

Parent-adolescent relationships:
The influence of multi-family group therapy on communication and closeness

by

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✓
Signatures have been redacted for privacy
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This thesis is dedicated to:

All individuals suffering from the day to day trials of alcoholism and drug addiction,

family members who continue to be supportive despite obstacles, and

individuals who have dedicated their lives to providing counsel and guidance.

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ABSTRACT

This research measured the perceived change in communication and closeness between adolescents and their parents after four weeks in an adolescent residential chemical dependency treatment program. Each of the adolescents was involved in an adolescent residential chemical dependency treatment program and met diagnostic criteria for substance dependence prior to admittance into the treatment program. The adolescents participated in this research study by completing questionnaires before and after the treatment program. Before the treatment program, the adolescents completed questionnaires measuring their perception of their parent-adolescent communication, parent-adolescent closeness, a demographic questionnaire, and an open-ended question. During the second testing, four weeks later after the treatment program, the adolescents again completed the questionnaires measuring parent-adolescent communication and closeness and the open-ended question along with a questionnaire measuring the perceived changes in the quality of their parent-adolescent relationship after four weeks of treatment.

Paired sample *t*-tests were used to compare pre-test responses to post-test responses. Independent samples *t*-tests were used to compare mean scores for those who completed the post-test with those who did not complete the post-test and to compare pre-test and post-test mean scores of the participants who completed the post-test based on their parents' attendance in the weekly multi-family therapy group. Although there was a significant loss of participants from the pre-test to the post-test, much of the data indicated a positive change after four weeks. When comparing the pre-test responses to post-test responses, significant changes were reported based on the parents attendance in the weekly multi-family therapy group. By gathering information about the changes within the parent-adolescent relationship, researchers, therapists, and social service workers will better understand the substance dependent adolescent population and their families. Additionally, areas of treatment programs that are not effective may be altered and funding sources will recognize the

importance of family therapy and place more emphasis on funding family therapy within chemical dependency treatment.

CHAPTER 1. INTRODUCTION

I have worked for Youth and Shelter Services Inc. (YSS) for almost six years. My original position was a Residential Technician in an adolescent residential chemical dependency treatment program. From the beginning, I recognized that adolescent substance abuse and related behaviors affected the entire family and if the entire family was not involved, the adolescent's substance abuse issues would not be fully addressed. In my current experience as a counselor in the weekly outpatient multi-family group therapy, parents are able to address their adolescent's negative choices, process their feelings and experiences from their perspective, and begin to restore their relationship with their child.

Although the number of adolescents who report abusing alcohol and other drugs has decreased in recent years, the numbers are still elevated according to the National Institute on Drug Abuse (NIDA, 2003). However, much of the previous research on family therapy within chemical dependency treatment programs has focused on chemically dependent adults and their spouses (O'Farrell, Cutter, & Floyd, 1985; O'Farrell & Fals-Stewart, 2003; Stewart & Birchler, 2001) or their children (Rolls, 1995; Rotunda, Scherer, & Imm, 1995). Although these studies are valuable because they emphasize the importance of involving the entire family to produce changes within the family unit, by learning about the younger population of substance abusers, problems can be addressed earlier, preventing long-term problems.

It is crucial to become more knowledgeable about the younger chemically dependent population because research shows that many adolescents are experimenting with alcohol and other drugs by the time they graduate high school (NIDA, 2003). Consequently, if this population is misunderstood and not adequately addressed, they will continue to abuse alcohol and other drugs as adults, which will continue to be expensive for society, both economically and emotionally.

To understand the adolescent population better, more research needs to focus on their relationship with their parents. Because the parent-adolescent relationship seems to be influential on

the adolescent's attitude and behaviors, it would be helpful to study how parent-adolescent relationships are affected and altered because of the adolescent's substance abuse. Despite the wealth of research focusing on the chemically dependent adult population, only a few studies have looked at the adolescent population. Researchers have analyzed the effectiveness of specific models of family therapy (Joanning, Quinn, Thomas, & Mullen, 1992; Robbins, Bachrach, & Szapocznik, 2002; Schmidt, Liddle, & Dakof, 1996) and the effects of various models of therapy on the outcome. Although the studies measured the decrease in substance use by the adolescent, a limited amount of research has investigated the changes within the parent-adolescent relationship after family therapy in chemical dependency treatment.

Although several studies have examined the effects of chemical dependency on marital relationships, fewer have examined its impact on the parent-adolescent relationship. Through studying the parent-adolescent relationship, researchers are able to provide valuable information to mental health workers and social service workers to better address the needs of their clientele. In addition, by providing better services, adolescents' issues will be addressed earlier, preventing problems in the future. Because of my experience working with the chemically dependent adolescent population, my primary research question was: *How does a parent-adolescent relationship change after participation in four weeks of multi-family group therapy?* I was interested in learning if significant changes can occur throughout a four-week time, which I chose because primary residential programs have typically decreased their length of stay to between 28 and 30 days due to budget cuts. Specifically, I wanted to identify if changes occur regarding the communication and closeness within the parent-adolescent relationship. The remaining chapters will (a) examine the research literature associated with this research question, (b) describe the methods used to perform this study and evaluate the data, and (c) present the results and discuss their meaning.

CHAPTER 2. LITERATURE REVIEW

This chapter will examine the research literature relevant to the research question, looking at it from within a variety of topics.

Family Life Cycle

Families move through stages as individual family members move along the life cycle. Researchers have focused on family life cycles and have developed theories regarding the numbers of stages families move through and the role of specific family members. Carter and McGoldrick (1989) have focused a substantial length of time on the development of their specific family life cycle model. It consists of six stages that incorporate three generations of families. Their intergenerational model begins with the young adult leaving home and developing his/her own identity and ends with the family members in later life dealing with ailing health and the death of a spouse.

