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Factors Effecting Personal Responsibility and Pregnancy Prevention

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FACTORS EFFECTING PERSONAL RESPONSIBILITY
AND PREGNANCY PREVENTION

An Abstract of a Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Specialist in Education

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July 1994

ABSTRACT

Teen pregnancy has been an area of concern in the United States for many years. Given the growing number of births to girls between 15 and 19 years of age, it is of no wonder. Teens are taking risks for unwanted pregnancy and disease, although they have no intention of experiencing childbirth. The research continually debates the relationship between birth control, sex education, and the use of that knowledge. The Psychosocial Factors of self esteem and locus of control have also been found to be determinants of adolescent birth control use and sexual activity, although the strength of this determinant is conflicting.

Current research focuses primarily on adolescent females and teen pregnancy, with little attention devoted to adolescent males. The purpose of this study was to determine if the same set of variables which distinguish adolescent females who become pregnant and those who do not also distinguish adolescent males who father from those who do not. The outcome of this factor concerns issues about sex education, family planning, onset of sexual activity, and public policy.

The Health Belief Model Survey, Piers-Harris Self-Concept Scale for Children, and the Nowicki-Strickland Locus of Control Scale for Children were administered to 100 adjudicated adolescent males. A discriminant analysis showed

that 63.54% of the cases could be correctly classified from a linear combination of the factor scores on Serious Affective Consequences of Pregnancy, Barriers to Birth Control Use, Benefits of Birth Control Use, Interpersonal Benefits to Birth Control Use, and the raw score on the Piers-Harris Self Concept Scale for Children. These findings are discussed in terms of the implications for future research which would be useful in clarifying the relationship between adolescent males and teen pregnancy, and Policy implications of the results are considered.

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TABLE OF CONTENTS

	Page
LIST OF TABLES	v
CHAPTER	
1. INTRODUCTION	1
Policy Issues	1
Research Issues	5
Statement of the Problem	7
Question to be Answered	7
Importance of the Study	7
Limitations of the Study	8
2. REVIEW OF THE LITERATURE.....	10
Schools and Policy	10
Adolescent Males	14
Self Esteem and Locus of Control.....	16
Sexual Beliefs	18
Communication About Sexuality.....	27
Responsibility.....	31
3. METHODOLOGY, RESULTS, AND ANALYSIS.....	33
Subjects.....	33
Instruments.....	34
Serious Affective Consequences of Pregnancy.....	35
Serious Pregnancy Resolution Consequences.....	35

Benefits of Effective Birth Control Use.....	36
Interpersonal Benefits of Birth Control Use.....	36
Barriers to Birth Control Use.....	37
Procedures.....	39
Results and Analysis.....	40
4. DISCUSSION, IMPLICATIONS FOR FUTURE RESEARCH AND POLICY.....	45
Discussion.....	45
Implications for Future Research.....	48
Policy Implications.....	49
REFERENCES.....	52
APPENDIX A: Health Belief Model Survey.....	56
APPENDIX B: Nowicki-Strickland Locus of Control Scale for Children.....	59

LIST OF TABLES

Table	Page
1. Classification Results.....	41
2. Wilks' Lambda, F Values, p Values and Discriminant Coefficients.....	43

CHAPTER 1

INTRODUCTION

Adolescent pregnancy has been a concern in society for many years (Hart & Hilton, 1988). Due to the long-term negative prospects for unwed teenage mothers and their children, it is no wonder that the trend in births is of special concern. Between the years of 1960 and 1982 the number of pregnancies per thousand for 15-19 year olds has climbed from 15.3 to 28.9 (National Center for Health Statistics, 1988). Currently, data show that 35% of late adolescents who are sexually active do not use birth control (Hart & Hilton). If we consider the abortion rate, it is frightening to realize how many teens are taking risks, although they have no intentions of becoming pregnant and experiencing childbirth. The literature provides many explanations for this risk taking behavior.

Policy Issues

White and White (1991) discuss policy issues from the perspective of The Adolescent Family Life Act (AFLA; authorized as Title XX of the Public Health Service Act), which is currently the only federal program specifically designed for adolescent pregnancy and sexuality. White and White provide evidence that part of the problem with the United States' policy in this area is the lack of specificity

in definition. Alternatively, Olsen (1988) outlined events associated with pregnancy which policy makers need to consider as they decide at what level they are going to intervene. Olsen holds that the first possibility is abstinence or postponement of sexual activity; second, pregnancy could be prevented by effective use of contraceptives; third, abortion or miscarriage could effect childbearing outcomes; and fourth, teenage parenting could be deterred through adoption.

According to White and White (1991), proponents of the AFLA feel early sexual activity is the problem. All of the other events would be preventable by changing the age of onset of sexual activity. However, there are multiple factors influencing teenage sexual activity. Reasons range from trouble within the family, to peer pressure, to the simple need for reassurance of self. The complexity and range of these problems makes postponement of early sexual activity very hard to achieve. There is no easy recipe to intervene in all of the situations in an adolescent's life, and certainly not for the emotions that go with them. According to White and White, the underlying assumption in the AFLA is to encourage adolescents to develop internal controls to resist external social factors. The resistance will be hard to accomplish when many adolescents are responding to a deviant subculture, such as delinquency, in which all of their self esteem needs are reinforced. If the

value in your subculture (cultural, delinquent, religious, etc.) is to have children while you are young, an outside government program reinforcing postponement of that reinforcement could be wasting both time and money.

Gabriel (1983) argued similarly to White and White (1991) by saying that attitudes vary between subcultures which delineates why the same interventions do not work for everyone. Carver, Kittleson, and Lacey (1990) agreed that most sexuality programs tended to focus on national norms and may not be appropriate for various subculture/high risk groups. Gabriel also noted that African-American subjects do not see marriage as a prerequisite to motherhood and they do not view completion of schooling and economic independence as phases of maturation to be reached before parenthood. Quite in reverse, African-American females often see motherhood as the link to maturation. If an African-American adolescent considers having an out-of-wedlock child as a high school sophomore, she is 80% more likely to have such a child than the African-American adolescent who would not consider it (Hanson, Myers, & Ginsburg, 1987).

In 1981, Planned Parenthood in Walla Walla, Washington developed a curriculum for providing sex education to delinquent populations (Britton and others, 1986). Emphasis is placed on the unique nature of the group in terms of experiences and recent failure in the public system. Also noted is the inability to have a step by step curriculum to

follow; this does not always work with delinquents due to varying styles of learning and value systems. The delinquent group is more homogeneous than the traditional student group. Their experiences may be different, but their struggles, responses, and attitudes are more closely aligned. Britton also noted that this group is more likely to possess strict sex role stereotypes and lack any role models. Finally, when working with a delinquent group there is a sense of urgency because they pass through the system unpredictably. Several suggestions were made to take advantage of instructing this group, including knowing where to adjust the curriculum. For instance, the traditional sex education curriculum was adjusted for the juvenile delinquents by focusing consistently on decision-making along with the regular physiology/health/birth control issues. A further adjustment was made when working with male sex offenders who needed to focus on personal rights, communication, and consent issues. These efforts at tailoring instruction to delinquent populations implies importance in intervening with this high risk group and making use of incarceration or other programmed time.

Currently, there is a lack of information about the nature of sexual engagement decisions which inhibit efforts at informed decision making regarding evaluation of current programs and future policy direction (White & White, 1991). The current need is to clarify the role of adolescent males

in this issue and possibly to extend the study to the role post-adolescent males play and why they are the more frequent fathers of teenage pregnancies (Males, 1994).

