Recent trends in rates of sexually transmitted diseases, AIDS, and teen pregnancies have led to a new emphasis on male involvement in family planning programs. Little research data exists on specific opinions, attitudes and needs of young males regarding the array of services available. This paper describes: (1) how market research (including focus groups, a client services audit, an educational services audit, and a client satisfaction survey) was used to determine a client-oriented approach to designing new services for males; and (2) results of a pilot project which compared two types of ("traditional" and "interactive") school-based sexuality education programs based on the market research findings. Results showed that the "interactive" educational program was associated with statistically significant gains in knowledge for both males and females, although knowledge gain was greater for males than for females. While male communication skills improved more than female, the difference was not significant. Overall results suggest that market research can be used effectively to design sexuality education programs and family planning services that are more consistent with the needs of young males. (Author/JD)
Effects of a Pilot Project to Involve Young Males in a School-Based Sexuality Education Program

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Chicago, Illinois
This paper describes a one-year pilot project aimed at involving adolescent males in family planning services. The programmatic aspects were carried out by the Family Planning Association of Maine; the evaluation research was conducted by the Human Services Development Institute of the University of Southern Maine.

The project was funded by a Special Initiative Grant from the Federal Title X program, and took place from mid-1987 through the early months of 1989.

Overall goals of the project were:

1. To design methods of delivering services to adolescent males within the context of the existing service delivery system, and
2. To put adolescent male clients' needs first, tailoring education and/or clinical services and clinic environment to meet those needs, rather than offering services first and then attempting to attract clients.

These goals were developed after a careful analysis of male involvement projects implemented across the country and considerations related to the current and specific needs for male involvement in Maine. Nationwide efforts to increase male sexual responsibility have recognized young males as the "missing link" in strategies and services intended to prevent unintended teenage pregnancies and the spread of sexually transmitted diseases among youth.

This project was intended to add to the body of knowledge regarding male sexual responsibility by designing a service for young men based on state of the art marketing research methods. These methods included the use of focus groups, client satisfaction surveys, and service delivery audits to determine areas of need and effective service delivery based on a client-centered approach. By obtaining reliable data from the adolescents themselves prior to
developing a service, this project has incorporated private sector methodology and public health objectives.

The specific objectives of the project were:

1. To conduct market research to determine what sexuality education and/or reproductive health services adolescent males (ages 14-18) want and need from family planning.

2. One clinic site, with direction from the FPA, will design, promote and begin delivering sexuality education and/or reproductive health care services for adolescent males (ages 14-18) which match needs identified through market research.

3. To provide training, information, and education resources to all contract agency management staff to increase their knowledge about adolescent male involvement and consumer oriented services.

This paper describes briefly two phases of the project: the market research and the service implementation; the final section will focus on the project evaluation.

The Market Research Phase

Market research was conducted within one service area. The John Snow Institute, Boston, Massachusetts was awarded a contract to conduct the market research which involved four components:

1. Focus groups to investigate adolescent male attitudes toward contraception and sex and to assess adolescent male demand for a variety of potential family planning services, including clinical, educational, counseling and contraceptive distribution services.

2. A clinic services marketing audit to assess possible barriers to service access and usage in the project site.
3. **An educational services marketing audit** to assess possible barriers to education program access and usage.

4. **A client satisfaction survey** to quantitatively assess current user satisfaction with clinical services.

The focus group research involved the recruitment and participation of 53 adolescents in six focus group sessions and six structured interviews of individuals and couples. The research was conducted on-site at local high schools, with the full cooperation of school officials and parents, who provided signed permission forms indicating approval for their children's participation in the project.

The focus groups consisted of ninety-minute sessions, with 5-9 participants per group. A focus group moderator conducted the sessions utilizing constructed scenarios to obtain participant reaction to the topics presented (contraception, sexual responsibility, service designs). Analysis of results indicated the sexuality/contraceptive education services were viewed by adolescents as the service with the highest potential demand of all services reviewed, and the lowest service in terms of presenting barriers (although service barriers did exist in this area). The analysis also revealed that youth perceived the potential demand for clinical services for males to be low, and barriers preventing male access and usage of clinical services to be high. In fact, every service except education programs was rated as having significantly high levels of service barriers.

