/ofp.html).

This new federal approach took the form of the Adolescent Family Life Act of 1983 (AFLA). AFLA provided an alternative to the pessimistic idea that only a massive infusion of funds for contraceptive distribution and sex education could stem the growing tide of out of wedlock teen pregnancies (<http://opa.osophs.dhhs.gov/titlex/ofp.html>).

Unlike previous policies, AFLA did not adopt the defeatist stance that widespread teen sexual activity was inevitable and unavoidable

[\(<http://opa.osophs.dhhs.gov/titlex/ofp.html>\)](http://opa.osophs.dhhs.gov/titlex/ofp.html). Addressing the corollary problems of

sexually transmitted diseases and the emotional trauma that premature sexual

involvement can cause, AFLA affirmed the family as the primary force for guiding and

educating teens (<http://opa.osophs.dhhs.gov/titlex/ofp.html>).

As Congress stated in the words of the Adolescent Family Life Act:

“Prevention of adolescent sexual activity and adolescent pregnancy depends primarily upon developing strong family values and close family ties, and since the family is the basic social unit in which the values and attitudes of adolescents concerning sexuality and pregnancy are formed, programs designed to deal with issues of sexuality and pregnancy will be successful to the extent that such programs encourage and sustain the role of the family in dealing with adolescent sexual activity and adolescent pregnancy” (Title XX of the Public Health Service Act, Section 2001 ((a) (1) (A))

Teenage Pregnancy Federal Institutions

The President and Congress called on the United States Department of Health and Human Services to develop a national strategy to address the serious issue of teenage pregnancy and to assure that at least 25 percent of communities in this country have teen pregnancy prevention programs in place as mandated under the Personal Responsibility

and Work Opportunity Reconciliation Act of 1996 (US HHS, 1998). The Health and Human Services response was to develop a National Strategy to Prevent Teen Pregnancy in January of 1998(US HHS, 1998). This strategy presented a comprehensive new plan to prevent teen pregnancies in the United States by strengthening, integrating and supporting teen pregnancy prevention and other youth-related activities in communities across this country (US HHS, 1998).

The 5 principles of the National strategy to prevent teenage pregnancy are as follows:

1. Parents and other adult mentors must play key roles in encouraging young adults to avoid early pregnancy and to stay in school.
2. Abstinence and personal responsibility must be the primary messages of prevention programs.
3. Young people must be given clear connections and pathways to college or jobs that give them hope and a reason to stay in school and avoid pregnancy.
4. Public and private sector partners throughout communities-including parents, schools, business, media, health and human service providers, and religious organizations-must work together to develop comprehensive strategies.
5. Real success requires a sustained commitment to the young person over a long period of time.

These 5 principles are from the National strategy to prevent teenage pregnancy (US HHS, 1998).

The 1999-2000 annual report on the National Strategy to Prevent Teen Pregnancy reported teen pregnancy and birth rates have declined to record low levels (US HHS, 2000). Rates have declined for all adolescent age groups, for all racial and ethnic groups, and for both first and second births to teens (US HHS, 2000). However, United States pregnancy rates remain among the highest in the industrialized world, and birth rates for Hispanic and black teens continue to be substantially higher than those for non-Hispanic white and Asian on Pacific Island youth (US HHS, 2000). Clearly, teenage pregnancy prevention programs need to continue.

Teenage pregnancy prevention programs have produced desired effects. By the end of 1999, the US had the lowest birth rate in the 15-17 year olds category (US HHS, 2000).

In August 1980, the New Jersey State Board of Education made a decision to mandate family life education for all public elementary and secondary schools in the state, the first such policy in the nation (The Network for Family Life Education's 20<sup>th</sup> Anniversary Conference-October 20, 2003). Since September 1983, all New Jersey students, except the tiny fraction whose parents chose to remove them from classes, have been provided with school programs on human growth and development, interpersonal relationships, sexuality, responsible personal behavior and building strong families (The Network for Family Life Education's 20<sup>th</sup> Anniversary Conference-October 20, 2003).

On August 22, 1996, President Clinton signed into law the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) (Office of Civil Rights, summary of Policy Guidance). The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) created Temporary Assistance for

Needy Families (TANF) and repealed the Aid to Families with Dependent Children Program (AFDC), the Job Opportunities and Basic Skills Training program (JOBS) and the Emergency Assistance program (EA) (<http://opa.osophs.dhhs.gov/titlex/ofp.html>).

The Americans with Disabilities Act (ADA) of 1990 and the Rehabilitation Act of 1973 apply to TANF programs (<http://opa.osophs.dhhs.gov/titlex/ofp.html>). The welfare reform law enacted in 1996 created the Abstinence Education Program which provides federal grants to states for abstinence education activities such as mentoring and counseling designed to promote abstinence from sexual activity until marriage (US Dept. HHS, 2002).

Several national agencies deal with the issue of teenage pregnancy prevention, including the National Institute for Child Health and Human Development and The Center for Disease Control.

“The mission of the NICHD is to ensure that every person is born healthy, and wanted, that women suffer no harmful effects from the reproductive process, and that all children have the chance to fulfill their potential for a healthy and productive life, free of disease or disability” ([www.nichd.gov](http://www.nichd.gov)).

The NICHD reaches this goal by conducting research, studying the effect of diseases, being a resource of scientific contraceptive information, and making advances in social and behavioral treatments ([www.nichd.gov](http://www.nichd.gov)).

The Center for Disease Control is an umbrella office for the Adolescent & School Health Department. The School Health Policies and Programs Study 2000 is a national survey periodically conducted to assess school health policies and programs at the state, district, school and classroom levels

([http://www.cdc.gov/nccdphp/dash/shpps/factsheets/fs00\\_preg.htm](http://www.cdc.gov/nccdphp/dash/shpps/factsheets/fs00_preg.htm)). The CDC sponsors

youth development programs, through the Community Coalition Partnership Programs, as a resource for teenage pregnancy prevention ([www.cdc.gov](http://www.cdc.gov)).

The notion of involving the community in forming pregnancy prevention programs continues. The United States Department of Health & Human Services' programs are built on the belief that the most effective programs are community driven and support the involvement of parents and other adults in young people's lives (US HHS, 2002). By focusing on abstinence and personal responsibility, HHS hopes to help young people develop their abilities to make choices that will lead to a successful future (US HHS, 2002). The United States Department of Health & Human Services provides direct funds in pregnancy prevention in about 47 percent of all communities across the country (US HHS, 2002). US HHS provides significant funding for abstinence education and other programs to prevent teen pregnancy and disease (US HHS, 2002).

The Adolescent Family Life Program is under the auspices United States Department Health & Human Services. This program supports care demonstrations that provide comprehensive health, education, and social services to pregnant and parenting adolescents, their children, family members, young fathers, and research into the causes and consequences of adolescent pregnancy mentoring and counseling designed to promote abstinence from sexual activity until marriage (US Dept. HHS, 2002).

The United States Department Health & Human Services supports general adolescent health care, both through block grant programs such as the State Children's Health Insurance Program (SCHIP) and the Maternal and Child Health Services Block Grant (Title V), and by providing funds directly to community clinics mentoring and



counseling designed to promote abstinence from sexual activity until marriage (US Dept. HHS, 2002).

The US HHS also has programs geared toward boys and young men. The US HHS programs work to ensure that men, including preteen and teenage boys, receive the education and support necessary to postpone fatherhood until they are emotionally and financially capable of supporting children mentoring and counseling designed to promote abstinence from sexual activity until marriage (US HHS, 2002).

The Joint Workgroup on School-based Teen Pregnancy Prevention (JWG) is also a federal program. The JWG has developed a plan to help constituents develop and implement prevention policies and programs mentoring and counseling designed to promote abstinence from sexual activity until marriage (US Dept. HHS, 2002).

The mission of the National Campaign to Prevent Teen Pregnancy is to improve the well-being of children, youth, and families by reducing teen pregnancy rates by 1/3 between 1996 and 2005 (<http://www.teenpregnancy.org/about/atc/asp>). The National Campaign to Prevent Teen Pregnancy is based in Washington, DC. The National Campaign to Prevent Teen Pregnancy fosters parental and community involvement as part of the pregnancy prevention programs

(<http://www.teenpregnancy.org/about/atc/asp>). Getting to know your son or daughter as a teenager, not just your child, is a vital component of this program

(<http://www.teenpregnancy.org/about/atc/asp>).