Carter and McGoldrick (1989) studied the difficulties in moving from one stage of the family life cycle to another. "Family stress is often greatest at transition points from one stage to another of the family developmental process, and symptoms are most likely to appear when there is an interruption in the unfolding family life cycle" (p. 4). They emphasized the importance of therapy with helping families deal with stress and difficult transitions. Families commonly struggle when they experience transition points such as divorce or remarriage. Similarly, when a child moves into adolescence it can be another difficult time for families. Specifically, it is common for adolescents to struggle with gaining independence from their parents, and the type of family communication that occurs can contribute to the stress that the entire family experiences (Noller & Bagi, 1985). The adolescent subjects in the current study will attend a weekly multi-family therapy group, which hopefully will contribute to better family communication.

Adolescent Substance Abuse Statistics

Substance abuse drains the economic resources of the individual, the family and society (Kaufman, 1985). NIDA (2003) estimated that adolescent and adult substance abuse costs \$67 billion per year in dollars alone. Treatment, human service programs, crime, and missed days at work contribute to the extensive price of substance abuse. Because substance abuse treatment can decrease the cost of substance abuse, some research has been devoted to the area of substance abuse treatment. Research by NIDA estimated that between \$4 and \$7 is saved for every dollar spent on treatment. According to NIDA, a drug abuser will cost approximately \$3,600 per month that h/she continues to abuse alcohol and/or other drugs. In addition, incarceration costs approximately \$3,300 per month. Although the studies combined the adolescent and adult population, adolescent treatment is particularly cost-effective because adolescents begin draining the economic resources earlier and potentially for a longer period of time.

Although the most recent NIDA data indicated that adolescent substance abuse has decreased, a substantial number of adolescents continue to report experimenting with alcohol and other drugs (NIDA, 2003). According to NIDA, 48.6% of high school seniors questioned reported consuming alcohol and 21.5% reported smoking marijuana within the last 30 days. Because a substantial number of adults with substance abuse issues started using alcohol or other drugs when they were an adolescent, it is imperative that adolescent substance abuse be addressed.

Parent-Adolescent Communication

Positive communication includes active listening, empathy, and respect. Through open communication, individuals are able to understand the other person's needs and provide support. Open communication can also prevent misunderstandings. Since the adolescent life cycle stage can be a difficult time for families, communication within the family is very important (Barnes & Olson, 1985; Carter & McGoldrick, 1989). According to Kafka and London (1991), having open communication between parents and adolescents may prevent the adolescent from engaging in

negative behavior, specifically using alcohol or other drugs. They conducted their study in two high schools. The adolescents completed questionnaires and an interview that measured their substance use and relationships. Their results indicated that adolescents who reported open communication with a parent reported less substance use. Kafka and London concluded that a parent's role is of moral authority and when open communication occurs, the parent's morals will be communicated, allowing them to potentially inhibit the adolescent's use of substances.

Communication affects a family's sense of cohesion and adaptability, according to Barnes and Olson (1985). In a study of communication, White (2000) reported that an increase in communication was related to an increase in agreement between the parent and adolescent. White studied 271 adolescents and their families from Australia. Each of the participants completed four questionnaires that measured adaptability, cohesion, communication, and moral authority. The results indicated that positive communication allowed family members to communicate their needs and the likelihood that the parent-adolescent relationship would be positive was influenced by more frequent communication. When open communication occurred within parent-child relationships, family rules and roles were more flexible and negotiable.

Open communication allows people to discuss their thoughts and feelings without fear or rejection (Marta, 1997). Marta conducted her study of 279 families in Milan, Italy. The parents and adolescents completed questionnaires that measured communication, support, self-esteem, and level of psychosocial risk. The results indicated that the adolescent's perception of adequate communication was negatively correlated with an imbalance between family challenges and resources. Open communication was connected with a greater ability to deal with stress, such as experimentation with alcohol and/or other drugs. In addition, the higher the perceived parental support, the less likely the adolescent participated in negative behaviors.

Research indicated that an adolescent's risk for substance abuse decreased as the communication with his/her parents increased. Anderson and Henry's (1994) research examined

possible predictors of adolescent substance abuse. Their study consisted of 489 adolescents who completed questionnaires that measured substance use, family characteristics, communication, flexibility within roles, and parental support. Their results indicated that the adolescents' perception of their family's ability to communicate with each other significantly reduced the risk of adolescent substance use. Kafka and London's (1991) research on communication explored the ways communication in parent-adolescent relationships can be potential influences on an adolescent's use of cigarettes, alcohol, and/or other drugs. They found that open communication between parents and adolescents was negatively correlated with the adolescent's substance use. In addition, Marta's (1997) research suggested that positive parent-adolescent communication was positively correlated with the adolescent displaying appropriate behaviors.

There is conflicting research about possible gender differences in parent and adolescent communication. Barnes and Olson (1985) found no significant relationship between adolescents' gender and their perception of their parents' communication skills. Their study included 426 families from a larger sample. Adolescents and their parents completed questionnaires on communication, adaptability and cohesion, and life satisfaction. Although differences were indicated between the adolescent's perception of communication and his/her parent's perception, there were no significant differences related to the gender of the adolescent or of the parent.

On the other hand, Noller and Callan (1990) and Noller and Bagi (1985) found that some differences occurred in parent-adolescent relationships regarding gender of the parent and of the adolescent. Noller and Callan's research focused on the impact of the parent's and adolescent's gender. The 296 adolescents in their sample completed the Parent-Adolescent Communication Inventory. Results showed that adolescents communicated more frequently, disclosed more, and felt more satisfied with their mother. They also found a significant difference between male and female adolescents when examining the level of disclosure and satisfaction. Female adolescents generally disclosed more and male adolescents reported less satisfaction. Noller and Bagi also examined the

impact of gender by studying 58 older adolescents, between the ages of 16 and 20 years, and still living at home. They found that female adolescents communicated more and disclosed more to both their mother and father compared to male adolescents. They also found that communication between mothers and adolescents was more frequent and satisfying than communication between fathers and adolescents.

Other research has focused on the improvement of communication through marriage and family therapy. O'Farrell et al. (1985) studied male alcoholics and their wives. The males, who were involved in an outpatient counseling program to address their alcoholism, were randomly selected into either a treatment program with marital therapy or a treatment program without marital therapy. The authors reported that the couples receiving the marital therapy along with treatment significantly improved their positive communication skills, along with abstinence from alcohol compared to the control group who did not receive marital therapy. Although the research by O'Farrell et al. focused on the marital relationship, it is important to recognize the positive relational changes and the potential to generalize to other familial relationships.