**Overall Trends**

The males thought that contraception is definitely important, felt that the responsibility of contraception should be shared, and understood the seriousness of creating an unwanted pregnancy.
Most of the groups did not know of contraceptive methods other than condoms and the birth control pill. Males expressed negative attitudes about using condoms because they are embarrassing to buy, lessen sensation, ruin spontaneity, and can break. They think that condoms are smart to use in order to prevent both pregnancy and STD's and think they are easily accessible, but the negative aspects seemed to be more emphasized than the positive aspects in influencing behavior. Most males know that condoms can be purchased at drug stores and grocery stores.

Based on results from the focus group discussions, the ideal family planning clinic for males would be in an accessible but discreet location, be part of a bigger building so that there could be many reasons why they are there, and the inside would be a comfortable, living-room type of atmosphere. The name of the clinic would be some sort of acronym, so that it would not be immediately obvious why someone was going in. The people that work there (as front-desk staff, counselors and doctors) would be males in their early 20s. The ideal counselor would be young enough to relate to teenagers but old enough to have experience. This counselor would also be understanding, easy to talk to, and wouldn't give advice unless the client asked for it. Males want to talk to counselors about what to do if a girlfriend gets pregnant. Another major concern is the discussion of sexual expectations in a relationship.

In regard to the type of education services wanted, the focus groups revealed that adolescent males want less didactic and more interactive programs. They value an adult educator who displays sensitivity to and awareness of male needs and perspectives, and clearly prefer coeducational programs to sex segregated formats (although time for sex segregated discussions within the coeducational format was rated as important).
Desirable features of educational programs include opportunities for youth to discuss emotional aspects related to contraceptive use and the need to address relationship issues and problems inclusive of the perspectives of both genders. Areas of skills development, particularly communication skills, were also cited as needing a strong emphasis.

The services and client satisfaction audits reinforced the focus group findings in identifying that clinical services presented significant barriers to male participation. Such barriers are: lack of funding due to the structure of Title X reimbursement; female-identified services and all-female staff; lack of awareness among males in regard to the existence and/or type of clinic services being among those barriers cited.

Implementation Phase

In reviewing the data obtained through the market research, it was decided to focus on the educational services provided by family planning in the obvious research component of the project. The focus groups proved valuable in providing important detailed information about what the education program content and format should be in order to meet the perceived needs of adolescent males.

The market research revealed a number of topics, including contraception, about which young males wanted: 1) more information; and 2) help in dealing with relationships where these issues were likely to surface. Central to the notion of establishing and maintaining relationships are good communications skills. Comments made during the focus groups sessions highlighted concerns of young males as to how to effectively communicate, particularly with young women, their fears, concerns, and attitudes related to sexuality. This finding helped shape the content and format of a new three session lesson
plan. This lesson plan served as the "interactive" curriculum evaluated in this project.

Methods

Two high schools in central Maine were selected to serve as the sites where contraceptive education programs would be implemented. One school site received the "traditional," didactic model of contraceptive education and the other received the newly designed "interactive" model. The schools were generally comparable with respect to size of student population, rural/urban composition, and economic status of communities within the school district. One of the high schools had provided students for the focus groups and structured interviews in the market research phase. The combined student samples were about half male and half female; almost all were 17 or 18 years of age.

In each high school, sexuality education lesson plans on the topic of contraception were presented to groups of students enrolled in home economics classes, the class in which health education is typically presented. At Site 1 (the "traditional" education site) three classes received 50 minutes of instruction over two consecutive days. At Site 2 (the "interactive" education site) two classes received 90 minutes of instruction over three consecutive days.

The "interactive" lesson plans required educators to use group facilitation techniques to achieve the state goals, as suggested by the focus groups. The "traditional" intervention was to be a more standard, didactic approach to contraceptive education, focusing on primarily one-way transmission (from teacher to students) of factual information.
The Evaluation Phase

The following research questions for the project evaluation were proposed:

1. To what extent do sexuality education lesson plans on the topic of contraception, carried out in coeducational high school classes, affect the knowledge, attitudes, and behaviors of students (male and/or female) who are exposed to the education?