#### Private Initiatives to Prevent Teenage Pregnancy

One teenage pregnancy prevention program is Baby Think it Over (BTIO) which is designed by the Wisconsin based Baby Think it Over, Inc. (Somers, Gleason and

Johnson, 2001). BTIO is designed to create a realistic experience of having an infant. The goal of BTIO is to “create a lasting impression of the personal sacrifice and challenges of infant care, so that teenagers’ attitudes and behaviors become more informed and responsible” (Somers, Gleason and Johnson, 2001, p.1). A computer pack in the back of a doll instructs it to cry at random and a care plug needs to be inserted into the doll to stop the crying while remaining there anywhere from five to forty minutes (Somers, Gleason and Johnson). The teenager is responsible for the baby’s care for a predetermined amount of time.

Abstinence only is another focus of pregnancy prevention program. Postponing Sexual Involvement (PSI) is the central component of a nationally recognized pregnancy prevention program, Education Now and Babies Later (ENABL) (Arnold, Smith, Harrison, & Springer, 2000). Developed by Marion Howard of Emory University Medical School, PSI is based on the social inoculation model, which theorizes that adolescents engage in potentially harmful behaviors, such as sexual intercourse, because they lack adequate knowledge (Howard & McCabe, 1990). According to Kirby, “social inoculation theory postulates that there exists a process of social inoculation that is analogous to physiological inoculation-people develop a resistance to social pressure when they can recognized the various forms of pressure, becoming motivated to resist that pressure, and then practice resisting weak forms of that pressure” (Kirby,1992, p.282-283).

ENABL has been used at various school districts across the country. However, ENABL was recently evaluated in California and no long-term impact on any of the

variables influencing the decision to have sex was found at 17 months (Kirby, Korbi, Barth and Cagampang, 1997).

Planned Parenthood provides a variety of services on reproductive rights. Planned Parenthood has a policy that individuals need access to contraceptive information and sexuality knowledge ([www.plannedparenthood.org](http://www.plannedparenthood.org)). Planned Parenthood provides such access.

There are also pregnancy prevention programs geared towards specific races and ethnicities. A Journey toward Womanhood is designed for teenage girls of African descent (Dixon, Schoonmaker and Philiber, 2000). A Journey toward Womanhood has four components. The first component, Reaching for Success (weeks 1-4) explores self-definition and the importance of seeing oneself as a unique individual (Dixon, Schoonmaker and Philiber). Developing Inner Health for Outer Beauty, weeks 5-7, explores diet and nutrition, exercise and fitness, holistic well-being, peer pressure, sexual health and healthy relationships is the second component (Dixon, Schoonmaker and Philiber). The third component involves Progressing with Finesse, Dignity and Pride, week 8, and including an out of town field trip during week 9 (Dixon, Schoonmaker and Philiber).

An educational career youth developmental model (ECYDM) is a teenage pregnancy prevention program aimed at African American teens in urban communities (Tabi, 2002). ECYDM uses mentoring, counseling skills, academic education support and social support services to prevent pregnancy. ECYDM strives to identify high-risk youths early on and provide interventions accordingly (Tabi).

Youth development programs are other teenage pregnancy prevention programs.

“A youth development approach is more holistic than are traditional approaches that focus upon improving adolescent sexual knowledge, attitudes, norms, and skills, and even on improving adolescent access to contraceptives (Kirby & Coyle, 1997, p.440).

One of the principles of youth development programs is to prepare the youth for the future, not just put a band-aid over the present situation (Kirby & Coyle,). This is especially important as some teenagers know of various contraceptives and have access to them; yet still take chances that open themselves to the possibility of childbearing (Kirby & Coyle). Teenagers need to have the opportunities to learn skills that will help them in their teenage years and beyond.

The Colorado Adolescent Maternity Program (CAMP) is a multidisciplinary prenatal, delivery and postnatal program taught in an urban hospital (Stevens-Simon, Kelly & Kulick, 2001). The hospital based curriculum emphasizes healthy habits, consistent contraceptive use and family/career planning (Stevens-Simon, Kelly & Kulick). CAMP meets every 3 weeks until 32 weeks gestation, weekly until they have their baby and monthly visits postnatal (Stevens-Simon, Kelly & Kulick).

A teenage pregnancy prevention program, based in a clinic in Philadelphia, strives to fit the unique needs of the program participants (Nitz, 1999). The staff evaluates the needs of the adolescents and makes adjustments in the program's focus accordingly (Nitz). This helps to make the program relevant to the members. Thus, cooperation with the program increases.

Zero Adolescent Pregnancy (ZAP) is a New York based program that involves teens who go into schools and talk about the risks of sexual activity (Orr, 2003). ZAP

curriculum talks about abstinence and responsible sexual behavior (Orr). ZAP aims to provide knowledge about ways to reduce the risk against STD's and pregnancy (Orr).

John B. Jemmott and Loretta Sweet Jemmott have done research on teenage pregnancy preventions, condom use, and HIV/AIDS knowledge (Jemmott, Jemmott, Spears, Hewitt & Cruz-Collins, 1992). There was a randomized trial study involving African Americans in middle schools in Philadelphia (Jemmott, Jemmott, & Fong, 1998). The curriculum incorporated abstinence and safer-sex strategies utilizing a pre and post questionnaire (Jemmott, Jemmott, & Fong). The results showed the safer-sex curriculum did have a positive impact by increasing condom use (Jemmott, Jemmott, & Fong).

Project Action focuses on public service announcements about condom vending machines (Nitz, 1999). Project Action also focuses on developing decision making skills (Nitz).

The Network for Family Life Education in Princeton, NJ is a tremendous resource for teenagers. The Network for Family Life Education is a state and national leader in the fight for effective family life/sexuality education and prevention of adolescent pregnancy (Network for Family Life Education-20<sup>th</sup> Anniversary Conference October 20, 2003). Since 1981, the Network for Family Life Education, created to facilitate the August 1980 ruling mandating family life education for all public elementary and secondary schools in the state, has sought to support teachers, influence policy makers and serve students (Network for Family Life Education-20<sup>th</sup> Anniversary Conference October 20, 2003). The Network for Family Life Education has grown from a tiny New Jersey organization to one with national and international reach. From an organization

focusing on teachers to one providing direct services to millions of teens (Network for Family Life Education-20<sup>th</sup> Anniversary Conference October 20, 2003). Network for Family Life Education continues to be at the forefront of teenage pregnancy prevention programs.

The New Jersey Teen Prevention Education Program is another opportunity for teenagers in New Jersey to get information on an array of health issues. The New Jersey Teen Prevention Education Program (Teen PEP) is a school based peer education program designed to increase knowledge, skills and behaviors that promote sexual health among adolescents (<http://www.princetonleadership.org/highschool.html>). Teen PEP enables high schools to implement a one year long course for credit in sexual health education that is team taught. Selected students enroll in the course where they are trained to be leaders and peer educators who conduct outreach workshops with peers, parents and educators (<http://www.princetonleadership.org/highschool.html>). The New Jersey Teen Prevention Education Program is an option for teenagers seeking knowledge on sexual issues.

There are programs that utilize a multitude of techniques to reduce teenage pregnancy. One such program set out to evaluate the effects of abstinence and reducing risk-taking sexual behaviors. The program involved a randomized controlled trial using cognitive-behavioral theories and 8 1-hour modules headed by adults or peers facilitators (Jemmott, Jemmott, and Fong, 1998). The participants were from middle schools in Philadelphia and voluntarily took part in the project called "Spruce Adolescent Health Promotion Project" (Jemmott, Jemmott, and Fong, 1998). The participants were offered money for participating: \$40 at the end of the second session and \$20 per session for each

of the 3 follow-ups (Jemmott, Jemmott, and Fong, 1998). The participants of the project completed questionnaires before the curriculum was implemented, immediately after the curriculum was implemented, 3 months after the curriculum was implemented, 6 months after the curriculum was implemented and 12 months after the curriculum was implemented (Jemmott, Jemmott, and Fong, 1998). The students who took part in the Spruce Adolescent Health Promotion Project reported increased condom use at the 3 month, 6 month, and 12 month post questionnaire (Jemmott, Jemmott, and Fong, 1998).

