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Acceptability of Refusal Skills Training Modalities: A Comparison of Adolescents' vs. Professionals' Perceptions

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Acceptability of Refusal Skills Training Modalities: A Comparison of Adolescents' vs. Professionals' Perceptions

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FIELD PROJECT ACCEPTANCE

Acceptance for the faculty of the Graduate College, University of Nebraska, in partial fulfillment of the requirements for the degree Educational Specialist, University of Nebraska at Omaha.

Committee

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Abstract

Fifty-three sexually active adolescents between 14 and 19 years of age were surveyed to identify general interest in refusal skills training for avoiding unwanted sexual activity. Subjects furnished information regarding preferences for three treatment modalities (pamphlet, behavioral rehearsal, and video modeling) used to deliver refusal skills training. Forty-one health care and school professionals (doctors, nurses, physician assistants, social workers, med tech/health educators, counselors, and psychologists) responded to a similar general interest survey and assessment of treatment modality preferences for provision of refusal skills training. Both adolescents and professionals demonstrated high general interest in refusal skills training as a viable and helpful intervention. Both groups rated behavioral rehearsal and video modeling as significantly more acceptable than the pamphlet method for delivery of refusal skills training. The results of the survey underscore the importance of school and health care providers evaluating general interest and preferences by the adolescent community when developing and implementing educational and skills training programs for this population.

Acknowledgements

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Personally, I would like to express my deepest gratitude to my husband, Joe, and my children, Aaron, Joey, Katie, Anne, and Ted. Their continued cooperation and sacrifice have helped me to reach this and other goals.

Finally, I dedicate this project to the 53 young women who so willingly agreed to discuss a very personal and often painful topic so that we might use their experiences to help others.

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Chapter I

Introduction and Purpose of the Study

Refusal skills training is one approach to reducing the occurrence of school-aged pregnancy and sexually transmitted disease. The generalization of these skills is dependent upon both the accuracy of the scenarios used in training, the specific behavioral components trained, and the likelihood that the target population will find the modality of training acceptable and thus participate. Although varying strategies for presentation of refusal skills training have been developed (e.g., behavioral rehearsal, written information, video modeling), the likelihood that adolescents and professionals will find this treatment of relevance or a designated method of delivering training as acceptable has yet to be determined.

The purpose of this project was to study the acceptability of refusal skills training and to analyze preference for treatment modalities used to deliver refusal skills training across groups of consumers and providers. Group I consisted of 53 sexually active adolescents between the ages of 14 and 19. These subjects were interviewed at two outpatient OB-GYN clinics affiliated with a large midwestern medical center and at a university affiliated public health clinic which provided services related to sexually transmitted disease. Group II consisted of 41 professionals who work with sexually active adolescents. The professional group was comprised of physicians, physician assistants, psychologists, social workers, counselors, med tech/health educators, and public health nurses. Measures of professionals' vs. adolescents' ratings of total acceptability of refusal skills in general

and of a variety of specific treatment modalities in particular were obtained. Information gained from this study has significant implications for dissemination of refusal skills training by a wide range of professionals. The at-risk adolescent population and their families may also be the beneficiaries of future intervention programs designed to formulate a match between treatment that is effective and identified by both adolescents and professionals as being acceptable and therefore useful for the target population.

Chapter II

Literature Review

A comprehensive literature review of numerous relevant topics was conducted in service of this project. Reviewed topics include sexually transmitted disease, HIV, AIDS and its prevention, adolescent pregnancy and risk-reduction, refusal skills, social skills training, treatment acceptability, and varying health-related topics. A computerized search was conducted reviewing the medical literature (Medline) for the years 1989 through November 1992 and a review of psychological abstracts (Psych Lit) for the years 1984 through September of 1992. Earlier dated articles and governmental publications receiving frequent citation in current research were also reviewed.

Teenage Pregnancy

Despite public health initiatives and national mandates for preventative educational interventions, 50% of unmarried adolescents between 15 and 19 years of age are sexually active (Stewart, 1987). These adolescents are at-risk for unplanned pregnancy and sexually transmitted diseases (STDs). Adolescent parents who marry subsequently display a greater frequency of both marital distress and divorce than do postadolescent parents (Baldwin & Cain, 1980). Children born to school-aged mothers are at substantially greater risk for displaying physical, emotional, and developmental problems than children of older parents. They are also more likely to die of injury, violence, and infection (Spivak & Weitzman, 1987). Behavior disorders are also more prevalent among this group (Finkelstein, Finkelstein, Christie, Roden,

& Shelton, Gunter & Labarba, 1980). To compound the process, behavioral disorders negatively correlate with future academic achievement and vocational readiness and greatly diminish future success for the children of teen parents (Card & Wise, 1978; Klerman, 1986; Zellman, 1982).

Klerman (1986) found that among pregnant teenagers less than one-third of those surveyed finished high school, held skilled jobs two years post hoc, or pursued higher education. Within the framework of its educational impact across generations, teenage pregnancy for both teen parents and their children may be viewed as the long-term and insidious debilitation of academic and socioeconomic status for both parent and child. Teenagers are likely to drop out as a result of the developmental inadequacy they bring to the increased pressures of being adolescent parents (Card & Wise, 1978); their children are likely to follow suit at a rate that is almost twice the national average (Klerman, 1986). Decreased academic performance, life skills, and vocational achievement are the sequelae often associated with adolescent sexual activity and teen pregnancy.

Sexually Transmitted Disease

By contrast, the more immediate and potentially virulent threat both to adolescents and their sexual partners is that of STDs (Stewart, 1987). Sexually transmitted diseases and human immunodeficiency virus (HIV), the most serious STD in terms of mortality, present a great threat to this age group. For example, 65% of all cases of gonorrhea occur to those between the ages of 15 and 24, and pelvic

inflammatory disease (PID) occurs most frequently in females aged 15 to 19 (Stewart, 1987). For both ethnic minorities and adolescents, number of sexual partners has been positively correlated with risk-taking behavior. This positive relation between age, ethnicity, and number of partners was also corroborated for the adolescent population at large by Coates (1990). Frequent unprotected intercourse, combined with a common failure of adolescents to obtain prompt medical care, contributes to and prolongs the disease process once initiated, thereby increasing the risk of transmission to other sexually active adolescents (Stewart, 1987).

Federally mandated AIDS prevention and education programs have been initiated to address this public health crisis; yet, sexual activity appears to be on the increase among adolescents, with sexual experimentation beginning at progressively younger ages (Cates, 1991; Jessor, 1991; Rogers, 1991; Zabin, Hardyn, & Smith, 1986). In a seminal article on the control of the most serious form of STD, the AIDS virus, Coates (1990) points to the necessity of an ongoing mandate to develop programs that deal not only with medical research but with behavior change as a primary form of prevention. Because of the chronicity of the HIV infection, preventative measures to alter the disease process will be a necessary treatment component even after vaccines and drug therapies have evolved to a more effective state (Institute of Medicine, 1988). Despite the fact that there are now available a variety of relatively effective, inexpensive, and easily dispensed techniques for treating many STDs, epidemics of disease ranging from gonorrhea and chlamydia to primary syphilis have erupted

recently with an alarming prevalence among minorities and younger persons (Fineberg, 1988; Holmes, 1989).

This rampant spread of STD among youth is in stark contrast to the recent success of programs such as the San Francisco Project (McCusick, Conant, & Coates, 1985) aimed at influencing risk factors among gay and bisexual men at the AIDS epicenters. This project was among the most successful when measuring impact on risk-reducing behavior, and attributes success to changing the components of sexual behavior among the population rather than to providing saturation of information in the absence of changes in sexual practice and lifestyle (Coates, 1990).

National Studies - STD and AIDS Prevention

Efforts to identify effective behavioral and educational programs have recently been the topic of study at the national level as well. For example, a recent study by the National Academy of Sciences (NAS) reporting to the Public Health Service addressed possible contributions by the statistical, behavioral, and social sciences in developing intervention and education programs aimed at fighting the AIDS epidemic (Turner, Miller, & Moses, 1989). In a discussion of strategies for affecting change in health behaviors, the Committee on AIDS Research and the Behavioral, Social, and Statistical Sciences reviewed the existing body of literature on health behavior change and issued 14 recommendations to serve as a guide for the continued development of behavior change efforts (see Table I). Among the recommendations made are the inclusion of information to be aimed at the target population, use of skills training,

Table I

Prevention Action Recommendations from the National Research Council*

The Committee on AIDS Research and the Behavioral, Social, and Statistical Sciences recommends the following:

1. Information should be made available in clear, explicit language in the idiom of the target audience.

2. Sex education should be available to both male and female students; such education should include explicit information relevant to the prevention of HIV infection.

3. AIDS prevention messages should strike a balance in the level of threat that is used.

4. TV networks should present more public service messages on those behaviors associated with HIV transmission and practical measures for interrupting the spread of infection.

5. TV networks should accept condom advertisements.

6. Programs to initiate and sustain changes in risk-associated behavior should take into account how the targeted population perceives and understands risk.

7. Innovative approaches to AIDS prevention programs should be introduced in a planned manner that reflects well-established principles about the adoption and diffusion of new ideas.

8. Programs to facilitate behavioral change should be approached as long-term efforts, with multiple and repeated strategies to initiate and sustain behavioral changes over time.

9. Anonymous HIV antibody testing with appropriate pretest and posttest counseling should be made available on a voluntary basis to anyone desiring it.

Table I continues

Table I continued

10. Programs should consider the psychological, social, biological, and environmental factors that may affect relapse: learned coping responses, including skills training and relapse rehearsal, should be taught to increase perceptions of self-efficacy.

11. To the extent possible, community-level interventions to prevent the spread of HIV infection should simultaneously address information, motivational factors, skills, prevailing norms, and methods for diffusing information.

12. The Office of the Assistant Secretary for Health should take responsibility for an evaluation strategy that will provide timely information on the relative effectiveness of different AIDS intervention programs.

13. The use of randomized field experiments should be expanded for evaluating new intervention programs on both individual and community levels.

14. Only the best designed and best implemented intervention programs should be selected to receive those special resources that will be needed to conduct scientific investigation.

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*Note: from Turner, Miller, and Moses, 1989

and an analysis of how the target population perceives risk. These recommendations also suggest that education and intervention be aimed at the school-aged population and that programs "consider the psychological, social, biological and environmental factors that may affect relapse; learned coping responses; including skills training and relapse rehearsal should be taught to increase perceptions of self-efficacy" (Turner et al., 1989, pg. 91). Although not directly addressed, inherent within these recommendations is the need to establish acceptability of skills training and the treatment modality found to be most acceptable for dissemination of appropriate skills to the target population.