2. Are there any differences in outcomes when a more interactive approach, rather than a traditional, more didactic, approach is used by teachers?

3. To what extent do community sexuality educators who work in local family planning agencies now use interactive teaching techniques? What subject matter is now included in high school classes they teach? What needs do they have for further training?

4. What are the implications of the findings for subsequent research studies?

In order to document the actual implementation of the lesson plans, community sexuality educators were asked to fill out "Educator Questionnaires." Additionally, each educator was asked to complete a checklist indicating which parts of the lesson plan they actually presented.

The Health Curriculum Coordinator for the district in which each school was located was asked to complete a one page School Profile Form. Information reported on that form was used to gain an understanding of the scope of the school's existing family life and sexuality education program. In particular, an effort was made to document previous contraception education of that had been directed to the students who participated in the pilot project.

A one-page pretest was administered by classroom teachers to all students who were to be exposed to the lesson plans on the day prior to the first
classroom session. Classroom teachers also administered the posttest immediately after the lessons were completed. The pretest/posttest contained questions which were developed relative to the content of both the traditional and interactive lesson plans. The instrument was developed especially for use in this study. Responses to questions in three areas (knowledge, attitudes, and behaviors) were scored and used to calculate a total score for each pretest and posttest. Instruments were coded to permit analyses of changes in scores among individuals rather than among groups of students. A score of 4 on the knowledge questions corresponded with 4 correct answers; a score of 16 on the attitudinal questions indicated the most positive attitudes toward sexuality; and a score of 4 on the behavioral questions corresponded with the greatest feeling of comfortableness discussing certain issues related to sexuality.

Constructs that the pretest/posttest sought to assess included the following:

**Knowledge (4 questions)**
- Relative effectiveness of birth control methods (2 questions)
- Where contraceptives can be obtained
- Choosing birth control methods

**Attitudes (4 questions)**
- Toward the importance of birth control
- Toward the importance of sexuality in one's life
- Clarity of long-term goals
- Toward gender role behavior

**Behaviors (4 questions)**
- Comfortableness in starting a discussion with boy/girlfriend about sex
Table 1: Pretest Results by Site

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Traditional (n=44)</th>
<th>Interactive (n=32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Correct</td>
<td>% Incorrect</td>
<td>% Correct</td>
</tr>
<tr>
<td>Least effective birth control</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Availability of contraceptives</td>
<td>91 9</td>
<td>91 9</td>
</tr>
<tr>
<td>Learn all methods before choosing</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Condom effectiveness with foam</td>
<td>55 45</td>
<td>75 25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>% Agree</th>
<th>% Disagree</th>
<th>% Agree</th>
<th>% Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important to understand boy/girlfriend's feelings before making decision on birth control</td>
<td>91 9</td>
<td>94 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual relationships create more problems than they're worth</td>
<td>74 26</td>
<td>84 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have a good idea of where I'm headed in future</td>
<td>91 9</td>
<td>97 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males and females have similar concerns talking about birth control</td>
<td>66 34</td>
<td>72 28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behaviors (Comfortableness)</th>
<th>% Comfort-</th>
<th>% Uncomfortable</th>
<th>% Comfortable</th>
<th>% Uncomfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a discussion with boy/girlfriend about sex</td>
<td>67 33</td>
<td>63 37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starting a discussion with boy/girlfriend about birth control</td>
<td>68 33</td>
<td>63 37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussing feelings about choice of method with boy/girlfriend</td>
<td>65 35</td>
<td>59 41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using some form of birth control if having sex</td>
<td>83 17</td>
<td>81 19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Percentages may not total 100 due to rounding.
Comfortableness in starting a discussion with boy/girlfriend about birth control

Comfortableness in discussing feelings about using a method of birth control

Comfortableness using some form of birth control, if he/she were to have sex

The pretest contained identical questions to the posttest as well as an additional section which assessed student reactions to the classes.