The Adolescent Communication and Education (ACE) program focuses on pregnancy reduction, STD training and HIV/AIDS training (SIECUS Report, 2003). Teen expression is one program under the ACE umbrella that is fostered by and for teenagers (SIECUS Report). Teen expression produces a cable show, monitored by experts, that is designed to enlighten teens about STD's, HIV/AIDS and pregnancy issues (SIECUS Report). Once a month for 8 months, 2 groups of 15 high school students, attended a Pillow talk session (SIECUS Report). The students participated in small group discussions, role-playing and individual counseling (SIECUS Report).  
Initiatives to prevent second pregnancy

Adolescent mothers face the risk of repeat pregnancy. A repeat pregnancy during adolescence could make their situation more precarious. The repeat pregnancy accentuates many factors in the teenager's life. The adolescent's path to education achievement may take a detour. The adolescent's reliance on others may increase. There are few second pregnancy prevention programs.

One such program is the Second Chance Club. The Second Chance Club includes

“(a) weekly group meetings throughout the school year focused on parenting, career planning, adolescent issues and group support.

(b) participation in school events such as a school club. (c) individual case management and home visits. (d) medical care for the adolescent and infant through both a linked university-based clinic as well as the school-based clinic. (e) service projects selected by the group that provided outreach to the community and to at-risk middle school girls” (Key, Barbosa, and Owens, 2001, p2).

The project coordinator of the Second Chance Club was a social worker who closely matched the participants’ ethnicity (Key, Barbosa, and Owens).

The following elements have been found to be effective in pregnancy prevention programs: peer counseling, achievement of high school diploma, vocational training, and contraceptive use and accessibility (Key, Barbosa, & Owens, 2001). A daycare on the premises of a second pregnancy prevention program helps to keep the teenage mother enrolled in the program. Peer counseling involves students serving as role models for other students. The role models hold open discussion weekly meetings for the new participants of the club (Key, Barbosa, & Owens).

Ninety percent of the Second Chance Club participants reported less than a high school education (Key, Barbosa, & Owens, 2001). The teenager needs services and support to achieve her high school diploma. When the teenager receives the club’s support, this can empower her to obtain her high school diploma.

Vocational training gives the students skills they can use to obtain employment. When the baby’s needs are taken care of by day care, the teen mother can focus on her own educational needs (Key, Barbosa, & Owens, 2001). The teenager can learn academic and vocational skills.

The Second Chance Club facilitates access to contraceptives by providing a school based clinic and a university based clinic (Key, Barbosa, & Owens, 2001). The



teenager needs to have readily accessible contraceptives in order to prevent future pregnancies.

The Dollar-A-Day program was created to prevent subsequent pregnancies to girls under 16 years old (Brown, Saunders & Dick, 1999). The components of the program include weekly meetings on: food, addressing the member's needs, setting short-term goals and awarding the adolescents a dollar for each day they remain nonpregnant (Brown, Saunders & Dick). The initial study on the Dollar-A-Day program resulted in 15 percent of the 65 enrollees experiencing subsequent pregnancies (Brown, Saunders & Dick).

There needs to be more variety in second or higher order teenage pregnancy prevention programs. When the teenager has a greater number of programs to choose from, she is better able to find a program that best fits her unique needs.

#### Female Contraceptives

One of the ways to avoid pregnancy is the use of contraceptives. Recent breakthroughs in medical technology have led to a variety of birth control methods. Birth control is the planned prevention of a pregnancy, using various methods.

Inconsistent birth control or no birth control not only exposes a teenager to pregnancy, but sexually transmitted diseases. This is a potential life changing event. Nearly two-thirds of single teenagers report no contraception use or inconsistent contraception use (Lachance). The exposure to STDs is real.

Typical use refers to the failure rate for men and women who are not consistent or always correct (<http://www.plannedparenthood.org/bc/bcfacts2.html>). Perfect rate refers

to the failure rate where the use is consistent and always correct

(<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Female non prescription Method. Abstinence refers to refraining from sexual intercourse. Abstinence is 100 percent effective as a form of birth control.

Breast feeding is a form of birth control. Breast feeding can be relied on only for 6 months and must be done exclusively

(<http://plannedparenthood.org/bc/cchoices1.html#LAM>). There is no protection for sexually transmitted diseases and the method is somewhat unreliable. Breast feeding has a typical use of 2.0 percent and a failure rate of 0.5 percent

(<http://www.plannedparenthood.org/bc/bcfacts2.html>).

The female condom is made of polyurethane, covers the labia and is better at protecting against STD's than the male condom (The Network for Family Life Education's 20<sup>th</sup> Anniversary Conference). The female condom may cause vaginal irritation and irritation of the vulva

(<http://www.plannedparenthood.org/bc/cchoices5.html#OVERTHECOUNTER>).

Using the female condom requires insertion before sexual intercourse. The typical use is 21.0 percent and the failure rate is 5.0 percent

(<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Spermicide blocks the sperm from reaching the egg. Spermicidal contraception may not form a good barrier over the cervix and may be messy or leak

(<http://www.plannedparenthood.org/bc/cchoices5.html#OVERTHECOUNTER>). The

typical use is 29.0 percent and the failure rate is 15.0 percent

(<http://www.plannedparenthood.org/bc/bcfacts2.html>). There is no protection for sexually transmitted diseases.

Fertility monitors may be used to discover a woman's fertile period. The woman then may choose to use additional birth control methods during ovulation. Unfortunately, the woman's fertile period may occur at different times during the cycle requiring months of record keeping and training. There are several forms of fertility awareness methods (FAM) (<http://www.plannedparenthood.org/bc/cchoices5.html#FAM>). The post ovulation method has a failure rate of 1.0 percent

(<http://www.plannedparenthood.org/bc/bcfacts2.html>). The cervical mucus (ovulation) method has a 3.0 percent failure rate

(<http://www.plannedparenthood.org/bc/bcfacts2.html>). The calendar method has a 9.0 percent failure rate. (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Female Prescription Methods. Birth control pills are a form of contraceptive. The main purpose of birth control pills is to inhibit ovulation by introducing hormones. Usually oral contraceptives are in 4 week cycles

(<http://www.plannedparenthood.org/bc/cchoices4.html#PILL>). There is no protection for sexually transmitted diseases. The pill has a typical use of 92.0 percent and a failure rate of 0.3 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Side effects of progestin only birth control pills include irregular bleeding, headache, nausea and dizziness

(<http://www.plannedparenthood.org/bc/cchoices4.html#PILL>). There is no protection for sexually transmitted diseases. The typical use of POPs is 92.0 percent and the failure rate is 0.3 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

The transdermal patch is one other steroidal contraceptive. The patch is placed once a week for 3 weeks. The patch is “shown have comparable efficacy and safety to oral contraceptives” (The Network for Family Life Education’s 20<sup>th</sup> Anniversary Conference). The Patch has side effects of skin reaction to site of application and the person may have problems wearing contact lenses (<http://www.plannedparenthood.org/bc/cchoices4.html#PATCH>). There is no protection for sexually transmitted diseases. There was no typical use listed for the Patch. The failure rate is 0.3 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

The Intra Uterine Device (IUD) involves placing a mechanical device in the uterus to prevent fertilization from occurring. Some side effects are increase cramping, heavier periods and longer periods (not so with IUDs containing hormones) (<http://www.plannedparenthood.org/bc/cchoices3.html#IUD>). There is no protection for sexually transmitted diseases. Also, the IUD can cause infections. The typical use of IUDs is 99.2 percent and the failure rate is 0.6 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Diaphragms and Cervical Caps may be difficult to insert, refitting may be needed and there may be an increase in bladder infections (<http://www.plannedparenthood.org/bc/cchoices3.html#DIAPHRAGM>). There is no protection for sexually transmitted diseases. Diaphragms have a typical use of 84.0 percent and a failure rate of 6.0 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>). Cervical Caps, to women who have not given birth have a typical use of 84.0 percent and a failure rate of 6.0 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>). Cervical Caps, to women who

have given birth have a typical use of 32.0 percent and a failure rate of 26.0 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

The Nuva Ring is a thin, flexible, rubber ring placed in the vagina. The Nuva Ring's side effects include increased vaginal discharge, irritation and inability to use a diaphragm or cervical cap as a back up birth control method

(<http://www.plannedparenthood.org/bc/cchoices4.html#RING>). There is no protection for sexually transmitted diseases. The Nuva Ring does not have a typical use. The failure rate is 0.3 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Injections. Injections are a relatively easy form of birth control to use. Depo-Provera is an injection given every 3 months. The Depo-Provera is an example of a progestin-only method of birth control method. The Depo-Provera's specific side effects include taking up to 1 year for periods to start after stopping the shots

(<http://www.plannedparenthood.org/bc/cchoices2.html#DEPO>). There is no protection for sexually transmitted diseases. The typical use of Depo-Provera is 97.0 percent and the failure rate is 0.3 percent (<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Non Reversible Prescription Method. The Emergency Contraception Pill (ECP) is a form of birth control. The ECP requires a prescription. Side effects include nausea, vomiting and cramping (<http://www.plannedparenthood.org/bc/cchoices3/html#EC>). There is no protection for sexually transmitted diseases. The ECP, taken within 72 hours of unprotected sexual intercourse reduces the risk of pregnancy by 75-89 percent (<http://www.plannedparenthood.org/bc/cchoices3/html#EC>).