The General Accounting Office (GAO, 1988) was similarly charged with applying previous research gained from public health education and applying it to STD and AIDS education. This report yielded a model which synthesized best practice approaches from some of the most exemplary existing programs. Again, this study calls first of all for specifying a target group, selecting media likely to reach the group, and provision of skills for risk reduction (see Table II). A necessary component of identifying the "media likely to reach the group" (Turner et al., 1989) is a preliminary assessment of overall acceptability, by the target population, of a skills training approach as well as an analysis of a variety of treatment delivery methods. Thus, at the national level the professionals comprising the behavioral, statistical, and medical communities have been called upon to respond within the framework of a preventative action model that targets youth and minorities, identifies

Table II

A Model for Health Education*

Step	Options to consider
1. Specification of the target group	Race or ethnicity, community, or neighborhood, age bracket, informal communication network
2. Identification of characteristics placing the group at risk	
Characteristics	Risk behaviors, capabilities, attitudes, health practices, awareness of the heath problem
Purposes	Changing characteristic, sidestepping characteristic, accommodating within-group differences
3. Selection of media likely to reach the group	Mass media, personal media, media variety
4. Determination of factual information to be included	Risk level, risk-reduction methods, efficacy of risk reduction; modes of transmission and non-transmission; medical, biological, and epidemiological information; testing and counseling; peer pressure; civil rights issues history of epidemics, available resources
5. Provision of skills for risk reduction	Practical skills, verbal and nonverbal interpersonal skills

Table II continues

Table II continued

	Step	Options to consider
6.	Provision of motivators for risk reduction	Negative motivators, tangible and symbolic positive motivators
7.	Specification of intended outcomes	
	Cognitive	Awareness of the problem, knowledge, attitudes
	Behavioral	Risk prevention, risk reduction or elimination, maintenance of risk reduction

* Note: From AIDS education-Reaching populations at higher risk (Document GAO/PEMD-88-35). Government Affairs, Washington, DC-U.S. Senate. In the public domain.

risk characteristics, selects media likely to reach the target group, and provides skills for risk reduction.

Refusal Skills

It is evident that efforts to reduce unwanted and unprotected sexual contact are urgently needed. A variety of preventative interventions have been developed, including providing information about reproductive health or values clarification. These efforts have been largely unsuccessful however, and have had little impact on the sexual behavior of adolescents (Howard 1985; Kirby, 1984). Information may be more helpful when accompanied by appropriate behavioral skills and the motivation to engage in risk-reducing behavior. Following this rationale, recent efforts have sought to teach behavioral strategies to deal with issues related to sexual activity and its refusal, as well as provide information on sex and sexual functioning (Hamburg, 1986; Melton, 1988; Warzak & Page, 1990).

Much of this work evolved from the psychological skills training movement originally developed by social learning theorists such as Albert Bandura. Bandura (1973) described the practice of developing prosocial skills as a three-phase process involving (a) modeling alternative responses, (b) practicing a newly learned skill under favorable circumstances (rather than in vivo), and (c) arranging success experiences (reinforcers) for efforts at behaving differently. Later efforts to refine skills training resulted in the development of programs like the social skills training movement developed by Goldstein and others (Goldstein, 1981; Goldstein, Sprafkin,

Gershaw, & Klein, 1980; Monti, Abrams, Binkoff et al., 1990). These programs have proven successful in training prosocial skills ranging from empathy, conflict resolution, and following directions to negotiation and assertiveness training, including refusal skills.

Goldstein, Reagles, and Amann (1990) define refusal skills components as being the prosocial skills that allow an individual to communicate effectively their desire not to participate in a given activity. Goldstein (1981) lists a variety of skills as being related to general assertiveness regarding decision-making and has recently applied the skills training approach to adolescents' ability to say "no" effectively within situations where pressure is exerted to participate in drug use (Goldstein, Reagles, & Amann, 1990). Warzak and Page (1990) specifically delineate refusal skills within the realm of unwanted sexual activity as being comprised of a four-part process of (a) making eye contact with a potential partner, (b) making an explicit and audible refusal, (c) making a specific statement regarding the unacceptability of the sexual behavior, and (d) leaving the situation. For the purpose of the present study this four-part process defined the behaviors known as "refusal skills." Although the skills training approach to avoiding unwanted sexual activity is a fairly recent phenomenon, this paradigm and specifically the refusal skills portion of the approach has been applied to a variety of behaviors such as response to aggression (Golden, 1975) and assertiveness training across a variety of situations (Guzetta, 1974; Jennings, 1975).

Thus, the skills training approach now rests on a well-developed and documented empirical foundation that continues to find utility within a variety of populations and intervention settings. Considerable applied research exists to corroborate the refusal skills approach as being particularly useful when dealing with problematic interpersonal encounters, including social contexts where responses to pressure or verbal persuasion are being trained (Goldstein et al., 1989; Kelly, 1982). Consistent with this, refusal programs have emulated the approaches provided within the realm of addictive behaviors such as cigarette smoking and substance abuse (Chaney & O'Leary 1978; Goldstein, Niauara, Follick et al., 1989; Monti et al., 1990). Warzak and Page (1990), for example, extended this approach to sexual behavior and achieved moderate success by training a number of common components of refusal skills within a structured role-play format of rationale, modeling, behavior rehearsal, feedback, and reinforcement (Kelly, St. Lawrence, Brosfield, Lemke, Amideri, & Roffman, 1990).

Treatment Acceptability

Although the extant body of knowledge developed in the social skills area is encouraging, considerable evidence exists to support the notion that developing effective treatment in and of itself is not sufficient to address many problems. Both Kazdin (1977) and Wolf (1978) report that regardless of treatment efficacy, use of treatment will be less likely and may even be avoided if the participants are not supportive or accepting of the treatment method or some aspect of intervention or

treatment delivery. Kazdin (1980a, 1980b) initially defined treatment acceptability and subsequently designed and validated an instrument for assessing treatment acceptability. By Kazdin's definition (1980a), "Acceptability refers to the judgements about the treatment procedures by nonprofessionals, lay persons, clients and other potential consumers of treatments" (p. 259).

Kazdin's contribution to the measurement of treatment acceptability is the 15-item Treatment Evaluation Inventory (TEI) with items answered on a 7-point Likert scale format. Kazdin (1980a, 1980b, 1981, 1984; Kazdin, French, & Sherick, 1981) found the TEI loaded highly on acceptability and effectively differentiated treatments by degree of acceptability. The TEI (and numerous modifications thereof) have been used extensively in a variety of acceptability studies (Reimers, Wacker, & Koeppl, 1987; Witt & Elliott, 1985 have reviewed these studies). Kelly, Heffer, Gresham, and Elliott (1989) validated the merits of the TEI by performing a factor analysis and found loadings on two factors labeled "acceptability" and "ethical issues/discomforts." Kelly's study also confirmed the TEI as having high alpha coefficients, attending to its internal consistency.

Although most of the methodology used to evaluate treatment acceptability has been analogue in nature, clinical studies are now emerging (Reimers, Wacker, Cooper, & DeRaad, 1989). Typically, raters are presented with a written description of a problem/treatment vignette and an acceptability rating scale to rate the treatment's application to the problem described. Both Reimers and Wacker (1988)

and Reimers et al. (1989) suggest that the established practice of using college students as raters is an acceptable but not ideal methodology. Suggestions for further study of treatment acceptability are that it be conducted with actual or potential consumers of the treatment being rated to provide a more ecologically-valid perspective on acceptability. Recent work in the acceptability area has also sought to establish the relationship between consumers' and professionals' ratings of treatment and has encompassed the views of teachers and students (Elliott, 1986; Martens, Witt, Elliott, & Darveaux, 1985), parents of children receiving clinical intervention (Fincham & Spettell, 1984; Kazdin, 1984; Reimers et al., 1987), psychiatric patients and staff and students and school psychologists (Elliott, Turco, & Gresham, 1987). Ratings of acceptability within the framework of the consumer/professional dyad have been established as being both pertinent and logical given the fact that professionals are often charged with selecting a given treatment or intervention for a target population (e.g., Michaelis, Warzak, Stanek, & Van Riper, 1992; Warzak, Ayllon, Milan, Majors, & Delcher, 1993). This issue is very relevant within the present context because many programs have been instituted for the prevention of pregnancy and STD, including efforts to encourage avoidance of unwanted sexual contact, but little attempt has been made to ascertain the interest of both health professionals and adolescents in participating in such intervention programs. This issue, as well as the acceptability of refusal skills programs as being viable and helpful interventions, is yet to be examined.

Research Questions

A logical step in analyzing the viability of refusal skills training would involve making a preliminary determination of professional vs. adolescent perceptions of the acceptability of this intervention. The goal of the present study was to measure these perceptions with regard to salient issues of refusal skills training such as presentation format, presentation contexts, and the behavioral components of refusal used in these interventions. Gaining a clearer picture of the acceptability of treatment from both the perspective of the adolescent consumers and professionals who serve as teacher/trainers is a necessary step in the development and dissemination of refusal skills programs.

The current study sought to address the following specific questions:

1. Do adolescents and professionals find refusal skills training to be a viable and helpful intervention for avoiding unwanted sexual activity? Are there differences in this perception across these groups (i.e., adolescent vs. professional)?
2. Are there differences in the acceptability ratings of these two groups as a function of treatment modality used to deliver refusal skills training (i.e., printed information vs. behavioral rehearsal vs. video modeling)?

Chapter III

Method

General Procedure

The present study included two independent groups (adolescents and professionals). The focus of study was to identify overall interest in and acceptability of refusal skills training as perceived by sexually active adolescents. Three methods of refusal skills training (written information, behavioral rehearsal, and video modeling) were described in a problem/treatment vignette to adolescents identified as being at-risk for unwanted sexual behavior (see Figure I for an illustration of research design). The present study attempted to identify overall acceptability and interest in refusal skills by potential consumers and providers as well as the most acceptable format for refusal skills presentation.

Population

A. Adolescents. Fifty-three sexually active female adolescents between the ages of 14 and 19 were interviewed at three outpatient clinics affiliated with a large midwestern medical center. Subjects were either the recipients of prenatal counseling and medical follow-up through two OB-GYN clinics or were recruited from an affiliated public health clinic which provided services related to sexually transmitted diseases. The current demographic data of an ongoing study predicted that subjects would be predominantly white (roughly 50%), Black (20-30%), and Hispanic (10%) (Warzak, Grow, Poler, & Walburn, submitted for publication). Subjects were interviewed by advanced psychology students who served as research assistants.

Treatment Methods	*Groups*	
	Adolescents	Professionals
T-I Pamphlet		
T-II Behavioral Rehearsal		
T-III Video Modeling		

Figure 1. Experimental Design

Matters of confidentiality and the legal obligations involved in potential reports of assault, abuse, and rape were delineated. Each interviewer participated in several practice interviews and was provided with feedback regarding performance by the principal investigators. Prior to conducting independent interviews, interviewers observed actual subject-staff interaction and then, in turn, were observed by staff while conducting initial interviews.