Research Issues

One continually debated area in the literature concerns the relationship between birth control, sex education, and the use of that knowledge (Flaherty, 1983; Hanson et al., 1987; Hart & Hilton, 1988; Loewenstein & Furstenberg, 1991). Findings do not support contentions that the knowledge of birth control through sex education leads to increased sexual activity (Hanson et al.), while at the same time, the same knowledge is only marginally related to birth control use (Loewenstein & Furstenberg).

There appears to be gender bias in research on adolescent pregnancy which is evidenced by the lack of attention paid to male adolescents and the role they play in unwanted adolescent pregnancy (Herz & Reis, 1987; Jemmott & Jemmott, 1990; Reis & Herz, 1989). Studies regarding female adolescent pregnancy examine differences between the females who either are or have been pregnant, and those who have not. The same type of question needs to be asked about adolescent males to understand the differences between males who are involved in adolescent pregnancy and those who are not.

The Psychosocial Factors of self esteem and locus of control have also been found to be determinants of adolescent behavior in terms of both sexual activity and birth control

use (Hart & Hilton, 1988; Landry, 1986; Rosenberg, Schooler, & Schoenbach, 1989). Landry found an internal locus of control was associated with increased ability to plan for one's future and have an ability to be concerned about how decisions in the present can effect the future. Self esteem has been found by Rosenberg to have an inverse relationship with delinquency. Hart found impulsivity to be to be a frequent trait of adolescents involved in unwanted pregnancy. Hart also found pregnant adolescent girls to have a very low impulse control.

Sexual beliefs of adolescents regarding contraception (benefits of use, barriers to use, and efficacy), knowledge of birth control methods, consequences of unwanted pregnancy, and acceptance of sexuality are all important considerations because the reasons for participation in sexual activity among adolescents are multi-faceted (Luker, 1975). Luker argued that the choice to participate in sexual activity is not rationally made.

Communication about sexuality has been found to be a variable in adolescent pregnancy (Barnett, Papini, & Gbur, 1991; Loewenstein & Furstenberg, 1991). The same research revealed that parent-adolescent communication has received mixed findings in regard to the effect it has on unwanted pregnancy and birth control use.

Responsibility for birth control use is also a major concern. According to Herz and Reis (1987) males are willing

to engage in sexual intercourse regardless of birth control use. In addition, they found that males and females both agree that females should be the responsible party in a sexual situation.

Statement of the Problem

There needs to be research conducted in a multi-variate format that focuses on the male gender to see if the previous literature on adolescent pregnancy applies equally to both genders. The present study was designed to analyze a population of adolescent males using a discriminant analysis of fathers and nonfathers in terms of psychosocial factors (self-esteem and locus of control), sexual beliefs, communication about sexuality, and personal responsibility for birth control use.

Question to be Answered

In the multi-variate space associated with adolescent sexuality, is there a linear combination of variables that individually measure sexual beliefs, psychosocial factors, communication about sexuality, and responsibility for birth control use which will reliably distinguish adolescent males who are fathers from adolescent males who are not?

Importance of the Study

There are two contributions this study can make to the literature. The first relates directly to whether the same variables that distinguish between adolescent females who become pregnant and those who do not also reliably

distinguish adolescent males who become fathers from those who do not--a gender congruence notion. The outcome of this factor then carries to questions about sex education, family planning, onset of sexual activity, and public policy related to the same issues. Without a balanced literature relating gender and parenthood, policy making cannot address the issue in an unbiased format.

The effect of adolescent pregnancy stretches farther than financial support to families and health care expenses. Prevention needs to start not only in the homes, but in the schools. According to Conger (1988), a society that aspires to greatness cannot continue to deny assistance to those whose need is greatest and whose power is the least. Edelman (1992) echoed the same when she said that in life the consequences often come first and the lessons afterward. In today's era of AIDS and drugs and violence and too early unsafe sex, the consequences can be deadly or last a lifetime.

Limitations of the Study

The population used in this study consisted of a sample of adjudicated adolescent males at a State Training School in the Midwest. This population contains traits which are unique within itself because each subject is a delinquent and has already failed in the public system. The findings of this study should not be generalized to the larger population without further research. In order to facilitate gaining

permission to conduct the study and to minimize the invasion of privacy, no questions about actual sexual activity were asked. Thus the study does not control for active vs. non-active elements. Generalization of the results should take this factor into account.

CHAPTER 2

REVIEW OF THE LITERATURE

The factors contributing to attitudes towards and perceived responsibility for birth control use will be reviewed from both male and female aspects. The majority of the published literature involves females with little attention given to adolescent males, although research consistently shows differences in knowledge of sexuality and birth control responsibility between the two groups (Carver et al., 1990; Treboux & Busch-Rossnagel, 1990).

The literature will be reviewed starting with Schools and Policy issues because they are the hopeful vehicles for future interventions. Literature about adolescent males follows because they are the focus of the present study. Next, issues of Self Esteem and Locus of Control will be covered. Again, these are important constructs as they directly relate to the population targeted in this study. The next areas are sexual beliefs, communication about sexuality, and responsibility. These areas are the constructs being measured in the current study to discriminate their effects on male adolescent fatherhood.

Schools and Policy

Caldas (1994) strongly advocated the importance of education programs in the schools regarding not only reproduction, but contraceptive use as well. He feels that

American adolescents are getting conflicting messages between the media and school, church, and family. The media depicts sex and sexiness as highly prized values, whereas the school, church, and family convey the message that sex is bad or sinful. Caldas not only supports contraceptive education, but also the dispensing of contraceptives in school. He sees this kind of instruction as a necessary, integrated part of the curriculum over the entire span, grades K-12.

Males (1994) on the other hand, disagrees that the school is the place for this education to take place. According to Males, the large majority of all teen pregnancies are caused by adults. According to the National Center for Health Statistics (1988) men older than high school age account for 77% of all births to girls between the ages of 16-18, and for 51% of all births to girls 15 or younger. In addition, men over 25 father twice as many births to teen mothers as boys under 18.

The existence of "adult/teen" sex has implications for sex education, according to Males (1993). Foremost, it offers a clear picture of why sex education programs are failing as they currently exist; they are missing a large half of the male problem which is no longer in school and may not have been for years. In addition Males says that prevention runs counter to the American tradition--which is adult/teen sex, although it is not openly discussed. Because of these

statistics, Males does not see a true "teen" pregnancy problem. He sees the messages teens receive as not conflicting, like Caldas (1994), but as consistent. Teens are modeling the behaviors and sexual values of adults close to them. In essence he does not see the schools as the arena for change. The task being presented to the schools is a "mission impossible," according to Males. The schools are being asked to transmit values to teenagers that adults in their culture do not espouse and to persuade these kids to reject the adult influences around them.

Males (1993) supports approaches that would investigate motivations for early pregnancy such as escape from an impoverished and/or abusive household, or as a response to a lack of educational opportunity combined with bleak job prospects in the future. The former situation may be an explanation for the rates of pregnancy among teen boys versus adult males with teenage girls. Teenage girls may be less likely to use birth control with someone older, who may be high school educated and possibly employed. In essence, Males supports programs which publicize realities of "teen" pregnancy and the perceived limitations of school-based remedies. The inclusion of adults in the occurrence of teen pregnancy (as well as STD transmission) needs to be incorporated into the curricula. The scope of the problem

must give way to a macro-view that treats teens as integrated members of adult society.

