

The Heat is On.....



Self-Efficacy for Sexual Abstinence and Gender Differences in a Rural Adolescent Population

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Introduction

- **Teenage pregnancy declined since 1991**
- **Some geographic areas of the country may be more at risk**
- **HP 2010: Responsible adolescent sexual behavior :**
 - **Never had sexual intercourse: baseline 50%, target 56%**
 - **If sexually experienced, not currently sexually active, baseline 27%, target 30%.**
 - **Mid-course review: proportion of adolescents who never had sexual intercourse increased from 50% to 53%**

- There are gender differences in adolescent sexual decision-making (Hulton, 2001; Smith et al., 2005), yet professionals often neglect these differences during program planning.
- More rigorous studies using theory-based evaluations and instruments with stronger psychometric properties are needed.
- Self-Efficacy Theory has been used as a framework for a number of health promotion research studies in adolescents:
 - Safer Choices: School-based HIV, other STD, and pregnancy prevention program (Coyle et al, 1999)
 - Protective factors to delay sexual debut in American Indian adolescents (Chewning et al, 2001)
 - Condom Use (Kalichman et al., 2002; Halpern-Felsher et al, 2004)
 - HIV-related risk behaviors (Faryna & Morales, 2000)
 - Avoidance of environmental tobacco smoke (Li & Wang, 2006)
 - Substance Use Prevention among African-American girls (Guthrie & Low, 2000)

Purposes

- **1). To further construct, define the dimensionality and determine the reliability and validity of an Adolescent Self-Efficacy Scale for Sexual Abstinence (ASESSA)**
- **2). To determine if there are significant gender differences in adolescent self-efficacy for sexual abstinence using the ASESSA**

“Gender”

- Latin word “genus”: means any group of similar things, kinds, or classes.
- Unfortunately, the term *gender* is erroneously interchanged with the term *sex* to describe the origin or male and female characteristics.
- In actuality, *sex* refers to biological differences between males and females, whereas *gender* refers to socially constructed differences influenced by ethnicity, culture, and environment (Udry, 1988)

“Self-Efficacy”

- An individual’s belief that s/he can exert control over his/her motivation (Bandura, 1992)
- A person with a strong sense of self-efficacy believes s/he can perform a specific behavior in the context of a social situation, with the appropriate support for that behavior (Bandura, 1994)
- Includes knowing how much effort to expend and can be a critical mediator of personal action and behavior change (Bandura, 1994)

Self-Efficacy for Sexual Abstinence

Definition: represents the subjects' level of confidence that they can resist having sexual intercourse across a number of tempting situations

Conceptualized in two ways:

- Confidence in ability to change risk behaviors
- Ability to continue these behaviors despite temptation

Methodology

- IRB approval
- This study was part of a larger cross-sectional investigation to evaluate a school-based sexual abstinence curriculum (A Vision of You)
- 3 target groups (middle school population (n = 80), high school population (n = 62), and alternative school population (n = 10) in a rural community.
- 10 session abstinence curriculum

Data Collection Procedures

- Data collected during 2005-2006 funding year (Year 2).
- Active parental consent and student assent was required for participation.
- Staff trained in administering the questionnaire directed the process.
- Confidentiality was maintained by a numerical coding system.
- AFL Core Instrument was administered within 1 month following completion of the program.
- Additional scale (ASSESA) was included as an additional scale for the purposes of this study.

Development of the items for the ASESSA

4 categories of questions

- Positive affect
- Situational cues
- Testing personal control
- Social pressure

Adapted from self-efficacy scales for

- ETOH use (Snow, 1991)
- Weight Control (Clark, Abrams, Niaura, Eaton & Rossi, 1991)
- Smoking Cessation (Velicer et al, 1990)

Validity and Reliability of Adolescent Self-Efficacy Scale for Sexual Abstinence

- 9 items generated after literature review and interviews with convenience sample of young adults.
- Responses scored based on a 5 point Likert scale.
- Principal Components Factor Analysis with varimax rotation
- One component extracted
- Parallel Item Assessment (concurrent validity)

