

FINAL EVALUATION REPORT

FAMILY PLUS Program
of
Employee and Family Resources (EFR) Des Moines, Iowa

Funded by
U.S. Substance Abuse and Mental Health Services Administration
(Family Strengthening Grants Program)

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I. INTRODUCTION

This document is the final report of the two-year evaluation of the Family Plus program. Family Plus, which is offered by Employee and Family Resources (EFR) in Des Moines, is one of 32 programs funded by the U.S. Substance Abuse and Mental Health Services Administration under its Family Strengthening grants program.

Family Plus provides early intervention and prevention services to families of middle school-aged children in Polk County, Iowa, which includes the city of Des Moines. Its goal is to prevent risky behaviors among youth—substance abuse, in particular—by strengthening family protective factors. Its specific objectives include:

- Increasing parents' and youth's knowledge of the effects of substance use and ways to resist the use of addictive substances
- Decreasing or preventing youth's use of addictive substances
- Increasing parents' mentoring, expectation-setting, and youth monitoring behaviors
- Increasing parents' awareness of the strengths of their families
- Increasing the levels of respectful communication among family members and decreasing the levels of interfamilial conflict

Family Plus brings families together in a group intervention built around an interactive CD-ROM-based curriculum. Parents or guardians and their middle school-aged children¹ attend a three-session group; program activities are designed for groups of four to eight families. Two-and-one-half-hour group sessions are held one evening a week. Although the original plan was to offer the groups at one of the EFR offices, a decision was later made to offer the groups in Des Moines middle schools, placing the program close to target families and in surroundings that are familiar to them and that are education—rather than treatment—focused.

Parenting Wisely, the CD-ROM-based curriculum used by Family Plus, helps families enhance relationships and decrease conflict through a program of behavior management and emotional support. The CD-ROM has video scenes of common family problems, such as youth associating with peers who are a bad influence, non-compliance, and poor school performance. Family members choose a solution to each problem, see it enacted, and hear a critique of the solution. *Parenting Wisely* also includes a workbook that repeats much of the information presented on the CD-ROM and has review questions to help parents practice what they learn from each problem and solution. Family Plus supplements the *Parenting Wisely* curriculum with additional information about substance use, ways to resist using alcohol and other drugs, and sources of additional information and services parents may need in the future.

The three group sessions incorporate a variety of activities. During the first hour of each session, youth meet with a substance abuse prevention specialist to talk about and participate in activities pertaining to topics such as substance use and family relationships and expectations. During this hour, parents review information in the *Parenting Wisely* CD-ROM and workbook.

¹ Middle-school aged children was broadly defined to include fifth to ninth graders.

Families then share a meal together. During the last hour of the session, parents and youth meet together to view a CD-ROM scenario and the results of their solution choices, review questions from the workbook, and talk about ways to apply the information within their own families. Parents are given homework assignments from the workbook each week to encourage them to practice the skills they are learning in the group sessions, and they discuss their homework experiences during group sessions. Throughout the group sessions, participants are encouraged to support each other by sharing experiences and ideas. Following each session, families receive tickets to local activities to encourage them to spend positive time together in the community. In addition, each family received a HyVee gift certificate for completing the pre-tests and a Walmart gift card for completing the post-tests.

The evaluation of Family Plus has two components: a process evaluation and an outcome evaluation. Chapter 2 describes the methodology and findings of the process evaluation, and Chapter 3 describes the methodology and findings of the outcome evaluation. Chapter 4 presents the conclusions and recommendations.

II. PROCESS EVALUATION

This chapter describes the process evaluation. The purpose of the process evaluation is to: 1) describe the Family Plus intervention as it was originally planned and as it evolved over the two-year life of the project; and 2) document the impact of changes in the intervention. Data for the process evaluation were collected through program documents, communication with the program coordinator, and gathering information from participants about program implementation.

Most of the process study findings are described in the Year 1 report.² As noted in the Year 1 report, the Family Plus intervention model was modified in the following areas: target population, group decision making plan, location of services, staffing, curriculum and group session design, pre- and post-test administration, participant recruitment, and the project timeline.

At the time the Year 1 report was written, only one cycle of the Family Plus intervention had been provided. As the intervention was subsequently implemented with more families, the original Family Plus intervention model was modified in four additional areas—not all interventions retained the group format, services were provided in Spanish for Spanish-speaking families, handouts were prepared, and activities and games were added.

Group format. The Family Plus program intervention was not always provided to groups of families. Due to limited enrollment, the intervention was provided to a single family during two cycles. However, in the other six cycles the intervention was provided in groups.³

Providing the Family Plus intervention to individual families—as opposed to groups of families—did alter the nature of the services these families received. Families who received the intervention individually had more time to discuss their personal family situations with the program coordinator and receive suggestions from her regarding possible solutions. However, these families did not have the opportunity to interact with other families. Families who received the intervention as a group often identified aspects of the program that helped them that were related to the group process, such as learning that other families experienced similar problems or gaining ideas about how to handle situations based on the experiences of other parents. Families who received the intervention individually did not have the opportunity to experience the group process. However, the parents and youths in families who received the intervention individually also identified aspects of the program that helped them.

Services for Spanish-speaking families. One Family Plus cycle served families whose first language is Spanish. Instead of using the Parenting Wisely CD-ROM program, the Parenting Wisely Spanish videos were used. These videos provided the same information as the CD-ROM program, but the videos did not allow families to choose one scenario and see only that scenario enacted—instead they watched all the scenarios. Participants also used the Spanish version of the workbook. Because the program coordinator is not fluent in Spanish, she used four interpreters to communicate with the program participants—two interpreters worked with the parents and two worked with the youth. The interpreters also worked with the participants to

² Allen, Reva I. (2001). Family Plus: Annual Report, Year 1, ISED: Coralville, IA.

³ Typically, three or four families were served in each cycle.

complete the pre- and post-tests, because these instruments were not available in Spanish. Because completing the pre- and post-tests took more time for participants in this cycle, a fourth session was added to allow more time for the intervention.

The nature of the services provided to families in the Spanish-speaking group differed from the services received by families who are fluent in English. Because the program coordinator could not speak Spanish and research instruments were not available in Spanish, communicating with participants was difficult and time-consuming. In addition, when compared with other parents in the Family Plus program, the parents in the Spanish-speaking cycle had lower educational levels,⁴ which made it difficult for them to express themselves in writing (even in Spanish) and understand some of the concepts used on the homework assignments and research forms. The program coordinator noted that discussion of the homework assignments took longer with this group than with the English-speaking groups. However, participants in the Spanish-speaking groups were able to demonstrate their understanding of program concepts. Despite the communication difficulties, all of the parents who completed post-tests identified aspects of the program that helped them. Youth were less likely than their parents to report any specific benefits from the program.

It is likely that the Family Plus intervention will be more helpful to Spanish-speaking families if the program is tailored to meet their needs. If the Family Plus intervention is provided to Spanish-speaking families again, it is recommended that the research instruments be made available in Spanish and that a bilingual program coordinator be used. The intervention might also be altered to include discussion of problems that are likely to be faced by families with this cultural background.

Handouts. After completing two cycles of the intervention, the program coordinator created handouts for each concept being taught (e.g., active listening). She began using the handouts during the third cycle. The program coordinator had noticed that family members often did not take notes, even though paper and writing utensils were provided. In addition, some family members would forget to bring or lose their workbooks, which seemed to be a result of the disorder created by the multiple issues faced by at-risk families. Handouts were used to help reinforce the information being provided to these families.