The scope of the problem cannot be totally faced in the schools. And it very well may be that it is not the responsibility of educators to prevent teen pregnancy. However, schools are doing many things now and taking on many roles that a decade ago would not have been their responsibility. Schools provide day care, breakfast, and values to students who do not get them at home. According to Dryfoos (1991), one successful program in pregnancy prevention which involved comprehensive sex and family life education occurred in the schools. In terms of multiagency efforts, it is significant that school buildings were the facilities where many successful prevention programs were located. Dryfoos also discusses many successful school-based programs which are significant in that they are organized, operated, and funded by agencies outside the school system. Can it still be argued that education regarding pregnancy prevention is not the schools responsibility?

In addition, the fact that many teen births are caused by adult males is certainly an area for further research. However, it does not negate the fact that education is important. Adolescent girls have every right to the education and to the availability of birth control methods regardless of the age of their partners. Considering the

impact relationships with significant adults have on adolescent beliefs and behaviors (Males, 1994), these statistics of adult fathers make the education more imperative. The system (school) needs to guarantee that every child is attached to a responsible adult, if not the mother and father, then someone else (Dryfoos, 1991). Males (1993) also sees sexuality among teens as an opportunity for educators to integrate teenagers into adult society, a process in which schools have a crucial role and ability to effect outcomes.

Adolescent Males

The statistics concerning adolescent males are deserving of attention. In 1979, the mean age of first experience of sexual intercourse for a sample of 421 males from New York City High Schools was 11.6 for African-Americans, 13 years for hispanics, and 14.5 for caucasians (Joshi & Battle, 1990). In 1985 12.7% of all U.S. births were born to women 19 years of age and younger. During that same year, 107,650 births, which is 22% of all teenage births, were to males 19 years of age and younger. It is believed that this figure is underreported. Also, Joshi and Battle note that an important change facing family structure in the United States is the delay in marriage and childbearing. But, paradoxically, there is an increase in the number of adolescent parents. A recent survey regarding service programs for pregnant

teenagers showed that most cities in the United States do provide programs for teenage mothers but only one fourth provide any services to their male partners. Some researchers have looked at adolescent males from a developmental standpoint to try and determine the contribution made to adolescent pregnancy.

Herz and Reis (1987) and Reis and Herz (1989) support a developmental theory approach based on Kohlberg's (1984) work. Reis and Herz (1989) posited that, ". . . the average child progresses from an egocentric world view and single-minded pursuit of their own self-gratification to empathic adult reasoning. The emergence of moral standards parallels the sequential phases of intellectual development" (p. 232). Young men may not be able to perceive a cause and effect relationship between their interests in sex, their sexual behavior, and the occurrence of pregnancy. Instead, they retain an egocentric, childlike belief that they will not be held accountable for what they do. In taking responsibility for a pregnancy, the young male feels he is acknowledging his sexual activity, not as a reflection of a conscious decision to impregnate the female partner. The results of Reis and Herzs' study fall in line with developmental theory, which postulates that the more egocentric (contraceptively irresponsible) young person seeks personal gratification with little thought for the consequences and defers to adult

authority figures. Decision-making processes and developmental theory both highlight the question of male responsibility. Personal gratification is an oversimplification of adolescent motivation for sexual behavior. There are many other factors involved in sexual decision making, even for adults, that have little to do with personal gratification and more to do with the need to be loved and have companionship.

Postrado and Nicholson (1992) discuss a Piagetian view in which adolescents younger than 16 years of age have not developed the ability to use formal operational thinking that allows people to think about the future and use abstract thinking. This is very significant in light of current trends towards gangs and violence in the schools and on the streets. Adolescents can be so removed from their future in many cases, that they don't really care if they have one.

Self Esteem and Locus of Control

According to Reis and Herz (1989) another area deserving of additional research for young adolescent contraceptive decision-making is the relationship between birth control and motivation for the initiation of sexual activity. Self esteem is a fundamental human motive. It has been referred to as the "self maintenance motive," the "motive for self-worth," and the "self enhancement motive" (Rosenberg et al., 1989). As noted earlier by Hart and Hilton (1988),

impulsivity is a trait of many adolescents involved in unwanted pregnancy. Impulsivity is also a trait characteristic of delinquents. Rosenberg et al. found that low self esteem fosters delinquency and that delinquency may enhance self esteem. The effect of self esteem on delinquency is stronger in the higher than in the lower Socio-Economic Status (SES) group, but significant in both. On the other hand, the effect of delinquency on self esteem is stronger in the lower SES group than in the higher.

Rosenberg et al. refer to Kaplan (1975):

. . . youngsters with low self esteem have frequently undergone unsatisfactory experiences in the conventional society-experiences that have created painful feelings of doubt about their self-worth. Seeking to alleviate these feelings, many turn to the delinquent group to enhance their self esteem. The delinquent group provides more favorable reflected appraisals, social comparisons, and self attributions. (p. 1006)

In essence, the youngster compares better with deviant peers in deviant activities than conventional peers and activities. However, self-esteem is not consistently viewed as a predictor of delinquent behaviors.

According to Dryfoos (1991), low self-esteem, no matter how it is measured, does not emerge as a predictor of high-risk behaviors. The inconsistency in this area does not support the use of programs which boast that they raise self esteem as they are not likely to be addressing underlying problems.

Locus of Control is also related to reduced chances of teen pregnancy (Landry, 1986). An internal locus of control, implying the ability to plan and contribute to one's future results in a better attitude towards life and contributes to less sexual activity and better use of contraception. Attitudes toward pregnancy seem to be related to external forces such as living away from home and having a best friend who had been pregnant.

According to Joshi and Battle (1990) two cross-sectional studies did not find any difference in locus of control between fathers and non-fathers. However, in one of the studies involving 48 African-American, unmarried adolescent fathers, it was found that in comparison to non-fathers, fathers were more likely to be externally oriented, irrespective of educational status. Williams-McCoy and Tyler (1985) concluded that adolescent fathers are likely to be less trusting than nonfathers and a correlational analysis suggested that those fathers who were less trusting had an external locus of control.

Sexual Beliefs

Adolescent pregnancy is a problem which is affecting all of society (Hart & Hilton, 1988; Loewenstein & Furstenberg, 1991). It effects aspects of our everyday lives such as health insurance and taxes because many adolescent mothers receive ADC and cannot afford to work. Society also faces

the issue of adolescent mothers, still babies themselves, raising babies; limited parenting skills conducive to healthy development; and the immature adults that are often the result. It is a trend that tends to pass from generation to generation and from friend to friend, considering that the majority of adolescent teens who become pregnant have a close friend or adolescent relative who is also pregnant, or were born to teen mothers themselves (Barnett et al., 1991). Data indicate that current policies in sex education and adolescent birth control services are not equal to the level of public support (Reichelt, 1986). It is argued that more and better contraceptive services and sex education for teenagers are important policies that would be supported by the American people. In spite of the sex education currently available in the schools, the access to contraception, and the strong campaign for abstinence, over one million adolescent girls become pregnant every year (Moyse-Steinberg, 1990). Many belief factors are found to contribute to adolescent birth control use, including feelings about contraception, personality traits, attitude, acceptance of one's own sexuality, knowledge of contraceptive methods, and feelings about the consequences of unwanted pregnancy.

Luker's (1975) Theory of "Contraceptive Risk-Taking" is utilized in Loewenstein and Furstenberg's (1991) study, with its premise on decision-making processes. In the development

of his theory, Luker attempted to reconstruct subjects' values and beliefs at the time they became pregnant.