Two basis analyses were performed on the data set: the first compared pretest/posttest change between sites (traditional to interactive); the second analysis compared pretest/posttest change for the combined sites. The latter analysis was performed when it became clear that differentiation between the educational interventions was minimal since documentation of the lesson plan formats showed that both interventions used a high proportion of interactive techniques. The standard student T-test was used in instances where variances in scores between groups were equal; an approximation of the student T-test was used where variances in scores were unequal. Changes among male participants were examined in the analysis to determine any gender-related differences caused by the interventions. Table 1 summarizes the responses of students on the pretest questions.

Results: With respect to scores on the knowledge questions, both sites were very similar to each other, with the exception of the question relative to condom effectiveness. Questions related to attitudes did elicit responses which were more varied by site: 84% of the students in the interactive site felt that "sexual relationships create more problems than they're worth," while 74% of the students in the traditional site agreed with that statement. More students (72%) at the interactive site than the traditional site (66%)
felt that males and females have similar concerns talking about birth control. Ratings of comfortableness were very comparable between sites relative to all four questions.

Results of the posttest, illustrated in Table 2, show changes in scores among participants by site. With respect to knowledge, the scores generally improved at each site with the exception of one knowledge question, "The method of birth control which is the least effective," at the traditional site. Most of the gain in overall knowledge scores were due to a higher number of students responding correctly to the question relative to condom effectiveness on the posttest.

Posttest scores on the attitude questions were similar at both site for two of the questions ("It's important to understand you boy/girlfriend's feelings before making a decision on birth control" and "I have a good idea of where I'm headed in the future"). Responses to the other two questions showed a difference between sites. More students (26%) at the interactive site than at the traditional site (17%) disagreed with statement "sexual relationships create more problems than they're worth." More students at the traditional site than at the interactive site (26% and 9%, respectively) agreed with the statement, "Males and females have similar concerns talking about birth control."

Using matched scores computed for individual students, pretest and posttest results were compared, by site, for each dimension included in the evaluation instrument. The results appear in Table 3. Although slight differences existed between sites with respect to knowledge, attitude, and comfort scores on both the pretest and the posttest, none were found to be statistically significant, based on the results of the student T-test.

Given the lack of any significant differences between the two sites on any
<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Traditional (n=44)</th>
<th>Interactive (n=32)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Correct</td>
<td>% Incorrect</td>
</tr>
<tr>
<td>Least effective birth control</td>
<td>98</td>
<td>2</td>
</tr>
<tr>
<td>Availability of contraceptives</td>
<td>96</td>
<td>4</td>
</tr>
<tr>
<td>Learn all methods before choosing</td>
<td>100</td>
<td>—</td>
</tr>
<tr>
<td>Condom effectiveness with foam</td>
<td>89</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attitudes</th>
<th>% Agree</th>
<th>% Disagree</th>
<th>% Agree</th>
<th>% Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important to understand boy/girlfriend's feelings before making decision on birth control</td>
<td>96</td>
<td>4</td>
<td>94</td>
<td>6</td>
</tr>
<tr>
<td>Sexual relationships create more problems than they're worth</td>
<td>83</td>
<td>17</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>Have a good idea of where I'm headed in future</td>
<td>91</td>
<td>9</td>
<td>97</td>
<td>3</td>
</tr>
<tr>
<td>Males and females have similar concerns talking about birth control</td>
<td>74</td>
<td>26</td>
<td>91</td>
<td>9</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Behaviors (Comfortableness)</th>
<th>% Comfortable</th>
<th>% Uncomfortable</th>
<th>% Comfortable</th>
<th>% Uncomfortable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a discussion with boy/girlfriend about sex</td>
<td>81</td>
<td>19</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Starting a discussion with boy/girlfriend about birth control</td>
<td>63</td>
<td>37</td>
<td>45</td>
<td>55</td>
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<tr>
<td>Discussing feelings about choice of method with boy/girlfriend</td>
<td>66</td>
<td>34</td>
<td>61</td>
<td>39</td>
</tr>
<tr>
<td>Using some form of birth control if having sex</td>
<td>79</td>
<td>21</td>
<td>78</td>
<td>22</td>
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</table>

Note: Percentages may not total 100 due to rounding.
Table 3: Comparison of Pre/Posttest Scores Between Site 1 and Site 2