Activities and games. Because the program coordinator noticed that some youth did not seem to enjoy watching and discussing the CD-ROM, more activities and games were used during the time when parents and youth met together. Instead of simply watching the CD-ROM and discussing the scenarios, as originally planned, parents and youth watched part of the CD-ROM and then the information was reinforced through an activity or game.

Adding activities and games helped to tailor the Family Plus intervention to the needs of the families participating in the program. Youth tended to respond more positively to the activities and games they participated in than they did to the CD-ROM.

Family Plus participants provided feedback about the program. Parents and youth provided information about aspects of the Family Plus program that were the most helpful to them. Many

⁴ The highest grades completed by parents in this cycle ranged from the fourth to the ninth grade.

of the parents and several of the youth noted that the group discussions helped them. Parents met other parents who had similar experiences and obtained new parenting ideas from each other. Youth mentioned that group discussions helped them to understand the perspectives of their parents better or influenced them to change their own behavior. A few youth also said that talking with others their age was helpful. Both parents and youth noted that it was helpful to have something to do together as a family.

Parents and youth provided suggestions about how the Family Plus program could be improved. The most frequent answer given by both parents and youth was to have more group sessions, to allow more time to cover the program content and have more in-depth discussions. One parent also noted that, due to the short length of the program, she did not have enough time to build trust in the group. She said, "I had just started to get comfortable with the group members and then the program was over."

III. OUTCOME EVALUATION

This chapter describes the outcome evaluation. The purpose of the outcome evaluation is to determine whether the Family Plus intervention led to positive outcomes for program participants. At the beginning of the study, research staff and the EFR program coordinator identified hypotheses about the types of changes that might be expected in adults and youth who completed the program. Four data collection instruments were also developed—two pre-test and two post-test instruments. The two pre-test instruments were used to gather data from families prior to the intervention—one instrument was used with adults and the other with youth. The two post-test instruments were used to gather data from adults and youth after the intervention had occurred.

The pre- and post-test instruments are adaptations of the questionnaires that all Family Strengthening Program grantees are required to use. These questionnaires were developed by the Family Strengthening Program Coordinating Center (PCC), McFarland & Associates. The PCC questionnaire was modified by adding questions to allow evaluators to measure changes in attitudes, beliefs, knowledge, and behaviors related to Family Plus research hypotheses and consumer satisfaction. These questions have not been tested for validity or reliability.

The PCC questionnaires include measures required by the Government Performance Reporting Act (GPRA) and the Center for Substance Abuse Prevention (CSAP) Core Measures, which incorporate all or part of several measurement instruments developed by other researchers. The list below contains these instruments and citations for them provided by PCC. PCC has not provided information about the development of these instruments, including reliability and validity assessments.

- Specific Family Needs (from Family Strengths Assessment, Kumpfer, 1997)
- Overall Family Strengths and Resilience (Kumpfer, 1997)
- Family Conflict Scale (Moos, 1974; Hawkins, et al; Kumpfer modified)
- Family Relations and Cohesion Scale (Gorman-Smith, et al)
- Family Attachment Scale (modified Kumpfer, Hawkins, et al.)
- Behavioral Assessment System for Children (BASC) – Parent Version
- Discipline Style (Kumpfer)
- Discipline Effectiveness (PV Cross-Site Study)
- Family Management (Arthur, et al.)
- Discipline Scale (Arthur, et al.)

Pre-test instruments were completed during or prior to the first group session and post-test instruments were completed two to three weeks after the intervention was completed. In most cases, pre-tests were self-administered; however, in some cases they were administered—either in person or by phone—by the program coordinator. Most of the post-test instruments were administered by phone by research staff. Interpreters administered the pre-tests and post-tests to parents and youth in the Spanish-speaking group.

The pre-test and post-test data were analyzed to: 1) test the study hypotheses, and 2) examine participants' responses to questions about the helpfulness of program components, satisfaction with the program as a whole, and satisfaction with specific aspects of the program. For some of the hypotheses, statistical tests were conducted to compare responses at pre-test and post-test (before and after the intervention). Some hypotheses were analyzed by computing the number and percentage of participants who correctly answered knowledge questions. Other hypotheses were tested by analyzing the answers to open-ended questions. Data about the helpfulness of program components and program satisfaction were analyzed by computing the number and percentage of participants who gave responses in each response category, as well as the mean of all of the responses to each question.

This chapter is divided into three sections. The first section presents the ten hypotheses and reports the findings related to each. The second section reports the findings regarding the helpfulness of program components, and the third section reports on participants' level of satisfaction with the program.

A. STUDY HYPOTHESES

This section contains three subsections. The first subsection lists the study hypotheses, the second describes the analysis of the hypotheses, and the third describes the findings related to the study hypotheses.

1. Hypotheses

This study tests whether the Family Plus program achieved the expected results by examining whether findings support the study's hypotheses. The ten study hypotheses are listed on the next page. The first five hypotheses relate to healthy family functioning and last five relate to addictive substances.

Hypotheses

Hypothesis 1. Parents will experience gains in the level of confidence in their ability to mentor their children and support their educational progress.

Hypothesis 2. Parents will increase their monitoring activities with their children.

Hypothesis 3. Parents will experience gains in their ability to establish clear, specific, and appropriate rules and expectations with their children.

Hypothesis 4. Parents will experience gains in their perceptions of the strength of their families.

Hypothesis 5. Parents and children will experience lower levels of interfamilial conflict.

Hypothesis 6. Parents will demonstrate gains in their own knowledge of the physical, psychological, and social effects of chemical dependency on both adults and youth.

Hypothesis 7. Youth will experience gains in knowledge about the consequences of substance use and abuse.

Hypothesis 8. Parents will experience gains in knowledge about how they can assist their children to resist the use of addictive substances.

Hypothesis 9. Youth will experience gains in their ability to identify substance refusal skills.

Hypothesis 10. Youth will maintain (if they have not used substances prior to program participation) or decrease their use of addictive substances.

2. Data Analysis

For hypotheses 1-5, adult and/or youth pre-test responses are compared with their post-test responses to determine whether the measures taken after the Family Plus intervention indicate improvement in comparison with those taken before the intervention occurred. By using t-tests to examine the differences in group means, one can determine whether a change from the time of the pre-test to the post-test indicates an improvement on that variable. The number of participants whose scores improved, stayed the same, or got worse at the post-test measure in comparison with the pre-test measure is also provided.

The remaining hypotheses were analyzed as follows. For hypotheses 6 and 7, data on adult and youth knowledge of the effects of chemical dependency are analyzed. Adults and youth were asked five questions to test their knowledge of the effects of chemical dependency. The number and percentage who answered each individual item correctly are provided. To determine whether participants gained knowledge, the t-test is used to compare the number of correct responses at pre-test and post-test. For hypotheses 8 and 9, the answers to open-ended questions at pre-test and post-test are analyzed. Finally, for hypothesis 10, the number of Family Plus youth who reported using alcohol, tobacco, or other drugs in the last 30 days is provided. In

addition, self-reported use of addictive substances of the Family Plus youth is compared with that of Polk County sixth and eighth graders.

3. Findings

This section describes the study findings for each of the ten hypotheses. For each study hypothesis, findings are provided in a table (or multiple tables), and the main findings are also described in the narrative.

Hypothesis 1. Parents will experience gains in the level of confidence in their ability to mentor their children and support their educational progress.