Parent-Adolescent Closeness

Parent-adolescent relationships are influenced by the involvement of each family member. Family bonding is the ability of family members to connect on an emotional level and interact with each other in a positive and productive way (Anderson & Henry, 1994). In addition to studying the connection between parent-adolescent communication and a reduced risk for substance abuse, Anderson and Henry's research also explored family bonding. Their results indicated that an adolescent's perception of family bonding was a significant predictor of a reduced risk for substance use. The ability for family members to bond with each other may be a buffer against psychosocial risks such as adolescent substance abuse. The bond between family members was also studied by White (2000). White's research measured family cohesion, which was the extent that family members were able to bond emotionally. Her results indicated that when adolescents perceived their

families as connected, they viewed their family as more influential over their behaviors and attitude and as a greater source of their moral authority.

Marta (1997) also studied the importance of parent-adolescent closeness by focusing on support as a resource parents can provide their adolescent. She examined the correlation between parent-child relationships and risk for problems for adolescents. A risk for problems can occur when “there is a lack of balance between challenges and resources” (p. 473). Challenges, such as maintaining employment, can push the adolescent to develop his or her own identity and independence. Resources, such as support, could help adolescents not give up the first time they experience failure. Marta’s results indicated that the adolescent’s perception of parental support was correlated with a decrease in risk of challenges, such as substance use and delinquent behaviors.

A strong bond between parents and adolescents could provide a more secure environment. A secure environment could allow adolescents to explore their increasing freedom and continue to be supported via the bond of attachment to their parents. White’s (2000) research of 271 adolescents and their parents indicated that when adolescents perceived their families as connected, they associated their family with the main source of their moral authority. Adolescents needed to feel confident that they would not be ridiculed or punished. Through open communication, parents send the message that they care about their child. The adolescent could interpret the parent’s behavior as respect of their opinions and feelings. By being respected, the adolescent may be more likely to respect the parent’s morals or be more likely to be honest if they experiment with substances (Kafka & London, 1991).

According to Marta (1997), the perception of support was negatively correlated with the presence of psychosocial risks for the adolescent. Specifically, a sense of family closeness was negatively related with the adolescent’s reported use of alcohol and other drugs. By perceiving support from parents, adolescents felt that they could rely on their parents during difficult situations. Anderson and Henry (1994) defined parental support as “praising, encouraging, physical affection

and showing approval, love and acceptance” (p. 408). A significant relationship was indicated between parental support and decrease in risk of adolescent substance abuse.

Family Systems Approach

The family systems approach takes the emphasis off each individual family member and places the focus on the entire family unit. Because a system includes both the individual parts and the manner that each individual part works with other individual parts, when looking at the family as a system, each family member is explored and additionally, the manner that they interact with each other is also explored. The family system approach to therapy provides an alternative to individual therapy.

According to Hoffman’s (1981) literature on the history of family therapy and the various models of family therapy, the family system is “any entity whose parts co-vary with each other and which maintain equilibrium in an error-activated way” (p. 17). Hoffman described the family unit as a spider web; when an action in one area of a family unit occurs, other areas of the unit will be affected. Consequently, the change in one family member’s behavior affects the other family members (Schmidt et al., 1996). Thus, each family member has a role in the way the family functions.

Nichols and Schwartz (2001) wrote, “Family therapy exerts change on the entire family; therefore, improvement can be lasting because each family member is changed and continues to exert synchronous change on each other” (p. 6). Systems therapy does not provide a perfect solution; instead it provides a different perspective from other therapeutic approaches because it focuses on the entire family (Bowen, 1974). When applying the family systems approach to substance abuse treatment, it is important to recognize each family member’s involvement. The family member who displays dysfunctional behaviors is not isolated and should not be the sole focus of treatment. The entire family system is involved and affected by the substance abuse. Consequently, it is important to get each of the family members involved in therapy. Adolescent treatment programs need to get

parents actively involved in therapy because parents are an obvious part of the adolescent's family system and need to be part of the solution.

Family Therapy to Address Adolescent Substance Abuse

Families struggle at transition points along the family life cycle. Carter and McGoldrick (1989) focused on the importance of family therapy to address the difficulty of transitioning from one lifecycle stage to another. By addressing the intergenerational relationships within a family, the therapist will better understand the family stressors. The stage of having a child move into adolescence requires the negotiation of rules and attitudes. However, when the adolescent is using alcohol or other drugs, different rules may be necessary. According to Carter and McGoldrick, family therapy can provide an appropriate environment to help every family member develop appropriate structure and rules.

In addition to addressing the appropriate level of structure for the adolescent, family therapy can also strengthen the family's ability to deal with the family member's substance abuse and increase the willingness to address the substance abuse problem. O'Farrell and Fals-Stewart (2003) reviewed 38 studies that examined marriage and family therapy within treatment to address alcoholism. They concluded that family therapy encouraged the substance abuser to participate in treatment and significantly helped the family members deal with their family problems.

Adolescents with substance abuse issues typically come from homes that have contextual problems. According to Anderson and Henry (1994), an adolescent's perception of his/her parents substance use was a significant predictor of the adolescent's substance abuse. Consequently, the adolescent's substance abuse may be a symptom of other problems within the home. Anderson and Henry recommended that the entire family become involved in therapy to address the problems occurring at home. According to the Center for Substance Abuse Treatment (1995), family therapy can provide an environment in which the family's ineffective problem-solving techniques can be addressed. Also, the therapists can model and teach healthy skills for the family members to use

outside of therapy. Once healthy parenting skills are adopted, it is important for the therapist to reinforce the parents' confidence in themselves as a "good" parent. According to the Center for Substance Abuse Treatment, by gaining confidence, parents become empowered to take on a more positive role within the family.