Sterilization in the female requires surgery in the hospital. The surgery is tying the female's tubes or performing a hysterectomy. Sterilization in the female may cause

mild bleeding, infection and post op complications

(<http://www.plannedparenthood.org/bc/cchoices1.html#STERILIZATION>). There is no protection for sexually transmitted diseases. Sterilization in the female has a typical use of 0.5 percent and a failure rate of 0.5 percent

(<http://www.plannedparenthood.org/bc/bcfacts2.html>).

#### Male Contraceptives

Reversible Non Prescription Method. The male condom has some side effects. The condom may break during sexual intercourse. Putting the condom on requires a temporary interruption during lovemaking. There is some protection for sexually transmitted diseases. The typical use is 85.0 percent and the failure rate is 2.0 percent

(<http://www.plannedparenthood.org/bc/bcfacts2.html>).

Non Reversible Methods. Sterilization in the male involves severing the vas deferens. Sterilization in the male may cause swelling, tenderness and post op complications

(<http://www.plannedparenthood.org/bc/cchoices1.html#STERILIZATION>). There is no protection for sexually transmitted diseases. Sterilization in the male has a typical use of 0.15 percent and a failure rate of 0.1 percent

(<http://www.plannedparenthood.org/bc/bcfacts2.html>).

#### Teenage Behaviors/Attitudes towards birth control and pregnancy

Adolescents have a broad range of attitudes about birth control. The female group of a study “was more likely to have discussed contraception with parents, obtain more contraception information from their mothers, and discussed contraception more with male friends than the teenagers who requested contraceptives at the family planning

clinic” (Freeman, Rickels, Huggins, Mudd, Ramon-Garcia, and Dickens, 1980, p.2). The male counterparts had less information about contraceptives and were less likely to use contraception (Freeman et al.).

Locus of control refers to an individual’s belief about whether his/her own actions affect his/her lives. An internal locus of control indicates a person believes he/she is responsible for what happens to him/her. Individuals with external locus of control believe outside factors are responsible for what happens to them. Teenagers are often in flux about their behavior and attitudes. These changes can cause their locus of control to flip flop. When a teenager feels a loss of control, a pregnancy may happen. This event has the potential to forever affect the teenager’s life.

There has been research conducted on teenagers’ attitudes and contraceptive information. In one study, sixty-four percent of the students suggested a girl’s boyfriend would try more sexual advances if he knew she was using contraceptives (Freeman et al., 1980). Teenagers have their attitudes and those attitudes about sexual identity and the choices they make have consequences, such as a pregnancy.

Media plays a large part in teenagers’ life. Media involves print, television, Internet and radio. In film media, sexual messages are becoming more explicit in dialogue, lyrics and behavior (Arnold, Smith, Harrison & Springer, 2001). The adolescent is bombarded with multiple formats in varied forms. Marketing, geared towards teenagers, are strong and very influential. The decision a teenager makes about engaging in sex, depends upon a number of factors. Television has shows and commercials that promote sexual promiscuity by showing multiple sexual scenes in a short amount of times. There are television ads for birth control. The lyrics of music

frequently have sexually explicit words on them. There are warning labels on CD's stating sexually explicit language.

There are several other factors that are possible predictors of a reduced risk of teenage pregnancy. Most research has indicated the effective parent-child communication decreases the risk of the child in sexual behavior that leads to pregnancy (Arnold, Smith, Harrison, & Springer, 2001). Communication between a parent and child is essential in knowing what is going on in the teenager's life. An open continuous dialogue allows the teenager comfort and security.

Many teens say a more open and honest dialogue with their parents would help them post pone sexual activity. Open communication is key to keeping the dialogue moving back and forth between the parent and child.

Levels of security combined with parent-child communication effect a young person's chance of getting pregnant. Parental supervision limits access to the home setting in which sexual behavior is likely to occur (Arnold, Smith, Harrison & Springer, 2001). When a parent leaves a situation open for exposure, anything is possible to happen. When a parent communicates with a child and provides supervision of the child and their guest, then the chances of sexual activity leading to a pregnancy are reduced.

Adolescence is a period of individuality. Teenagers are trying to find their own path in life, separate from their families. In a study by Whitbeck and colleagues (1999), permissive teenager attitudes were predictive of sexual behavior (Whitbeck, Yoder, Hoyt, and Conger, 1999). While trying to find their own path in life, teenagers may strike out in ways that will forever change their lives. A teenage pregnancy is one such event. Raising a baby, while a teenager, adds an additional stressor during a period that is



frequently changing. The teenager is still developing herself. What the child is exposed to effects their present and future life. How much and to what degree is debatable.

### Choices

An adolescent's problem solving strategies are formed by their experiences (Meier, 2003). The teenager has a choice in how to handle the situations. The situations include peer pressure activities (Meier, 2003). Teenagers' choices will have consequences. Teenagers very much live in the moment; the here and now. Planning requires forethought and that characteristic is fleeting for teenagers.

The teenager has multiple choices of birth control to choose from. Inconsistent use is like playing a game. Sometimes you are safe and sometimes you are called to step up to the plate and deal with a pregnancy.

An unplanned pregnancy has life long consequences. The teenager may choose to abort the pregnancy. However, the woman will always remember that pregnancy and ponder what could have been. If the teenager chooses to give the child up for adoption, they will forever wonder what happened to that child. If the teenager chooses to raise the child, the teenager's life as she knows it is over. The teenager is entering a new phase of her life.

Society has a great influence on an individual's life. If society is more accepting, then they are more tolerant. Increased tolerance may increase the frequency of an action. Teenage pregnancy and child birth remains an issue of importance to the entire society.

There are several governmental initiatives designed to reduce teenage pregnancy. Title X authorizes project grants to public and private nonprofit organizations to serve all who need and want family planning services, including sexually active adolescents.

There are initiatives that focus on the family for educating and guiding the teenagers (<http://opa.osophs.dhhs.gov/titlex/ofp.html>).

Teenage pregnancy and childbirth has brought about an infusion of programs and services to the youth of today. There are programs that help the pregnant teenage mother stay in school and graduate from high school, even after the baby is born (Card, 1999). Programs designed to help the teenager stay in school, attain work readiness skills and demonstrate vocational proficiency are varied in their nature (Somers, Gleason, and Johnson, 2001).

The state of New Jersey has several schools, called Project TEACH, that provide services exclusively to pregnant and parenting adolescents. Project TEACH is an alternative, year round, education program for pregnant or parenting teens who typically dropped out of high school and are at risk of never going back (<http://www.state.nj.us/humanservices/oe/teach.html>.)

Teenage pregnancy and adolescent sexual behavior impacts society. STD's are among the top ten causes of death among 15 to 24 year old people (Nagy, 2002). There are many reasons why STD's occur. Behavioral, social and contraceptive knowledge are some of those reasons (Nagy). One study looked at young people's knowledge of STD's and whether the changes were characteristic of a certain group (Nagy). The study used the Alabama Adolescent Survey (AAS) to measure the knowledge; the surveys were administered four times over a ten-year period (Nagy). The questionnaire was filled out by the students after the instructions were read by a member of the research team (Nagy). A likert-type scale was used to measure knowledge of STD symptoms (Nagy). Students', of all groups, knowledge increased over the ten year time frame (Nagy).

