

Targeting the "Real" Economic Costs of Teen Pregnancy:
A Skill Building Approach for Early Adolescents

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Research Problem

There is a relatively limited amount of research supporting the efficacy of social and life skills building treatment models with early adolescents (Schinke & Gilchrist, 1984; Children's Defense Fund, 1985; LeCroy & Rose, 1986; Hayes, 1987; Barth, 1986 & 1988; and Kirby, 1989). This is particularly true for treatment programs conducted within a school setting with early adolescents at risk of an unintended pregnancy. The majority of these treatment models have been geared toward high school students. The literature clearly shows a need to develop and conduct early intervention programs in an effort to enhance cognitive functioning and behavioral change (Schinke, et al 1981; Dawson, 1986; Barth, 1986 & 1988). Evidence suggest that a treatment model which combines social skills training with cognitive/problem-solving skills is more effective than either single approach by enhancing the social competence of early adolescents (LeCroy and Rose, 1986). Further, although many preventive interventions relating to teen pregnancy prevention have been developed and implemented, few have been rigorously evaluated (Hayes, 1987; Kirby, 1984). Since the literature indicates a lack of early intervention models for early adolescents; that is models that start early, i.e., elementary and middle school, teach options including social cognitive skills (problem-solving/decision making skills), include personalization (impact on person's life or lifestyle), and accentuate "real life" information about the severe economic and social consequences for teen mother, teen father, and child; the RLCM breaks "new" ground in this endeavor.

The major problem is that up to this time preventive efforts have not focused on early adolescents for the most part, nor have they focused on cognitive-behavioral efforts as early intervention tools. Quinn (1986) suggest "interventions should start early (by age 9), be age-appropriate, and should teach skills (such as decision-making and communication), as well as facts, and programs must address not only the capacity to prevent pregnancy, but also the motivation to do so" (p.109).

Research Background Questions/Hypotheses

Based on developmental and social learning theories, the model addresses the lack of cognitive-behavioral, skill building early intervention models for adolescents, ages 11-13. The ten sessions (total of 20 hours) attends to the developmental level of the target group and teaches "real life" options including social and cognitive skills that promote staying in school, abstinence related to drugs, alcohol, and early sexual involvement, and educates about the "real life" economic and social costs or consequences for teen mother, teen father, and child. The intervention also addresses adolescents' awareness of risk factors influencing an

unintended pregnancy (i.e. locus of control and self esteem).

The research question was: will the real life cost model impact early adolescents' problem-solving/decision-making skills, locus of control, self-esteem, and monetary costs associated with an unintended pregnancy.

The independent variable was the Real Life Cost Model (RLCM) and dependent variables were: problem-solving/decision-making skill, locus of control, self-esteem, knowledge of monetary costs associated with an unintended pregnancy.

This research question generated 4 hypotheses. They are:

- H1: Experimental groups (NAE and AE) will score significantly higher on the Nowicki-Strickland Locus of Control Scale (N-SLCS) indicating greater internal locus of control than the control groups (NAE and AE) at posttest and at 8 weeks follow-up.
- H2: Experimental groups (NAE and AE) will demonstrate higher levels of problem-solving ability on the Means-Ends Problem-Solving Procedures (MEPS) than control groups (NAE and AE) at posttest and 8 weeks follow-up.
- H3: Experimental groups (NAE and AE) will score higher on the Hare Self-Esteem (HSS) than control groups (NAE and AE) at posttest and 8 weeks follow-up.

The null hypothesis stated that for each hypotheses, there will be no observable differences between the treatment and control groups.