The research by Schmidt et al. (1996) indicated that as parents were involved in their adolescent's substance abuse treatment, their parenting skills improved and their adolescent's substance abuse problem decreased. Liddle (1996) also found that negative parenting behaviors were decreased through family therapy in his review of the adolescent substance abuse treatment research. According to Meyers, Apodaca, Flicker, and Slesnick (2002), family therapy can redefine family roles and alter communication patterns between family members. Their research examined three empirically supported interventions, community reinforcement and family training, behavioral marital/couples therapy, and family therapy, all of which involved family members within substance abuse treatment. Their results indicated a significant need to involve the family members of the substance abuser. The involvement of family members improved the effectiveness, retention, and outcome of treatment, regardless of the intervention.

In addition, Robbins et al. (2002) reviewed the effectiveness of Brief Strategic Family Therapy (BSFT) on adolescent substance abusers. They concluded that BSFT was significantly more effective in engaging family members and reducing marijuana use compared to a control group, which received therapy that did not include family involvement. These authors suggest that adolescents will maintain the positive changes developed in therapy as long as the changes involve the whole family system.

Because family members influence the thoughts and behaviors of adolescents and vice versa, family therapists should address parent-adolescent interactions. Research indicates that family systems therapy is more successful in producing changes than therapy without family involvement (Center for Substance Abuse Treatment, 1999; Joanning et al., 1992; Liddle & Dakof, 1995; Liddle,

Dakof, Parker, Diamond, Barrett, & Tejada, 2001; Meyers et al., 2002; Stanton & Shadish, 1997).

Joanning et al. compared three models of adolescent drug abuse treatment to examine the effectiveness of each model. Of the 134 families studied, family systems therapy was significantly more effective in stopping adolescent drug abuse than the other two approaches that did not include family therapy. Liddle and Dakof's research reviewed studies focused on the effect of family therapy on addressing substance abuse problems in a controlled treatment setting. Many of the studies they reviewed identified how family therapy engaged the substance abuser and their family and helped the substance abuser to remain in the treatment program. In addition, substance abuse and related problems were also reduced.

Liddle et al. (2001) studied the effectiveness of three substance abuse treatment programs. Although the adolescents reported improvements in each program, the adolescents involved in the multidimensional family therapy (MDFT) showed the most significant improvements. Drug use was dramatically decreased and maintained for a longer period of time compared to the other two programs. In addition, the MDFT program produced significant improvements with the family's functioning. Liddle and Dakof's (1995) review of research, which included studies that involved various family interventions, showed that including the family within the treatment of drug abuse was more effective than treatment that does not include the family.

In Stanton and Shadish's (1997) meta-analysis of 1,571 cases involving the patient and family members, they reported that family therapy improved substance abusers' engagement and retention within treatment. Their analysis specifically examined participant dropout and noted that several previous research studies omitted participants who dropped out when analyzing the data. However, in Stanton and Shadish's analysis, they included the participants who were originally omitted and considered them treatment failures. This alteration caused the failure rate of programs without family therapy to greatly increase and the family therapy programs to be more successful in

comparison because family therapy programs generally had fewer dropouts compared to programs without family therapy.

Emener (1993) took a different approach in that he studied alcoholics who had completed a treatment program, were in recovery, and were involved in Alcoholics' Anonymous (AA) meetings. The participants in his research reported the need for family therapy throughout chemical dependency treatment and expressed a desire for more family therapy than was provided to them. Emener's research provided an alternative perspective that strengthens the need for further research. By examining the influence of family therapy on parent-adolescent relationships, insight for future development of programs can be developed. The current research will study the importance of involving parents in adolescent substance abuse treatment by examining the changes that occur in the parent-adolescent communication and closeness after four weeks of family therapy.

CHAPTER 3. METHOD

Definition of Terms

The primary research question for this study was *How does the parent-adolescent relationship change after participation in four weeks of multi-family group therapy?* The adolescent (a) was a client in an adolescent residential chemical dependency program, (b) met criteria for chemical dependence according to the Diagnostic and Statistical Manual of Mental Disorders, 4th Ed – TR (DSM-IV-TR) (American Psychiatric Association, 2000) (see Appendix A), and (c) was appropriate for the residential level of treatment. The parent was defined as (a) a parental figure living with the adolescent outside of treatment or (b) a parental figure not living in the adolescent's home. I intentionally stated "parental figure" because I wanted to allow the adolescent to respond to a stepparent or other biological or non-biological adults assuming a parental role.

Chemical dependency residential treatment is a level of treatment where individuals live at the facility instead of at their home with their parents. The individuals spend a majority of their day focused on their substance abuse issues. Their typical day includes at least two hours of group therapy, one hour of individual therapy, and a 12-step meeting. A part of treatment concentrates on the family. Multi-family therapy group is a weekly group that specifically focuses on the family. Multi-family group therapy, defined as a two-hour therapy group that includes adolescents and their families involved in the residential chemical dependency program, occurs on Sunday afternoons during family visiting hours when family members are invited to the treatment facility to visit their family member in treatment. The multi-family therapy group is facilitated by two or three counselors who meet the requirements of "therapy approved," established by the Iowa Department of Human Services and have been in the position of counselor for at least one year. The goals of the groups are to provide (a) support to family members, (b) an environment to process feelings and experiences related to the adolescent's substance use and related behaviors, and (c) education about chemical dependency and recovery. At the beginning of the group session, group rules such as respect and

confidentiality are covered. The counselors then ask the group members if they have any issues they would like to discuss. At this time it is common for parents or adolescents to bring up an issue that they are struggling with such as an adolescent's recent relapse. The counselors encourage all of the group members to become involved in the discussion. For example, other parents may offer feedback about their similar experiences. If the group members do not have any issues they want to focus on, the counselors will then generate a group conversation about a planned topic such as an adolescent's upcoming discharge from the residential program. The counselors will encourage other group members to offer constructive feedback to the identified family regarding developing a home-living contract and attending AA meetings. During some group sessions, adolescents may have specific assignments or topics to bring up during the group, including ways their substance use affected their family members or ways to improve the communication with their parents. Following the multi-family therapy group, some adolescents are able to leave the facility with their family members for a few hours, as long as they have earned the appropriate privilege.