Loewenstein and Furstenberg showed that young adolescents may not have developed the logical operational thinking necessary to recognize choices of abstaining and using contraception.

In addition, he recognized young adolescents' sexual encounters as infrequent and unpredictable. Spontaneity was an important factor. The decision theoretic framework has many positive features but falls short in relation to adolescent pregnancy because teenagers do not behave in a calculating manner but are impulsive and reactive. Sexual behavior, whether for adults or adolescents, does not lend itself to strict rationality. Contraceptive choice in the decision-making theoretic is associated with suboptimal behavior (Loewenstein & Furstenberg). Benefits of birth control use are probabilistic (pregnancy is a chance in itself), pregnancy is a delayed price to pay and the cost of birth control is immediate and certain. Overall results supported the utility of a decision-making approach, particularly for sexual activity.

Personality traits are found to be related to chances of an adolescent pregnancy and birth control use. Hart and Hilton (1988) conducted a study using many different assessment methods providing useful insights regarding personality. Pregnant adolescents anticipated that they

would now be a "woman" and have something that was all theirs, belonging to no one else. Generally, pregnant adolescents were deficient in emotional development and had low impulse control. The issue seems to be a longing for someone to love, and someone to be loved by. Non-birth control users demonstrated an internal struggle to acknowledge their sexually active status while reconciling differences with church and family values. Also, they tried to recognize, anticipate, and experience a sense of personal responsibility for the consequences of their actions. An examination of the non-birth control users super ego suggests deficiencies in the development of an internalized value system. They externalize conflict, do not deal with guilt, and rebel against church and family. Hart and Hilton noted that these non-birth control users were confused with how they could reconcile their wish for autonomy while gaining approval from their families and separating from parental values. As a whole this group was in a vigorous struggle. Birth control subjects gave answers on the Rorschach using Friedman's Developmental Level Scoring System (Friedman, 1960) reflecting their capacities for adult identification, inner living, self reliance, and self insight. They also demonstrated better ability to integrate their impulse life in the wake of future goals (Hart & Hilton, 1988).

The birth control group related Thematic Apperception Test (Murray, 1943) stories which expressed more conflict, guilt, anxiety, depression, ambition and disillusion than any other group (Hart & Hilton, 1988). They interpreted this to mean that it is not that individuals with higher levels of ego development have less conflict, but that they have resources to deal with and tolerate strong affective experience while advancing in development. Older adolescents who are sexually inactive are characterized by conventional attitudes, constricted affective states, immature object representations, primitive defense structure, and faulty superego development. In addition, inactives' inability to resolve life's conflicts without authoritative direction leaves them vulnerable to unprotected sexual encounters.

Overall, teens at risk for unwanted pregnancy have low tolerance for frustration and tend to be both high on impulse and unable to relate intimately with peers and adults (Hart & Hilton, 1988). Friedman's Developmental Scoring System on the Rorschach shows that the birth control users have higher cognitive maturity than any other group (Friedman, 1960). Hart and Hilton's findings corroborate past research which has shown that this group is at higher levels of ego-development, consistently showing high levels of differentiated, complex levels of psychic organization.

This author's review of the literature showed attitude to be very important in determining adolescents who might be at risk for unwanted pregnancy. Loewenstein and Furstenberg (1991) found the most important variables influencing sexual activity were attitudes about the best age to first have sex and beliefs about the sexual behavior of peers. In relation to birth control, attitudes toward contraception counted most. Hanson et al. (1987) found that going steady was strongly related to pregnancy, increasing childbirth by 121% for Whites and 91% for African-Americans. These percentages validate parental concern regarding going steady. Parental concern, as it effects the adolescents behavior, is found to be mediated by well disciplined behavior, going steady, and educational expectations.

Educational expectations appeared to influence child bearing indirectly through attitudes on out of wedlock child bearing (Hanson et al., 1987). Women who attach less importance to school or work or do not feel they have educational or occupational opportunities tend to have earlier first births. In addition Hanson et al. notes that research shows that pregnancy rates are higher for teens from disadvantaged families. These teens feel they have few options in life with limited opportunities. Frequently their family includes other members who have experienced early pregnancy.

Overall, research has found a positive relationship between birth control use and one's attitude and acceptance of one's own sexuality. Also, acceptance by friends and family of birth control and their knowledge of it's use increase contraception (Loewenstein & Furstenberg, 1991). Logistic regression analysis, using a sample of 124 sexually active females, found that adolescent pregnancy status was a function of a combination of demographic and familial variables. Subjects who were pregnant at the time of the study perceived their families as having low levels of family strength, perceived communication with parents as closed, came from homes characterized by family fragmentation, were from low income households, were unlikely to use any method of birth control, and were more likely to be married than non-pregnant counterparts (Barnett et al., 1991).

Utrainen (1989) conducted a survey of sexual behavior and attitudes among two thousand six hundred 13, 15, and 17 year olds in Finland. This survey showed that they had fewer adolescent pregnancies than most Western societies. This finding is attributed to the availability of comprehensive social welfare services, Finland's tradition of understanding the problems of adolescence, and a greater tolerance of early sexuality. This finding would certainly support the notion that the focus of education regarding birth control should be realistic about sexual activity and not use abstinence as the

method of choice. As Conger (1988) noted, present society has failed to provide an effective model for young people and that current social values have fostered a neglect of the needs of America's families. In other words, what is currently in place is not working.

Scott, Schiffman, Orr, Owen, and Fawcett (1988) conducted a study which concluded that sexuality knowledge among adolescents is generally colored with misconceptions and misinformation, such as beliefs that the pill is harmful to a females health, that various contraceptive methods cause harm to the baby, can cause death of the infant or mother, deformity of the baby, and can cause infertility. One minority woman said that the doctor puts the diaphragm up you and it gives you cramps. She also believed that you have to go to the hospital to get it out. Other subjects thought the diaphragm could get stuck or burst. Comments about other birth control methods included, "the pill kills the egg," "a douche washes the baby out," "the pill kills the sperm," "the IUD can catch on the babies foot," and a condom "stops circulation to the penis." When asked to name a negative thing about contraception, a majority of the sample, 100% of Hispanic males, 53% Hispanic females, 80% African-American males, and 71% African-American females, were able to name something. This supports societal notions that birth control is associated with negative thoughts. When asked to name

good things about birth control, a majority of African-American teens (92% boys, 54% girls) named at least one element. In contrast, only 42% of Hispanic males and 39% of Hispanic females could name anything good.

Reis and Herz (1989) reported paradoxical findings. Although adolescents are generally aware of birth control methods, they typically delay use for 12 months subsequent to initiating intercourse even though 50% of unplanned teen pregnancies occur within the first six months of becoming sexually active. Actually, this finding does not seem so paradoxical as it does causative; logically these pregnancies would not be occurring if birth control were being used from the initiation of intercourse.

The findings regarding adolescent knowledge and beliefs about birth control are not hopeful. Clearly the knowledge is both not accurate and not sufficient. Inaccurate information and a lack of responsibility are clearly major areas of concern. The practice of preaching abstinence as the only form of pregnancy prevention, in the face of these statistics, will not stop the behavior.

