

## PREVENTING TEEN PREGNANCY BY AVOIDING RISK EXPOSURE

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*Abstract: The purpose of this research was to generate a substantive theory that explains how rural adolescent females think about teen pregnancy and how this influences their sexual choices. Grounded theory methods were used to analyze data collected from 20 adolescent females. The participants lived in risk-promoting environments. They saw beyond the immediate appeal of risky behaviors and avoided risky situations because they appreciated positive input from others, desired future success, heard encouragement from "point persons", owned the consequences of choices, and believed in themselves. The theory created promotes adolescent health by emphasizing future success as an alternative to teen pregnancy.*

### BACKGROUND

The US has the highest teen pregnancy rate of all industrialized nations with one out of three adolescent females becoming pregnant during her teen years (The National Campaign, 2008). The rates of pregnancies, births and abortions in the U.S. are increasing (Kost, Henshaw, & Carlin, 2010) and these rates are higher in rural communities, particularly among younger teens in the Southeastern U.S. Socioeconomic and educational levels are lower in rural communities and rates of poverty are higher, with teen pregnancy a contributing factor. One way to decrease persistent child poverty is to prevent teen pregnancy (Hoffman, 2006). Health educators have unique opportunities to promote the well-being of adolescents through the development of creative teen pregnancy prevention strategies. Gaining insight from teens that live in environments with unusually high teen pregnancy rates could be helpful in this endeavor. The purpose of this grounded theory research was to generate a substantive theory to explain how adolescent females living in a rural community with a high teen pregnancy rate think about teen pregnancy and pregnancy prevention and how these thoughts influence their choices about sexual activity.

### SIGNIFICANCE

Teen pregnancy often results in hardships for teen parents, their children, their communities, and society. Early pregnancy increases the risks of complications for both teens and their infants, often leading to increased morbidity and mortality and large financial expenditures (Gilbert, Jandial, Field, Bigelow, & Danielsen, 2004). Children born to teen mothers are more likely to be premature and under-weight,

increasing their risks for hyperactivity, blindness, deafness, chronic respiratory problems, infant death, and mental retardation (Terry-Humen, Manlove, & Moore, 2005). Rates of abuse and neglect are higher for children of teen parents and these children are 50% more likely to repeat a grade in school, perform lower on standardized tests, and they are less likely to complete high school (Terry-Humen, et al., 2005). Sons of teen mothers are 13% more likely to go to prison and daughters are more likely to become teen parents themselves (Hoffman, 2006).

In teens ages 15 to 19, Florida ranks 12th in the nation for the highest rate of pregnancies, 21st for the highest rate of births, and 9th for the highest rate of abortions (Kost, Henshaw, & Carlin, 2010). In 2007, the rural south Florida community where this research was conducted had a teen birth rate that was double that of the state and has had one of the highest birth rates of younger teens (13 to 14) for the last several years (Florida Department of Health, 2009). While many community leaders and educators in the Southeastern US are concerned about the high rates of teen pregnancy, they also tend to prefer abstinence-only educational perspectives, especially in rural communities. As a result, discussing sexual activity freely within a public school environment, in the context of instruction or data collection for research is very difficult. In a prior qualitative study, conducted in this rural community with incarcerated teens, the participants normalized risky behaviors (believed risky behaviors were normal) and, as a result, made high risk sexual choices (Weiss Jampol, Lievano, Smith, & Wurster, 2008). Following the research with incarcerated females, and recognizing the high rates of teen pregnancy in younger rural teens, this study was designed to better understand the choices of younger rural teens.

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## METHOD

### DESIGN

Grounded theory concepts, originally developed by Glaser (1998) and Strauss, were derived from symbolic interactionism (Blumer, 1969). According to this perspective, persons who share similar circumstances are believed to share a common (social psychological) problem that is not readily apparent. In response to this problem these persons develop a (social psychological) process that is also not apparent. Through data analysis, the researcher seeks to uncover and articulate the problem the participants share and the processes they use to deal with the problem.

### RESEARCH QUESTIONS.

- 1) What is the basic social psychological problem faced by adolescent females living in a rural community with a high teen pregnancy rate?
- 2) What basic social psychological process do these females use to deal with this problem?