Purpose

The purpose of this research was to study the importance of involving parents in their adolescent's substance abuse treatment by examining the changes that occur in the parent-adolescent communication and closeness after four weeks of multi-family therapy group. By using a quantitative and qualitative design, I wanted to broaden my knowledge of the effects of family therapy on adolescents and to identify the extent of perceived change that occurs after four weeks of therapy. The information gained from this study could educate treatment facilities and the human service field of the importance of family therapy throughout adolescent chemical dependency treatment.

Participants

Of the 32 adolescents participating in the chemical dependency treatment program at the time of the research study, 43% (n = 14) were excluded because (a) they would be completing the treatment program in less than four weeks, 9% (n = 3), or (b) they refused to participate in the study,

33% (n = 11). Of the adolescents in this research study who were eligible and agreed to participate (n = 18), 10 were male and 8 were female adolescents ranging from 14 to 17 years of age. They were all individuals who (a) met the diagnostic criteria for chemical dependence according to the Diagnostic and Statistical Manual, 4th Edition, Text Revised (DSM-IV-TR) (see Appendix A), (b) had been admitted into a residential chemical dependency treatment program, and (c) were involved in a two-hour multi-family group each week.

A plurality of participants, 44.4%, began using alcohol or other drugs by age 13. The participants had been referred to the residential level of treatment from one or more of the following: (a) their parents, 50%, (b) the juvenile court system, 33.3%, (c) the Department of Human Services, 22.2%, and (d) other mental health service providers, 5.6%. Of the participants, 83.3% reported their ethnicity as Caucasian and 61.1% reported their parents were not married to each other. All of the 18 participants completed the pre-test questionnaires. However, eight of the adolescents, 45%, dropped out of the study before they were able to complete the post-test questionnaires. Six of the adolescents who dropped out left the treatment facility before the four weeks of treatment were completed, either because they needed a different level of treatment or because their parents pulled them out. The other two adolescents who did not complete the post-test questionnaires remained in the treatment program. However, one chose not to participate in the post-test questionnaires and the other started to complete the post-test questionnaires and then decided not to finish. A summary of the demographic information of all the participants is presented in Table 1.

Table 1

Demographic Variables of the Adolescents and Their Families

<u>Demographic Variables</u>	<u>Summary Statistics (N = 18)</u>
Age (range; mean)	14 – 17; 15.8 years
Gender	
Male	55.6%
Female	44.4%
Ethnicity	
Caucasian	83.0%
Multi-Racial	11.1%
Age of First Substance Use (range; mean)	8 – 16; 13.3 years
Length in Current Treatment Facility at Pre-Test	1 – 2 weeks
Number of Adults in the Home (range; mean)	1 – 4; 1.9 adults
Parents' Married to Each Other	
Yes	38.9%
No	61.1%
Mothers' Marital Status ^a	
Married to Father	38.9%
Divorced	38.9%
Remarried	11.1%
Fathers' Marital Status ^a	
Married to Mother	38.9%
Divorced	22.2%
Cohabiting	16.7%
Living Situation Outside of Treatment ^a	
Mother and Father	38.9%
Mother only	22.2%
Mom and her boyfriend	11.1%
Number of Family Groups Parents Attended	
Mother (range; mean)	0 – 4; 2.3 groups
Father (range; mean)	0 – 4; 2.7 groups
Distance Between Home and Treatment Facility (mean)	1 – 2 hours
Other Diagnosis ^b	
Conduct Disorder	5.6%
ADHD/ADD	22.2%
Depression	38.9%
Referral Source ^b	
Parents	50.0%
Juvenile Court System	33.3%
Department of Human Services	22.2%

^aThese numbers do not equal 100%. Refer to the Code Book (Appendix I) for complete listing of variables.

^b The statistics could exceed 100% because it was possible to select more than one variable.

Procedure

Ethics

Before beginning the study, approval was obtained from the Institutional Review Board (IRB) at Iowa State University. The participants received a consent form including (a) a description of the research, (b) a description of any potential risks and/or discomfort, and (c) a promise of confidentiality (see Appendix B). All raw data were viewed only by the researcher and her major professor. All names were changed for data analysis purposes. To ensure confidentiality, data were stored in a locked cabinet, as indicated in the IRB application.

Recruitment

After obtaining permission from IRB and the residential treatment program, participants were recruited by communicating with the Intake Counselor at a chemical dependency residential program in a midwestern university town. The intake counselor notified the researcher when an intake took place. The researcher contacted each potential participant in person at the residential facility and explained to them (a) that I am an MS student at Iowa State University, (b) that I am an outpatient treatment counselor within the same organization as the residential treatment program, (c) their role in the research, and (d) that there would be complete confidentiality. Because the participants were involved in a residential treatment program, an advocate was assigned on their behalf. The advocate, an intern at the residential treatment program, answered questions and ensured that the participants understood their rights. Once each participant agreed to participate, s/he endorsed the consent form. At that time, a date and time were scheduled for the researcher to meet individually with the participant to gather the information.

Data Collection

At the time of the first scheduled meeting, the researcher individually met with each participant in an office at the residential treatment facility. The office provided a private place with minimal interruptions. First each participant completed the demographic questionnaire (see

Appendix C), which asked about the age they first used alcohol or other drugs, their living situation away from treatment, and their parents' marital status. Once the demographic questionnaire was completed, the qualitative questionnaire was read to the participants and they were given a choice of either writing their response or dictating it to the researcher. Most participants chose to dictate their responses. Once the qualitative questionnaire was completed, the quantitative questionnaires were read to each participant to minimize the opportunity for confusion. The questionnaires measured the participants' perception of their communication and closeness with their parents. The first meeting lasted between 30 and 60 minutes.

Following four weeks of the treatment program, the researcher and the participant met again. The second meeting was conducted in a manner almost identical to the first meeting. The questionnaires were asked in the same order as the first meeting. However, the demographic questionnaire was not completed and instead the participants completed an additional questionnaire to measure the level of change within their parent-adolescent relationship.

Instruments

The following instruments were used to measure the quantitative and qualitative variables of interest in this research study.