There are programs that first emphasize abstinence and secondarily emphasize contraceptive information (Kirby, 2002). The curriculum is taught during school, after school at shelters and detention centers (Kirby). Twenty-seven of the 28 programs that were examined showed HIV/STD and human sexuality education delayed the initiation of sex or had no significant effect (Kirby). The results of the studies showed increased contraceptive use (Kirby). Programs that involved HIV/STD education found significant effects on condom use (Kirby).

The initial results of Postponing Sexual Involvement (PSI) in Atlanta were replicated by research teams from California and Arkansas implemented a program called Reducing the Risk (Kirby, 2002). The research teams implemented Reducing the Risk and studied the effect of the curriculum and young people's sexual behavior (Kirby). The results of this research are in agreement with the initial sexual intercourse and increased condom use (Kirby).

Pregnancy prevention programs contain a variety of elements. These elements may include a theoretical background, behavioral interventions, contraceptive training and communication training. Programs frequently are piloted to judge the effectiveness of the program.

There are many pregnancy prevention programs. When deciding which program to implement, one needs to carefully evaluate the program. Keeping your target population in mind, look at other components that are similar to your needs. This will help the trainer judge the value and effectiveness of a pregnancy prevention program.

This study used a quasi-experimental design to examine the effects of the Making Proud Choices curriculum. The experimental group received the questionnaire, the

training on the curriculum and the same questionnaire will be readministered. The control group will receive the questionnaire pre and post with no curriculum training. The next section will describe the study in detail.

## Chapter 3 Methods

### Research Design

The research study was a quasi-experimental design. In a quasi-experimental study, one group receives a pretest, a treatment and a posttest; while a second group receives only the pre and post test (McMillan, 2000). There was a control group and an experimental group. Both groups were given a questionnaire to complete at week one and week four. Only the experimental group received the treatment.

A convenience sample was used. Convenience sampling is selecting a group of subjects because of their availability (McMillan, 2000). An advantage of convenience sampling is the subjects are easily available for the researcher.

A disadvantage of convenience sampling is the lack of generalization from a convenience sample to a population (McMillan, 2000). Convenience sampling may create bias because subject participation is usually high (McMillan).

The independent variable of the experiment was the Making Proud Choices curriculum. The dependent measure was the questionnaire, given before and after the training.

### Subjects

Experimental Group. Participants in this group were enrolled in a high school in New Jersey for pregnant and parenting teenagers. The subjects were all female and between the ages of 14 and 20 years old. The mean age was 17.73 years old. The number of subjects in the experimental group was 15. There were 9 regular education students, 2 students with the classification of Specific Learning Disability and 4 students with the

classification of Multiply Disabled in this group. The subjects were selected because of convenience sampling. All subjects' participation was completely voluntary. Parental consent forms were sent to the parents of subjects under 18 years old. Subjects 18 years and older were allowed to sign their own consent forms. Students who chose not to participate in the experiment did not answer the questionnaire. The students who returned the consent forms answered the questionnaire before the training was implemented and after the training was finished

Control Group. Participants in this group were enrolled in a high school in New Jersey for pregnant and parenting teenagers. The subjects were all female and between the ages of 14 and 20 years old. The mean age was 16.53 years old. The number of subjects in the control group was 15. There were 5 regular education students, 4 students with the classification of Specific Learning Disability, 4 students with the classification of Multiple Disabled and two students with the classification of Emotional Disturbed in this group. The subjects were picked because of convenience sampling. All subjects' participation was completely voluntary. Parental consent forms were sent to the parents of subjects under 18 years old. Subjects 18 years and older were allowed to sign their own consent forms. Students who chose not to participate in the experiment did not answer the questionnaire. The students who returned the consent forms were allowed to answer the questionnaire.

#### Instrumentation

Dependent Measure. The questionnaire consists of two sections. The first section focused knowledge of AIDS/STD and consisted of 25 true/false questions. The student was asked to circle T for true and F for False. Each student was also allowed to circle a

question mark, if she did not know the answer. The second section focuses on sexual attitudes using a Likert type scale. There were 25 questions in this section. The participant's responses range #1 #1 which is negative (e.g. disapprove strongly and very bad idea) to #5 which is positive (e.g. approve strongly and very good idea) to extremely likely #5, on a Likert-type scale.

Training Materials. The curriculum focuses on providing the young adolescence with contraceptive information and the skills to reduce their risk of sexually transmitted diseases and pregnancy (Jemmott, Jemmott, & McCaffree, 2002). A variety of teaching strategies were implemented, (e.g., counseling sessions, videos and role-playing are some of the instructional methods used (Jemmott, Jemmott, & McCaffree). The students completed the questionnaire prior to the program implementation and at the end of the program implementation. (Jemmott, Jemmott, & McCaffree). Making Proud Choices is divided into eight- 1 hour small group sessions (Jemmott, Jemmott, & McCaffree, 2002).

The modules were as follows:

- Module 1: Getting to Know You and Steps to Making Your Dreams Come True
- Module 2: The Consequences of Sex: HIV Infection
- Module 3: Attitudes and Beliefs About HIV/AIDS and Condom Use
- Module 4: Strategies for Preventing HIV Infection: Stop, Think and Act
- Module 5: The Consequences of Sex: STDs and Correct Condom Use
- Module 6: The Consequences of Sex: Pregnancy and Contraception
- Module 7: Developing Condom Use Skills and Negotiation Skills
- Module 8: Enhancing Refusal and Negotiation Skills

Module one is an introduction to the curriculum. The objectives of this section include defining proud and responsible behavior, listing the consequences of having sex, devising strategies for consequence reduction and identifying strategies to overcome struggles to personal goals (Jemmott, Jemmott, & McCaffree, 2002). Some of the

activities of this module include making a timeline of your past, present and future (Jemmott, Jemmott, & McCaffree). The curriculum also includes time for group discussion on program rules and expectations (Jemmott, Jemmott, & McCaffree).

Module two has several objectives. Learning basic HIV and AIDS facts, identifying a person's risk of HIV infection, given various sexual and non sexual behaviors, and learning how HIV can be prevented. A video about HIV/AIDS is shown followed by a question and answer period (Jemmott, Jemmott, & McCaffree, 2002). This module includes a list of risk behaviors and the students need to say if it is a green, yellow or red light behavior (Jemmott, Jemmott, & McCaffree).

Module three focuses on attitudes and beliefs of HIV/AIDS and condom use. The objectives of this module are identifying the student's attitudes toward various sexual and non-sexual behaviors, developing problem-solving strategies for sexual and non-sexual behavior and developing safer sex strategies (Jemmott, Jemmott, & McCaffree, 2002). Module three activities include a video on young people and AIDS. There is a scenario where the student is given the job of an AIDS hotline worker and must respond to the callers (Jemmott, Jemmott, & McCaffree).

Module four centers on learning problem-solving techniques, implementing these techniques, dream development and attainment, and review questions on HIV/AIDS (Jemmott, Jemmott, & McCaffree, 2002). The problem solving strategy of stop, think and act is introduced here (Jemmott, Jemmott, & McCaffree). Several situations are later introduced that utilized the stop, think and act techniques.

Module five highlights identifying signs and symptoms of common STD's, learning about STD transmission and prevention, demonstrating correct condom use and



listing condom effectiveness (Jemmott, Jemmott, & McCaffree, 2002). There is an activity in this module that involves students finishing sentences that are read to them (Jemmott, Jemmott, & McCaffree). Students are also given the chance to agree or disagree with statements that concern HIV/AIDS and safer sex (Jemmott, Jemmott, & McCaffree).

Module six looks at myths versus facts on the pregnancy issue and listing birth control methods (Jemmott, Jemmott, & McCaffree, 2002). The students are read statements about pregnancy and they tell the facilitator whether it is a myth or fact (Jemmott, Jemmott, & McCaffree). The facilitator provides clarification if needed. Students learn about various birth control methods and develop their own attitudes about contraception (Jemmott, Jemmott, & McCaffree).

Module seven objectives are learning correct condom usage, listing barriers to birth control methods and learning strategies for using birth control (Jemmott, Jemmott, & McCaffree, 2002). The activities include: demonstrating the correct condom steps, role-playing scenarios that involve condom use and learning how to deal with excuses partners give for not using condoms (Jemmott, Jemmott, & McCaffree).

Module eight looks at the effect of body language on unprotected sex, developing negotiation skills for getting a partner to use a condom and role-playing the negotiation skills (Jemmott, Jemmott, & McCaffree, 2002). Module eight activities include role-playing, group discussion on newly acquired skills and the student is given various problem scenarios to solve (Jemmott, Jemmott, & McCaffree).