### SETTING AND SAMPLE

This research took place in a rural South Florida high school, where only ninth grade students attend. Following approval by the Institutional Review Board of the sponsoring university and local school officials, adolescent females were invited to participate. Criteria for participation were: female gender, attendance at the ninth-grade campus, ability to speak English, and a signed parental/guardian consent agreeing to the female's participation. School personnel, particularly the school nurse, assisted by advertising the research and by scheduling the interviews. A convenience sample was used for this research with snowball sampling assistance by some of the participants. Because the researchers initially had difficulty recruiting participants, incentives were provided to increase interest in participation. Adolescents who were interested in participating were given a packet which contained information about the research and two copies of the parental consent. Each female who returned a signed paren-

tal consent form (with or without parental/guardian agreement for participation) was given a \$15 Wal-Mart gift card and her name was placed in a drawing for an iPod. Even though a convenience/snowball sample was used, the demographic characteristics of the participants (shown in Table 1) are similar to the demographics of the rural community where this research was conducted (U.S. Census Bureau).

### DATA COLLECTION AND ANALYSIS

Before each interview the research plan and purpose were explained again and each participant was asked to sign an adolescent assent form. The researcher interviewed each participant separately in a private room at the school, during school hours. With parental consents and adolescent assents, each interview was audio-recorded. The recorded interviews were transcribed by a transcriptionist and proofed by the PI.

The semi-structured interviews were guided by probing questions (see Table 2). Data analysis began after the first interview. The grounded theory methods of data collection, line-by-line theoretical coding, constant comparison and memoing were conducted concurrently. As categories emerged during coding, the findings provided guidance for further data collection. As a result the probing questions were refined to capture emerging relevant data. The findings were compared and contrasted within each interview and among all interviews. This process of data collection and analysis continued until saturation occurred, which required interviews with 20 adolescent females.

Data were coded on three levels. Initially the interviews were coded line by line and then these codes were sorted into categories. During this second level of coding, the core category of "seeing beyond the immediate," became apparent. In the third level of coding, the Theory of Avoiding Risk Exposure by Seeing Beyond the Immediate was fully developed.

Five graduate students, one doctoral student and four master's students, assisted with the initial data analysis. Prior to the initiation of the student participation, the PI instructed these assistants in grounded theory methods and data analysis techniques. The

Table 1. Participant Demographics

All participants were females attending the ninth grade in a rural community

	Age 14	Age 15	Age 16	Total	Ever Pregnant
African American	2		1	3	1
Caucasian	8	1		9	0
Caucasian/Hispanic	1			1	0
Hispanic	3	2	1	6	0
Native American	1			1	0

Table 2 Probing Questions

1. How do you think about teen pregnancy?
2. What do you think it would be like to have a baby as a teen?
3. How do you feel about teens being sexually active?
4. Is there a right or wrong to teens being sexually active? Please explain...
5. Who influences teens the most about being sexually active and about teen pregnancy? How?
6. How do friends (girlfriends and boyfriends) influence teens' choices about being sexually active?
7. How do friends (girlfriends and boyfriends) influence teens' choices about pregnancy prevention?
8. How do family members influence teens' choices about being sexually active? About teen pregnancy?
9. What kind of influences do teachers or other school personnel have on the choices teens make?
10. How do media (TV, radio, videos, magazines, etc.) affect teen choices about sexual issues? About teen pregnancy?

group also reviewed and discussed pertinent articles describing qualitative research techniques and findings. Due to the large group of research assistants, traditional data analysis measures were used, rather than computerized software. Members of the research team coded the data independently and then met together regularly to compare codings, and propose categories. The team worked together until a core variable was identified.

Data collection and analysis were concluded when saturation occurred and the theory fully developed. Trustworthiness, confirmability, credibility and transferability were addressed to assure the rigor of this research (Macnee & McCabe, 2008). Adherence to the established research plan and consistently using the probing questions assures trustworthiness. Comparisons of data analysis until consensus was reached by the members of the research team assure confirmability. Corroboration of the research findings through discussions with other adolescents who were not participants assures transferability. Refining and clarifying the findings based on discussions with other colleagues and researchers with expertise in qualitative methods and/or adolescent health assure credibility.

## Results

While a broad variety of perspectives toward teen pregnancy were sought, the females who chose to participate in this research primarily discussed the importance of avoiding teen pregnancy. In response to the first research question, the problem shared by these participants was living in risk promoting environments. In response to the second question, the process these participants used to deal with the problem of their risk-promoting environments was seeing beyond the immediate appeal of risky behaviors, and avoiding risky situations (see Figure 1.)