Table 1 shows findings relating to parents' ability to mentor their children and support their educational progress. The findings show that parents increased their levels of confidence on all eight variables measured and that they made significant gains on six of those variables. Parents made the most significant progress in the areas of mentorship and help with homework/school projects. Parents also made significant progress in acting as role models for their children, helping their children improve their school performance, talking with their children about how they are doing in school, and monitoring homework completion. The two areas where parents did not make significant progress were setting a time for their children to be home on school nights and knowing whether their child skipped school.

Hypothesis 2. Parents will increase their monitoring activities with their children.

Tables 2a and 2b show findings relating to parents' use of monitoring activities with their children—Table 2a lists adult responses and Table 2b lists youth responses. Based on the adult responses, the findings show that parents increased their monitoring activities on eight of the twelve variables measured and that they made significant gains on two of those variables. Parents made significant progress in the areas of talking with their children about how they are doing in school and monitoring homework completion. The four areas where parents did not make progress were asking their children to call if they are going to be late getting home, knowing where their children are and who they are with when they are not home, their perception of whether they would know if their child carried a handgun without their permission, and talking with their children about their plans for the coming day.

Based on the youth responses, the findings show that parents increased their monitoring activities on six of the seven variables measured and that they made significant gains on one of those variables. Parents made the most significant progress in their level of awareness of their children carrying handguns without their permission. It is interesting to note that parents did not agree with youth that they had made progress in this area. Based on the youth responses, parents did not make progress in one area—asking their children about homework completion. This was another area where parents and youth disagreed—the parents' responses indicate that they had made progress in monitoring homework completion.

Table 1

Hypothesis 1. Parents will experience gains in the level of confidence in their ability to mentor their children and support their educational progress.

	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means^a	p-value	Scores improved from pre- to post-test	Scores remained same from pre-to post-test	Scores got worse from pre- to post-test
Variable					Number of Cases	Number of Cases	Number of Cases
Extent to which the following is true:^b							
My child comes to me for help completing homework and school projects.	3.07	3.55	.48	***	12	15	2
I am a competent mentor for my child: I provide guidance that my child uses.	3.45	3.79	.34	***	11	17	1
I am able to help my child improve her/his school performance.	3.03	3.45	.41	**	9	18	2
My child looks up to me as a positive role model.	3.24	3.48	.24	**	7	21	1
Frequency with which the following occurs:^c							
Do you talk with your child about how he/she is doing in school?	3.24	3.55	.31	**	11	16	2
I check to see if my child has gotten his/her homework done.	2.93	3.17	.24	**	8	19	2
My child(ren) has a set time to be home on school nights.	3.66	3.72	.07	NS	4	22	3
I would know if my child skipped school.	3.79	3.83	.03	NS	4	23	2

Number of responses = 29 (Data available at pre-test and post-test)

^aImprovement is indicated by a positive difference in group means.

^bResponse categories and their numerical values are as follows: True = 4; Somewhat true = 3; Somewhat false = 2; False = 1. The numerical values of the response categories in the research instruments were reversed for the purposes of the data analysis, so that on the tables, the highest numerical value always corresponded with the most positive response to the item.

^cResponse categories and their numerical values are as follows: Never = 1; Sometimes = 2; Often = 3; Almost always = 4.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001. NS=Not Significant

Table 2a

Hypothesis 2. Parents will increase their monitoring activities with their children: Adult Responses

	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means ^a	p-value	Scores improved from pre- to post-test	Scores remained same from pre-to post-test	Scores got worse from pre- to post-test
Variable					Number of Cases	Number of Cases	Number of Cases
Frequency with which the following occurs:^b							
Do you talk with your child about how he/she is doing in school?	3.24	3.55	.31	**	11	16	2
I check to see if my child has gotten his/her homework done.	2.93	3.17	.24	**	8	19	2
My child has a set time to be home on weekend nights.	3.66	3.76	.10	NS	5	21	3
I pay attention to whether my child has drunk some beer or wine or liquor without my permission.	3.79	3.90	.10	NS	3	24	2
Do you know who your child is with when your child is not at home?	3.38	3.45	.07	NS	5	21	3
My child has a set time to be home on school nights.	3.66	3.72	.07	NS	4	22	3
I would know if my child did not come home.	3.83	3.90	.07	NS	2	27	0
I would know if my child skipped school.	3.79	3.83	.03	NS	4	23	2
I ask my child to call if he/she is going to be late getting home.	3.66	3.66	0	NS	5	20	4
When not at home, I know where my child is and who he/she is with.	3.41	3.41	0	NS	4	20	5
I would know if my child carried a handgun without my permission.	3.79	3.66	-.14	NS	1	26	2
I talk with my child about his/her plans for the coming day.	3.28	3.07	-.21	NS	4	18	2

Number of responses = 29 (Data available at pre-test and post-test)

^aImprovement is indicated by a positive difference in group means.

^bResponse categories and their numerical values are as follows: Never = 1; Sometimes = 2; Often = 3; Almost always = 4.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001. NS=Not Significant

Table 2b

Hypothesis 2. Parents will increase their monitoring activities with their children: Youth Responses

	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means^a	p-value	Scores improved from pre- to post-test	Scores remained same from pre-to post-test	Scores got worse from pre- to post-test
Variable					Number of Cases	Number of Cases	Number of Cases
Frequency with which the following occurs:^b							
If you carried a handgun without your parents' permission, would your parents catch you? ^{a=37}	3.19	3.51	.32	*	9	24	4
If you drank some beer or wine or liquor without your parents' permission, would they catch you? ^{b=37}	2.95	3.24	.30	NS	11	19	7
If you skipped school, would you be caught by your parents? ^{c=37}	3.19	3.46	.27	NS	7	26	4
My parents want me to call if I'm going to be late getting home.	3.42	3.68	.26	NS	8	25	5
When I am not at home, one of my parents knows where I am and who I am with.	3.05	3.29	.24	NS	9	23	6
Would your parents know if you did not come home on time?	3.47	3.55	.08	NS	7	24	7
My parents ask if I've gotten my homework done.	3.37	3.13	-.24	NS	4	25	9

Number of responses = 38 (Data available at pre-test and post-test)

^aImprovement is indicated by a positive difference in group means.

^bResponse categories and their numerical values are as follows: Never = 1; Sometimes = 2; Often = 3; Almost always = 4.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001. NS=Not Significant

Hypothesis 3. Parents will experience gains in their ability to establish clear, specific, and appropriate rules and expectations with their children.

Table 3 shows findings relating to parents' ability to establish rules and expectations with their children. The findings show that parents increased their ability to establish rules and expectations on four of the six variables measured. However, none of the gains were statistically significant. The two areas where parents did not make progress were asking their children to call if they are going to be late getting home and knowing where their children are and who they are with when they are not home.

Hypothesis 4. Parents will experience gains in their perceptions of the strength of their families.

Table 4 shows findings relating to parents' perceptions of the strength of their families. The findings show that parents' perceptions of family strengths increased on all of the twelve variables measured and that they made significant gains on five of those variables. The most significant progress was made in the area of family organization. Significant progress was also made in the areas of effective discipline style, physical health, positive family communication, and family unity. The seven areas where the gains were not statistically significant were social networking, positive mental health, emotional health, spiritual strength, effective parenting skills, educational level and family supportiveness.

Hypothesis 5. Parents and children will experience lower levels of interfamilial conflict.