Methodology

This study evaluated the effectiveness of the real life cost model (RLCM), an educational, cognitive-behavioral, skill building approach with early adolescents. A total of 74 male and female, ethnically diverse students were selected from two middle schools in Leon County, Florida, and randomly assigned to either a treatment or control group at each school using a pretest-posttest control group design with one follow-up. Scores from the Nowicki-Strickland Locus of Control Scale, (N-SLCS), Means-Ends Problem-Solving (MEPS), Hare Self-Esteem (HSS), and the Pregnancy Cost Knowledge Questionnaire (PCKQ), were used to assess subjects' cognitive-behavioral changes at pretest, posttest, and 8 week follow-up. To ensure group equivalency prior to treatment, the pretest scores were analyzed for group differences.

Results

Statistically significant differences between pretest and posttest scores, and 8 week follow-up from the N-SLCS, MEPS, PCKQ, were found for the treatment groups but not for the control groups. Scores on the self-esteem measure (HSS) yielded significant differences between experimental and control groups' change scores from pretest to posttest; these changes did not maintain significance at follow-up. Additional findings showed inter-rater

reliability of .91 and .90 on the role plays suggesting improved decision-making skill. These findings provided evidence that this school-based educational, cognitive-behavioral treatment program produced significant changes in the treatment subjects perceptions of locus of control, self-esteem, problem-solving/decision-making skills, and knowledge of costs associated with an unintended pregnancy. It resulted in significant cognitive-behavioral changes in 6th grade students who are considered "high risk." Most importantly, there is evidence that these changes were not limited to the pretest/posttest setting, but significant gains were maintained through at least 8 weeks of follow-up. These findings are particularly important because social work practitioners face a difficult task as they attempt to utilize existing research to build and strengthen pregnancy prevention efforts.

Utility for Social Work Practice

This study provides empirical evidence that this social-cognitive/social problem-solving (skills oriented) program resulted in significant cognitive-behavioral changes in 6th grade students who are considered "high risk." Most importantly, there is evidence that these changes were not limited to the pretest/posttest setting, but significant gains were maintained through at least 8 weeks of follow-up. These findings are particularly important because practitioners face a difficult task as they attempt to utilize existing research to build and strengthen pregnancy prevention efforts.

Second, the social work profession has not historically focused on preventive intervention addressing teen pregnancy (Furstenberg, 1971; Sarrel and Lidz, 1970; Schinke, 1978). This study is a secondary prevention approach aimed at high risk adolescents aged 11-13. It can be the beginning of a broadening conceptualization for practice to not rely solely on sex education and contraceptive availability, but to consider this social skills approach which identifies many factors--social, interpersonal, situation, and maturational--that interact to lead adolescents into unprotected early sexual activity and susceptibility to peer pressure issues (i.e., skipping school, dating, and drug/alcohol use).

Third, school social workers may find this intervention useful because high risk students are currently underserved by school social workers. There are few intervention options within the middle school setting, outside of the suspension process. This social-skills building program provides an opportunity for school social workers to become involved in identifying and serving this group of students rather than waiting for the peer pressure issues to become insurmountable, or to the point where students are repeatedly suspended from school or referred for counseling. This study provides school social workers with an effective means of early intervention by teaching students a number of cognitive and social skills necessary for survival within the middle school.

Finally, the social work profession has not historically focused on preventive interventions addressing teen pregnancy. It has historically treated the family (Axinn & Levin, 1982; Minuchin, 1969; Satir, 1967). However, teen pregnancy prevention is very appropriate for social work services given the profession's long-standing concerns with family and child welfare issues i.e., child abuse prevention, family planning efforts, and individual, family and group intervention modalities. This social skills building program provides an opportunity for social work practitioners to look beyond "case management" and

focus on early intervention efforts. Schinke (1978) stated:

primary prevention is the single most important opportunity for casework services with teenagers at risk for pregnancy--clearly, the only time social workers can help prevent an unwanted pregnancy is before contraception (p.408).

This study was intended to enhance some of the gaps left by previous researchers. Social work practitioners can play a key role in this endeavor. While this study did not evaluate the actual effects on teen pregnancy, future studies should attempt to determine such effects through longitudinal efforts which follow subjects over time who have been exposed to such treatment.

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