All subjects within the age group 14 to 19 were asked to participate whenever interviewers were at the clinic sites. After providing informed consent, each subject provided information regarding demographics, contraceptive use, number of months/ years sexually active, and overall interest in learning refusal strategies to avoid unwanted sexual activity. After reading a brief explanation of refusal skills training, subjects read three representative problem situations and were then asked to rate three separate treatments describing refusal skills training. To control for sequencing effects, equal combinations of orders of Treatments I, II, and III were randomized before distribution of questionnaires by interviewers. Problem situations used in the vignettes were those identified by similar adolescents in previous studies as being difficult situations for avoiding unwanted sexual activity (Warzak et al., submitted for publication). See Table III for a list of these situations. Subjects were asked to assign ratings based on a 7-point ([1] less acceptable to [7] highly acceptable and or less effective [1] to highly effective [7] treatment) Likert scale to indicate overall interest and acceptability of refusal skills intervention. A variety of questions

Table III

Prompts Used to Ascertain Common Situations Where Unwanted Sexual Activity Takes Place

Have you ever been in a situation . . .		
1.	. . .	where drinking alcohol led to unwanted sex (24%)[1]
2.	. . .	where taking drugs led to unwanted sex (7%)
3.	. . .	where unwanted sex followed parental conflicts or threats? (13%)
4.	. . .	where unwanted sex followed a boyfriend/girlfriend threatening to break up with you? (13%)
5.	. . .	where unwanted sex took place during or after a party? (18%)
6.	. . .	where unwanted sex took place at home before you or your partner's parents came home (35%)
7.	. . .	where unwanted sex took place after a scheduled school event (7%)
8.	. . .	where leaving school during school hours led to unwanted sex? (9%)
9.	. . .	where unwanted sex took place at a summer camp? (0%)
10.	. . .	where you had unwanted sex while you were out for a drive? (14%)
11.	. . .	where being in the company of another couple who were having sex led to unwanted sex for you? (16%)
12.	. . .	where unwanted sex occurred because you felt obligated to have sex (34%)
13.	. . .	where being at a motel led to unwanted sex? (9%)
14.	. . .	where unwanted sex followed a boyfriend/girlfriend saying, "Prove that you love me" or words to that effect? (14%)
15.	. . .	where unwanted sex followed being out on a late date? (11%)
16.	. . .	where unwanted sex followed a date spending money on you? (16%)

[1] Percentage of participants who responded to each item from, Warzak, Grow, Poler, & Walburn, submitted for publication. Identifying situations which place adolescents at risk for unwanted sexual activity.

aimed at measuring overall acceptability, interest, and preference for treatment modalities (e.g., behavioral rehearsal, video modeling, or written information) were rated using a questionnaire adapted from the Treatment Evaluation Inventory (see Appendix A, Form A, Adolescents' Questionnaire).

Interview Sites. Both the STD Clinic and the two OB-GYN clinics were appropriate sites for recruiting subjects because of a number of factors. All three clinics served a clientele that is predominantly female, young, known to be sexually active, and had minority populations that were analogous to the overrepresentation of minorities found in a number of federal studies (Kelly et al., 1990; McCusick et al., 1985). These clinic sites were also often frequented by lower income individuals. Therefore, age, gender, ethnicity, and income level of subjects was similar to the target population needing further study as described by various researchers furnishing demographic information on the at-risk adolescent population (General Accounting Office, 1988).

B. Professionals. Forty-one professionals (e.g., physicians, physician assistants, public health nurses, counselors, social workers, psychologists, and med tech/health educators) who served the sexually active adolescent population were likewise surveyed. This group furnished demographic information, including their occupation, age, profession, and length of time as a professional experienced in working with sexually active adolescents. The professional group furnished ratings of their general interest in providing refusal skills strategies to adolescents. The professionals used

the same 7-point Likert scale format as the adolescent population and a similar questionnaire adapted from the Treatment Evaluation Inventory (see Appendix A, Form B, Professionals' Questionnaire).

Recruitment of Professionals. Professionals were drawn from the staff of the three clinics described above. They were not provided any prior knowledge of the project until they were given a questionnaire to complete. Professionals at the clinics, whether they were doctors, physician assistants, public health nurses, social workers, counselors, psychologists, nurses, or med tech/health educators dealt extensively with the target population. Additionally, counselors and social workers who dealt with sexually active adolescents through high school counseling and teen pregnancy programs were invited to participate. The professional group included only those individuals described above whose present position qualified them to be knowledgeable regarding the target population.

Chapter IV

Results

Adolescents

To examine adolescents' ratings of overall interest (Interest) in learning about, likelihood of participating (Participate) in, and perceived effectiveness (Effective) of refusal skills training, three general interest questions were posed. Before comparing the adolescent general interest questions, analyses were completed to evaluate the influence of subject and demographic variables alone and in combination with ratings of Interest, Participate, and Effective questions.

Preliminary analyses were conducted to examine differences in response sets as a function of age, ethnicity, and location of clinic. None of these analyses yielded significant effects on the ratings of general interest questions with the exception of age. A median split of 14 through 16 year olds (N = 24) as compared to 17 through 19 year olds (N = 29) respondents yielded significant differences for Participate. Although the older respondents reported less likelihood of participation ($\underline{M}$ =4.69) than did younger respondents ($\underline{M}$ = 5.92), both were in the positive response direction for the notion of refusal skills participation. This difference factor may be related to their age and independence. None of the demographic analyses yielded findings that seriously compromised the integrity of grouping data.

Adolescent data were pooled and further analyses evaluated the ratings of adolescents as an aggregate across treatment modality conditions. Demographic data for adolescents is presented in Table IV. Cronbach's alpha Coefficients, computed to

Table IV

Demographic Characteristics of Adolescent Subjects

Race		
White	N = 22	(41.5%)
Black/African American	N = 24	(45.3%)
Hispanic	N = 2	(3.8%)
Mexican	N = 2	(3.8%)
Asian	N = 3	(5.7%)
Chronological Age (Mean = 17 yr/9 mo)		
14	N = 4	(7.5%)
15	N = 9	(17.0%)
16	N = 11	(20.8%)
17	N = 10	(18.9%)
18	N = 8	(15.1%)
19	N = 11	(20.8%)
Location of Clinics:		
North (OB-GYN) -	N = 21	(40%)
South (OB-GYN) -	N = 10	(19%)
STD Clinic -	N = 22	(42%)

assess the internal consistency of the TEI ratings of TI, TII, and TIII, yielded alpha levels of .83 for pamphlet, .87 for behavioral rehearsal, and .91 for video modeling. These levels attest to the high internal reliability of the TEI and are consistent with previous data published by Kazdin (1980a).

A one-way within subjects analysis of variance was used to evaluate the three general interest queries. This analysis failed to find significant differences for Interest vs. Participate vs. Effective ratings $\underline{F}_{(2,104)} = 92$, $\underline{p} = .40$,NS. Means and standard deviations for adolescents' ratings of general interest questions are delineated in Table V. Over 50% of the 53 adolescents surveyed rated Interest and Effective at 6 or 7 on the 7 point scale, indicating that adolescents responded favorably as a group to general interest in and perceived effectiveness of refusal skills training. Slightly fewer (45%) responded at 6 or 7 for the Participate question. (See Table V for Means of the Overall Interest Survey.)

To examine the adolescent group's evaluations of preferences for refusal skills treatment modalities, a fourteen item questionnaire adapted from the Treatment Evaluation Inventory (TEI) was used to compare ratings of TI, TII, and TIII. A significant difference was found when comparing the three treatments across the adolescent group with a one-way within subjects Analysis of Variance, ANOVA, $\underline{F}_{(2,184)} = 24.99$, $\underline{p} < .01$. Although no single preference for treatment modality was identified, treatments two (behavioral rehearsal) and three (video modeling) were rated as significantly more acceptable than treatment one (pamphlet).

Table V

Adolescent Responses to Survey of General Interest in Refusal Skills Training

Cut score = 6 on a 7 point Likert scale (1 = Not At All and 7 = Very Much)		
How interested would you be in learning about refusal skills training if it was available? N = 27* (50.9%)	Mean 5.30	SD 1.63
How likely would you be to participate in providing refusal skills training if it was made available at your school or clinic? N = 24* (45.2%)	5.24	1.56
How effective (how well do you think the training might work) at helping teens to avoid unwanted sex? N = 31* (58.5%)	5.53	1.19

*Respondents reporting 6 or 7 on a 7-point Likert scale format, with 7 being high rating.)

Pearson Product Moment Correlations were computed to determine the correlates of treatment I, II, or III as paired with overall interest (Interest, Participate, Effective) variables. Treatment II (behavioral rehearsal) was found to correlate most highly with all three of the Interest, Participation, and Effectiveness general interest determinants. (For results of Treatment vs Interest, Participate, Effective correlates see Table VI.)

When comparing Treatment II (behavioral rehearsal), it correlated at $\underline{r} = .48$ with Interest, $\underline{r} = .41$ with Participation, and $\underline{r} = .32$ with Effectiveness on the general interest questions (all $\underline{p} < .01$). Although no single significant preference for treatment modality emerged from adolescent ratings, behavioral rehearsal gained some mild support by its strong association with Interest and Participate as compared to the other two treatment modalities. Thus, adolescents who showed a higher rating for interest and likelihood of participation demonstrated a positive relationship with behavioral rehearsal.

Professionals

To examine professionals' overall interest in refusal skills training as a viable and helpful intervention, they responded to the same general interest survey questions, (Interest, Participate, Effective), regarding their evaluations of general interest in providing refusal skills training. These responses were submitted to analyses parallel to those described for adolescents.

Table VI

Correlation Coefficients for Adolescents' Interest, Participate, Effective Responses by TI, TII, TIII

	Interest	Participate	Effective	TI	TII	TIII
Interest		.71	.36	.37	.47	.39
Participate	.71		.63	.30	.40	.39
Effective	.36	.06		.30	.31	.16
TI	.37	.30	.30		.35	.61
TII	.47	.40	.31	.35		.43
TIII	.39	.39	.16	.61	.43	

Before making comparisons of professionals as an aggregate group, subject and demographic variables were examined alone and in combination to evaluate potential covariation of dependent measures and demographic variables (age, profession, and location). To test for differences by profession, counselors, nurses, and social workers were compared since they were the only subgroups of professionals having an N large enough to render a valid groupwise comparison, (Counselors N=13, Social Workers N=8, and Nurses N=8). A one-way between subjects ANOVA found that the three groups showed significant differences in their ratings of TII (behavioral rehearsal). Post-hoc tests using the Tukey-HSD procedure found that the mean rating produced by the counselors ($\underline{M}$=5.98) was significantly greater than that of the nurses ($\underline{M}$.=4.29) ($\underline{p} < .05$), suggesting that the counselors may have greater familiarity with treatment interventions overall. Although nurses at the clinic sites give input regarding treatment selection, counselors are often in the position of administering portions of the treatment selected. The remaining professions (doctor, nurse, psychologist, physicians assistant, and med tech/health educator) were not subjected to analysis by profession because of the small number of members in each cell. However, when comparing mean ratings by profession, it is apparent that no significant differences existed. Demographic data for professionals is presented in Table VII.