Principal Component Factor Analysis for Adolescent Self-Efficacy Scale for Sexual Abstinence

| Statement Wording | Component Loading |
|---|-------------------|
| You could say “no” to having sex with your girl/boyfriend even when you are turned on. | .84 |
| You could stick with your decision not to have sex. | .81 |
| You could firmly say “no” to having sex. | .81 |
| You could resist having sex with your girl/boyfriend even when you think she/he will be upset if you say no. | .81 |
| You could resist having sex with your girl/boyfriend even if your friends are telling you it is okay. | .80 |
| You could explain your reasons for not having sex if your girl/boyfriend pressures you. | .70 |
| You could stop seeing your girl/boyfriend if he/she continues to pressure you to have sex. | .70 |
| You could avoid getting into a situation that might lead to sex (like going to a bedroom, drinking alcohol, doing drugs). | .68 |
| You could talk to your girl/boyfriend about your decision not to have sex. | .65 |
| Cronbach’s alpha = .91 | |

SELF-REPORTED DEMOGRAPHIC SUMMARIES OF STUDY PARTICIPANTS

| | Gender | Mean Age (SD) | Family Composition | Ethnicity |
|---------------------------------------|------------------------|----------------------|---------------------------------------|---|
| Middle School (n=80) | Male: 38 Female: 42 | 12.5 (.52) | Two Parent: 61% Single Parent: 38% | Caucasian: 78% African-American: 17% |
| High School (n=62) | Male: 22 Female: 40 | 15.6 (.52) | Two Parent: 58% Single Parent: 41% | Caucasian: 71% African-American: 22% |
| Alternative School (n = 10) | Male: 3 Female: 7 | 16(.73) | Single Parent: 40% Two Parent: 60% | Caucasian: 90% Latino: 10% |

Independent Sample T-tests for Adolescents on ASESSA

| | Mean | S.D. | <i>Df</i> | T |
|----------------------------|------|------|-----------|-----------|
| Middle School Males | 28 | 9.2 | 109 | -2.895** |
| Middle School Females | 32.8 | 7.9 | | |
| High School Males | 25.7 | 9.4 | 92 | -5.004*** |
| High School Females | 34.2 | 6.4 | | |
| Alternative School Males | 20 | 9.2 | 14 | -2.145* |
| Alternative School Females | 28 | 5.7 | | |

*p<.05

** p<.005

***p = < .000

Limitations

- Active parental consent and student assent
- Lack of socio-economic data
- Self-reported nature of the data
 - Social desirability bias

Discussion on ASESSA scale

- Easily understood by all three target groups with few questions about format or literacy
- Previous research on scale development for self-efficacy in adolescents: minimum of 3 features: beliefs, behaviors, and circumstances
- Recent research by Wang & Hsu (2006) used the scale with PCFA, a single factor accounted for 64.2% of the variance.

Discussion on Gender Differences

- Girls consistently report higher levels of self-efficacy for sexual abstinence.
- Adolescents with positive attitudes towards abstinence also report higher levels of intentions to practice abstinence (Bazargan & West, 2006).
- Bandura posits that there are four sources of self-efficacy and it could be that females have been better prepared via verbal persuasion by their families, peers or educators.
- Behavioral consequences and feedback from surrounding social and physical environments, and the individuals interpretation of these, determines future action.

Implications for Increasing Self-Efficacy

- Self-efficacy interventions should be considered for improving sexual abstinence behaviors.
 - Mastery experiences
 - Vicarious experiences
 - Verbal persuasion or enhancement
 - Reduction of physiological or affective states

Practical Implications for Intervention Programs

- Offer at times & places where adolescents congregate (rec centers, churches, schools, and neighborhood centers)
- Experiential in nature (interactive dialogue, “what-if” role-playing scenarios, videos, and interactive computer games)
- Use the skill of persuasion such as debate and the use of group discussions
- Led by older peers who mirror the intended audience (helps to build the participants’ confidence and capabilities)

More Practical Implications

- Lead at a level of discourse that is familiar to and understood by the intended audience
- Encouraging participants exploration and understanding of how their ethnic backgrounds influence their perceptions and expectations
- Supportive of participants' strengths by way of self-affirming and self-valuing activities (transitional rituals, celebration programs)
- Community-based (importance of seeking active collaboration of various organizations, groups, and families prior to the design and implementation of a program)
- **EXPLORE THE CONTEXT OF ROMANTIC OR SEXUAL RELATIONSHIPS**

Conclusions

- Need for future research on making interventions culturally specific and culturally sensitive.
- A greater understanding and measurement of gender differences in adolescent sexual decision making can assist parents and educators to address the health and social issues and provide a basis for more effective programs.