Girls are taught to look out for themselves and be prepared (Luker, 1975). Loewenstein and Furstenberg (1991) supported the reality that adolescent males do not feel it is their responsibility to be contraceptively prepared. One of the things society overlooks when preaching preparedness is

the social costs and stigma associated with the plan. As Luker noted, there are consequences. A boyfriend may think his girlfriend is promiscuous for being prepared. Also, by being prepared she risks giving the illusion that she views the date as a pre-planned sexual encounter. Loewenstein and Furstenberg also showed that whether or not birth control was thought to detract from the encounter was largely related to use at both last and very first intercourse. Embarrassment about birth control was related to sexual activity, but only weakly to use at last intercourse. Surprisingly, a weak relationship was found between the efficacy of birth control and use.

Communication About Sexuality

Treboux and Busch-Rossnagel (1990) found that for males, regardless of virginity status, the paths of influence remained consistent with parents seemingly more influential than friends in determining sexual attitudes and behaviors. Discussion with parents proved to be a positive direct influence on sexual behavior for virgin males and on contraceptive use for nonvirgin males, suggesting that parents are accepting of sexuality in their adolescent sons. These results support the double standard which is still operative in socialization of sexuality. If you are female, don't do it; but if you do, don't tell us. This is conflicting in light of the findings that male adolescents

place the responsibility for birth control with the female, and that females do the same.

Loewenstein and Furstenberg (1991) and Barnett et al. (1991) focused on communication among family and school as a variable in adolescent pregnancy. The findings are inconclusive. Loewenstein and Furstenberg found communications from parents correlated positively with whether the respondents had ever had intercourse, where Barnett et al. found parent-adolescent communication as unrelated to use of birth control and onset of coital activity. Barnett et al., in their study of familial correlates, found that pregnant adolescents reported communication patterns with their parents as being more problematic than non-pregnancy counterparts. He also found conflicting evidence that those who received education on sex and contraception from home and school were more likely to delay sex and use contraception. As mentioned earlier, Treboux and Busch-Rossnagel (1990) found that parents were more influential than friends for male adolescents in determining their sexual attitudes and behaviors.

Some studies showed that pregnancy could only be understood when contextual factors were taken into account, suggesting occurrences as situational (Barnett et al., 1991; Loewenstein and Furstenberg, 1991). Loewenstein and Furstenberg found that teens living with household members

who receive welfare are more likely to have had intercourse within the past four weeks and less likely to have used contraceptives at that time or their first time than teens who do not live in households with members who receive welfare. Barnett et al. found that pregnant adolescents were more likely to be married than non-pregnant counterparts, more likely to live in low income housing and come from single or no parent homes. He did not differentiate if these girls became pregnant or married first, or if they were low income before their marriage and/or pregnancy.

Empirical research indicates that irresponsible sexual behavior is frequently associated with family behavior which is maladaptive, inconsistent, and noncohesive (Barnett et al., 1991). These behaviors in the home produce a host of problems. Ironically, homes with babies raising babies are frequently of a maladaptive nature, continuing a never ending cycle. Hanson et al. (1987) found that parents who show more concern and have higher educational expectations for their children reduce the risk that an adolescent pregnancy will occur by a significant 36-42%. Families who are unable to cope with stress and changes may raise their children to have low self esteem, poor self image, and weak ego strength. Frequently these factors lead individuals to earlier sexual involvement.

Families who do not promote emotional strength and connectedness may create feelings of social and emotional isolation which can be somewhat compensated for through sexual activity (Barnett et al., 1991). It is important for families to encourage individual expression, and those that thwart it may be unwittingly pushing their children into irresponsible sexual activity. Sex becomes one part of the adolescents life where they enjoy private expression and are reinforced.

Families have to be able to deal with the issue and the changes their children experience as they approach adolescence (Barnett et al., 1991). Parenting styles that are very lenient, where dating and social activities are not monitored, are also at risk. On the other side of the coin, overly strict parents who exercise a high degree of control are also at risk of contributing to adolescent pregnancy. Rigid families are at the highest risk because of their inability to adjust to changes within the family. The ideal parenting style appears to be families who exercise moderate control over the individuals.

Adolescent pregnancy can be a symptom of a families dysfunction in adjusting to changes brought on by adolescence. Family stress, strain, and conflict in general may be factors as well as the parent-adolescent control strategies which are in place.

Responsibility

Herz and Reis (1987) found that males indicated a willingness to have intercourse, regardless of the contraceptives used, if any. These males believed responsibility for use of a birth control method belonged to females. Few seventh grade boys felt it was their responsibility to use a birth control method. For those males, opinions as to where contraceptive responsibility should lie divided between the female partner (62%), both parties (4%), and no one (32%). Same age girls concurred with the male's assessment that the burden to be responsible for contraception was their own.

Half the seventh and eighth grade females attributed contraceptive responsibility to themselves only, while one third felt both they and their partners should use some method of birth control (Herz & Reis, 1987). Over half the seventh and eighth grade males believed their girlfriends should use contraception. Only one-fourth of the eighth grade males favored mutual responsibility for contraception. One-third of the seventh grade males indicated that neither they nor their partner should use birth control.

Reis and Herz (1989) continued to support both the developmental theory approach and the lack of perceived responsibility for contraception. They found that the majority of 13 year old boys were similar to older adolescent

males in their attribution of having no responsibility for using birth control. Boys accepting responsibility for birth control differed from the larger male group with their relationships between satisfaction with self, self worth, and acceptance of sexual intercourse. Contraceptively irresponsible teens as compared to contraceptively responsible teens were less knowledgeable about human sexuality, were less independent from rules, attributed decision making for an adolescent pregnancy to someone other than themselves, and were more willing to engage in sexual intercourse.

CHAPTER 3

METHODOLOGY, RESULTS, AND ANALYSIS

This chapter contains both information about the subjects, instruments, and methodology employed in this study, and the results and analysis. The chapter proceeds from a discussion of the sample characteristics.

Subjects

According to Oyserman and Markus (1990) juveniles represent only 6% of the population, yet juveniles under 18 account for over 30% of arrests for serious crimes. Although juveniles are overrepresented in arrest statistics, researchers asking for self reports of juvenile criminal activity (with or without arrest) have found that a surprisingly large number of teenagers engage in delinquent activity. In addition, 60% of youth report beginning and ending their delinquent involvement within one year. These statistics support the generalization of delinquent characteristics as being possessed by many youth in the community, not just those that are adjudicated. Therefore, the population used for this study was a State Training School in the midwest.

The setting of the institution is for structured treatment of 185 adjudicated males between the ages of 12 and 18. The average age at time of admission is 16.4 years. Seventy-two percent have felony convictions, they average

over five out of home placements, and average length of stay at the Training School of 7.5 months. Fifty-seven percent qualify for special education. Over 50% come from single parent homes, have numerous experiences with drugs and alcohol, and have an extensive arrest record stretching over at least two years prior to commitment.

The subjects were those students attending first period, Life Transition instruction, which automatically excluded individuals in the Receiving Unit who are court ordered evaluation students and do not attend regular classes. In addition, individuals who were believed to have sufficient reading difficulties as not to understand the questionnaire were excluded. And finally, incomplete data sheets resulting from discontinuation from regular school attendance were removed. School attendance is disrupted from population movement due to detention, runaway, hospital stay, and court appearances. The results yielded 100 respondents, 72 non-fathers and 28 fathers, which constituted 66 percent of the resident population at the time of the study.

Instruments

The instruments used include a Health Belief Model Survey (HBMS, see Appendix A) which contains 35 randomly selected items, with 5 items added to assess information regarding family communication, openness with sexual issues, and fatherhood. The alpha range of these constructs is from

.35 to .73 (Eisen, Zellman, & McAlister, 1992). Internal-consistency reliability estimates for each construct support the five Constructs as being sufficiently reliable for making group comparisons ($\alpha > .50$).