Differences across location were analyzed with a one-way between subjects Analysis of Variance (ANOVA). A significant difference was found when

Table VII

Demographic Characteristics of Professional Respondents

Race		
White	N = 34	(82.9%)
Black	N = 5	(12.0%)
Hispanic	N = 2	(4.9%)
Age		
25-29	N = 1	(2.4%)
30-34	N = 7	(17%)
35-39	N = 6	(14.6%)
40-44	N = 11	(26.8%)
45-50	N = 11	(26.8%)
51-55	N = 1	(2.4%)
56-60	N = 3	(7.3%)
61-65	N = 1	(2.4%)
Location of Clinic or School:		
North (OB-GYN) -	N = 6	(14.6%)
South (OB-GYN) -	N = 5	(12.2%)
STD Clinic -	N = 10	(24.4%)
High School -	N = 20	(48.8%)
Profession:		
Physician	N = 2	(4.9%)
Nurse	N = 8	(19.5%)
Physician's Assistant	N = 4	(9.8%)
Social Worker	N = 8	(19.5%)
Counselor	N = 13	(31.7%)
Psychologist	N = 5	(12.2%)
Med Tech/Health Educ	N = 1	(2.4%)

comparing ratings of TII (behavioral rehearsal) by location $\underline{F}_{(3,49)} = 2.98$, $\underline{p}$ .04. Using Tukey's HSD procedure, South Clinic was found to rate behavioral rehearsal as significantly higher than North clinic. This finding is thought to be spurious because of the fact that the two clinics are virtually analogous in staff and clientele. In fact, some of the professional subjects occasionally work at both clinics and were assigned a location based on the location they occupied when completing an interview and questionnaire. No significant differences were found when comparing the overall interest in refusal skills questions across age breakdowns.

To assess the internal consistency of the treatment evaluation inventory as a whole, alpha coefficients were computed across all professionals' response sets. Attesting to high internal consistency, robust alpha levels were found across all dependent measures as described above. Alpha Coefficients for the TEI ratings of pamphlet, behavioral rehearsal, and video modeling were .91, .88, and .86, respectively.

Because of favorable findings on demographic variables, professional data were pooled and responses on both dependent measures (General Interest Questions and TEI responses) were combined as aggregate professional data.

Professional ratings of Interest, Participate, and Effective were compared using a one-way within subjects ANOVA. A comparison of differences of ratings by professionals of the three general interest questions yielded a significant difference for Interest, $\underline{F}_{(2,80)} = 14.57$, $\underline{p} < .01$. Interest was rated significantly higher than either

Willingness to Participate ($t(40) = 3.85$ $p < .01$) or Perceived Effectiveness ($t(40) = 4.26$ $p < .01$) of refusal skills as an intervention (see Figure II for an illustration of group means). As compared to adolescents, professionals responded in a more positive manner regarding both Interest and Participate. Using 6 as a cut score on the 7 point Likert scale, 73% responded with a rating of 6 or higher for Interest. Likelihood of participation was rated 6 or higher by 63% of professionals, while effectiveness was similarly rated by 76% of professionals. Thus, higher ratings of general interest questions were made by a greater number of professionals as compared to adolescents. See Tables VIII and IX for Means, Standard Deviations, and Cut Score Ratings of General Interest questions.

To examine preference for delivery of refusal skills by treatment modality, professionals' ratings of the 14 item Treatment Evaluation Inventory were evaluated with a one-way within subjects ANOVA. No single preference for treatment modality was identified; however, both TII and TIII were rated as significantly higher than Treatment I (pamphlet) ($F_{(2,184)} = 24.99$ $p < .01$). Means and Standard Deviations for ratings of TI, TII, and TIII are presented in the between groups analysis.

Professionals' general interest in refusal skills was correlated with preference for treatment modalities using Pearson Product Moment Correlations. As compared to adolescent data, professionals demonstrated an even stronger correlation between the variables of Interest $r. = .58$, Participate $r. = .63$, and Effective $r. = .63$ as correlates of TII (behavioral rehearsal) (all $p < .01$). These coefficients are double

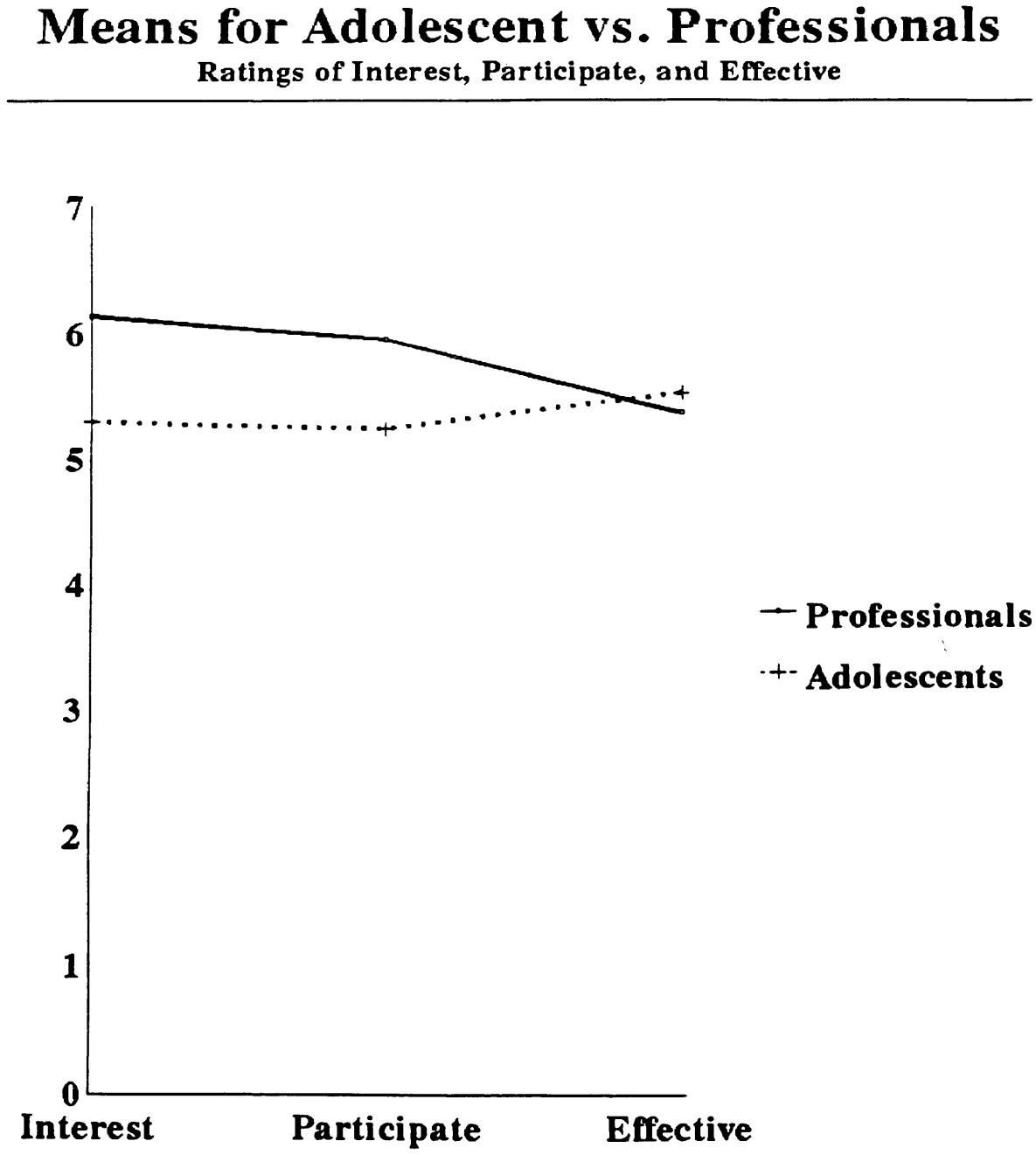
Means for Adolescent vs. Professionals
Ratings of Interest, Participate, and Effective
7
6
5
4
3
2
1
0
Interest
Participate
Effective
Professionals
Adolescents

Figure 2.

Table VIII

Means and Standard Deviations for Professionals' vs. Adolescents' Ratings of Interest, Participate, and Effective

		Mean	Std. Dev	N
Interest	Adol	5.30	1.62	53
	Prof	6.15	1.06	41
Participate	Adol	5.24	1.56	53
	Prof	5.95	1.22	41
Effective	Adol	5.52	1.18	53
	Prof	5.37	1.13	41

Table IX

Professionals' Responses to Survey of General Interest in Refusal Skills Training

Cut Score = 6 on a 7 point Likert scale (1 = Not At All and 7 = Very Much)

	Mean	Std Dev
How interested would you be in learning about refusal skills training if it was available? N = 30* (73.2%)	6.15	1.06
How likely would you be to participate in providing refusal skills training if it was made available at your school or clinic? N = 26* (63.4%)	5.95	1.22
How effective (how well do you think the training might work) at helping teens to avoid unwanted sex? N = 31* (75.6%)	5.37	1.13

* Respondents rating question 6 or 7 on a 7 point Likert scale

the ratings assigned to either TI (behavioral rehearsal) or TII (video modeling) values. Values for correlation coefficients for professionals are presented in Table X.

This would give some additional support to the premise that professionals as well as adolescents who rate Interest, Participate, and Effective questions favorably may also rate behavioral rehearsal favorably.

Analysis of Adolescents and Professionals (Between Groups)

The second research question (What are the differences in acceptability ratings between groups as a function of treatment modality used to deliver training?) was examined by joining the data sets in a final analysis for both adolescents and professionals. These data sets included ratings on Participate, Interest, and Effective as well as ratings on Kazdin's TEI scales across the treatments (pamphlet, behavioral rehearsal, video modeling).

Before performing the ANOVA for the two data sets, Cronbach's alpha was computed for each of the TEI scales using the combined data set. Alpha coefficients for all three scales were computed using 94 cases. This analysis found high internal consistency for each of the three treatment modalities: alpha for pamphlet = .88, behavioral rehearsal = .88, and video modeling= .90.

To provide a comparison of adolescent vs. professional responses to the dependent measure, a 2 (groups) x 3 (treatment modalities) mixed design analysis of variance ANOVA was completed.

Table X

Correlation Coefficients for Professionals' Interest, Participate, Effective by TI, TII, TIII

	Interest	Participate	Effect	TI	TII	TIII
Interest		.83	.43	.09	.58	.21
Participate	.83		.66	.21	.63	.24
Effective	.43	.66		.24	.56	.29
TI	.09	.21	.24		.35	.25
TII	.58	.63	.56	.15		.32
TIII	.21	.24	.29	.25	.32	

The results of this ANOVA indicated a significant interaction between groups and methods, $F_{(2,184)} = 4.80$ $p < .01$ as well as a main effect for method, $F_{(2,184)} = 30.72$, $p < .01$. The means and standard deviations for each condition are listed in Table XI and a graph of the means is shown in Figure III.

Results of a simple effects analysis indicated that the professionals rated the pamphlet as less effective compared to the adolescents. There was no significant difference between the two groups on their ratings of the video method and no significant difference between groups for ratings of behavioral rehearsal (see Table XII for a presentation of these findings).

An examination of the simple effects for the groups resulted in two significant findings. First, the adolescents' rating showed significant differences across the three treatment methods, $F_{(2,184)} = 8.41$, $p < .01$ as did the ratings provided by the professionals, $F_{(2,184)} = 24.99$, $p < .01$. To determine which of the three means differed from the other(s), correlated t-tests were performed. The results of t-test analysis are illustrated in Table XII. It should be noted that any two means not sharing the same superscript are significantly different at the $p < .01$ level.