Tables 5a and 5b show findings relating to interfamilial conflict—Table 5a lists adult responses and Table 5b lists youth responses. Based on the adult responses, the findings show that levels of interfamilial conflict were lower on nine of the thirteen variables measured and that significant gains were made on three of those variables. The most significant progress was made in the area of handling disagreements. Significant progress was also made in the areas of getting along well with each other and family members getting so angry that they throw things. The four areas where families did not make progress were the frequency with which family members 1) became angry, 2) lost their tempers, 3) hit each other, and 4) tried to one-up or out-do each other.

Based on the youth responses, the findings show that that levels of interfamilial conflict were lower on ten of the thirteen variables measured and that significant gains were made five of those variables. Youth agreed with the adults—the most significant progress was made in the area of handling disagreements. Significant progress was also made in the areas of getting along well with each other, family members getting so angry that they throw things, having serious arguments, and criticizing each other. The three areas in which families did not make progress were the frequency with which family members 1) lost their tempers, 2) argued about the same things over and over, and 3) tried to one-up or out-do each other. In fact, according to the youth respondents, family members were significantly more likely to try to one-up or out-do each other.

Table 3

Hypothesis 3. Parents will experience gains in their ability to establish clear, specific, and appropriate rules and expectations with their children.

	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means ^a	p-value	Scores improved from pre- to post-test	Scores remained same from pre-to post-test	Scores got worse from pre- to post-test
Variable					Number of Cases	Number of Cases	Number of Cases
Frequency with which the following occurs:^b							
The rules in my family are clear.	3.31	3.52	.21	NS	7	17	5
My child has a set time to be home on weekend nights.	3.66	3.76	.10	NS	5	21	3
My child has a set time to be home on school nights.	3.66	3.72	.07	NS	4	22	3
My family has clear rules about alcohol and drug abuse.	3.79	3.86	.07	NS	3	24	2
I ask my child to call if he/she is going to be late getting home.	3.66	3.66	0	NS	5	20	4
When not at home, I know where my child is and who he/she is with.	3.41	3.41	0	NS	4	20	5

Number of responses = 29 (Data available at pre-test and post-test)

^aImprovement is indicated by a positive difference in group means.

^bResponse categories and their numerical values are as follows: Never = 1; Sometimes = 2; Often = 3; Almost always = 4.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001. NS=Not Significant

Table 4

Hypothesis 4. Parents will experience gains in their perceptions of the strength of their families.

Variable	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means ^a	p-value	Scores improved from pre- to post-test	Scores remained same from pre-to post-test	Scores got worse from pre- to post-test
					Number of Cases	Number of Cases	Number of Cases
Rating of family's "strengths" in the following areas:^b							
Family organization (rules, chores, self-responsibility)	2.52	3.24	.72	***	14	11	4
Effective discipline style (less spanking, consistent)	3.00	3.48	.48	**	17	9	3
Physical health	3.55	4.03	.48	**	12	13	4
Positive family communication ^{a=28}	2.98	3.39	.43	**	10	14	4
Family unity (togetherness, cohesion)	3.55	3.93	.38	**	13	10	6
Social networking (friends, community)	3.31	3.69	.38	NS	12	12	5
Positive mental health	3.48	3.79	.31	NS	13	9	7
Spiritual strength	3.24	3.52	.28	NS	13	10	6
Emotional health	3.59	3.86	.28	NS	12	11	6
Effective parenting skills (reading to child, rewarding)	3.21	3.48	.28	NS	10	15	4
Educational level	3.48	3.66	.17	NS	12	11	6
Family supportiveness/love/care	3.76	3.83	.07	NS	6	18	5

Number of responses = 29 (Data available at pre-test and post-test)

^aImprovement is indicated by a positive difference in group means.

^bResponse categories and their numerical values are as follows: No strength = 1; Almost no strength = 2; Some strength = 3; Considerable strength = 4; and Amazing strength = 5.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001. NS=Not Significant

Table 5a

Hypothesis 5a. Parents and children will experience lower levels of interfamilial conflict.: Adult Responses

	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means^a	p-value	Scores improved from pre- to post-test	Scores remained same from pre- to post-test	Scores got worse from pre- to post- test
Variable					Number of Cases	Number of Cases	Number of Cases
Extent to which the following is true:^b							
If there's disagreement in our family, we try hard to smooth things over and keep the peace. ^{a=28}	2.89	3.39	.50	**	15	11	2
We really get along well with each other.	2.79	3.17	.38	*	17	7	5
In our family, we believe you don't get anywhere by raising your voice.	2.90	2.97	.07	NS	9	13	7
Family members rarely become angry. ^{b=28}	2.29	2.14	-.14	NS	8	11	9
Family members hardly ever lose their tempers. ^{c=28}	2.25	1.96	-.29	NS	9	8	11
Extent to which the following is true:^c							
Family members sometimes get so angry they throw things.	2.69	3.07	.38	*	8	19	2
People in my family have serious arguments.	2.28	2.31	.03	NS	7	15	7
Family members often criticize each other.	2.45	2.76	.31	NS	11	11	7
People in my family often insult or yell at each other.	1.86	2.07	.21	NS	10	13	6
We fight a lot in our family. ^{d=28}	2.79	2.82	.04	NS	7	15	6
Family members sometimes hit each other.	2.90	2.79	-.10	NS	7	14	8
We argue about the same things over and over again in my family.	1.90	2.00	.10	NS	7	16	6
Family members often try to one-up or out-do each other.	2.79	2.55	-.24	NS	7	11	11

Number of responses = 29 (Data available at pre-test and post-test)

^aImprovement is indicated by a positive difference in group means.

^bResponse categories and their numerical values are as follows: True = 4; Somewhat true = 3; Somewhat false = 2; False = 1. The numerical values of the response categories in the research instruments were reversed for the purposes of the data analysis, so that on the tables, the highest numerical value always corresponded with the most positive response to the item.

^cResponse categories and their numerical values are as follows: True = 1; Somewhat true = 2; Somewhat false = 3; False = 4.

Note: * $p \leq .10$ ** $p \leq .05$ *** $p \leq .01$ **** $p \leq .001$. NS = Not Significant

Table 5b

Hypothesis 5. Parents and children will experience lower levels of interfamilial conflict.: Youth Responses

	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means ^a	p-value	Scores improved from pre- to post-test	Scores remained same from pre- to post-test	Scores got worse from pre- to post- test
Variable					Number of Cases	Number of Cases	Number of Cases
Extent to which the following is true:^b							
If there's disagreement in our family, we try hard to smooth things over and keep the peace. ^{a=37}	2.61	3.13	.53	***	20	12	6
We really get along well with each other.	2.58	2.95	.37	**	12	21	5
In our family, we believe you don't get anywhere by raising your voice. ^{b=37}	2.46	2.73	.27	NS	13	16	8
Family members rarely become angry.	2.03	2.26	.24	NS	14	13	11
Family members hardly ever lose their tempers.	2.13	1.95	-.18	NS	9	14	15
Extent to which the following is true:^c							
Family members sometimes get so angry they throw things.	2.79	3.24	.45	**	13	20	5
People in my family have serious arguments.	2.47	2.89	.42	**	15	19	4
Family members often criticize each other. ^{c=37}	2.46	2.81	.35	*	13	20	4
People in my family often insult or yell at each other. ^{d=37}	2.22	2.27	.05	NS	10	19	7
We fight a lot in our family.	1.14	1.20	.05	NS	10	20	8
Family members sometimes hit each other.	2.95	2.97	.03	NS	6	25	7
We argue about the same things over and over again in my family.	2.61	2.45	-.16	NS	9	18	11
Family members often try to one-up or out-do each other. ^{e=37}	3.00	2.68	-.32	*	7	16	14

Number of responses = 38 (Data available at pre-test and post-test)

^aImprovement is indicated by a positive difference in group means.