### PROBLEM: LIVING IN RISK-PROMOTING ENVIRONMENTS

These participants lived in environments with many risk promoting influences, including ambiva-

lent or positive attitudes toward pregnancy, normalized risky behaviors by peers, examples of others, provocative media, living in a rural community, peer and/or partner pressure, and substance use. One participant described her risk-promoting environment this way, "When I got into 6th grade, people were having sex in the bathrooms and we were hearing about it on TV." Another discussed the influences of peer pressure leading to ambivalence toward teen pregnancy: "That is a form of peer pressure, I see my cousin having fun with her baby and I would be like, 'Oh, that's cute. I can't wait to have children'."

Some of the participants' peers *normalized* risky behaviors. Seeing their examples and the examples of others, including parents, was influential, as one participant explained,

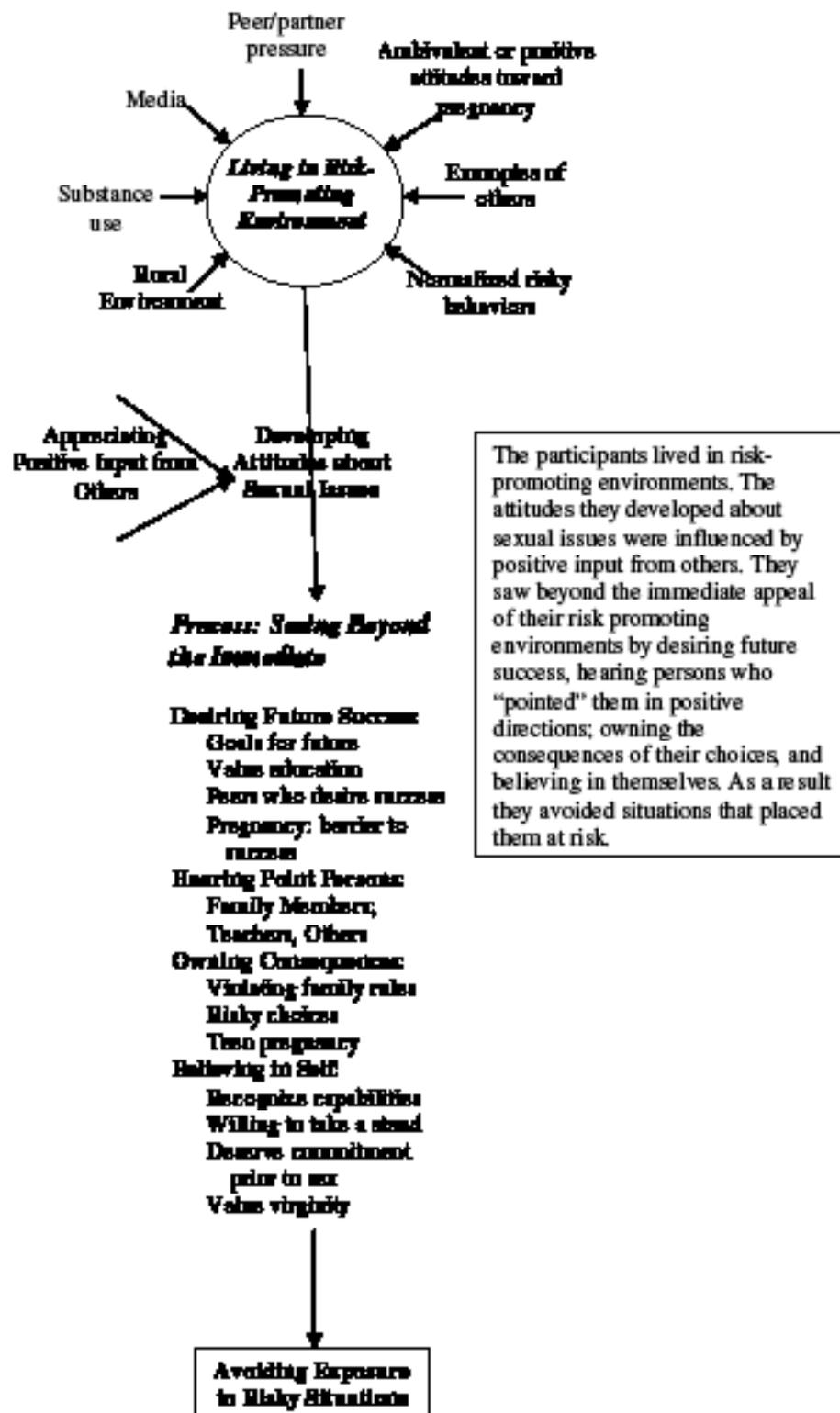
I think that parents are a big influence. If they see their parents going out and doing anything they can, to have sex and have fun, saying it's fun, then they are going to be, "Well, if my parents can do it then why not I do it?" . . . It seems like their parents are having no consequences, so they think that they won't have any consequences. I think parents are probably the biggest influence on teen pregnancy.