#### Procedures

The experimental group was given the questionnaire as a pre-test to

prior to implementation of the curriculum. Eight (1) hour modules were conducted at the school the students attended. The modules were held two times per week for four weeks. One week after the training was conducted, the same questionnaire was given as a post-test. The experimenter was the same facilitator of all 8 sessions. This helped to control extraneous variables.

The questionnaire was the data collection method. The students were allowed to review the cumulative final results of the experiment. The experimenter explained in detail the results to all students who wanted an explanation. The students were allowed to review the theses.

The control group was given a pre & post questionnaire. There was no training on the curriculum for the control group.

#### Data Analysis

Analysis of Variance (ANOVA) was used to compare scores of the treatment and control groups. Post test scores were analyzed using SPSS 11.5 for Windows. Both knowledge and attitude of participants was measured and compared. The next section will describe the results of this study.

## Chapter 4 Results

The first 25 questions of the questionnaire were true/false questions. The students circled true, false, and a question mark for not knowing the answer. The students in the study received the following scores on the True/False section of the posttest.

Table 1  
Posttest Scores of Students for Study

Student Number	Experimental Group	Control Group
1	92%	58%
2	88%	40%
3	96%	64%
4	84%	52%
5	88%	56%
6	76%	88%
7	92%	52%
8	92%	60%
9	96%	64%
10	92%	56%
11	92%	56%
12	84%	52%
13	84%	92%
14	92%	72%
15	92%	60%

In table 2, there was a significant difference in percentage of correct answers on the post test true/false questions.

Table 2

Total true and false post test results	F	Sig
True/False	Between Groups 6.104	.020

As seen in table 2, results of the Analysis of Variance (ANOVA) between groups showed a significant effect. Post Hoc tests revealed where the differences were. There were differences in several true/false questions (i.e., Questions 6, 7, 8, 9, 10, 12, 20, 24, 25) (see table 2).

---

Table 3  
True/False Frequencies

---

Question #	Experimental Group		
	True (%)	Don't Know (%)	False (%)
6-A woman who has a STD can get an infection in her uterus and tubes.	86.7	6.7	6.7
7-A pregnant woman who has a STD can give it to her baby.	93.3	6.7	
8-If you have a STD your sexual partner probably has it too.	86.7	13.3	
9-Having AIDS makes you more likely to get other diseases.	100.0		
10-A person can have the AIDS virus and give it to other people even if the person does <u>not</u> look sick.	100.0		
12-Having anal sex with a guy (i.e., penis in your anus/behind) increases your chance of getting AIDS).	100.0		
20-Storing or carrying condoms in a hot or warm place can destroy their effectiveness.	100.0		
24-A girl who is taking birth control pills and does not take them one or two days in a row does <u>not</u> increases her chances of becoming pregnant.	13.3		86.7

Table 3 (continued)

True/False Frequencies

25-The foam and jelly forms of birth control that a girl uses work better if the boy uses a condom.

100.0

## Control Group

Question #	True (%)	Don't Know (%)	False (%)
6-A woman who has a STD can get an infection in her uterus and tubes.	13.3	53.3	33.3
7-A pregnant woman who has a STD can give it to her baby.	13.3	53.3	33.3
8-If you have a STD your sexual partner probably has it too.	26.7	20.0	53.3
9-Having AIDS makes you more likely to get other diseases.	26.7	26.7	53.3
10-A person can have the AIDS virus and give it to other people even if the person does <u>not</u> look sick.	40.0	13.3	46.7
12-Having anal sex with a guy (i.e., penis in your anus/behind) increases your chance of getting AIDS).	13.3	60.0	26.7
20-Soring or carrying condoms in a hot or warm place can destroy their effectiveness.	60.0	13.3	26.7
24-A girl who is taking birth control pills and does not take them one or two days in a row does <u>not</u> increases her chances of becoming pregnant.	80.0		20.0
25-The foam and jelly forms of birth control that a girl uses work better if the boy uses a condom.	53.3	40.0	6.7

The one way ANOVA between groups produced significant results in several questions in the attitude section of the survey. The students' attitudes ranged from disapproval of using a condom to strongly agreeing to use a condom.

The students' attitudes towards birth control and contraceptives changed gradually to more acceptance of birth control and contraceptives, in the experimental group. The students' attitudes in the control group remained relatively unchanged.

Students' attitudes towards condoms preventing STDs, pregnancy and AIDS changed in the experimental group. The control group's attitudes remained relatively unchanged. Question numbers 5, 8, 14, 20, 23, 24 showed significant differences between groups (control and experimental). Results of these questions are presented in Table 4. These data are grouped according to the descriptors on the 5 point-scale.

---

Table 4  
Frequencies for Attitude Questions

---

Experimental Group					
Question #	1-Disapprove Strongly	2-Disapprove	3-In the Middle	4-Approve	5-Approve Strongly
5			26.7	33.3	40.0
8				6.7	93.3

---

Experimental Group					
Question #	1-Disapprove Strongly	2-Disapprove	3-In the Middle	4-Approve	5-Approve Strongly
14					

Table 4 (continued)

## Frequencies for Attitude Questions

Question #	1-Extremely Unimportant	2-Moderately Unimportant	3-In the Middle	4-Moderately Important	5-Extremely Important
14			6.7	40.0	53.3

## Experimental Group

## Question #

20-Condoms help prevent STDs.

21-Condoms help prevent pregnancy.

23-Condoms help prevent AIDS.

24-Condoms ruin the mood because you have to stop to put one on.

Question #	Disagree Strongly	Disagree	In the Middle	Agree	Agree Strongly
20				53.3	46.7
21				53.3	46.7
23				60.0	40.0
24	6.7	13.3	46.7	33.3	

## Control Group

## Question #

5-Would your sexual partner approve or disapprove of you using a condom if the two of you have sex in the next 3 months?

8-Would most people who are important to you approve or disapprove of you using birth control pills if you have sex in the next 3 months?

Question #	1-Disapprove Strongly	2-Disapprove	3-In the Middle	4-Approve	5-Approve Strongly
5		20.0	46.7	26.7	6.7
8			6.7	40.0	53.3

## Control Group

## Question #

14-In general, how important to you are your sexual partner's opinions about what you do?

Question #	1-Extremely Unimportant	2-Moderately Unimportant	3-In the Middle	4-Moderately Important	5-Extremely Important
14			13.3	73.3	13.3

Table 4 (continued)

## Frequencies for Attitude Questions

## Control Group

## Question #

20-Condoms help prevent STDs.

21-Condoms help prevent pregnancy.

23-Condoms help prevent AIDS.

24-Condoms ruin the mood because you have to stop to put one on.

Question #	Disagree Strongly	Disagree	In the Middle	Agree	Agree Strongly
20			6.7	86.7	6.7
21				93.3	6.7
23			46.7	46.7	6.7
24					



## Chapter 5 Discussion

Teenage pregnancy remains a prevalent issue today. Teenage pregnancy has rippling effects that affect the teenager, the baby and society. The teenager might still need educational services. These services have been provided in a continuum of educational settings.

The adolescent mother has increased demands placed on her. Juggling child care and educational services is a balancing act many teenage mothers experience. Something in the teenager's life may have to wait. That wait may have consequences. This study was intended to measure the change in knowledge and attitude toward contraceptive use after a training program.

The following questions were addressed in this study:

- (1) Do the attitudes of teenage mothers change when they receive 8 weeks of training on contraceptives and their use?

Yes, the attitudes of teenage mothers changed when they receive 8 weeks of training on contraceptives and their use, using the "Making Proud Choices! A Safer-Sex Approach to HIV/STDs and Teen Pregnancy Prevention Curriculum." The One Way ANOVA produced significant results on several of the questions from the questionnaire.

- (2) What are the students' attitudes before training about contraceptives and their use?

The students' attitudes about contraceptives and their use before the curriculum was implemented varied. Some teenagers used various birth control methods. Some

teenagers used birth control sometimes, they varied the type of birth control used and or they used no birth control at all.

(3) What are the students' attitudes after training about contraceptives and their use?

The students' attitudes about contraceptives and their use after the curriculum was implemented tended to have a higher acceptance of use than their before the training.