^bResponse categories and their numerical values are as follows: True = 4; Somewhat true = 3; Somewhat false = 2; False = 1. The numerical values of the response categories in the research instruments were reversed for the purposes of the data analysis, so that on the tables, the highest numerical value always corresponded with the most positive response to the item.

^cResponse categories and their numerical values are as follows: True = 1; Somewhat true = 2; Somewhat false = 3; False = 4.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001. NS=Not Significant

Hypothesis 6. Parents will demonstrate gains in their own knowledge of the physical, psychological, and social effects of chemical dependency on both adults and youth.

Table 6 shows findings relating to parents' knowledge of the effects of chemical dependency. Parents made significant gains in knowledge of the effects of chemical dependency—they were more likely to answer all five questions correctly at post-test. Parents' knowledge increased in all five of the areas measured. The area of greatest improvement was in knowledge of the effects of inhalants. After the intervention, all of the parents knew that marijuana use is dangerous for teenagers, but they were least likely to know that using methamphetamine or cocaine increases the risk of heart attack.

Hypothesis 7. Youth will experience gains in knowledge about the consequences of substance use and abuse.

Table 7 shows findings relating to youths' knowledge of the effects of chemical dependency. Youth also made significant gains in knowledge of the effects of chemical dependency—they answered more questions correctly at post-test. Youths' knowledge of the effects of chemical dependency increased in three of the five of the areas measured. The area of greatest improvement was in learning that marijuana use is dangerous for teenagers. After the intervention, youth were least likely to know about the lasting effects of inhalant use. In two areas, there was virtually no change in the percentage who answered correctly. These areas were: 1) the effects of alcohol, inhalants, and marijuana on memory; and 2) the effects of drinking too much alcohol.

Hypothesis 8. Parents will experience gains in knowledge about how they can assist their children to resist the use of addictive substances.

At pre-test and post-test, parents were asked to list three ways they can help their children resist addictive substance use. Parents' answers at pre-test and post-test were categorized and listed in Table 8. At the post-test, many of the strategies parents listed for helping their children resist the use of addictive substances were the same as those given at the pre-test. A few parents appear to have gained knowledge about how they can assist their children to resist addictive substance use. At pre-test, two of the 32 parents interviewed (6%) indicated that they did not know what they could do to help their children, but at post-test, all of the 29 parents interviewed gave at least one way they could help their children resist the use of addictive substances. In addition, parents were able to list more strategies at post-test than at pre-test. At pre-test, the mean number of strategies listed was 2.38, but at post-test, it was 2.83—meaning that more parents were able to list three strategies at post-test.

Hypothesis 9. Youth will experience gains in their ability to identify substance refusal skills.

At pre-test and post-test, youth were asked to list three things they can do to resist the use of alcohol, tobacco, and other drugs. Youths' answers at pre-test and post-test were categorized and listed in Table 9. At the post-test, many of the youths' strategies for resisting the use of addictive substances were the same as those given at the pre-test. A few youth appear to have made gains in their abilities to identify substance refusal skills. At pre-test, four of the 41 youth

Table 6

Hypothesis 6. Parents will demonstrate gains in their own knowledge of the physical, psychological, and social effects of chemical dependency on both adults and youth.

Variable	Pre-test N=32		Post-test N=29		Difference in Percentages ^a	
	Number	Percentage	Number	Percentage		
Frequency with which the question was answered correctly:						
Using inhalants (such as adhesives, paint products, and correction fluid) leaves no lasting effects on the user.	25	78.1%	28	96.6%	18.5%	
Using methamphetamine (meth) or cocaine increases the risk of heart attack.	25	78.1%	26	89.7%	11.6%	
Alcohol, inhalants, and marijuana all can cause memory problems.	28	87.5%	28	96.6%	9.1%	
There are no dangers associated with teenagers using marijuana.	30	93.8%	29	100.0%	6.2%	
It is possible to overdose by drinking too much alcohol in a brief period of time, and this may result in death.	29	90.6%	28	96.6%	6.0%	
Variable	Pre-test Group Mean		Post-test Group Mean		Difference in Group Means ^b	p-value
Number of correct responses (out of five questions)	4.38		4.79		.41	**

^aImprovement is indicated by a positive difference in percentages.

^bImprovement is indicated by positive difference in group means.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001.

Table 7

Hypothesis 7. Youth will experience gains in knowledge about the consequences of substance use and abuse.

Variable	Pre-test N=32		Post-test N=38		Difference in Percentages ^a
	Number	Percentage	Number	Percentage	
Frequency with which the question was answered correctly:					
Using inhalants (such as adhesives, paint products, and correction fluid) leaves no lasting effects on the user.	13	40.6%	20	52.6%	12.0%
Using methamphetamine (meth) or cocaine increases the risk of heart attack.	17	53.1%	26	68.4%	15.3%
Alcohol, inhalants, and marijuana all can cause memory problems.	25	78.1%	29	76.3%	-1.8%
There are no dangers associated with teenagers using marijuana.	21	65.6%	35	92.1%	26.5%
It is possible to overdose by drinking too much alcohol in a brief period of time, and this may result in death.	26	81.3%	30	78.9%	-2.4%

Variable	Pre-test Group Mean	Post-test Group Mean	Difference in Group Means ^b	p-value
Number of correct responses (out of five questions)	3.07	3.77	.70	***

^aImprovement is indicated by a positive difference in percentages.

^bImprovement is indicated by positive difference in group means.

Note: *p ≤ .10 **p ≤ .05 ***p ≤ .01 ****p ≤ .001.

Table 8

Hypothesis 8. Parents will experience gains in knowledge about how they can assist their children to resist the use of addictive substances.

Answer categories: Pre-test	Number of times answer was given
Have discussions with the children about alcohol/tobacco/drug use.	15
Educate the children about the effects and consequences of drinking/using/smoking.	11
Monitor the children/know where they are, what they are doing, who they are with.	8
Offer the children positive alternatives/keep them active.	7
Act as a positive role model/teach values and morals.	5
Know who their friends are/help them find "good" friends.	5
Teach the children to say no/avoid peer pressure.	5
Maintain open communication with your children.	4
Spend time with the children/show them you care.	4
Don't let people drink/use around the children.	2
Get rid of beer signs.	1
As parents, don't use around the children.	1
Tell your children not to use.	1
Have your children talk to friends who have used drugs.	1
Tell your children to talk to you if someone offers drugs to them.	1
Tell the children to stay out of areas where people often use drugs.	1
Help the children make attitude/behavior changes.	1
Answer category: post-test	Number of times answer was given
Educate the children about the effects and consequences of drinking/using/smoking.	16
Monitor the children/know where they are, what they are doing, who they are with.	15
Have discussions with the children about alcohol/tobacco/drug use.	11
Tell the children about parent's experiences with using alcohol/drugs and the consequences.	5
Teach the children to say no/avoid peer pressure.	5
Spend time with the children/pay attention to them/provide support.	4
Know their friends and the parents of their friends.	4
Offer the children positive alternatives.	4
Act as a positive role model/teach values and morals.	3
Talk to someone who knows about drug abuse prevention/go to a program.	3
Tell your children not to use/set rules and expectations.	3
As parents, don't use around the children.	2
Don't let your children hang around with drug users/keep them out of a "bad atmosphere."	2
Ask your children if they are using drugs.	2
Maintain open communication with your children.	1
Discuss with your children options for responding if they are offered addictive substances.	1
Tell them if they make a mistake you'll help them make a better choice next time.	1
Tell them how drugs can affect their future.	1

Table 9

Hypothesis 9. Youth will experience gains in their ability to identify substance refusal skills.