### PROCESS: SEEING BEYOND THE IMMEDIATE

The process these participants used to deal with the problem of living in risk promoting environments was labeled "seeing beyond the immediate." The participants in this study saw beyond the immediate appeal of the risky behaviors promoted in their environments because they appreciated positive input from others; desired future success; heard "point persons" (individuals who "pointed" them in positive directions); "owned" the consequences of their choices; and believed in themselves. As a result, they avoided exposure to risky situations.

**Positive input from others.** The participants appreciated positive input from others. Positive input came from family members, other adults, and

Figure 1. Theory of Avoiding Risk Exposure by Seeing Beyond the Immediate



peers, and often promoted safe sexual choices. One participant explained, "The lady that comes here and talks about sexual harassment from Martha's House has talked to us about some things and she's good help."

**Future success.** The desire for future success was powerful in the lives of these females. Most of the participants believed education is key to future success. One female explained: "I want a good job and I want a good salary. I want to be smart and I want to be able to say I went to college and tell my kids that I went to college." Most of the participants saw teen pregnancy as a barrier to future success for teens. One explained this well: "The people that get pregnant early and have all these goals set for their future life; they're not going to be able to accomplish those goals that they want because they have kids..."

**Point persons.** Each participant described one or more individuals who "pointed" her in positive directions. These point persons encouraged the participants to avoid risky situations and often promoted future success. For most, this encourager was a family member. One participant explained this clearly:

My grandmother and my oldest brother are the main ones who really encouraged me to push through and to persevere about what I would like to do. Well technically, my brother's like, I have no choice but to have an education and to go to college.

**Owning consequences.** The females who participated in this study were very aware of the consequences of their choices. According to one participant, "There are a lot of consequences if you have sex." These participants strongly believed they would pay the consequences for violating family rules, disappointing family members, making risky choices, and especially for getting pregnant as a teen. One participant recognized consequences through the examples of her peers who became pregnant, "... seeing that makes me know, I don't need that in my life until I'm older."

The consequences of greatest concern to these participants were the increased time and responsibilities required for child rearing, the likelihood of being abandoned by the teen father following pregnancy disclosure, and the loss of opportunities for further education and success. One participant posed questions related to the consequences she feared if she became pregnant:

Would the teachers look at me differently?  
Would people look at me differently? Is my dad still going to talk to me the way he used to? Is my family going to hate me? Am I go-

ing to get through college? Am I going to do something? Am I going to get out of this small town? Am I going to live with my dad for the rest of my life? It's just all those consequences. Am I going to be alone after this?

**Believing in self.** These participants believed in themselves and their ability to make their own choices. One participant explained this well: "I am my own person; I'm not going to follow the crowd. I am going to have a crowd follow me and make the right choices."

Many of the participants spoke of taking a stand in response to risky opportunities they or their friends encountered. One described her stand in response to pressure from males: "I just tell them, 'Hey, take me for who I am or hit the road.' That's what I believe and, 'If you don't like me and if you just want to date me to have sex with me, then you can leave.'" While not being boastful, many spoke of their own capabilities, and their willingness to be different from their peers because of their beliefs.

**Avoiding exposure to risky situations.** These participants were empowered to avoid exposure to risky situations because they saw beyond the immediate appeal of risky choices. Avoidance was accomplished by staying busy with non-risk-promoting activities such as school and after-school activities, and other obligations. The teens also avoided exposure by being particular about peers and boyfriends and by having friends with similar values. They valued their reputations, their virginity, and condom/contraceptive use, and most expected a commitment prior to sexual intercourse, and childbearing. One participant summed up her convictions:

I have had people say, "Come over to my house, this guy is coming here." I'm like, "I'm not doing that." They're like, "Why not?" I'm like, "Because that's just not me." They're like, "What do you mean, it's not you?" It's like, my goal for myself is to keep myself for that one special person and I don't want to go and blow it while I'm a teenager.

## DISCUSSION

The participants in this research provided unexpected information about teen pregnancy prevention. While adolescents in prior research and clinical practice have spoken freely about the normalcy of risky sexual behaviors placing them at risk for teen pregnancy, these participants spoke more of the consequences. Initially the research team believed that these females were simply young, inexperienced, and/or had not been pressured or had opportunities to be sexually active. However, as more participants were interviewed and data analyzed, this clearly was

not the case. These participants saw beyond the immediacy of risky temptations and avoided risk-promoting situations. The theory that emerged from the data helps explain how some adolescents avoid risky situations, while other adolescents do not.