The results of this study show the attitudes of teenage mothers did change when they received "The Making Proud Choice Curriculum" 8 weeks of training on contraceptives and their use. Before the training, the students' attitudes about contraceptives and their use varied. Some students agreed with condom use while others did not. The training impacted the students' attitudes changing them from strongly disagree to contraceptive use to agreeing or even strongly agreeing to particular contraceptive use.

Baby Think it Over (BTIO) is a program designed to reduce teenage pregnancy. The goal of BTIO is to create a realistic impression on the care of an infant and provide training on teenagers' attitudes and behaviors (Somers, Gleason, and Johnson, 2001). The training aims to incorporate more responsibility and accountability for the teenager's actions and behaviors (Somers, Gleason, and Johnson). The curriculum in the BTIO program and the Making Proud choices Curriculum both share training on empowering teenagers with personal decision making skills. The Baby Think it Over curriculum shares elements of the Making Proud Choices curriculum and the results of this study.

An educational career youth developmental model (ECYDM) provides a variety of mentoring, academic support, and social service assistance to prevent teenage

pregnancy (Tabi, 2000). This program aims to improve student's knowledge about sexual issues, like the "Making Proud Choice Curriculum" does. This program provides training on sexual issues (i.e., contraceptive information, role-playing, and assertive training). The results of the study involving ECYDM conclude training on human sexuality issues increases students' knowledge of sexual issues. These elements are similar to those in the Making Proud Choices curriculum and the results of this study.

The Adolescent Communication and Education program (ACE)- pillow talk program provides information about STD, AIDS and pregnancy. The pillow talk program increased adolescents' attitudes about healthy sexual behaviors and built their self-esteem (SIECUS Report). The findings of the pillow talk program are in agreement with this study.

The Second Chance Club aims to prevent a second pregnancy. One component of this program is to increase access and change attitudes about contraceptive use (Key, Barbosa, and Owens, 2001). One major component of the Making Proud Choices curriculum is to provide training on contraceptives and change attitudes of teenagers. The determination of a second pregnancy was made by the reappearance of a participant's name and social security number in the South Carolina Birth Certificate Data Registry from 1994 to 1997 (Key, Barbosa, and Owens, 2001). "Within the 3 years measured, repeat births occurred in 3 of the participants (6percent), compared with 95 of 255 control subjects (37 percent)" (Key, Barbosa, and Owens). Within the control participants, 29 percent had one repeat birth, 7 percent had two repeat births and 1 percent had three repeat births (Key, Barbosa, and Owens). Changing attitudes toward contraception is something that both curriculums share. Both the South Carolina study

and the current study changed attitudes by training and can help reduce a second pregnancy.

The Spruce Adolescent Health Promotion Project took place in Philadelphia (Jemmott, Jemmott, and Fong, 1998). The program involved a randomized controlled trial using cognitive behavioral theories and eight 1-hour modules headed by adults or peer facilitators (Jemmott, Jemmott, and Fong). The results of the study include, teenagers in the abstinence group were less likely to report having sexual intercourse than the two other groups (Jemmott, Jemmott, and Fong). The adolescents in the safer-sex group reported higher condom knowledge, a greater belief that condoms can prevent pregnancy (STDs and HIV), and they would have condoms available when they needed them, than the other two groups (Jemmott, Jemmott, and Fong). The results of the Spruce adolescent Health Promotion Project are in agreement with the results of this study.

This study has shown that training on contraceptives and communications skills does change teenagers' attitudes about contraceptives. Reductions or delays in pregnancy can benefit the teenager. The teenager can receive educational training, and delay a pregnancy until they are physically, emotionally and socially ready to have a child. This delay in child bearing can be beneficial to the child and society. Teenage pregnancy and child birth have long term implications for society. Delaying pregnancy and child bearing can reduce these implications.

### Limitations

The sample used in this study was small and from one district. Therefore, generalizability was limited. The subjects used in the study were drawn from a

convenience sample so randomization was not possible. The subjects may have had a desire to please their teacher, the facilitator of the study.

Despite these limitations, this study can be used as a step in developing future teenage pregnancy prevention programs.

### Future Research

Further research on teenage pregnancy prevention programs needs to continue. Future research should build on this study by controlling the limitations and expanding the sample size. Expanding the sample size can lead to greater generalizability. Therefore, results of future experiments will have more validity and reliability. Further research should continue to use a culturally diverse population. This will help expand the generalizability.

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APPENDIX A  
IRB APPROVAL

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**Date:** Tue, 11 May 2004 11:56:19 -0400  
**From:** "Tricia J. Yurak" <yurak@rowan.edu>  
**To:** christine.king@dhs.state.nj.us, "Tricia J. Yurak" <yurak@groupwise.rowan.edu>  
**Subject:** KING IRB approved

**Plain Text Attachment** [ [Download File](#) | [Save to my Yahoo! Briefcase](#) ]

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Your IRB application is now approved.

A hard-copy of this notification will be sent to the Principal Investigator through postal mail.

Thank you, and good luck with your project.

-----  
Tricia J. Yurak, Ph.D.  
Chair, Rowan University Institutional Review Board  
Department of Psychology  
Rowan University  
Glassboro, NJ 08028

[yurak@rowan.edu](mailto:yurak@rowan.edu)  
-----

APPENDIX B  
PERMISSION FROM SCHOOL DISTRICT



State of New Jersey  
DEPARTMENT OF HUMAN SERVICES  
OFFICE OF EDUCATION

JAMES E. MCGREEVLY  
Governor

GWENDOLYN I. HARRIS  
Commissioner

TO WHOM IT MAY CONCERN

Dear Chris King:

I am granting you the permission to conduct your study entitled "Does The Use Of The Making Proud Choices Curriculum Impact Student' Decision To Use Birth Control During School Time." I understand that this is for your Masters Thesis. If I can be of further assistance to you during your academic endeavors And struggles, do not hesitate to contact me at 609-267-7595.

Sincerely,

A handwritten signature in black ink, appearing to read "Dr. N. J. Obot".

Dr Nse J. Obot, Ph. D.  
Principal, Project T.E.A.C.H.



APPENDIX C

CONSENT FORM FOR 18 YEAR OLDS & OLDER

Participants 18 and older

My name is Christine King and I am a graduate student in the Special Education Department at Rowan University. I will be conducting a research project under the supervision of Dr. Steven Crites as part of my master's thesis concerning a safer sex approach to preventing repeat teenage pregnancy and STD's. The goal of this study is to increase the student's knowledge and use of contraceptives.

I am requesting your permission to be part of the study. Please read below and sign if you agree to participate in the study.

I agree to participate in a study titled, "Does the use of the Making Proud Choices Curriculum impact students' decision to use birth control?" The study is being conducted by Christine King of the Special Education Department, Rowan University. The purpose of this study is to increase the student's knowledge and use of contraceptives.

I understand that I will be required to answer an anonymous questionnaire before implementation of the curriculum. I understand that I will answer the same questionnaire after the end of the program. I understand that Ms. King is the only person who will be administering the questionnaire.

I understand that my responses will be anonymous and that all the data gathered will be kept confidential. I agree that any information obtained from this study may be used in any way thought best for publication or education provided that I am in no way identified and my name is not used.

I understand that there are no physical or psychological risks involved in this study, and that I am free to withdraw my participation at any time without penalty.

I understand that my participation does not imply employment with the state or New Jersey, Rowan University, the principal investigator, or any other project facilitator.

If I have any questions or problems concerning my participation in this study, I may contact Christine King at 609-267-7595 or Dr. Steven Crites at 856-256-4500 ext. 3684.

\_\_\_\_\_  
(Signature of Participant)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature of Investigator)

\_\_\_\_\_  
(Date)

APPENDIX D

CONSENT FORM FOR STUDENTS UNDER 18 YEARS OLD

Dear Parents/Guardians,

My name is Christine King and I am a graduate student in the Special Education Department at Rowan University. I will be conducting a research project under the supervision of Dr. Steven Crites as part of my master's thesis concerning a safer sex approach to preventing repeat teenage pregnancy and STD's. I am requesting permission for your child to participate in this study. The goal of this study is to increase the student's knowledge and use of contraceptives.

Each student will take an anonymous questionnaire before program implementation. There will be 8-45 minute periods during the school day. Attached is a copy of the module overview. When the program is complete, the student will take the same questionnaire. To preserve confidentiality, the primary investigator, Christine King, will be the only one to administer the questionnaire. The questionnaire will contain no names. All data will be reported in terms of group's results; individual results will not be reported.