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum/Maximum Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRETEST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge (score of 4=all correct; 0=none correct)</td>
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<td></td>
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<tr>
<td>Traditional (Site 1)</td>
<td>43</td>
<td>3.44</td>
<td>0.55</td>
<td>2.0-4.0</td>
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<tr>
<td>Interactive (Site 2)</td>
<td>32</td>
<td>3.66</td>
<td>0.48</td>
<td>3.0-4.0</td>
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<tr>
<td>Attitudes (score of 16=most positive attitudes, 4=least positive)</td>
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<tr>
<td>Traditional (Site 1)</td>
<td>42</td>
<td>12.38</td>
<td>1.46</td>
<td>10.0-15.0</td>
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<tr>
<td>Interactive (Site 2)</td>
<td>31</td>
<td>12.58</td>
<td>1.26</td>
<td>11.0-15.0</td>
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<tr>
<td>Comfort (score of 4=most comfortable, 16=least comfortable)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Traditional (Site 1)</td>
<td>38</td>
<td>5.97</td>
<td>2.75</td>
<td>4.0-12.0</td>
</tr>
<tr>
<td>Interactive (Site 2)</td>
<td>31</td>
<td>5.84</td>
<td>2.41</td>
<td>4.0-13.0</td>
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<tr>
<td><strong>POSTTEST</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Knowledge (score of 4=all correct; 0=none correct)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional (Site 1)</td>
<td>43</td>
<td>3.81</td>
<td>0.39</td>
<td>3.0-4.0</td>
</tr>
<tr>
<td>Interactive (Site 2)</td>
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<td>3.81</td>
<td>0.40</td>
<td>3.0-4.0</td>
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<tr>
<td>Attitudes (score of 16=most positive attitudes, 4=least positive)</td>
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<td></td>
<td></td>
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<tr>
<td>Traditional (Site 1)</td>
<td>40</td>
<td>12.67</td>
<td>1.51</td>
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<td>Interactive (Site 2)</td>
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<td>12.64</td>
<td>2.00</td>
<td>5.0-16.0</td>
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<tr>
<td>Comfort (score of 4=most comfortable, 16=least comfortable)</td>
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<td></td>
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</tr>
<tr>
<td>Traditional (Site 1)</td>
<td>41</td>
<td>6.16</td>
<td>2.42</td>
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<tr>
<td>Interactive (Site 2)</td>
<td>31</td>
<td>5.34</td>
<td>1.944</td>
<td>4.0-11.0</td>
</tr>
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</table>
of the three dimensions, further by-site analyses were not performed. However, based on the similarity of the interventions, documented through a content analysis of the lesson plans submitted by the community sexuality educators, the data were subsequently regrouped to permit an analysis of difference in pretest/posttest scores for all students exposed in both sites. The results of that analysis appear on Table 4. Although gains were noted in all three dimensions, only the change in knowledge scores were statistically significant (p = .003).

Since one of the major aims of the study was to determine if exposure to the lesson plans resulted in any differential effects among males and females, the combined data set was then grouped to allow an analysis of scores by gender on the pretest and posttest. The results are presented in Table 5. Among males, the improvement in knowledge scores between the pretest and posttest was statistically significant (p = .002), however, gains in attitudes and comfort were not significant. Females experienced a statistically significant gain in both knowledge (p = .03) and attitudes (p = .04) from the pretest to the posttest, but not in comfort.

An analysis of the differences between male and female scores was also performed. Although differences were found relative to knowledge, attitude, and comfort scores between males and females, they were not statistically significant.

Discussion and Summary: Information submitted by the school health coordinators for each of the school districts involved documented previous student exposure to family life and sexuality education in general, and to contraceptive education in particular. Based on that information, it appeared that groups of students who participated in the educational sessions at each of the high schools were similar with respect to age and previous exposure to
### Table 4: Comparison of Pretest to Posttest Results, Combined Sites