Adolescent's Perception of the Relationship with Their Parents. This qualitative questionnaire was developed by the researcher to measure the participant's perception of their relationship with each parent. Participants were asked to describe, in their own words, their relationship with each of their parents (see Appendix D). The qualitative questionnaire was administered both before and after four weeks of multi-family therapy group.

Parent-Adolescent Communication Scale (PACS). The PACS (Barnes & Olson, 1985) was used to measure the participants' perception of their relationship with their parents (see Appendix E). In developing the PACS, Barnes and Olson completed a factor analysis of the items using a varimax rotation and concluded that it was comprised of two subscales that measured the level of openness

and number of problems in parent-adolescent communication. The two subscales have 10 items each, for a total of 20 items, rated on a 5-point Likert-type scale. The response choices range from Strongly Disagree (1) to Strongly Agree (5). Item 17 was removed because a typing error caused it to duplicate Item 16, thus reducing the level of openness factor to 9 items.

Barnes and Olson (1985) reported two measures of reliability: internal consistency and test-retest reliability. The internal consistency of the openness and the problem subscales was .87 and .78, respectively. Test-retest reliability was .78 and .77 for the openness and problems subscales, respectively. In this research study, the PACS was administered both before and after four weeks of multi-family therapy group.

Parent-Adolescent Communication Inventory (PACI). The PACI (Noller & Bagi, 1985) was used to measure the participant's perception of the process and content of the adolescent's communication with his/her parents (see Appendix F). It is comprised of 14 themes that quantify the content areas of communication that are measured by the 6 subscales that quantify the process of the communication. In the original study, the six subscales were measured in terms of a 6-point Likert-type response. However for this study, the scale was redesigned as a 5-point Likert-type scale and a total score for each subscale was computed and used for data analysis. Although measures of reliability were not reported, significant differences were reported according to the adolescent's gender (Noller & Callen, 1990). This inventory was administered both before and after four weeks of multi-family therapy group.

Parent-Child Closeness (PCC) Questionnaire. The PCC (Buchanan, Maccoby, & Dornbusch, 1991) is a 9-item questionnaire used to measure the participants' perceptions of the closeness of their relationship with their parent(s) (see Appendix G). The items are rated on a 5-point, Likert-type scale. The response choices ranged from Not at all (1) to Very (5). Buchanan et al. reported reliability for the mother and father subscales. The internal consistency was .89 for mothers

and .90 for fathers. For the current study, the PCC was administered both before and after four weeks of multi-family therapy group.

Relationship Change Scale (RCS). The RCS (Guerney, 1977) was developed to measure *change* in the quality of a relationship, not just parent-adolescent relationships (see Appendix H). The original questionnaire was based on potential change after a three-month interval. However, according to Guerney the time interval can be altered. For the present research, the time interval was four weeks. Because the original 27-item questionnaire measured the change in quality of romantic relationships, original items 6, 17, and 20 were removed since they were not appropriate for the current study. In addition, the wording of certain items was altered to measure the change in quality of parent-adolescent relationships. The original item 8 was also removed because it was a duplicate of item 7. The items are rated on a 5-point, Likert-type scale. The response choices ranged from Much Less (A) to Much More (E). Although reliability has not been measured on the RCS, the measure was significantly correlated with two other measures of relationships change, the Handling Problems Change Scale ($r = .29$) and the Satisfaction Change Scale ($r = .49$). In the current study, the RCS was administered once, after four weeks of multi-family therapy group.

Demographic Questionnaire. The demographic questionnaire, designed by the researcher for the current research, identified the participants' gender, age, ethnicity, age of first alcohol or other drug use, substance abuse history, other mental health diagnosis, number of adults in the primary home, distance treatment is from hometown, and referral source (see Appendix C). The questionnaire was administered once, before four weeks of multi-family therapy group.

Data Analysis

The quantitative data for this study were analyzed using Statistical Package for the Social Sciences (SPSS) version 11.5. First, a factor analysis was performed on each instrument except the demographic questionnaire. The factor analysis for the PACS was then compared to the factor analysis conducted by the original researchers. Next, summed scores and means for each instrument

were computed. Frequencies, percentages, means, and standard deviations were also computed. Then, independent *t*-tests were conducted to compare the means of the pre-test scores of the two groups (adolescents who completed only the pre-test and adolescents who completed both the pre-test and post-test) to evaluate possible differences between the two groups. Independent *t*-tests were also conducted to analyze the post-test mean scores based on the parents' attendance (low: two or fewer sessions versus high: three or more sessions) in the weekly multi-family therapy group. The researcher also conducted paired-sample *t*-tests to compare the means of the pre-test and post-test scores for the 10 adolescents who completed both tests. The Code Book displays the variables and descriptions (see Appendix I).

The qualitative data were entered into Microsoft Word, but computer software was not used to analyze the responses. Independently, the researcher and her major professor organized the statements into categories. They each identified themes within the statements and the nature of the change (positive or negative) between pre-test and post-test statements. Other than one response, there was agreement on every interpretation of the responses. A third person was asked to resolve the one difference in interpretation.

CHAPTER 4. RESULTS AND DISCUSSION

The purpose of this study was to examine parent-adolescent relationships and to evaluate the adolescents' perceived communication and closeness with their mothers and fathers before and after four weeks of a weekly multi-family therapy group in a residential chemical dependency treatment. It was expected that the adolescents' perceived communication and level of closeness would improve after participating with their mothers and fathers in the weekly multi-family therapy group.

Quantitative Results

Factor Analysis

Factor analyses were conducted on each instrument, except the demographic questionnaire, using principal components extraction and varimax rotation. In the first factor analysis of the PACS, the number of factors was not forced, resulting in a 5-factor solution for mothers and a 6-factor solution for fathers. Although the factor loadings were very high, it was impossible to determine the meaningfulness of these factors, thus indicating a lack of construct validity. After much discussion, a forced two-factor analysis was conducted to compare the findings with Barnes and Olson's (1985) original factor analysis, which had resulted in two factors. When the current data were forced to two factors, the items from the second through fifth/sixth factors collapsed into this second factor. Although Barnes and Olson's original factor analysis had 925 participants and the current study only 18, the results of the two are similar (see Table 2), which is encouraging. However, Barnes and Olson's factor analysis combined responses about the mother and father, whereas the current factor analysis separated the responses by parent gender, thus increasing the importance of the current factor analysis. In the end, the original two factors designated by Barnes and Olson were used for further data analysis of the PACS in the current study.