Your decision whether or not to allow your child to participate in this study will have absolutely no effect on your child's standing in her class. If you have any questions or concerns, please contact me at 609-267-7595 or your may contact Dr. Steven Crites at 856-256-4500 ext 3684. Thank-you.

Sincerely,

Christine King

Please indicate whether or not you wish to have your child participate in this study by checking the appropriate statement below and returning this letter to me by February 9<sup>th</sup>, 2004.

\_\_\_\_\_ I grant permission for my child, \_\_\_\_\_, to participate in  
(Child's Name)  
this study.

\_\_\_\_\_ I do not grant permission for my child, \_\_\_\_\_, to participate  
(Child's Name)  
in this study.

\_\_\_\_\_  
(Parent/Guardian Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Student's Signature)

\_\_\_\_\_  
(Date)

APPENDIX E  
PRE & POST TEST

This questionnaire asks about what you know, asks your opinion on things and asks about things you may or may not have done. Some of the questions are very personal and ask about different sexual activities that some people do. These particular questions are very, very blunt and to the point. If the questions bother you so much that you do not want to answer them, you can stop filling out the questionnaire. Please answer all of the questions honestly. Your answers will be kept completely confidential; no one from school or home will ever see your answers. **Do not write your name on this questionnaire.**

### **AIDS/STD True-False Items**

**True or False.** Some of the statements below are true; some are false. Please circle **T** for each statement that you think is True; circle **F** for each one you think is False; and circle “?” if you **do not know** whether the statement is true or false.

- T ? F 1. A common symptom of STDs in a man is discharge (drip) from his penis.
- T ? F 2. A common symptom of STDs is burning with urination (peeing).
- T ? F 3. A common symptom of STDs is a sore on the penis or vagina.
- T ? F 4. A common symptom of STDs in a woman is discharge from her vagina that causes itching or burning.
- T ? F 5. You can not have a STD if you feel perfectly fine.
- T ? F 6. A woman who has a STD can get an infection in her uterus and tubes.
- T ? F 7. A pregnant woman who has a STD can give it to her baby.
- T ? F 8. If you have a STD your sexual partner probably has it too.
- T ? F 9. Having AIDA makes you more likely to get other diseases.
- T ? F 10. A person can have the AIDS virus and give it to other people even if the person does not look sick.
- T ? F 11. Having sex with a man who shoots drugs is a way many women get AIDS.
- T ? F 12. Having anal sex with a guy increases your chance of getting AIDS.
- T ? F 13. Using Vaseline as a lubricant when you have sex lowers the chance of getting STDs and AIDS.
- T ? F 14. Using spermicidal (birth control foam or jelly containing Nonoxynol-9) when you have sex lowers the chance of getting AIDS.

- T ? F 15. There is a good chance you will get AIDS if you share a sink, shower, or toilet seat with someone who has AIDS.
- T ? F 16. The AIDS virus is present in blood, semen, and vaginal fluid.
- T ? F 17. The penis should be hard when the condom is put on it.
- T ? F 18. When a condom is placed on the penis, space should be left at the tip of the condom.
- T ? F 19. The condom should be completely unrolled before it is placed on the penis.
- T ? F 20. Storing or carrying condoms in a hot or warm place can destroy their effectiveness.
- T ? F 21. A girl can not get pregnant the first time she has sex.
- T ? F 22. If a girl washes herself out with a douche after she has sex, she won't become pregnant.
- T ? F 23. Even if a guy withdraws from the woman's vagina before he reaches climax the woman can still become pregnant.
- T ? F 24. A girl who is taking birth control pills and does not take them one or two days in a row does not increase her chances of becoming pregnant.
- T ? F 25. The foam and jelly forms of birth control that a girl uses work better if the boy uses a condom.

## Sexual Attitudes

The following questions ask how you feel about different behaviors. Please indicate how good or bad an idea it is to do the following, whether others would approve or disapprove of the behavior, and whether you plan to do these behaviors in the next 3 months. Circle the NUMBER that best describes your feelings.

- Would your friends approve of you having sex in the next 3 months?
 

1	2	3	4	5
Extremely	Moderately	In the	Moderately	Extremely
Unlikely	Unlikely	Middle	Likely	Likely
- How likely is it that you will decide to have sex in the next 3 months?
 

1	2	3	4	5
Extremely	Moderately	In the	Moderately	Extremely
Unlikely	Unlikely	Middle	Likely	Likely

3. How do you feel about using a condom if you have sex in the next 3 months?

1	2	3	4	5
Extremely Unlikely	Moderately Unlikely	In the Middle	Moderately Likely	Extremely Likely

4. Would most people who are important to you approve of you using a condom if you have sex in the next 3 months?

1	2	3	4	5
Extremely Unlikely	Moderately Unlikely	In the Middle	Moderately Likely	Extremely Likely

5. Would your sexual partner approve of you using a condom if the two of you have sex in the next 3 months?

1	2	3	4	5
Disapprove Strongly	Disapprove	In the Middle	Approve	Approve Strongly

6. How likely is it that you will decide to use a condom if you have sex in the next 3 months?

1	2	3	4	5
Extremely Unlikely	Moderately Unlikely	In the Middle	Moderately Likely	Extremely Likely

7. How do you feel about using birth control pills if you have sex in the next 3 months?

1	2	3	4	5
Very Bad Idea	Bad Idea	In the Middle	Good Idea	Very Good Idea

8. Would most people who are important to you approve of you using birth control pills if you have sex in the next 3 months?

1	2	3	4	5
Disapprove Strongly	Disapprove	In the Middle	Approve	Approve Strongly

9. Would your sexual partner approve of using birth control pills if the two of you have sex in the next 3 months?

1	2	3	4	5
Disapprove Strongly	Disapprove	In the Middle	Approve	Approve Strongly

10. How likely is it that you will decide to use birth control pills if you have sex in the next 3 months?

1	2	3	4	5
Extremely Unlikely	Moderately Unlikely	In the Middle	Moderately Likely	Extremely Likely



11. How do you feel about not using a condom if you have sex in the next 3 months?

1	2	3	4	5
Very Bad Idea	Bad Idea	In the Middle	Good Idea	Very Good Idea

12. How likely is it that you will not use a condom if you have sex in the next 3 months?

1	2	3	4	5
Extremely Unlikely	Moderately Unlikely	In the Middle	Moderately Likely	Extremely Likely

13. How likely is it that you will decide to carry a condom with you at all times during the next 3 months?

1	2	3	4	5
Extremely Unlikely	Moderately Unlikely	In the Middle	Moderately Likely	Extremely Likely

14. In general, how important to you are your sexual partner's opinions about what you do?

1	2	3	4	5
Extremely Unimportant	Moderately Unimportant	In the Middle	Moderately Important	Extremely Important

15. In general, how important to you are your friends' opinions about what you do?

1	2	3	4	5
Extremely Unimportant	Moderately Unimportant	In the Middle	Moderately Important	Extremely Important

16. A girl should be in a serious relationship with her boyfriend before having sex with him.

1	2	3	4	5
Disagree Strongly	Disagree	In the Middle	Agree	Agree Strongly

17. A girl should be in love with her boyfriend before having sex with him.

1	2	3	4	5
Disagree Strongly	Disagree	In the Middle	Agree	Agree Strongly

18. Sex wouldn't feel as good if my partner and I used a condom.

Disagree Strongly	Disagree	In the Middle	Agree	Agree Strongly
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19. Condoms are embarrassing to use.  
Disagree Strongly      Disagree      In the Middle      Agree      Agree Strongly
20. Condoms help prevent STDs.  
Disagree Strongly      Disagree      In the Middle      Agree      Agree Strongly
21. Condoms help prevent pregnancy.  
Disagree Strongly      Disagree      In the Middle      Agree      Agree Strongly
22. Sex feels unnatural when a condom is used.  
Disagree Strongly      Disagree      In the Middle      Agree      Agree Strongly
23. Condoms help prevent AIDS.  
Disagree Strongly      Disagree      In the Middle      Agree      Agree Strongly
24. Condoms ruin the mood because you have to stop to put one on.  
Disagree Strongly      Disagree      In the Middle      Agree      Agree Strongly
25. Sex still feels good when a condom is used.  
Disagree Strongly      Disagree      In the Middle      Agree      Agree Strongly