In sum, refusal skills training has overall high ratings for general acceptance as an intervention by both adolescents and professionals with professionals demonstrating somewhat greater general interest. Further, behavioral rehearsal and video modalities are more readily accepted by both adolescents and professionals compared to the pamphlet.

Table XI

Means and Standard Deviations for Between Groups ANOVA (Groups by Methods)

Groups		Method		
		TI	TII	TIII
Adolescents	Mean	5.01	5.57	5.45
	SD	.87	.83	.96
Professionals	Mean	4.59	5.44	5.72
	SD	1.23	.90	.73

Means for Groups by Methods

Ratings of Treatment Modalities

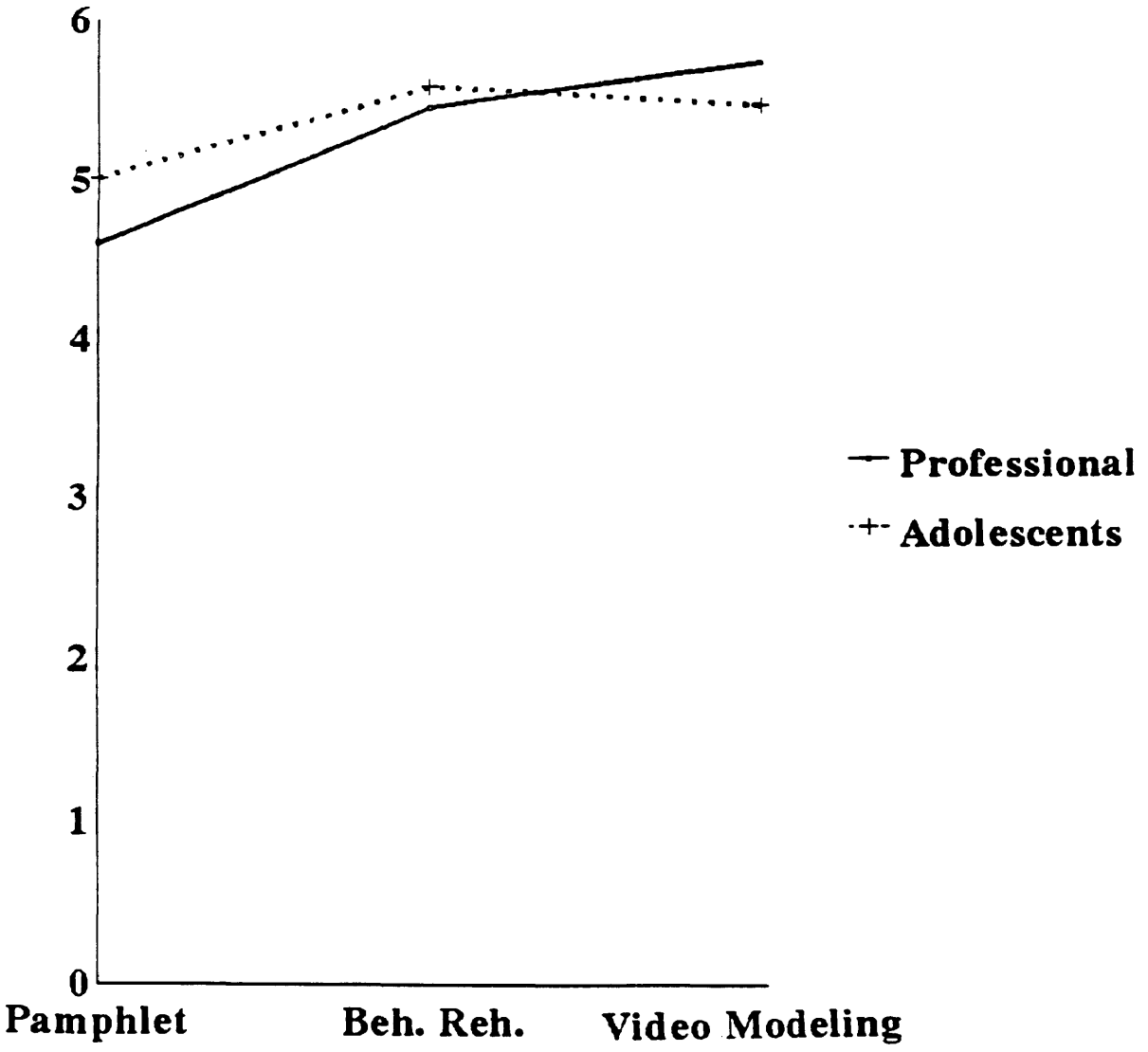

Figure 3.

Table XII

Significance of Ratings of Between Groups Means for Treatment Modalities

	Pamphlet	Behavioral Rehearsal	Video
Adol.	5.01^{A}	5.57^{B}	5.45^{B}
Prof.	4.59^{C}	5.44^{B}	5.72^{B}

Any two means not sharing the same superscript are significant at the $p < .01$ level.

Chapter V

Discussion

Adolescent Findings

The major findings of this study were that a) refusal skills training as a general intervention had high ratings for both Interest, Participate, and Effective as measured by the three general interest questions; b) for both adolescents and professionals, behavioral rehearsal was highly correlated with Interest, Participate, and Effective ratings; and, c) both behavioral rehearsal and video modeling were rated significantly higher than the pamphlet intervention, although not significantly different from one another. There was a significant interaction effect for groups by methods with both groups rating the pamphlet intervention as significantly less acceptable than both behavioral rehearsal and video modeling. Professionals gave significantly higher ratings for Interest than they did for Effective. Although not significantly different, adolescents gave Effectiveness of refusal skills a higher rating as compared to professionals.

The fact that adolescents showed high ratings for Interest, Participate, and Effectiveness is an encouraging, finding of this study. Adolescents' ratings for Effective are especially encouraging since perceptions of effectiveness have been found to show strong positive correlations with treatment acceptability and treatment outcome (Kazdin, 1980b).

Given the fact that adolescents and others often rate treatments they are unfamiliar with as negative (Elliott, Witt, Galvin, & Peterson, 1984), it is interesting

that they showed almost equal preference for behavioral rehearsal and video modeling. Considering the types of modalities presently available for learning behaviors related to unwanted sexual activity in schools and health clinics, behavioral rehearsal and video modeling are most assuredly interventions adolescents have not previously experienced within these settings. This fact makes the adolescents high ratings of behavioral rehearsal and video modeling even more encouraging since minors are known to categorically rate interventions and treatments lower as compared to professionals and parents (Kazdin et al., 1981).

Both public health clinics and schools frequently and vigorously present information in pamphlet form regarding the avoidance of unwanted sexual activity as well as other general sex education and AIDS awareness packets. This reality, coupled with adolescents' demonstrated preference for both behavioral rehearsal and video modeling and the findings of recent national studies, have implications for future treatment. In a comprehensive national report the General Accounting Office (1988) called for the development of skills training programs in response to the AIDS crisis rather than further involvement with more didactic AIDS education programs. It would appear that the adolescents surveyed in this study are corroborating recommendations at the national level; they are demonstrating a strong interest in refusal skills and a clear preference for treatment modalities other than the readily available printed information.

This study failed to confirm video modeling as the adolescents' intervention of choice for learning refusal skills. It was reasonably expected that adolescents would prefer video modeling because of the presentation format involving greater peer interaction and therefore a potentially less threatening instructional approach than either the pamphlet or behavioral rehearsal. Professionals actually rated the video as slightly higher than did adolescents suggesting that professionals may need to become more convinced of the effectiveness of behavioral rehearsal before programs using this modality are undertaken. Behavioral rehearsal has been shown to be one of the most effective methods for establishing a behavior that is presently not in the repertoire of the subject (Kelly, 1982). The present study suggests that adolescent attitudes are reflective of a match between a treatment (behavioral rehearsal) that has both demonstrated effectiveness and a greater likelihood of utility because of acceptability ratings.

It is evident from some of the previous studies on attitudes of at-risk adolescents (Goldstein et al., 1990) that adolescents who have difficulty saying no in situations where sex is unwanted have similar difficulty in other situations. That is, the absence of refusal skills behavior may represent a rather generalized lack of negative assertiveness across situations. This may offer some explanation for the adolescents' high ratings of behavioral rehearsal and video modeling. This may be an indication of their awareness that the behaviors in question may best be attained through intensive interactive therapy. Behavioral rehearsal and video modeling (tailored to the

individual with provision for feedback), appear to be identified by adolescent consumers as superior for establishing refusal behaviors that are nonexistent in their present behavioral repertoires.

One limitation of this study may be its failure to account for adolescents' perceptions of problem severity. Melton (1988) identified adolescents as having a fairly well developed capacity to perceive risky behavior. Adolescents' ability to perceive risk in sexual behavior was found to be equal to that of adults. However, younger adolescents often did not weigh relevant risks when making decisions. This failure to weigh risks and general cognitive and social immaturity has strong potential to influence ratings of their general interest, likelihood of participation, and perceived effectiveness as well as overall acceptability of refusal skills training. This concomitant variable (risk perception) may be operating in the present study.

Strongly related to perceptions of problem severity may be the influences of developmental level on perception of problems and subsequent judgements on appropriate treatment and treatment acceptability. Elliott (1986) investigated the influence of developmental level on acceptability ratings of interventions. In general, children from fifth grade through their teens rated home-based intervention, for a variety of problems, as being superior. This finding was interpreted as reflecting adolescents' inability to rate treatments in an unbiased fashion due to their cognitive and social-emotional immaturity. However, in the present study, the adolescents chose behavioral rehearsal and video modeling over the pamphlet treatment method

techniques which are more invasive and have greater adult input. These treatment preferences may demonstrate a mature style of responding although no attempt was made to assess the social maturity or cognitive awareness of the adolescents who participated in the present study.

Another consideration when analyzing the responses of adolescents deals with their ability to accurately assess effectiveness. Although it is encouraging to review adolescents' high ratings of effectiveness, the question is raised as to the veracity of judgements in the absence of in vivo experience. Unlike other treatment acceptability studies where clinical interventions are rated, sexual refusal skills are a unique set of circumstances. When children rate interventions such as time out and spanking, they have often experienced these interventions (Kazdin, 1984). However, successfully refusing an unwanted sexual overture may be an experience that some of the respondents in the study have not yet had.

Professionals

Professionals' high rating for Interest, as well as their ratings of both behavioral rehearsal and video modeling is encouraging. The finding that Interest in learning about refusal skills was rated significantly higher as compared to effectiveness of this intervention may be the focus of further study with professionals. A factor affecting professionals' ratings of effectiveness may be related to their knowledge base regarding refusal skills and behavioral interventions in general. Reimers et al. (1987) developed a model of treatment acceptability that suggested improved acceptability

and the potential for increased use of behavioral treatment may be aided by increased familiarity with behavioral intervention principles. Counselors' significantly higher ratings for behavioral rehearsal as compared to nurses may well be a function of their increased knowledge base for skills training approaches. Future studies may wish to use an a priori procedure such as establishing knowledge levels of participants before attempting to rate acceptability. Various research teams (Jeger & McClure, 1979; McMahon, Forehand, & Griest, 1981) have demonstrated that increasing positive attitudes toward behavioral techniques logically follows an increase in rater's knowledge of the techniques being rated.