The participants in this research lived in environments where risky behaviors were prevalent and often encouraged. At the time of their interviews, the attitudes of these participants about sexual issues were well-established. Their attitudes were influenced by positive input from others. Our participants could not explain why they are receptive to positive input, while some adolescents are not.

Each participant spoke of her desire for success in the future, which usually included finishing high school and, for some, attending college. Some of the participants had very specific ideas about their future success, while others only believed that more education would help them obtain better jobs and make more money. They all believed that teen pregnancy would interfere with their success. The desire for future success was a key component of seeing beyond the immediate and a primary reason for avoiding risky situations. Kirby, Lepore, and Ryan (2005) also identified having plans for the future and high educational aspirations as well as high academic performance to be protective from risky sexual behaviors leading to teen pregnancy. Since socioeconomic and educational levels are lower in rural communities than state and national averages and many rural adolescents do not attend college, encouraging rural teens to focus on future success as a pregnancy prevention strategy could be especially significant.

Each participant spoke of one or more specific individuals who "pointed" her in a positive direction which included avoiding risky behaviors, and usually promoted future success.

Point persons, often individuals other than mothers, were individuals to whom these participants turned with questions and concerns. For one teen, her point person was simply, "the lady down the street." These females spoke of point persons with respect and suggested that they provided reliable support, often in brief consistent statements of affirmation, as well as encouragement. Several other researchers have also identified the importance of supportive adults, sometimes identified as mentors, in decreasing risky behaviors (Tevendale, Lightfoot, & Slocum, 2009).

These participants "owned consequences" because they were certain the consequences of their negative choices and those of their peers would ultimately result in negative outcomes. All of these females were certain of serious negative consequences for getting pregnant as a teen. Some viewed these consequences quite simply ("boys won't like me anymore"), while others viewed these more complexly

("I won't be able to go to college and get the job I want."). Most volunteered that desertion by the baby's father was a frequent consequence of teen pregnancy. For some, avoiding the consequences of violating family rules and/or causing family disappointments were also important. Many teen pregnancy prevention strategies focus on increasing teen awareness of the consequences of risky behaviors. For these participants, the consequences were more personal than some healthcare providers might realize. Appreciating consequences from a teen perspective could help educators develop more effective strategies.

These participants believed in themselves and their rights to determine their own choices. "Believing in self" may be similar to self-efficacy, but in this research was focused specifically on avoiding risky situations. These participants believed they could make their own choices about sexual activities rather than being swayed by their peers. Many did not see themselves as leaders and were not particularly self-assertive or self-confident during their interviews.

The components of the Theory of Avoiding Risk Exposure by Seeing Beyond the Immediate seem to be interconnected. These participants wanted to be successful in the future, although each viewed success differently. Point persons helped these females believe they could be successful in the future. These participants exhibited confidence that the consequences of their positive choices would lead to success in the future just as they believed that the consequences of their negative choices would result in failure to achieve their desired success. Their point persons promoted this perspective as well. Also for these participants, believing in their ability to make their own choices was strengthened by their desires for success and their beliefs that following the negative choices of others would have negative consequences. If some of the identified components are not present, the significance of the other components in empowering teens to avoid exposure to risky situations may be weakened. For example, if the desire for future success is not present, perhaps the consequences of negative choices would not seem so significant. Without point persons to encourage them, teens might not believe in their abilities to stand up for their beliefs. If adolescents lose their desire for, and vision of, future success and/or they doubt the consequences of their negative choices, they may be less likely to avoid risky situations, which could increase their likelihood of teen pregnancy.

#### WHY ANOTHER THEORY?

Other researchers have developed theories and used these extensively to guide understanding and research about adolescent sexual decision-making.

The Theory of Reasoned Action (Ajzen & Fishbein, 1980) and later the Theory of Planned Behavior (Ajzen, 1991), have been used effectively, especially in HIV prevention. According to these theories, attitudes or beliefs about a particular behavior, and the influence of other persons, result in intentions to behave in a certain way. A behavior is either performed or not performed because of these intentions, especially when coupled with a perception of control over the behavior. According to Bandura's Social Learning Theory (1997), behaviors are based on observing and modeling the behaviors, attitudes and emotional reactions of others. In Bronfenbrenner's Ecological Systems Theory (1989), behavior is influenced by microsystems, mesosystems, exosystems, macrosystems and chronosystems within individuals' social environments.