Serious Affective Consequences of Pregnancy

4. A young girl's pregnancy can really hurt her parents.

6. If you had unprotected sex, how worried might you be if you or your partner got pregnant?

12. An abortion is a pretty simple medical procedure but it can affect how you feel for a long time.

13. With AIDS/STDS getting more common all the time, a teenager who worries about it is realistic.

17. Even though a girl may not think so now, becoming a teenage mother can make it very hard to do all she'd like to do later in life.

27. Getting married may seem like an easy way to solve an unplanned pregnancy, but a teenage marriage may be more trouble than it is worth.

35. Even though an abortion may be pretty easy to get, the decision to have one is often difficult and painful.

Serious Pregnancy Resolution Consequences

9. If a teenage girl has an unplanned pregnancy, it's not a problem since she can raise her baby alone.

21. Unplanned pregnancy is not worth worrying a lot about because it can be taken care of pretty easily with an abortion.

33. If a guy gets a girl pregnant, it's not a big problem since then partners can always get married.

Benefits of Effective Birth Control Use

7. If a guy has contraceptives available, a girl is more willing to agree to sex.

8. If you use it the right way, contraception makes pregnancy less likely to happen.

15. There is not much point in using over-the-counter birth control methods (like condoms, foam)-- they really aren't that good at preventing pregnancy.

19. It's always a good idea to carry contraceptives because then you can always have protected intercourse.

20. I believe contraception is an important part of responsible sexual behavior.

23. Using a contraceptive to prevent unplanned pregnancy is a good thing to do.

24. You can feel pretty sure that you won't get pregnant if you use contraception every time you have sex.

Interpersonal Benefits of Birth Control Use

10. The use of contraception improves a relationship.

14. If a girl uses birth control, her partner will know she really cares about herself.

28. If a male uses birth control, his partner knows he really cares about her.

31. If a girl uses birth control, her partner will think she's pretty smart.

34. If a guy makes sure that one of them is using contraceptives, his partner knows he really cares about her.

Barriers to Birth Control Use

1. Sometimes it seems that when you try to prevent problems, it is more trouble than it is worth.

2. If my girlfriend wanted to have sex but I didn't, I would find it pretty hard to say no.

11. The side effects of the good birth control methods are real problem.

16. If I wanted to get a good method of birth control, I know where to get it.

18. I would feel pretty comfortable talking to a sexual partner about birth control.

25. I have no religious or moral objection to contraception.

26. The use of contraceptives makes sexual intercourse seem dirty.

29. The whole idea of birth control is embarrassing to me.

30. It can sometimes be important to show your love by taking a chance on getting pregnant.

32. Having contraceptives with you makes sexual intercourse seem less romantic and exciting.

The Piers-Harris Self-Concept Scale for Children is an 80 item, self report questionnaire designed to assess how adolescents feel about themselves (Piers, 1984). The reading level of this instrument is at the third grade level, which was very good for this population. Many studies have been conducted to assess the test-retest reliability of the Piers-Harris, with a range of .42 to .96 (median .73). Also, several studies have investigated the internal consistency. Using the Kuder-Richardson Formula 20 (KR-20), estimates range from .88 to .93. The Piers-Harris was used in this study to determine how this particular group of adolescents feel about themselves. The research on self esteem has been contradictory. According to Oyserman and Markus (1990) and Dryfoos (1991), self-esteem alone is not a powerful predictor of high risk behaviors such as delinquency. Because of this, an additional instrument was added to assess locus of control.

The Nowicki-Strickland Locus of Control Scale for Children (see Appendix B) is a 40 item yes-no instrument which is described as being readable at the fifth grade level. Many studies have been done supporting the reliability and validity of the Nowicki-Strickland Scale (Nowicki, 1976; Nowicki & Strickland, 1973). Unruh, Cronin,

and Gilliam (1987) found the Nowicki-Strickland and The Intellectual Achievement Responsibility Scale to correlate well with one another. Nunn (1987) found concurrent validity between Nowicki-Strickland and the Behavior Rating Profile: Home, School, and Peer Scales (Brown & Hammill, 1978).

Additional items were added to acquire fatherhood status, level of comfortableness when communicating about sexual issues, and feelings of personal responsibility.

Procedures

The surveys (HBMS, Nowicki Strickland Locus of Control Scale for Children, and the Piers-Harris Self-Concept Scale for Children) were delivered to the Training School by the researcher to the Principal and instructions for administration were discussed. The Principal then scheduled a meeting with all of the teachers and instructed them on what days they would be distributing the surveys to the students. Each teacher was instructed to develop a method of ensuring each student used the same scoring sheet on each day while maintaining anonymity from the researcher.

The first page of the packet was the Consent form guaranteeing anonymity. The Consent form also explained that participation in the study was voluntary.

The instructions were at the top of the first page of the survey. The teachers read the directions, telling

students to fill in the corresponding number for their answer onto the IBM answer sheets. The instructions for the Nowicki-Strickland and the Piers-Harris were further elaborated by explaining to the students that they were to fill in "A" for yes and "B" for no. Some teachers wrote the A and B at the top of the columns on surveys for students who they felt needed special assistance. Additional help was provided as deemed necessary by the teachers to meet the needs of each student. Because of the wide range of abilities and ages among students in the classrooms, standardized instructions were not provided. Both the researcher and the Principal of the institution felt it was necessary for the teachers to provide instructions at the levels most helpful to individual students.

The surveys were administered throughout a one week period. The researcher was not told of the exact dates, but was notified upon completion of the surveys. The researcher returned to pick up all materials.

Results and Analysis

Of the 100 cases processed, four cases had at least one missing discriminating variable, leaving 96 cases to be used for output.

A stepwise method discriminant analysis of the two scales, constructs from the HBMS, and the two added constructs (communication and responsibility) was undertaken

with the raw scores on the Nowicki-Strickland Locus of Control Scale, raw scores on the Piers-Harris Self-Concept Scale, and the mean construct scores for both the HBMS and the two added constructs as the discriminating variables and group membership as the dependent variable. The resulting discriminating equation accurately predicted group membership for 63.54% of the cases (59.3% for fathers and 65.2% for nonfathers, see Table 1).

Table 1

Classification Results

Actual Group	No.of Cases	<u>Predicted Group Membership</u>	
		1	2
Group 1 YES	27	16 59.3%	11 40.7%
Group 2 NO	69	24 34.8%	45 65.2%

The Nowicki-Strickland Locus of Control Scale, the constructs communication and responsibility, and Serious Pregnancy Resolution Consequences fell out of the discriminant analysis because their *F* values were insufficient for further computation.

Discriminant coefficients, Wilks' Lambda, F values, and p values are provided in Table 2 for the five primary constructs. The discriminant analysis showed three constructs to be significantly predictive of group membership.

The construct score most strongly predictive of group membership in the discriminant function was Construct 1, Serious Affective consequences of Pregnancy (coefficient of $-.83$). The fathers had a higher mean score than the nonfathers indicating a difference between the attitudes of the two groups in terms of consequences such as teen pregnancy and teen motherhood.

The next strongest predictor of group membership was Construct 5, Barriers to Birth Control Use (coefficient of $.81$). The nonfathers had a higher mean score in this area, indicating another difference between fathers and nonfathers. These differences support the notion that nonfathers do not see barriers to birth control use such as side effects and embarrassment.