For all of the other measurements, it was difficult to explain the variance that occurred because of the small sample. Thus, factor analyses were abandoned as a part of the statistical analysis of the rest of the current data.

Table 2

Factor Analysis for PACS Compared to Original Factor Analysis by Barnes and Olson (1985)

Factor 1: Openness in Communication					
Item No.	<u>Current Mother</u>		<u>Current Father</u>		<u>Barnes and Olson</u>
	Communality Extraction	Rotation	Communality Extraction	Rotation	Factor Loadings (Combined Mother and Father)
1	.55	.61	.45	.64	.53
3	.84	.87	.57	.72	.59
6	.67	.75	.25	.38	.48
7	.80	.83	.86	.93	.71
8	.51	.70	.72	.25	.59
9	.61	.69	.71	.74	.55
13	.85	.73	.71	.83	.55
14	.64	.80	.47	.68	.66
16	.66	.79	.27	.47	.70
Factor 2: Problems in Communication					
2	.66	.80	.66	.68	.29
4	.16	.29	.84	.78	.49
5	.81	.76	.14	.64	.60
10	.31	.55	.44	-.05	.56
11	.26	.43	.21	.02	.26
12	.30	-.00	.67	.80	.58
15	.77	.86	.55	.70	.45
18	.57	.14	.30	.39	.55
19	.64	.40	.22	.22	.47
20	.52	.70	.14	.09	.57

Table 3

Rotation Sums of Squared Loadings for Current Factor Analysis of PACS¹

Factor	Total	Cumulative %
<u>Mother</u>		
Openness in Communication	6.93	36.45
Problems in Communication	4.16	58.36
<u>Father</u>		
Openness in Communication	5.41	28.47
Problems in Communication	3.93	49.15

¹ These numbers are not available for the original (Barnes & Olson, 1985) analysis.

Independent-Samples t-Tests

Because a large number of participants did not complete the post-test, it was important to examine the potential differences between the two groups, (a) the group who completed the pre-test and post-test ($n = 10$) and (b) the group who completed only the pre-test ($n = 8$), using data from the demographic questionnaire. Independent-samples t -tests were performed on all variables and specific items to examine the two groups of adolescents. No significant differences were found between the two groups, with the exception of two variables; for the group who completed the post-test, the referral source was more apt to be the juvenile court system and the adolescents perceived a lower level of domination by the father. Of the six adolescents who were referred by the juvenile court system, all but one completed the post-test. This is logical because adolescents who are referred by the juvenile court system will not be removed from the treatment program unless their behaviors warrant a higher level of care. The other difference was that the adolescents who completed the post-test ($M = 47.17$, $SD = 7.94$), perceived that their fathers dominated the conversations significantly less than the adolescents who completed only the pre-test ($M = 37.38$, $SD = 6.99$), $t(12) = 2.45$, $p = .03$.

Independent-samples t -tests were also conducted on the group ($n = 10$) that completed the pre-test and post-test to evaluate whether the number of family groups parents attended made an impact. One variable, perceived initiation of communication regarding mother, was significantly higher $t(8) = -2.52$, $p = .04$, in the group whose parents were in the high attendance group. These adolescents perceived that they initiated more of the conversations with their mothers than the adolescents whose parents were in the low attendance group. Similar to the research completed by O'Farrell et al. (1985), which found that couples receiving marital therapy significantly improved their positive communication, it is possible that in the current study having parents involved in three or more multi-family therapy groups caused the adolescents to feel more comfortable and willing to bring up conversations with their parents compared to their peers whose parents attended two or

fewer groups. It is also possible that attendance (or lack thereof) signifies other problems in the parent-adolescent relationship.

Fathers' perceived openness in the PACS, was also significantly higher $t(6) = -.244, p = .05$ between the two groups of adolescents based on their parents' attendance in the multi-family therapy group. The adolescents' perceived greater openness within the communication with their fathers when their parents attended three or more multi-family therapy groups compared to their peers in the low attendance group. It is possible that having parents involved in their treatment encouraged the father-adolescent communication to be more open. In addition to the two variables that were significant, all of the variables indicated differences in the expected direction (see Table 4). Specifically, it is encouraging that the perceived closeness with fathers approached significance because it supports previous research that found an adolescent's perception of family bonding significantly reduced the risk for substance abuse issues (Anderson & Henry, 1994; Marta, 1997). If the sample had been larger, it is reasonable to assume more variables would have been significantly different in the expected direction.

The adolescents' perception of the amount of change in their relationship with their fathers was also significantly different at the .10 level. The adolescents whose parents attended three or more groups perceived a significantly greater amount of change compared to the adolescents whose parents attended two or fewer groups $t(6) = -.84, p < .10$. A greater amount of positive change occurred within the relationships when families were involved in multi-family therapy group. The frequency of attendance does appear to be important. What does it say to an adolescent whose parent(s) do attend versus do not attend? In addition, it is a part of a complete afternoon with family members, as noted previously.

Table 4

Independent t-Tests Comparing Mean Scores of Adolescents' Post-Test Perceptions of the Communication and Closeness With Their Mothers and Fathers Based on the Parents' Attendance in Weekly Multi-Family Therapy Group (Low = Attended Two Groups or Fewer, High = Attended Three Groups or More).