While the Theory of Avoiding Risk Exposure by Seeing Beyond the Immediate has similarities with these theories and others, this theory provides helpful insight about how some teens avoid pregnancy. As in many other theories, the instruction, encouragement and examples of other individuals influence adolescent decision making. The influence of the social environment in which adolescents live must be recognized as well. One difference in the Theory of Avoiding Risk Exposure is the emphasis on avoiding risky situations that promote risky behaviors, rather than emphasizing only the prevention of risky behaviors. This theory could be an effective guide to help teens recognize that being in risky situations often leads to risky behaviors, which may result in negative consequences that could interfere with desired future success. Incorporating these strategies into health education strategies could help teens see beyond the temptation of immediate pleasures and avoid risky situations.

#### LIMITATIONS

This research is limited in several ways. These participants were not asked if they had ever been or currently were sexually active, due to the vulnerability of the participants, the abstinence-only policy of the public school system, and the IRB agreement. This restriction could have limited the information teens shared; however, one female admitted to a prior pregnancy and a few suggested that they had been sexually active in the past, while others spoke proudly of their virginity. Based on experiences in prior adolescent research, positive comments about teen pregnancy were expected and desired, but the participants in this research spoke primarily about the negative aspects of teen pregnancy. Perhaps adolescents who viewed pregnancy more positively did not feel comfortable speaking freely in an "abstinence-only" educational environment, and chose not to participate. While hearing views that em-

phasized avoiding risky situations by seeing beyond immediate temptations may appear "one-sided," the data provide rich insight into how some adolescents avoid teen pregnancy.

This research provides helpful insight into the risk-promoting environments where teens live and the process some use to avoid risky situations. As with all qualitative research, with small numbers of participants, while this theory provides insight, the findings are not generalizable and may not be applicable to teens in other age groups and environments. More research is needed to determine better ways to decrease pregnancy in vulnerable teens and this theory provides some new areas for investigation.

#### IMPLICATIONS

Promoting adolescent health by helping teens avoid early pregnancy and make safe sexual choices is a priority of all health educators and others who work with adolescents and their parents. Knowing how to do this, however, is often difficult. Recognizing that teens live in environments that consistently promote risky behaviors is the first step in helping them resist the temptations they encounter. Openly discussing ways to avoid risky situations could be effective as well. As health promotion experts, we have opportunities to help teens develop healthy attitudes toward sexual issues. Encouraging parents to listen to their children and to provide opportunities for open, honest discussions about sexual issues beginning at early ages are essential.

The attitudes of these participants about sexual issues seemed to be well-formed by the time of these interviews, suggesting that to be most effective, sexual education should begin early. A great deal of safe behavior information is directed at most teens by parents, teachers and other adults. However, understanding how to help teens hear and value the positive input they receive is not clear. Following the examples of "point persons," perhaps teens receive instruction more effectively when it is provided in the context of affirmation and encouragement.

These participants all wanted to be successful in the future. Another implication of this research is the importance of encouraging and promoting the success of teens during interactions with them. Perhaps providing time for teens to discuss their hopes and dreams for the future and encouraging parents to do so as well would not only promote future success, but also help teens avoid early pregnancies.

For these participants, point persons were individuals who valued them and encouraged them to be successful. Health educators have opportunities to be point persons for some adolescents. Taking time to build caring relationships with adolescents, to listen to and encourage, as well as educate them, could more effectively promote safe sexual choices than

discussions focused only on safe sexual practices.

These participants “owned” the consequences of negative behaviors related to teen pregnancy, while many teens do not. The importance of emphasizing the likelihood of negative consequences as a result of negative choices is another implication of this research. Empowering parents to set real and reasonable limits for younger children with consequences for violating these limits could help these children “own” the consequences of their choices when they become teens.

## CONCLUSION

The Theory of Avoiding Risk Exposure by Seeing Beyond the Immediate provides helpful insight from the perspective of teens. By recognizing the risk promoting environments in which teens live and the process some use to avoid risky situations, health educators who work with teens may be able to provide more effective teen pregnancy prevention

strategies. Based on this theory, teens who appreciate positive input from others, desire future success, hear the encouragement of point persons, while believing in the consequences of negative behaviors and their ability to say no to negative opportunities, are more likely to avoid risky situations. Incorporating the factors identified in this research with accurate information about safe sexual practices, could lead to more effective interventions to prevent teen pregnancy.

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