Construct 3, Benefits to Birth Control Use is the third strongest predictor of group membership (coefficient of $.65$). Again, the nonfathers had a higher mean score than the fathers. The higher mean score on this construct suggests differences in feelings about carrying, introducing, and using birth control in sexual situations.

Table 2

Wilks' Lambda, F values, p values, and Discriminant Coefficients

Construct	Wilks' Lambda	F value	p value	Discriminant Coefficient
Piers-Harris	.94	5.49	.02	.44
Construct 1	.86	4.77	.003	-.83
Construct 3	.83	4.47	.002	.65
Construct 4	.80	4.17	.001	-.48
Construct 5	.90	4.67	.01	.81

The results of the discriminant analysis showed the nonfathers to be higher on both Barriers and Benefits to birth control use as significant in predicting group membership. This implies that while nonfathers do not perceive barriers to birth control use, they do not see benefits to being prepared or introducing birth control into a sexual situation.

The fathers scored higher on Serious Affective Consequences of Pregnancy which was found to be the strongest predictor of group membership. This suggests much more tolerance for teenage marriages, teen girls raising babies alone, and less emphasis on fear of AIDS/STDS and conception.

Also found to be significant, although less than those previously mentioned, are the raw scores on the Piers-Harris and Construct 4, Interpersonal Benefits to Birth Control Use. The nonfathers scored higher on the Piers-Harris indicating higher self esteem. Overall, this group feels better about themselves. This finding somewhat contradicts the literature suggesting that self-esteem is not related to participation in high risk behaviors. It should be noted, however, that both fathers and nonfathers had mean Piers-Harris scores below the mean of the norm sample (fathers $x = 48$, nonfathers $x = 54$, norms $x = 59$). The fathers' mean score was higher on the Interpersonal Benefits than the nonfathers, suggesting that they disagree that birth control use is able to improve a relationship and that it is a smart thing to do. The differences between fathers and nonfathers in their attitudes towards birth control may reflect the experiences of the fathers who may be more sexually active and more comfortable with communicating with girlfriends.

CHAPTER 4
DISCUSSION, IMPLICATIONS FOR
FUTURE RESEARCH AND POLICY

Discussion

The fathers and nonfathers appeared more similar than different, which may be a result of the sample's nature. The findings of the discriminant analysis are conflicting. Two of the constructs measured which were predictors in group membership, Barriers and Benefits to Birth Control Use, although somewhat opposite in content, had higher mean scores for nonfathers. In terms of the research, this supports findings that knowledge and efficacy of birth control do not imply use of that knowledge (Hanson et al., 1987).

The lower mean score of the fathers is indicative of feeling that preventing problems can be more trouble than it is worth, side effects of birth control can be unpleasant, and saying no to an unwanted sexual encounter would be hard to do. At the same time fathers were more agreeable to statements concerning carrying contraception with them all the time. The nonfathers believe birth control is effective, and they do not think that always being prepared is consent or reason to have sex. However, the nonfathers disagreed with statements that it is smart to be prepared and carry contraception. From this information, it could be

hypothesized that experience is a stronger determinant of birth control use, if we assume that the fathers have more of both sexual and relationship experience. Because questions were not asked regarding rate of sexual activity, the above must remain as speculation.

Another possible explanation for fathers depicting the use of birth control as positive in a relationship is hindsight. Perhaps they are realizing that things could have been different in their lives if they had made different decisions. Their prior experience in relationships may prevent them from seeing birth control as implying that one cares about their partner; adolescent relationships are irrational and high in emotional energy (Loewenstein & Furstenberg, 1991).

The construct Serious Affective Consequences of Pregnancy had a higher mean score for fathers. This is logical since it appears to be what is behind the decisions that made these youths fathers. They do not see problems with teen marriages, sacrificing education, risking disease transmission, or worry about the possibility of pregnancy.

The Nowicki-Strickland Locus of Control Scale (Nowicki & Strickland, 1973) did not contribute in the stepwise analysis. Part of this may be because, overall, the delinquent population had a more external orientation than the norm. However, it would seem that the responses to the

serious affective consequences of pregnancy represent external thought. For instance, a lack of concern that a pregnancy will in fact occur or that AIDS/STD's can occur suggest a lack of control over the future. It is possible that the absence of a significant difference between groups is attributable to the homogeneity of the sample.

Self-esteem was higher among the nonfathers; they feel better about themselves. Low self esteem among fathers may contribute to their need for fatherhood status to give them a purpose to feel good about themselves, as a "motive for self-worth" (Rosenberg, 1989, p. 1006).

The construct of Interpersonal Benefits of Birth Control Use had higher means for the fathers than nonfathers. This difference shows the fathers as disagreeing that the use of birth control implies that you care about yourself, your partner, or that you think using birth control is smart. Again, the nonfathers see the use of birth control as a positive part of a relationship.

The constructs of responsibility and communication did not contribute to the discrimination. In order to better assess the contribution of these factors in the future, a more lengthy assessment instrument in these areas might provide more accuracy concerning their significance.

The research question is answered through the discriminant function. The result is a linear combination of

variables that predict group membership for fathers and nonfathers using Serious Affective Consequences of Pregnancy, Barriers to Birth Control Use, Benefits to Birth Control Use, Interpersonal Benefits of Birth Control Use, and scores from the Piers-Harris Self Concept Scale. Successful classification using these variables occurs 63.54% of the time.

Implications for Future Research

The research points to many areas for further research including the role of adult males fathering teen pregnancies, birth control practices of teen girls utilizing both teen and adult male groups, sexual attitudes and beliefs of female delinquent populations, and the role of adolescent males in teen pregnancy. Currently males are being slighted not only in research, but in policy as well. In addition, the areas of locus of control and self esteem produce conflicting results. Using a sample of juvenile delinquents appears to further dilute locus of control and self esteem issues.

One thing which is supported in the research is the growing number of adolescent pregnancies and the dismal futures of those effected. The prognosis is bad for the teen parents themselves, and acutely worse for the innocent babies born to them.

The benefit of being able to discriminate between the two groups of fathers and nonfathers would be a proactive

one. Since this study surveyed adolescents who had already made the decisions getting them to where they are in life, the changes they have experienced may be effecting their responses. If this is the case it might be better (although more difficult, if not impossible) to create a longitudinal study in which a large sample of adolescent males is surveyed for a period of several years, hopefully capturing a portion who become fathers. Surveying a group of expectant adolescent fathers before birth and then at a selected time afterwards might shed light on the changes in perception that occur during the time frame.

The area of juvenile delinquency is interesting because it is a population of individuals who are high in impulsivity and at high risk for engaging in activities leading to early childbirth. The dilemma with this group surrounds their perceived responsibility, cultural values, locus of control, and self esteem. The benefit to focusing on this population is the amount of educational time available while they are incarcerated. During this time they are a captive audience, drug free, motivated to try harder than in the regular school system, and preparing to go back to their neighborhoods and succeed in the system.

Policy Implication

If the United States is looking for policy interventions then they need to focus on appropriate levels of

intervention. It is important that research identify these levels. For example, what might typically be accepted as indicative of high self esteem in the average adolescent may be inverse to high self esteem in a juvenile delinquent. The ways in which this subculture identifies and defines themselves is unique to that group and they are the only ones who can tell researchers that information. Considering that these individuals are at high risk for being involved in teen pregnancy and the statistics regarding adolescent childbirth rates, it is certainly an area needing further research.

Implications for policy involve the incorporation of interpersonal relations in conjunction with birth control use and the further incorporation of that curriculum into the schools. The study demonstrated that knowledge of birth control is not enough, feelings about relationships are important as well. The fathers in the study were less likely to attribute birth control preparedness to demonstrating concern for one's partner. This could be effected by the high adrenalin relationships of adolescents and the self centered nature of these relationships.