Professionals' significantly lower ratings for the effectiveness of refusal skills training in this study have raised the question that perceived effectiveness by professionals is an area salient to future acceptability studies. Foci for the future development of refusal skills training may lie in conveying the message to both health and school professionals that behavioral rehearsal and video modeling interventions are highly effective. Only by raising perceptions of effectiveness to match the actual effectiveness of refusal skills, as demonstrated by a variety of studies, will professionals begin to utilize the treatments. Without a high perceived rating of effectiveness, acceptability and adoption of the interventions by professionals are unlikely.

The present study gives evidence that adolescents, by rating their interest and acceptability of treatments in much the same way that trained professionals do, are

quite capable of giving input regarding the treatment they find most acceptable and are thus most likely to use. The future of intervention and treatment planning aimed by professionals at adolescent consumers will need to recognize the value of assessing adolescents' acceptability of the treatments being adopted for their use. Just as Kazdin (1982) identified that even severely disturbed children and adolescents could readily distinguish among alternative treatment techniques, the adolescents in this study appear to be equally capable. Adolescents, as compared to professionals, demonstrated ratings that were both stable and consistent across the treatment interventions studied.

Consideration must be given to professionals' ratings of the pamphlet intervention as significantly lower than either behavioral rehearsal or video modeling. Although ratings for the pamphlet were significantly lower, it is somewhat surprising that they were not rated even lower. It is difficult to accept that professionals rated their ability to help an adolescent change behavior by using a pamphlet as falling in the positive range of the scale. Replication of the present study would provide information on the stability of this and other findings.

Implications for School Psychology

This study has established that adolescents and professionals are both highly interested in and accepting of refusal skills training methods for changing the behaviors of sexually active adolescents. A clear preference for two identified treatment modalities (behavioral rehearsal and video modeling) rather than written

information has also been established. This finding, coupled with other studies of refusal skills training and recent national studies aimed at AIDS risk reduction (GAO, 1988; Institute of Medicine, NAS, 1988), are sending a clear message to those who would claim to follow the scientist-practitioner model for selection of interventions. As a profession, school psychologists must respond to the AIDS crisis and adolescent risk-taking behaviors with treatments that have both demonstrated efficacy and acceptability by the target population.

In a recent comprehensive national survey, the Institute of Medicine (1988) calls for psychologists to fulfill the role of implementing AIDS prevention programs. This would imply that psychologists are heavily involved in both the development and implementation of training that meets the needs of the at-risk adolescent population. This mandate further implies that school psychologists will need to assume the role of proactive interventionists at the policy making level within their school districts. Now that there is a preliminary scientific base to support the use of refusal skills training as a viable and helpful intervention, psychologists must answer the call to use the information we have at hand to the best of our ability.

Klerman (1986) and Kirby (1984) have both corroborated the presence of reams of printed information being disseminated in the schools for the purposes of teaching sex education and risk reduction in general. Continuing to follow this path is not only contraindicated by the research on effective and acceptable behavior change training, it is both irresponsible and dangerous given the seriousness of the problem we are

facing with the AIDS crisis. Although the realm of behavioral training of refusal skills in the schools may be controversial to some, it is clearly indicated by the present and previous studies identifying interventions that are effective, acceptable, and thus likely to be used.

On a final note, some anecdotal information is provided regarding requests for training made by the subjects who participated in this research. After being interviewed, numerous adolescents asked when and where the refusal skills training discussed in the interview would be conducted. It was explained that no such training presently exists within the schools or public health education programs conducted in the midwestern city that was the site for this study. The youth in this study, like other adolescents nationwide, are not saying 'no'; they are looking to health and behavioral science professionals and saying, "Help me learn how to say 'no.'" As a profession, school psychology must respond by making inroads for these types of training programs to find their utility in schools, clinics, and nontraditional settings such as community youth groups and neighborhood clubs.

This research project was begun approximately nine months ago. During that time hundreds of adolescents have died of AIDS nationwide. Of the 53 adolescent females interviewed, projections would indicate that roughly five of these young women will meet a similar fate. We have no choice but to respond to this crisis with all the knowledge and skills we can muster. By developing behavioral intervention

programs in the schools aimed at reducing risk-taking sexual behavior, school psychology can begin its move from apathy to our intended role of child adovacy.

Addendum

The Treatment Evaluation Inventory (TEI) is presented in a Likert scale format and as such a question is raised regarding the appropriate statistical analysis for use with data that are not known to have equal intervals between adjacent units. (See Stevens [1951] for a discussion of scale types.) Anderson (1961) has argued that scale type has little relevance when determining whether to use parametric or nonparametric statistics and regards parametric analyses appropriate for non-interval data. Anderson concluded that problems of invariance (generality of results) transcend measurement scale typology and should be considered as statistical rather than measurement scale problems. Pagano (1986) has also asserted that numerous measures which do not have an absolute zero or equal intervals lend themselves to parametric analyses, such as analysis of variance. He stated that respondents often appear to be treating measurement scales as if they were equal interval in nature although determination of equal spacing between intervals in such scale types is admittedly difficult. Some recent work has suggested that even when basic assumptions of interval scaling are violated, robust parametric measures such as the t-test and analysis of variance remain practically invulnerable to serious compromise of F and t values (Borgatta & Bohrnstedt, 1980; Gaito, 1980; Terwilliger, 1978).

Others have argued rather convincingly that permutations and transformations of data of less than interval scaling (i.e., ordinal data) may seriously compromise interpretation of results. For example, Hays (1973) presented the view that violations

of scaling criteria are not nearly so serious a violation in use by statisticians as they are when interpretation is applied to the ensuing results.

> Most of the statistical techniques introduced in this book are designed for numerical scores, presumably arising from application of measurement techniques at the interval-scale level. This does not mean that these techniques cannot be applied to numerical data where the interval-level scale of measurement is not met; these data can be applied to any numerical data where the purely statistical assumptions are met. It does mean, however, that caution must be exercised in the interpretation of these statistical results in terms of some property the experimenter intended to measure. The statistical conclusion may be quite valid for these scores as scores, but the experimenter must think quite seriously about the further interpretation he gives results (Hays, 1973, pg. 89).

More recently, Townsend and Ashby (1984) have concurred in this analysis, providing illustrations of cases wherein ordinal data subjected to parametric analysis may result in incorrect conclusions.

For the purpose of the present study, the TEI has an extensive history of standardization, validation, determination of reliability coefficients, and the establishment of norms for some clinical, school, and professional populations. As such the TEI was viewed in much the same light as are other measures which may fall above ordinal but short of interval scaling.

When determining the appropriateness of the present statistical analysis, consultation was obtained from the Research Assistance Line at the University of Nebraska-Lincoln and from Ken Jordan, Ph.D., Bergan Mercy Hospital, an independent statistician who supplied assistance with this data analysis. Both sources supported the use of ANOVA with Jordan stating that "ANOVA appears to be an appropriate measure that is commonly used for this type of analysis." The well-established use of TEI in numerous published articles also was reviewed. Kazdin (1980a, 1980b, 1986), Kazdin, French, and Sherick (1981), Reimers and Wacker (1988) use analysis of variance to evaluate the TEI. Because the TEI appears to possess greater than rank order values and the well-established use of ANOVA with this instrument, analysis of variance was similarly employed for analysis in this study.

Although a clear precedent exists in the literature for the use of analysis of variance with the TEI and various adaptations thereof, the controversy surrounding this analysis is fully acknowledged. A precedent in the literature does not constitute clear justification for employing a parametric statistic with these data. Therefore, a caveat is warranted lest the significance and meaning of the present data be overinterpreted. Future studies may do well to employ a more conservative and potentially more appropriate analysis such as that provided by nonparametric measures.

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Appendix A

QUESTIONNAIRE: FORM A

Instructions: Please complete the following:

Date: _____

I. Demographics

Age: _____

Birthdate: _____

Male: _____ Female: _____

Race: Circle the correct category.

a. White

b. Black/African American

c. Hispanic
   1. Mexican/Chicano
   2. Puerto Rican
   3. Cuban
   4. Filipino
   5. Other _____

d. Indian/American
   Tribe _____

e. Asian/Pacific Islander
   1. Chinese
   2. Korean
   3. Japanese
   4. Other _____

f. Other _____

Teenagers are often involved in situations where they are pressured into doing something they really don't want to do. Many teenagers have also reported times when they have felt pressure to take part in unwanted sexual activity.

You have been invited to take part in this survey because you work with teens who may sometimes feel pressured into having sexual activity that they don't want to have. Many people have reported they have a problem with finding an effective way (a way that works well) of saying no in certain situations. For example, many teens say that when drinking is involved they have more trouble avoiding a situation where they don't want to have sex.

One way for teens to avoid unwanted sexual activity is to learn how to say "no" more effectively. For example, some programs have trained teenagers to look the person in the eye, say "no" clearly, tell why they are not interested in having sex, and then leave the situation. These skills for saying no more effectively are called refusal skills.

1. How interested would you be in learning about refusal skills training if it was available?

1	2	3	4	5	6	7
Not interested at all			Neutral neither interested nor disinterested			Very interested

2. How likely would you be to participate in providing refusal skills training if it was made available at your school or a clinic?

1	2	3	4	5	6	7
Not likely to participate			Neutral no preference to participate or not participate			Very likely to participate

3. How effective (how well do you think the training might work) at helping teens to avoid unwanted sex?

1	2	3	4	5	6	7
Not effective (wouldn't work)			Neutral neither effective nor ineffective			Very effective (would work well)

Your answers to the following questions will help us to learn how you view various ways of providing training to people your age about how to avoid having sex at times when they really don't want to. There will be some problem situations and a treatment described. Please read the problems and treatments and then rate the treatments 1 through 7 answering the questions below. If you have a question, please ask the interviewer for help.

Problem Situations

1. A person your age is at home alone with their partner. Parents or others are not expected to be home soon. The teen is being pressured both verbally and through persuasive touch and kissing to have sex. Their partner knows no one will be home soon and is being very persuasive. Even though they care for their partner, they really do not want to have sex at this time.

2. A person your age is with a partner they have known for a long time and feel obligated to have sex with the person because they love them or somehow feel they owe it to their partner. Even though they do not want to have sex at this time, they are being pressured

by their partner's words and actions and are having trouble resisting and avoiding the sexual activity that is not wanted at this time.

3. A person your age is at a party where they have been drinking alcoholic beverages. Even though they don't want to have sex at this time, they are being pressured (by words and action) to take part in sex with their date for the party. Even though they have enjoyed the party and their partner's company, they do not want to have sex. They are only interested in getting home and want to avoid the situation.

Please read the treatments described below and rate them according to how well you think they might work in helping an adolescent learn how to avoid the problem situations described above. Remember, these are all situations where the person described does not want to have sex at the time.