Answer category: pre-test	Number of times answer was given
Say no (when someone offers you drugs, etc.).	15
Walk or run away (from someone who offers you drugs).	12
Stay away from drug dealers/adults or kids who use/kids who get in trouble.	12
Do other things instead of drugs (e.g., play basketball, ride bike).	11
Listen to your parents/look up to them/spend time with them.	6
Run and tell a parent (if someone offers you drugs).	5
Talk with others (parents, friends, teachers) to resist using.	4
Think about/educate yourself about the consequences of using.	4
Think about what happened to someone who smoked/used/drunk.	3
Tell person who offers it to you to get away/scream for help.	3
Tell yourself not to do it/Don't think about doing it.	2
Think about your future.	2
Tell them it is bad for your health.	2
Keep your mind on school/grades.	2
Go to your house/stay home.	2
If someone offers it to you, tell them what could happen to them.	1
Have your parents drive you to school (to avoid drug dealers).	1
Call 911 (if someone offers it to you).	1
Use the "DARE" steps.	1
Answer category: post-test	Number of times answer was given
Say no (when someone offers you drugs, etc.).	16
Stay away from drug dealers/adults or kids who use/kids who get in trouble.	14
Walk or run away (from someone who offers you drugs).	13
Do other things instead of drugs (e.g., play basketball, ride bike).	12
If someone offers it to you, tell them what could happen to them.	6
Give them an excuse for not drinking/smoking/using.	4
Talk with others (parents, friends) to resist using.	3
Listen to your parents/spend time with them.	2
Keep your mind on school/grades.	2
Tell them you don't smoke or drink (if they offer it/pressure you).	2
Think about/educate yourself about the consequences of using.	2
Tell them to stay away (if they offer it)/avoid peer pressure.	2
Run and tell a parent (if someone offers you drugs).	1
Think about what happened to someone who smoked/used/drunk.	1
Report drug dealers to the police.	1
Have a group of people with you.	1
Tell the kid's parents or another adult when a kid drinks/uses, etc.	1
Ignore people who tell you to drink/use/smoke.	1
Tell yourself not to do it/Don't think about doing it.	1
Think about your future and your children's future.	1

interviewed (10%) indicated that they did not know what they could do to resist the use of alcohol, tobacco, and other drugs, but at post-test, only one of the 38 youth interviewed (3%) was unable to list anything. The number of strategies youth listed at pre-test and at post-test were virtually the same.

Hypothesis 10. Youth will maintain (if they have not used substances prior to program participation) or decrease their use of addictive substances.

Tables 10a, 10b, and 10c show findings relating to youths' use of addictive substances. As shown in Table 10a, at both pre-test and post-test, the overwhelming majority of the youth had not used alcohol or other drugs (not including tobacco) during the last 30 days. For those who had used, the types of drugs the youth reported using during the last 30 days are alcohol (but not to intoxication) and marijuana. Table 10b shows that, at the time of the pre-test, 75% of the youth reported that they had never drank more than just a few sips of alcohol. As shown in Table 10c, some of the youth reported using cigarettes, cigars, or chewing tobacco in the past 30 days, but there was little change in tobacco use patterns from pre-test to post-test.

Table 10d shows the comparison between self-reported alcohol and drug use during the last 30 days by Family Plus participants (grades five through nine) at post-test with that of Polk County sixth and eighth graders surveyed by the Iowa Consortium in 1999.⁵ In comparison with youth in the Iowa Consortium survey, Family Plus youth are less likely to report the use of alcohol but more likely to report smoking cigarettes. Marijuana use rates between the two groups are comparable. None of the Family Plus youth reported using inhalants, amphetamines or cocaine at post-test, but some of the Iowa Consortium youth, the eighth graders in particular, did report such use.

⁵ Iowa Consortium for Substance Abuse Research and Evaluation. (2000). *1999 Iowa Youth Survey Report: Polk County*. Iowa City IA: Iowa Consortium for Substance Abuse Research and Evaluation. (<http://www.state.ia.us/dhr/cjrp/Ythsurvey/Reports/Counties/county%2077.pdf>)

Hypothesis 10. Youth will maintain (if they have not used substances prior to program participation) or decrease their use of addictive substances.

Table 10a

Variable	Pre-test N=41		Post-test N=38	
	Number of youth who used in the last 30 days	Number of days used in last 30 days	Number of youth who used in the last 30 days	Number of days used in last 30 days
Type of drug:				
Alcohol	3	1	2	1
Alcohol to intoxication (5+ drinks in one sitting)	0	0	0	0
Marijuana/hashish, pot	1	5	2	1, 5 ^a
Cocaine/crack	0	0	0	0
Heroin or other opiates	0	0	0	0
Non prescription methadone	0	0	0	0
PCP or other hallucinogens/psychedelics, LSD, mushrooms, mescaline	0	0	0	0
Methamphetamine or other amphetamines, uppers	0	0	0	0
Benzodiazepines, barbiturates, other tranquilizers, downers, sedatives, or hypnotics	0	0	0	0
Inhalants, poppers, rush, whippets	0	0	0	0
Number of youth who reported using alcohol and/or other drugs in last 30 days^b	3	-	3	-

^aOne youth reported using 1 day during the last 30 days, and the other youth reported using 5 days during the last 30 days.

^bAt both pre-test and at post-test, one youth reported using alcohol and marijuana.

Table 10b

Variable	Pre-test N=41	
	Number	Percentage
How many times (if any) have you had alcohol to drink – more than just a few sips?		
Never	31	75.6%
1-2	3	7.3%
3-5	5	12.2%
6-9	1	2.4%
10-19	1	2.4%
20-39	0	0%
40 or more	0	0%

Table 10c

Variable	Pre-test N=41		Post-test N=38	
	Number of youth who used in the last 30 days	Percentage	Number of youth who used in the last 30 days	Percentage
Type of drug:				
Part or all of a cigarette	4	9.8%	6	15.8%
Chewing tobacco	0	0%	2	5.2%
Part or all of any type of cigar	1	2.4%	1	2.6%
Snuff	0	0%	0	0%
Tobacco in a pipe, even once (during the last 30 days)	0	0%	0	0%

Table 10d

	Family Plus youth (grades 5-9) at post-test	Polk County sixth graders	Polk County eighth graders
Percentage of youth who reported using the following substances during the last 30 days:			
Cigarettes	15.8%	3%	14%
Alcohol	5.3%	6%	12%
Marijuana	5.3%	1%	8%
Inhalants	0%	2%	4%
Cocaine	0%	0%	2%
Amphetamines (other than methamphetamines)	0%	0%	2%
Methamphetamines	0%	0%	1%

B. HELPFULNESS OF THE FAMILY PLUS PROGRAM

Two or three weeks after the completion of the program, adults and youth were asked to rate how helpful each of the 13 aspects of the Family Plus program was to them. Their responses are summarized in Tables 11 and 12.⁶

1. Program Helpfulness—Adults

Table 11 shows adult participant responses to the program helpfulness items. The vast majority of responses (88.6%) fall under the “moderately helpful” and “extremely helpful” categories. The average ratings vary from 2.89 (watching the CD-ROM program) to 3.64 (discussing examples of other families’ situations with the group), with most items scoring in the 3.26 to 3.64 range. These scores indicate that adult respondents experienced the Family Plus program somewhere between moderately and extremely helpful.