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum/Maximum Scores</th>
<th>T-Ratio</th>
<th>Probability</th>
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<td>2.0-4.0</td>
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<td>.0003</td>
</tr>
<tr>
<td>Posttest</td>
<td>75</td>
<td>3.81</td>
<td>0.39</td>
<td>3.0-4.0</td>
<td></td>
<td></td>
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<tr>
<td><strong>Attitudes</strong></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Pretest</td>
<td>71</td>
<td>12.46</td>
<td>1.38</td>
<td>10.0-15.0</td>
<td>0.75</td>
<td>.45</td>
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<td>Posttest</td>
<td>73</td>
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<td>1.73</td>
<td>5.0-16.0</td>
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<td>(n.s.)</td>
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<tr>
<td><strong>Comfort</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>69</td>
<td>5.91</td>
<td>2.58</td>
<td>4.0-13.0</td>
<td>-0.54</td>
<td>.59</td>
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<tr>
<td>Posttest</td>
<td>72</td>
<td>5.69</td>
<td>2.19</td>
<td>4.0-13.0</td>
<td></td>
<td>(n.s.)</td>
</tr>
</tbody>
</table>

* Indicates statistically significant difference at p ≤ 0.05 level.
<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum/Maximum Scores</th>
<th>T-Ratio</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MALES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Knowledge</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>35</td>
<td>3.37</td>
<td>0.55</td>
<td>2.0-4.0</td>
<td>3.12</td>
<td>.002</td>
</tr>
<tr>
<td>Posttest</td>
<td>35</td>
<td>3.74</td>
<td>0.44</td>
<td>3.0-4.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Attitudes               |        |      |                    |                        |         |             |
| Pretest                 | 33     | 12.55| 1.42               | 10.0-15.0              | -0.74   | .46         |
| Posttest                | 32     | 12.22| 2.07               | 5.0-15.0               | (n.s.)  |             |

| Comfort                 |        |      |                    |                        |         |             |
| Pretest                 | 32     | 6.75 | 2.82               | 4.0-12.0               | -1.46   | .15         |
| Posttest                | 33     | 5.82 | 2.27               | 4.0-13.0               | (n.s.)  |             |

**FEMALES**              |        |      |                    |                        |         |             |

| * Knowledge             |        |      |                    |                        |         |             |
| Pretest                 | 40     | 3.68 | 0.47               | 3.0-4.0                | 2.18    | .03         |
| Posttest                | 40     | 3.88 | 0.33               | 3.0-4.0                |         |             |

| * Attitudes             |        |      |                    |                        |         |             |
| Pretest                 | 40     | 12.40| 1.35               | 10.0-16.0              | 2.09    | .04         |
| Posttest                | 39     | 13.03| 1.31               | 10.0-15.0              |         |             |

| Comfort                 |        |      |                    |                        |         |             |
| Pretest                 | 37     | 5.19 | 2.09               | 4.0-13.0               | 0.83    | .41         |
| Posttest                | 39     | 5.59 | 2.14               | 4.0-12.0               | (n.s.)  |             |

*Indicates statistically significant differences at p ≤ 0.05 level
school-based family life and sexuality programs. After exposure to the lesson plans, there were no statistically significant differences in posttest scores between the two sites.

Table 1 and 2, which summarized pretest and posttest scores by site, showed few notable differences between the sites in responses to the knowledge, attitude, and comfortableness questions. Before exposure to the classes, students at the interactive site had somewhat higher mean score in knowledge and attitudes, but a lower score in comfort than the traditional site. All pretest scores were relatively high, however, indicating the combined group of students who took the pretest were knowledgeable, had generally positive attitudes about sexuality and birth control, and reported being reasonably comfortable discussing these topics. After exposure to the lesson plans, mean values for knowledge and attitude scores were almost identical for both sites. The lower level of comfort felt by students at the interactive site after the lessons may be explained by the tendency of teens to overrate their level of competence prior to actual experience. After participating in a session where they had to demonstrate these behaviors, some students may have felt less comfortable and rated themselves accordingly.

Information provided by the educators who implemented the lesson plans in the schools showed that the two interventions were remarkably similar. In effect, the traditional lesson was more like the interactive lesson, due to the inclusion of effective teaching methods. Thus, differences between the sites due to effects of the interventions that might have been discerned, if the implementation had been carried out as originally planned, were not found. The lack of significant differences may also be due to the relatively short time students were exposed to the information and experience period of the lesson plans. Other studies of school health educational program effects
have shown that attitudinal and behavioral changes often require longer exposure and more reinforcement to be manifested. Therefore, it may have been unrealistic to expect major shifts in any area except knowledge, given the 2 to 3 hours of instruction students received. Additionally, limitations of the pre/posttest instrument may have affected the nature of the data collected.