Treatment I

A pamphlet will be handed out that describes the situations outlined above that often result in unwanted sex. The pamphlet will include statistics on HIV infection, sexually-transmitted disease, risk of pregnancy, and other problems associated with unwanted sex. The pamphlet will explain the refusal skills approach to avoiding unwanted sexual activity and give instructions on how to "say no" effectively (how to make eye contact, say "no" out loud, tell why you don't want to have sex, and leave the situation). The pamphlet will discuss saying "no" when you are at home alone with your partner, at a party after drinking, and when you are feeling obligated. The pamphlet will also include the reasons unwanted sex should be avoided and talk about the different skills needed to say no effectively.

1. How acceptable do you find this treatment to be for the problem?

1	2	3	4	5	6	7
Not at all acceptable			Neutral neither acceptable nor unacceptable			Very acceptable

2. How willing would you be to give the person a pamphlet yourself if you had to change the person's problem?

1	2	3	4	5	6	7
Not at all willing			Neutral neither willing nor unwilling			Very willing

3. How suitable is this procedure for adolescents who might have behavioral problems other than those described for this adolescent?

7	6	5	4	3	2	1
Not at all suitable			Neutral neither suitable nor unsuitable			Very suitable

4. If adolescents had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

1	2	3	4	5	6	7
Very bad			Neutral just as likely to be bad as not bad			Not bad at all

5. To what extent does this procedure treat the adolescent humanely (fairly & kindly)?

1	2	3	4	5	6	7
Very cruel			Neutral neither cruel nor uncruel			Not cruel at all

6. Would it be acceptable to use this procedure for institutionalized adolescents, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

1	2	3	4	5	6	7
Not at all acceptable to apply this procedure			Neutral neither acceptable nor unacceptable			Very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

1	2	3	4	5	6	7
Very different or inconsistent			Neutral neither consistent nor inconsistent			Very consistent with everyday notions

8. To what extent do you think there might be risks in undergoing this treatment?

7	6	5	4	3	2	1
Lots of risks are likely			Neutral just as likely to be lots of risks as no risks			No risks are likely

9. How much do you like the procedures used in this treatment?

1	2	3	4	5	6	7
Do not like them at all			Neutral neither like them nor dislike them			Like them very much

10. How effective is this treatment likely to be?

7	6	5	4	3	2	1
Not at all effective			Neutral neither effective nor ineffective			Very effective

11. How likely is this treatment to make permanent improvement in the adolescent?

1	2	3	4	5	6	7
Unlikely to make improvement			No difference just as likely to make improvements as not			Very likely to make improvement

12. To what extent are undesirable side effects likely to result from this treatment?

7	6	5	4	3	2	1
Many undesirable side effects likely			Neutral may or may not be side effects			No undesirable side effects would occur

13. How much discomfort is the adolescent likely to experience during the course of using the treatment?

1	2	3	4	5	6	7
Very much discomfort			Neutral may or may not have discomfort			No discomfort at all

14. Overall, what is your general reaction to this form of treatment?

1	2	3	4	5	6	7
Very negative (don't like it)			Neutral just as likely to like it as not			Very positive (like it a lot)

Note: Adapted from "Acceptability of alternative treatments for deviant child behavior" by A. E. Kazdin, 1980, Journal of Applied Behavior Analysis, 13, 25-273. Copyright 1982 by Journal of Applied Behavior.

Treatment II

Adolescents will be given a description of the problem situation outlined above that often results in unwanted sex. Sessions will include discussions of the problems connected with unwanted sex, statistics on HIV infection, sexually-transmitted disease, risk of pregnancy, and other problems associated with unwanted sex. After a therapist explains the reason to learn refusal skills, the adolescent will be trained by first watching the therapist as he practices saying no. The adolescent will then rehearse the strategy of making eye contact, saying no, telling why you're not interested, and walking away. Training will cover saying "no" when you are at home alone with your partner, at a party after drinking, and when you are feeling obligated to have sex. The therapist will comment on what the adolescent did correctly or incorrectly and give praise for the efforts made in training. This treatment will involve rehearsing a different skill each week needed to say no effectively.

1. How acceptable do you find this treatment to be for the problem?

1	2	3	4	5	6	7
Not at all acceptable			Neutral neither acceptable nor unacceptable			Very acceptable

2. How willing would you be to give the person this kind of training yourself if you had to change the person's ability to avoid sex in these situations?

1	2	3	4	5	6	7
Not at all willing			Neutral neither willing nor unwilling			Very willing

3. How suitable is this procedure for adolescents who might have behavioral problems other than those described for this adolescent?

7	6	5	4	3	2	1
Not at all suitable			Neutral neither suitable nor unsuitable			Very suitable

4. If adolescents had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

1	2	3	4	5	6	7
Very bad			Neutral just as likely to be bad as not bad			Not bad at all

5. To what extent does this procedure treat the adolescent humanely (fairly and kindly)?

1	2	3	4	5	6	7
Very cruel			Neutral neither cruel nor uncruel			Not cruel at all

6. Would it be acceptable to use this procedure for institutionalized adolescents, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

1	2	3	4	5	6	7
Not at all acceptable to apply this procedure			Neutral neither acceptable nor unacceptable			Very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

1	2	3	4	5	6	7
Very different or inconsistent			Neutral neither consistent nor inconsistent			Very consistent with everyday notions

8. To what extent do you think there might be risks in undergoing this treatment?

7	6	5	4	3	2	1
Lots of risks are likely			Neutral just as likely to be lots of risks as no risks			No risks are likely

9. How much do you like the procedures used in this treatment?

1	2	3	4	5	6	7
Do not like them at all			Neutral neither like them nor dislike them			Like them very much

10. How effective is this treatment likely to be?

7	6	5	4	3	2	1
Not at all effective			Neutral neither effective nor ineffective			Very effective

11. How likely is this treatment to make permanent improvement in the adolescent?

1	2	3	4	5	6	7
Unlikely to make improvement			No difference just as likely to make improvements as not			Very likely to make improvement

12. To what extent are undesirable side effects likely to result from this treatment?

7	6	5	4	3	2	1
Many undesirable side effects likely			Neutral may or may not be side effects			No undesirable side effects would occur

13. How much discomfort is the adolescent likely to experience during the course of using the treatment?

1	2	3	4	5	6	7
Very much discomfort			Neutral may or may not have discomfort			No discomfort at all

14. Overall, what is your general reaction to this form of treatment?

1	2	3	4	5	6	7
Very negative (don't like it)			Neutral just as likely to like it as not			Very positive (like it a lot)

Note: Adapted from "Acceptability of alternative treatments for deviant child behavior" by A. E. Kazdin, 1980, Journal of Applied Behavior Analysis, 13, 25-273. Copyright 1982 by Journal of Applied Behavior.

Treatment III

Adolescents will be shown a video that describes the situations outlined above that often result in unwanted sex. The video will also discuss statistics on HIV infection, sexually-transmitted disease, risk of pregnancy, and other problems associated with unwanted sex. Adolescents will then be shown a video which portrays two adolescents (at home alone, at a party, and when they are feeling obligated to have sex) in these same situations. They will show how one adolescent successfully avoids having sex in these same situations. The video can be paused to show the adolescent certain features of saying "no" that are important (e.g., making eye contact, saying "no," explaining why, and leaving the situation). Each session will involve a review of the training learned in the previous session and a new role-play situation to train each of the three components of refusal skills. The actors in the video will be adolescents who are within the same age range as the adolescents receiving the treatment.

1. How acceptable do you find this treatment to be for the problem?

1	2	3	4	5	6	7
Not at all acceptable			Neutral neither acceptable nor unacceptable			Very acceptable

2. How willing would you be to give the person this kind of training yourself if you had to change the person's ability to avoid sex in these situations?

1	2	3	4	5	6	7
Not at all willing			Neutral neither willing nor unwilling			Very willing

3. How suitable is this procedure for adolescents who might have behavioral problems other than those described for this adolescent?

7	6	5	4	3	2	1
Not at all suitable			Neutral neither suitable nor unsuitable			Very suitable

4. If adolescents had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

1	2	3	4	5	6	7
Very bad			Neutral just as likely to be bad as not bad			Not bad at all

5. To what extent does this procedure treat the adolescent humanely (fairly and kindly)?

1	2	3	4	5	6	7
Very cruel			Neutral neither cruel nor uncruel			Not cruel at all

6. Would it be acceptable to use this procedure for institutionalized adolescents, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

1	2	3	4	5	6	7
Not at all acceptable to apply this procedure			Neutral neither acceptable nor unacceptable			Very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

1	2	3	4	5	6	7
Very different or inconsistent			Neutral neither consistent nor inconsistent			Very consistent with everyday notions

8. To what extent do you think there might be risks in undergoing this treatment?

7	6	5	4	3	2	1
Lots of risks are likely			Neutral just as likely to be lots of risks as no risks			No risks are likely

9. How much do you like the procedures used in this treatment?

1	2	3	4	5	6	7
Do not like them at all			Neutral neither like them nor dislike them			Like them very much

10. How effective is this treatment likely to be?

7	6	5	4	3	2	1
Not at all effective			Neutral neither effective nor ineffective			Very effective

11. How likely is this treatment to make permanent improvement in the adolescent?

1	2	3	4	5	6	7
Unlikely to make improvement			No difference just as likely to make improvements as not			Very likely to make improvement

12. To what extent are undesirable side effects likely to result from this treatment?

7	6	5	4	3	2	1
Many undesirable side effects likely			Neutral may or may not be side effects			No undesirable side effects would occur

13. How much discomfort is the adolescent likely to experience during the course of using the treatment?

1	2	3	4	5	6	7
Very much discomfort			Neutral may or may not have discomfort			No discomfort at all

14. Overall, what is your general reaction to this form of treatment?

1	2	3	4	5	6	7
Very negative (don't like it)			Neutral just as likely to like it as not			Very positive (like it a lot)

Note: Adapted from "Acceptability of alternative treatments for deviant child behavior" by A. E. Kazdin, 1980, Journal of Applied Behavior Analysis, 13, 25-273. Copyright 1982 by Journal of Applied Behavior.

PROFESSIONALS' QUESTIONNAIRE - FORM B

Name: _____ Date: _____

Date of Birth: _____ Years in Profession: _____

Profession: _____ Years in Position: _____

Position: _____

Describe how you work with the sexually active adolescent population _____

_____

_____

Teenagers are often involved in situations where they are pressured into doing something they really don't want to do. Many teenagers have also reported times when they have felt pressure to take part in unwanted sexual activity.

You have been invited to take part in this survey because you work with teens who may sometimes feel pressured into having sexual activity that they don't want to have. Many adolescents have reported they have a problem with finding an effective way (a way that works well) of saying no in certain situations. For example, many teens say that when drinking is involved they have more trouble avoiding a situation where they don't want to have sex.

One way for teens to avoid unwanted sexual activity is to learn how to say "no" more effectively. For example, some programs have trained teenagers to look the person in the eye, say "no" clearly, tell why they are not interested in having sex, and then leave the situation. These skills for saying no more effectively are called refusal skills.

For the purposes of answering this survey, please assume that you have adequate time, money, and staff to implement refusal skills training at your clinic or school if you so desire.