2. Program Helpfulness—Youths

Table 12 shows youth participant responses to the program helpfulness items. The majority of responses (69.2%) fall under the “moderately helpful” and “extremely helpful” categories. The average ratings vary from 2.69 (watching the CD-ROM program) to 3.80 (discussing examples from my own family with the group), with most items scoring in the 2.88 to 3.24 range. These scores indicate that most youth respondents experienced the Family Plus program somewhere between moderately and extremely helpful.

⁶ For each item in each of the two tables, we show the number and percent of responses falling into each of four response categories (e.g., 1=not at all helpful, 2=a little helpful, 3=moderately helpful, and 4=extremely helpful). At the far right-hand side of each table, there is a column that shows the mean response for each item (e.g., adult responses to the first helpfulness item “Discussing examples of other families’ situations with the group” as shown in Table 11 averaged 3.64 on the four-point scale referenced above). The number of adults or youths who responded to one or more items is shown in the first note at the bottom of each table. If one or more adults (or youth) did not respond to an individual item, the number of responses to that item is shown in a table note accompanying the item name. The second note at the bottom of each table shows the overall mean response across the items summarized in the table. For example, the mean adult response to the program helpfulness items as shown in Table 11 is 3.32, indicating that adult respondents tended to characterize the Family Plus program as being a bit more than “Moderately helpful” but less than “Extremely helpful.”

Table 11
Helpfulness of Family Plus Program Components: Adult Responses

Program Component	Not at all helpful (1)		A little helpful (2)		Moderately helpful (3)		Extremely helpful (4)		Mean
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Discussing examples of other families' situations with the group ^{a=28}	1	3.6%	0	0%	7	25.0%	20	71.4%	3.64
Being in the same program with my children ^{b=28}	0	0%	1	3.6%	9	32.1%	18	64.3%	3.61
Discussing examples from my own family with the group ^{c=26}	0	0%	2	7.7%	9	34.6%	15	57.7%	3.50
Being in the same program with my spouse/partner ^{d=6}	0	0%	0	0%	3	50%	3	50%	3.50
Discussing other ways I can learn more about parenting and strong family life ^{e=25}	0	0%	1	4.0%	11	44.0%	13	52.0%	3.48
Receiving handouts ^{f=27}	0	0%	3	11.1%	10	37.0%	14	51.9%	3.41
Sharing a meal together	1	3.4%	3	10.3%	10	34.5%	15	51.7%	3.34
Being able to borrow the Parenting Wisely videotape ^{g=7}	0	0%	0	0%	5	71.4%	2	28.6%	3.29
Discussing workbook exercises with the group ^{h=25}	1	4.0%	2	8.0%	11	44.0%	11	44.0%	3.28
Getting information about how to keep my children from using alcohol, tobacco, and other drugs ⁱ⁼²⁷	2	7.4%	3	11.1%	8	29.6%	14	51.9%	3.26
Discussing the CD-ROM program with the group ^{j=27}	1	3.7%	2	7.4%	13	48.1%	11	40.7%	3.26
Completing workbook exercises ^{k=26}	2	7.7%	4	15.4%	10	38.5%	10	38.5%	3.08
Watching the CD-ROM program ^{l=28}	0	0%	6	21.4%	19	67.9%	3	10.7%	2.89

Number of responses = 29

Overall mean = 3.32. (The overall mean was calculated by totaling an individual's responses for all the items and calculating the mean, and then totaling the means for each individual and calculating the mean.)

Table 12

Helpfulness of Family Plus Program Components: Youth Responses

Program Component	Not at all helpful (1)		A little helpful (2)		Moderately helpful (3)		Extremely helpful (4)		Mean
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Discussing examples from my own family with the group ^{a=35}	4	11.4%	8	22.9%	8	22.9%	14	40.0%	3.80
Sharing a meal together ^{b=37}	3	8.1%	5	13.5%	9	24.3%	20	54.1%	3.24
Meeting with the substance abuse counselor at the beginning of each session ^{c=32}	3	9.4%	3	9.4%	11	34.4%	15	46.9%	3.19
Being in the same program with my parent(s)	4	10.5%	7	18.4%	6	15.8%	21	55.3%	3.16
Getting information about how to keep from using alcohol, tobacco, and other drugs	4	10.5%	5	13.2%	10	26.3%	19	50.0%	3.16
Discussing workbook exercises with the group ^{d=31}	3	9.7%	7	22.6%	8	25.8%	13	41.9%	3.00
Being able to borrow the Parenting Wisely videotape ^{e=17}	2	11.8%	3	17.6%	5	29.4%	7	41.2%	3.00
Receiving handouts ^{f=33}	4	12.1%	5	15.2%	12	36.4%	12	36.4%	2.97
Discussing examples of other families' situations with the group ^{g=36}	3	8.3%	11	30.6%	7	19.4%	15	41.7%	2.94
Completing workbook exercises ^{h=34}	4	11.8%	7	20.6%	11	32.4%	12	35.3%	2.91
Discussing the CD-ROM program with the group ⁱ⁼²⁶	2	7.7%	7	26.9%	9	34.6%	8	30.8%	2.88
Being in the same program with my brother or sister ^{j=21}	6	28.6%	2	9.5%	4	19.0%	9	42.9%	2.76
Watching the CD-ROM program ^{k=29}	4	13.8%	9	31.0%	8	27.6%	8	27.6%	2.69

Number of responses = 38

Overall mean = 3.05. (The overall mean was calculated by totaling an individual's responses for all the items and calculating the mean, and then totaling the means for each individual and calculating the mean.)

C. SATISFACTION WITH THE FAMILY PLUS PROGRAM

In the post-intervention interview, adults and youth were also asked how satisfied with they were with the Family Plus program as a whole and with nine specific aspects of the program. Their responses are summarized in Tables 13 and 14.

1. Program Satisfaction—Adults

Table 13 shows adult participant responses to the program satisfaction items. The vast majority of responses (85.0%) fall under the “moderately helpful” and “extremely helpful” categories. The average ratings vary from 3.00 (the change in your child’s behavior as a result of the program) to 3.93 (Kathleen’s leadership of the program), with most items scoring in the 3.18 to 3.43 range. These scores indicate that adult respondents were somewhere between moderately and extremely satisfied with the Family Plus program.

2. Program Satisfaction—Youths

Table 14 shows youth participant responses to the program satisfaction items. The vast majority of responses (74.5%) fall under the “moderately helpful” and “extremely helpful” categories. The average ratings vary from 2.94 (the change in your own behavior as a result of the program) to 3.51 (Kathleen’s leadership of the program), with most items scoring in the 2.94 to 3.19 range. These scores indicate that most youth respondents were moderately satisfied with the Family Plus program.