Using the assumption that both interventions were almost identical, the data were grouped to allow an assessment of differences between pretest and posttest scores for all students who participated in both sites. The significant gain in knowledge (see Table 4) as evidenced in the posttest scores, indicates that students who were exposed to the lesson plans gained a better understanding of the information presented in the lesson. Although attitudes became more positive and students became more comfortable after participating in the lessons, none of these differences were significant for the group as a whole.

Further examination of the data to determine any variations among male and female students revealed some interesting differences. Although both males and females experienced significant gains in knowledge from the lessons, males gained more than females but the difference was not statistically significant. This finding suggests that the intervention may be more effective with males than females in influencing knowledge. Since both genders had relatively high rates of knowledge at the outset, the lessons may have provided an opportunity for males to "catch up" to females. Further study is needed to determine whether or not these preliminary gender-related differences are valid and possible implications for program planners.

Additional studies would also be useful to monitor how changes in student knowledge, attitudes, and behaviors are sustained over time. Effects on students related to variations in program length, format, and content might
also be assessed in subsequent research.

To a certain extent, the success of the implementation phase can be tied to the validity of the market research phase. The contraceptive lesson plans were well received and appeared to meet an existing need for more information. They helped young males become more comfortable initiating crucial discussions with females regarding feelings about contraception and sexuality.

From the standpoint of the measure selected for study during the implementation phase, the market research appeared to be very useful. Little quantitative or qualitative data were available, prior to the market research, specifically targeted to young males. The focus groups yielded a substantial amount of information which provided FPA staff with some general ideas about young males' needs and current barriers to service. Limitations on funding in the market research phase prevented more extensive use of focus group discussions which should be used to confirm or disconfirm these preliminary findings.

The evidence provides justification for an expanded curriculum beyond the limited three sessions developed for this project. It is reasonable to anticipate further gains in knowledge, comfort, and skills development through the use of strongly focused interactive teaching methodologies. An expansion in content would be warranted in order to assess outcomes related to significant behavioral changes as, for example, increased utilization of clinical services by males.

Conclusion: Recommendations

Despite the limited duration of the project there were demonstrated outcomes of significance to national efforts to promote male involvement in
family planning and to encourage increased sexual responsibility among adolescent males. These outcomes included the value of using client-centered approaches to assess needs and service delivery systems, the effectiveness of sexuality and contraceptive education strategies, and the importance of coordinating management, staff and consultants under the oversight of an umbrella agency (FPA) in such efforts.

Specific recommendations from the project as identified by the project's evaluation are to:

1. Conduct additional focus groups around themes identified in this project to confirm/disconfirm their relevance to young men.
2. Compare the effects of an interactive curriculum to a traditional curriculum, where the interventions are clearly differentiated, using control or comparison sites who are not exposed to the education.
3. Design and conduct studies of alternative (e.g., male only group) methods for educating young males about issues identified in focus groups.
4. Develop and test methods to reach young males through their sexual/relationship partners (using some of the data from the clinical services component of this project).
5. Develop and refine methods to teach communication and decision-making skills to young males.
6. Compare the effectiveness of male and female instructors, group leaders, clinic personnel, and others in meeting the needs of young males.
7. Develop and refine methods to increase the educational skills of community sexuality educators.

The word RESPECT emerges as the primary descriptor from this project.
Goals for reducing unintended teenage pregnancy relate to the numerous nationwide efforts to achieve this outcome by means of helping adolescents develop self-respect and respect for each other. This project contributes an extension of the concept of RESPECT to every element of family planning services for adolescents. Successful programs should base assessment strategies on young people's opinions, design services according to the perceptions of needs and strategies provided by young people, maintain consistent respect for teenagers through the method of services delivery and evaluate the effectiveness of that service through the eyes of those for whom it is intended.