1. How interested would you be in learning about refusal skills training if it was available?

1	2	3	4	5	6	7
Not interested at all			Neutral neither interested nor disinterested			Very interested

2. How likely would you be to participate in providing refusal skills training if it was made available at your school or a clinic?

1	2	3	4	5	6	7
Not likely to participate			Neutral no preference to participate or not participate			Very likely to participate

3. How effective (how well do you think the training might work) at helping teens to avoid unwanted sex?

1	2	3	4	5	6	7
Not effective (wouldn't work)			Neutral neither effective nor ineffective			Very effective (would work well)

Your answers to the following questions will help us to learn how you view various ways of providing training to adolescents (14 to 19 years of age) about how to avoid having sex at times when they really don't want to. There will be some problem situations and a treatment described. Please read the problems and treatments and then rate the treatments 1 through 7 answering the questions below. If you have a question, please ask the interviewer for help.

Treatment I

A pamphlet will be handed out that describes the situations outlined above that often result in unwanted sex. The pamphlet will include statistics on HIV infection, sexually-transmitted disease, risk of pregnancy, and other problems associated with unwanted sex. The pamphlet will explain the refusal skills approach to avoiding unwanted sexual activity and give instructions on how to "say no" effectively (how to make eye contact, say "no" out loud, tell why you don't want to have sex, and leave the situation). The pamphlet will discuss saying "no" when you are at home alone with your partner, at a party after drinking, and when you are feeling obligated. The pamphlet will also include the reasons unwanted sex should be avoided and talk about the different skills needed to say no effectively.

1. How acceptable do you find this treatment to be for the problem?

1	2	3	4	5	6	7
Not at all acceptable			Neutral neither acceptable nor unacceptable			Very acceptable

2. How willing would you be to give the person a pamphlet yourself if you had to change the person's problem?

1	2	3	4	5	6	7
Not at all willing			Neutral neither willing nor unwilling			Very willing

3. How suitable is this procedure for adolescents who might have behavioral problems other than those described for this adolescent?

7	6	5	4	3	2	1
Not at all suitable			Neutral neither suitable nor unsuitable			Very suitable

4. If adolescents had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

1	2	3	4	5	6	7
Very bad			Neutral just as likely to be bad as not bad			Not bad at all

5. To what extent does this procedure treat the adolescent humanely (fairly and kindly)?

1	2	3	4	5	6	7
Very cruel			Neutral neither cruel nor uncruel			Not cruel at all

6. Would it be acceptable to use this procedure for institutionalized adolescents, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

1	2	3	4	5	6	7
Not at all acceptable to apply this procedure			Neutral neither acceptable nor unacceptable			Very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

1	2	3	4	5	6	7
Very different or inconsistent			Neutral neither consistent nor inconsistent			Very consistent with everyday notions

8. To what extent do you think there might be risks in undergoing this treatment?

7	6	5	4	3	2	1
Lots of risks are likely			Neutral just as likely to be lots of risks as no risks			No risks are likely

9. How much do you like the procedures used in this treatment?

1	2	3	4	5	6	7
Do not like them at all			Neutral neither like them nor dislike them			Like them very much

10. How effective is this treatment likely to be?

7	6	5	4	3	2	1
Not at all effective			Neutral neither effective nor ineffective			Very effective

11. How likely is this treatment to make permanent improvement in the adolescent?

1	2	3	4	5	6	7
Unlikely to make improvement			No difference just as likely to make improvements as not			Very likely to make improvement

12. To what extent are undesirable side effects likely to result from this treatment?

7	6	5	4	3	2	1
Many undesirable side effects likely			Neutral may or may not be side effects			No undesirable side effects would occur

13. How much discomfort is the adolescent likely to experience during the course of using the treatment?

1	2	3	4	5	6	7
Very much discomfort			Neutral may or may not have discomfort			No discomfort at all

14. Overall, what is your general reaction to this form of treatment?

1	2	3	4	5	6	7
Very negative (don't like it)			Neutral just as likely to like it as not			Very positive (like it a lot)

Note: Adapted from "Acceptability of alternative treatments for deviant child behavior" by A. E. Kazdin, 1980, Journal of Applied Behavior Analysis, 13, 25-273. Copyright 1982 by Journal of Applied Behavior.

Treatment II

Adolescents will be given a description of the problem situation outlined above that often results in unwanted sex. Sessions will include discussions of the problems connected with unwanted sex, statistics on HIV infection, sexually-transmitted disease, risk of pregnancy, and other problems associated with unwanted sex. After a therapist explains the reason to learn refusal skills, the adolescent will be trained by first watching the therapist as he practices saying no. The adolescent will then rehearse the strategy of making eye contact, saying no, telling why you're not interested, and walking away. Training will cover saying "no" when you are at home alone with your partner, at a party after drinking, and when you are feeling obligated to have sex. The therapist will comment on what the adolescent did correctly or incorrectly and give praise for the efforts made in training. This treatment will involve rehearsing a different skill each week needed to say no effectively.

1. How acceptable do you find this treatment to be for the problem?

1	2	3	4	5	6	7
Not at all acceptable			Neutral neither acceptable nor unacceptable			Very acceptable

2. How willing would you be to give the person this kind of training yourself if you had to change the person's ability to avoid sex in these situations?

1	2	3	4	5	6	7
Not at all willing			Neutral neither willing nor unwilling			Very willing

3. How suitable is this procedure for adolescents who might have behavioral problems other than those described for this adolescent?

7	6	5	4	3	2	1
Not at all suitable			Neutral neither suitable nor unsuitable			Very suitable

4. If adolescents had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

1	2	3	4	5	6	7
Very bad			Neutral just as likely to be bad as not bad			Not bad at all

5. To what extent does this procedure treat the adolescent humanely (fairly and kindly)?

1	2	3	4	5	6	7
Very cruel			Neutral neither cruel nor uncruel			Not cruel at all

6. Would it be acceptable to use this procedure for institutionalized adolescents, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

1	2	3	4	5	6	7
Not at all acceptable to apply this procedure			Neutral neither acceptable nor unacceptable			Very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

1	2	3	4	5	6	7
Very different or inconsistent			Neutral neither consistent nor inconsistent			Very consistent with everyday notions

8. To what extent do you think there might be risks in undergoing this treatment?

7	6	5	4	3	2	1
Lots of risks are likely			Neutral just as likely to be lots of risks as no risks			No risks are likely

9. How much do you like the procedures used in this treatment?

1	2	3	4	5	6	7
Do not like them at all			Neutral neither like them nor dislike them			Like them very much

10. How effective is this treatment likely to be?

7	6	5	4	3	2	1
Not at all effective			Neutral neither effective nor ineffective			Very effective

11. How likely is this treatment to make permanent improvement in the adolescent?

1	2	3	4	5	6	7
Unlikely to make improvement			No difference just as likely to make improvements as not			Very likely to make improvement

12. To what extent are undesirable side effects likely to result from this treatment?

7	6	5	4	3	2	1
Many undesirable side effects likely			Neutral may or may not be side effects			No undesirable side effects would occur

13. How much discomfort is the adolescent likely to experience during the course of using the treatment?

1	2	3	4	5	6	7
Very much discomfort			Neutral may or may not have discomfort			No discomfort at all

14. Overall, what is your general reaction to this form of treatment?

1	2	3	4	5	6	7
Very negative (don't like it)			Neutral just as likely to like it as not			Very positive (like it a lot)

Note: Adapted from "Acceptability of alternative treatments for deviant child behavior" by A. E. Kazdin, 1980, Journal of Applied Behavior Analysis, 13, 25-273. Copyright 1982 by Journal of Applied Behavior.

Treatment III

Adolescents will be shown a video that describes the situations outlined above that often result in unwanted sex. The video will also discuss statistics on HIV infection, sexually-transmitted disease, risk of pregnancy, and other problems associated with unwanted sex. Adolescents will then be shown a video which portrays two adolescents (at home alone, at a party, and when they are feeling obligated to have sex) in these same situations. They will show how one adolescent successfully avoids having sex in these same situations. The video can be paused to show the adolescent certain features of saying "no" that are important (e.g., making eye contact, saying "no," explaining why, and leaving the situation). Each session will involve a review of the training learned in the previous session and a new role-play situation to train each of the three components of refusal skills. The actors in the video will be adolescents who are within the same age range as the adolescents receiving the treatment.

1. How acceptable do you find this treatment to be for the problem?

1	2	3	4	5	6	7
Not at all acceptable			Neutral neither acceptable nor unacceptable			Very acceptable

2. How willing would you be to give the person this kind of training yourself if you had to change the person's ability to avoid sex in these situations?

1	2	3	4	5	6	7
Not at all willing			Neutral neither willing nor unwilling			Very willing

3. How suitable is this procedure for adolescents who might have behavioral problems other than those described for this adolescent?

7	6	5	4	3	2	1
Not at all suitable			Neutral neither suitable nor unsuitable			Very suitable

4. If adolescents had to be assigned to treatment without their consent, how bad would it be to give them this treatment?

1	2	3	4	5	6	7
Very bad			Neutral just as likely to be bad as not bad			Not bad at all

5. To what extent does this procedure treat the adolescent humanely (fairly and kindly)?

1	2	3	4	5	6	7
Very cruel			Neutral neither cruel nor uncruel			Not cruel at all

6. Would it be acceptable to use this procedure for institutionalized adolescents, the mentally retarded, or other individuals who are not given an opportunity to choose treatment for themselves?

1	2	3	4	5	6	7
Not at all acceptable to apply this procedure			Neutral neither acceptable nor unacceptable			Very acceptable to apply this procedure

7. How consistent is this treatment with common sense or everyday notions about what treatment should be?

1	2	3	4	5	6	7
Very different or inconsistent			Neutral neither consistent nor inconsistent			Very consistent with everyday notions

8. To what extent do you think there might be risks in undergoing this treatment?

7	6	5	4	3	2	1
Lots of risks are likely			Neutral just as likely to be lots of risks as no risks			No risks are likely

9. How much do you like the procedures used in this treatment?

1	2	3	4	5	6	7
Do not like them at all			Neutral neither like them nor dislike them			Like them very much

10. How effective is this treatment likely to be?

7	6	5	4	3	2	1
Not at all effective			Neutral neither effective nor ineffective			Very effective

11. How likely is this treatment to make permanent improvement in the adolescent?

1	2	3	4	5	6	7
Unlikely to make improvement			No difference just as likely to make improvements as not			Very likely to make improvement

12. To what extent are undesirable side effects likely to result from this treatment?

7	6	5	4	3	2	1
Many undesirable side effects likely			Neutral may or may not be side effects			No undesirable side effects would occur

13. How much discomfort is the adolescent likely to experience during the course of using the treatment?

1	2	3	4	5	6	7
Very much discomfort			Neutral may or may not have discomfort			No discomfort at all

14. Overall, what is your general reaction to this form of treatment?

1	2	3	4	5	6	7
Very negative (don't like it)			Neutral just as likely to like it as not			Very positive (like it a lot)

Note: Adapted from "Acceptability of alternative treatments for deviant child behavior" by A. E. Kazdin, 1980, Journal of Applied Behavior Analysis, 13, 25-273. Copyright 1982 by Journal of Applied Behavior.