Table 13

Satisfaction with the Family Plus Program: Adult Responses

Satisfaction with:	Not at all satisfied (1)		Mildly satisfied (2)		Moderately satisfied (3)		Extremely satisfied (4)		Mean
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Kathleen's leadership of the program	0	0%	0	0%	2	6.9%	27	93.1%	3.93
the level of trust you felt with other members of the group ^{a=28}	1	3.6%	1	3.6%	11	39.3%	15	53.6%	3.43
Family Plus program as a whole	0	0%	4	13.8%	9	31.0%	16	55.2%	3.41
the amount learned about how to make your family stronger	0	0%	4	13.8%	10	34.5%	15	51.7%	3.38
the discussions with your children about the CD-ROM, group sessions, and the workbook exercises	1	3.4%	5	17.2%	8	27.6%	15	51.7%	3.28
how well the program helped you improve your family situation	1	3.4%	2	6.9%	15	51.7%	11	37.9%	3.24
the change in your own behavior as a result of the program	0	0%	4	13.8%	14	48.3%	11	37.9%	3.24
the level of closeness you felt with other members of the group ^{b=28}	0	0%	4	14.3%	15	53.6%	9	32.1%	3.18
the amount learned about ways to keep your children from using alcohol, tobacco, and other drugs ^{c=28}	1	3.6%	7	25.0%	9	32.1%	11	39.3%	3.07
the change in your child(ren)'s behavior as a result of the program	2	6.9%	6	20.7%	11	37.9%	10	34.5%	3.00

Number of responses = 29

Overall mean = 3.32. (The overall mean was calculated by totaling an individual's responses for all the items and calculating the mean, and then totaling the means for each individual and calculating the mean.)

Table 14

Satisfaction with the Family Plus Program: Youth Responses

Satisfaction with:	Not at all satisfied (1)		Mildly satisfied (2)		Moderately satisfied (3)		Extremely satisfied (4)		Mean
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Kathleen's leadership of the program ^{a=37}	2	5.4%	4	10.8%	4	10.8%	27	73.0%	3.51
Family Plus program as a whole ^{b=37}	4	10.8%	4	10.8%	10	27.0%	19	51.4%	3.19
the amount learned about ways to keep from using alcohol, tobacco, and other drugs	5	13.2%	4	10.5%	8	21.1%	21	55.3%	3.18
the level of trust you felt with other members of the group ^{c=36}	2	5.6%	7	19.4%	12	33.3%	15	41.7%	3.11
the discussions with your parent(s) about the CD-ROM, group sessions, and the workbook exercises ^{d=37}	2	5.4%	6	16.2%	16	43.2%	13	35.1%	3.08
how well the program helped you improve your family situation	7	18.4%	4	10.5%	8	21.1%	19	50.0%	3.03
the amount learned about how to make your family stronger	6	15.8%	5	13.2%	10	26.3%	17	44.7%	3.00
the level of closeness you felt with other members of the group ^{e=36}	1	2.8%	10	27.8%	14	38.9%	11	30.6%	2.97
the change in your own behavior as a result of the program ^{f=36}	5	13.9%	7	19.4%	9	25.0%	15	41.7%	2.94

Number of responses = 38

Overall mean = 3.09. (The overall mean was calculated by totaling an individual's responses for all the items and calculating the mean, and then totaling the means for each individual and calculating the mean.)

IV. CONCLUSIONS AND RECOMMENDATIONS

This chapter describes the study conclusions and recommendations for future implementation of the Family Plus intervention. There are five study conclusions: 1) the Family Plus program helped families of middle school-aged youth to increase their use of healthy family functioning techniques; 2) the program helped parents and youth gain knowledge about the effects of chemical dependency, but neither parents nor youth appear to have made substantial gains in knowledge about substance use prevention; 3) there was little change in youth substance use patterns as a result of the Family Plus program; 4) offering the Family Plus program to groups of families gave families the opportunity to benefit from interaction with each other; and 5) parents in Spanish-speaking families found the program beneficial, but communication between participants and staff was difficult.

Families increased their use of healthy family functioning techniques. The intervention helped families make improvements in healthy family functioning on four of the five dimensions: 1) increased confidence of parents in their ability to mentor their children and support their educational progress; 2) increased use of monitoring activities with their children; 3) gains in parent's perceptions of the strengths of their families; and 4) lower levels of interfamilial conflict. Little improvement was found on the last family functioning dimension, establishing clear, specific, and appropriate rules and expectations with the children, but most families noted that they were already setting clear and appropriate rules and expectations with their children prior to the intervention.

There were only a few areas in which family functioning appeared to be getting worse, such as family members losing their tempers more often⁷ and increases in family members trying to one-up or out-do each other. There are a variety of possible explanations about why some aspects of family functioning appear to be getting worse. One explanation is that family members might have been avoiding discussion of problems prior to the intervention. Discussing family problems during the group sessions may have led to similar discussions at home, which may have led to increased conflict between family members. A second reason is that family members may have reported their family situations more honestly at the time of the post-test. Finally, parents may have learned and implemented new parenting techniques that resulted in increased conflict, at least temporarily, with their children.

Parents and youth gained knowledge about the effects of chemical dependency on both adults and youth. When asked five questions to test their knowledge of the effects of chemical dependency, both adults and youth answered more of the questions correctly at post-test. The most substantial gains made by parents were in knowledge of the effects of stimulants and inhalants. The most substantial gains made by youth were in knowledge of the effects of stimulants and marijuana.

Parents and youth do not appear to have made substantial gains in knowledge about substance use prevention. A few parents appear to have gained knowledge about how they can assist their children to resist the use of addictive substances, and a few youth appear to have made gains in their abilities to identify substance refusal skills. However, for the most part, the

⁷ This finding was not statistically significant.

strategies given by parents and youth at post-test were similar to those given at pre-test. Perhaps, in a three-week group session, with many concepts to cover, it may have been difficult to spend enough time on substance use prevention to result in substantial change. Perhaps the substance use prevention strategies were not presented clearly and therefore not understood. Or perhaps the parents and youth understood the strategies being presented, but did not see them as useful or realistic. Finally, it may have been difficult to detect changes in the level of substance abuse prevention knowledge because a substance abuse prevention knowledge test was not administered.

There was little change in the substance use patterns of youth. The good news is that, if youth were truthfully reporting their substance use, there were not significant increases in youths' use of addictive substances after the intervention. Perhaps the intervention gave youth who were not already using addictive substances more reasons not to start using. An alternative explanation is that substance use was under-reported by the Family Plus participants. A comparison of the self-report substance use rates of Family Plus youth with Polk County youth surveyed in 1999 shows that Family Plus youth were less likely to report using alcohol and illegal drugs (other than marijuana) during the last 30 days.⁸ A third explanation is that the Family Plus intervention helps families increase their use of healthy family functioning techniques, but is less effective in changing youth substance use rates.

The aspects of the Family Plus program that parents and youth found most beneficial were often related to interacting with others as part of a group. Parents and youths benefited from group discussions, and many noted that they would like the program to be longer to allow more time for such discussions. They found other people in similar situations, which helped to reduce isolation. They talked about their family situations and discussed solutions, allowing them to learn from the experiences of other families. The group process may have helped families to develop communication skills. As shown by the overall reduction in family conflict at the post-test, it appears that Family Plus participants have gained communication skills that they are applying in their homes.

When the Family Plus program was provided to Spanish-speaking families, parents noted that the program was beneficial. However, there was a lack of capacity to provide services in Spanish to the participants, which made communication between participants and staff difficult.

The following recommendations are made for future implementations of the Family Plus program:

- Due to the benefits of the group process, it is recommended that the intervention be provided in the group format.
- Consider adding a fourth session to the intervention to provide more time to cover program concepts and have group discussions. Some of the extra time could be used to more thoroughly cover specific strategies that youth can use to resist use of addictive substances, as well as strategies parents can use to support their children in resisting such use.

⁸The rate of marijuana usage between the two groups was comparable, and Family Plus youth were more likely to report using cigarettes in the last 30 days than the youth surveyed by the Iowa Consortium.

- If the intervention is provided to Spanish-speaking participants again in the future, provide all program materials and research instruments in Spanish and use a Spanish-speaking facilitator.