In support of the research, self-esteem may not be significant enough to be the target of educational programs (Dryfoos, 1991). It is likely, especially with this population, that there are issues of much more importance to be targeted. These issues are in the areas of communication,

interpersonal relationships, consequences of teen pregnancy,
and life skills.

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APPENDIX A

Health Belief Model Survey

Please fill in your answers on the IBM answer sheets provided. Fill in the circles indicating your answers using a number 2 pencil.

Respond to items 1 through 35 using the following five points unless otherwise indicated:

1- strongly agree 2-agree 3- disagree 4- strongly disagree
5- not sure

1. Sometimes it seems that when you try to prevent problems, it is more trouble than it is worth.

2. If my girlfriend wanted to have sex but I didn't, I would find it pretty hard to say no.

3. If you or your partner used no contraceptives, how likely is it that you/your partner would get pregnant?

1-very likely 2-somewhat likely 3-unlikely 4-very unlikely
5-not sure

4. A young girl's pregnancy can really hurt her parents.

5. If you had unprotected sex, how worried would you be that you or your partner might get AIDS?

1-very worried 2-somewhat worried 3-not very worried 4 -not at all worried 5- not sure

6. If you had unprotected sex, how worried might you be if you or your partner got pregnant?

1-very worried 2-somewhat worried 3- not very worried 4- not at all worried 5- not sure

7. If a guy has contraceptives available, a girl is more willing to agree to sex.

8. If you use it the right way, contraception makes pregnancy less likely to happen.

9. If a teenage girl has an unplanned pregnancy, it's not a big problem since she can raise her baby alone.

10. The use of contraception improves a relationship.

11. The side effects of the good birth control methods are a real problem.

12. An abortion is a pretty simple medical procedure but it can affect how you feel for a long time.
13. With AIDS/STDS getting more common all the time, a teenager who worries about it is being realistic.
14. If a girl uses birth control, her partner will know she really cares about herself.
15. There is not much point in using over-the-counter birth control methods (like condoms, foam)-- they really aren't that good at preventing pregnancy.
16. If I wanted to get a good method of birth control, I know where to get it.
17. Even though a girl may not think so now, becoming a teenage mother can make it very hard to do all she'd like to do later in life.
18. I would feel pretty comfortable talking to a sexual partner about birth control.
19. It's always a good idea to carry contraceptives because then you can always have protected intercourse.
20. I believe contraception is an important part of responsible sexual behavior.
21. Unplanned pregnancy is not worth worrying a lot about because it can be taken care of pretty easily with an abortion.
22. Most teenage couples who don't use contraceptives wind up pregnant.
23. Using a contraceptive to prevent unplanned pregnancy is a good thing to do.
24. You can feel pretty sure that you won't get pregnant if you use contraception every time you have sex.
25. I have no religious or moral objection to contraception.
26. The use of contraceptives makes sexual intercourse seem dirty.

27. Getting married may seem like an easy way to solve an unplanned pregnancy, but a teenage marriage may be more trouble than it's worth.
28. If a male uses birth control, his partner knows he really cares about her.
29. The whole idea of birth control is embarrassing to me.
30. It can sometimes be important to show your love by taking a chance on getting pregnant.
31. If a girl uses birth control, her partner will think she's pretty smart.
32. Having contraceptives with you makes sexual intercourse seem less romantic and exciting.
33. If a guy gets a girl pregnant, it's not a big problem since then partners can always get married.
34. If a guy makes sure that one of them is using contraceptives, his partner knows he really cares about her.
35. Even though an abortion may be pretty easy to get, the decision to have one is often difficult and painful.
36. To my knowledge I have fathered a baby.
1- Yes 2- No
37. If I need to talk to someone about sex, I can talk to someone in my family.
1- Yes 2- No
38. If I need to talk to someone about sex, I can talk to a friend.
1- Yes 2- No
39. I am responsible for birth control.
1- Yes 2- No
40. My girlfriend is responsible for birth control.
1- Yes 2- No

Eisen, M., Zellman, G., & McAlister, A. (1992). A Health belief model-social learning approach to adolescents' fertility control: Findings from a controlled field trial. Health Education Quarterly, 19, 249-262.

APPENDIX B

Nowicki-Strickland Locus of Control Scale for Children

Answer each question by marking either YES or NO. There are no right or wrong answers.

- YES NO 1. Do you believe that most problems will solve themselves if you don't fool with them?
- YES NO 2. Do you believe that you can stop yourself from catching a cold?
- YES NO 3. Are some kids just lucky?
- YES NO 4. Most of the time do you feel that getting good grades means a great deal to you?
- YES NO 5. Are you often blamed for things that just aren't your fault?
- YES NO 6. Do you believe that if somebody studies hard enough he or she can pass any subject?
- YES NO 7. Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
- YES NO 8. Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?
- YES NO 9. Do you feel that most of the time parents listen to what their children have to say?
- YES NO 10. Do you believe that wishing can make good things happen?
- YES NO 11. When you get punished, does it usually seem it's for no good reason?
- YES NO 12. Most of the time do you find it's hard to change a friend's opinion?
- YES NO 13. Do you think that cheering more than luck helps a team to win?
- YES NO 14. Do you feel that it's nearly impossible to change your parent's mind about anything?

- YES NO 15. Do you believe that your parents should allow you to make most of your own decisions?
- YES NO 16. Do you feel that when you do something wrong there's very little you can do to make it right?
- YES NO 17. Do you believe that most kids are just born good at sports?
- YES NO 18. Are most of the other kids your age stronger than you are?
- YES NO 19. Do you feel that one of the best ways to handle most problems is just not to think about them?
- YES NO 20. Do you feel that you have a lot of choice in deciding who your friends are?
- YES NO 21. If you find a four-leaf clover do you believe it might bring you good luck?
- YES NO 22. Do you often feel that whether you do your homework has much to do with the kind of grade you get?
- YES NO 23. Do you often feel that when a kid your age decides to hit you, there's little you can do to stop him or her?
- YES NO 24. Have you ever had a good luck charm?
- YES NO 25. Do you believe that whether or not people like you depends on how you act?
- YES NO 26. Will you parents usually help you if you ask them?
- YES NO 27. Have you felt that when people were mean to you it was usually for no reason at all?
- YES NO 28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
- YES NO 29. Do you believe that when bad things are going to happen they just are going to happen no matter what you try to do to stop them?

- YES NO 30. Do you think that kids can get their own way if they just keep trying?
- YES NO 31. Most of the time do you find it useless to try to get your own way at home?
- YES NO 32. Do you feel that when good things happen then happen because of hard work?
- YES NO 33. Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?
- YES NO 34. Do you feel that it's easy to get friends to do what you want them to do?
- YES NO 35. Do you usually feel that you have little to say about what you get to eat at home?
- YES NO 36. Do you feel when someone doesn't like you there's little you can do about it?
- YES NO 37. Do you usually feel that it's almost useless to try in school because most other children are just plain smarter than you?
- YES NO 38. Are you the kind of person that believes that planning ahead makes things turn out better?
- YES NO 39. Most of the time, do you feel that you have little to say about what your family decides to do?
- YES NO 40. Do you think that it's better to be smart than lucky?

Nowicki, S., and Strickland, B.R. (1973). A locus of control scale for children. Journal of Consulting and Clinical Psychology, 40, 148-154.