Variable	Low			High			<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i>	<i>n</i>	<i>SD</i> ¹	<i>M</i>	<i>n</i>	<i>SD</i>			
PACS – Total									
Mother	2.79	4	.30	3.35	7	1.01	-1.07	9	.31
Father	2.53	1		3.82	6	.82	-1.46	5	.20
PACS – Openness									
Mother	3.28	4	.52	3.95	7	1.33	-.77	9	.46
Father	2.67	1		4.13	6	.81	-2.44	6	.05**
PACS – Problem									
Mother	2.75	4	.31	3.40	7	.92	-1.25	9	.24
Father	2.40	1		3.53	6	.92	-.88	6	.17
PACI – Frequency									
Mother	36.33	3	4.73	36.43	7	10.52	-.02	8	.99
Father	29.00	1		40.50	6	9.52	-1.12	5	.31
PACI – Initiation									
Mother	43.67	3	10.12	54.71	7	4.42	-2.52	8	.04**
Father	33.00	1		45.00	6	11.28	-.99	5	.37
PACI – Recognition									
Mother	48.00	3	10.54	53.14	7	16.46	-.49	8	.64
Father	34.00	1		54.67	6	13.28	-1.44	5	.21
PACI – Self-Disclosure									
Mother	43.67	3	11.72	40.71	7	12.35	.35	8	.74
Father	32.00	1		46.83	6	10.89	-1.26	5	.26
PACI – Domination									
Mother	37.67	3	3.51	34.29	7	15.00	.37	8	.72
Father	36.00	1		34.83	6	7.81	.14	5	.90
PACI – Satisfaction									
Mother	43.67	3	4.16	46.71	7	11.80	-.42	8	.68
Father	34.00	1		49.83	6	11.65	-1.26	5	.26
Closeness									
Mother	4.00	3	.40	4.17	7	.96	-.86	9	.42
Father	3.11	1		4.24	6	.61	-1.70	5	.15
Change									
Mother	3.73	4	.39	4.29	7	1.28	-.84	9	.42
Father	3.00	1		4.12	6	-.50	-2.08	5	.09*

¹ The missing values are due to *n* = 1.

* *p* < .10.

** *p* < .05.

Paired-sample t-tests

Paired-sample *t*-tests were conducted to compare the mean pre-test score to the mean post-test score to determine if there was change in parent-adolescent communication and closeness after four weeks of treatment. When comparing the pre-test scores to the post-test scores, using the 20 comparisons displayed in Table 5, 11 were in the positive direction, indicating improvement in the adolescent's perception of their communication and closeness with each parent (see Table 5). The PACS showed significant improvement in the adolescent's perception of overall communication with their mothers $t(10) = -2.73, p < .05$. After four weeks of multi-family therapy group, the adolescents perceived an improvement in the communication with their mothers. In addition, the openness factor within the PACS was significantly improved for the mothers at the .10 level. The adolescents perceived more openness within the communication with their mothers after the four weeks $t(10) = -1.35, p < .10$. The adolescents also perceived a significant increase in the level of closeness with their mothers after four weeks of multi-family therapy group $t(9) = -2.10, p < .10$. These results are encouraging since previous research by Marta (1997) and Kafka and London (1991) indicated that an adolescent's perception of closeness with their parents is a significant indicator of a decreased risk for substance abuse related issues. These results indicate that the adolescents perceived that their relationship with their mother had changed positively; that is, their communication was more open and their level of closeness had increased compared to before they were involved in the four weeks of multi-family therapy group. The adolescents' reports of communication with their father were also in the positive direction.

For the 12 comparisons using the 6 PACI subscales, 4 were in the positive direction and 8 were in the negative direction. In analyzing the 12 PACI comparisons, the Bonferroni adjustment was used and none of the PACI comparisons were statistically significant at the .004 level.

Table 5

Paired t-Tests Comparing Mean Scores of Adolescents' Perception of Their Communication and Closeness With Their Mothers and Fathers, Before and After Four Weeks of Treatment (n = 10).

Variable	M		SD		t	df	p
	Pre	Post	Pre	Post			
PACS - Total							
Mother (n = 11)	3.15	3.42	.85	.91	-2.73	10	.02**
Father (n = 7)	3.42	3.63	.61	.89	-1.35	10	.23
PACS - Openness							
Mother (n = 11)	3.30	3.71	1.12	.34	-1.97	10	.08*
Father (n = 7)	3.70	3.92	.88	.93	-1.65	6	.15
PACS - Problem							
Mother (n = 11)	3.01	3.16	.74	.80	-1.02	10	.33
Father (n = 7)	3.17	3.37	.56	.94	-.83	6	.44
PACI - Frequency							
Mother (n = 10)	39.50	36.40	12.12	8.87	1.21	9	.26
Father (n = 7)	38.57	38.86	11.87	9.72	-.07	9	.95
PACI - Initiation							
Mother (n = 10)	49.50	51.40	8.41	8.02	-.63	9	.55
Father (n = 7)	49.29	43.29	12.12	11.25	1.31	6	.24
PACI - Recognition							
Mother (n = 10)	49.00	51.60	13.54	14.54	-.80	9	.44
Father (n = 7)	52.14	51.71	12.08	14.42	.14	6	.89
PACI - Self-Disclosure							
Mother (n = 10)	48.70	41.60	11.78	11.59	2.00	9	.08*
Father (n = 7)	50.29	44.71	15.81	11.41	1.18	6	.28
PACI - Domination							
Mother (n = 10)	38.00	35.30	10.60	12.46	.58	9	.58
Father (n = 7)	36.29	35.00	6.78	7.14	.66	6	.53
PACI - Satisfaction							
Mother (n = 10)	44.80	45.80	13.98	9.94	-.39	9	.71
Father (n = 7)	50.86	47.57	14.02	12.21	1.16	6	.29
Closeness							
Mother (n = 10)	3.79	4.12	1.19	.81	-2.10	9	.07*
Father (n = 7)	4.21	4.08	.63	.70	1.04	6	.34

** $p < .05$.

* $p < .10$.

Qualitative Results

The purpose of examining the parent-adolescent relationships using a qualitative approach was to allow the adolescent to use his/her own vocabulary and to describe the relationship with each parent. The results from the open-ended statement provided valuable information about the parent-adolescent relationships from the adolescents' perception. The request, "Please describe your relationship with your mother (or father)" provided four major themes: getting along, communication, trust, and use of alcohol and/or other drugs. The responses tended to be brief and most of the examples of the four themes represent the totality of the individual response (see Table 6). The wording and language was not altered. Of the 52 responses, some represented more than one theme and thus were categorized with each theme represented. Additionally, 14 of the responses did not represent any of the themes but a random assortment of themes.

Getting Along

The most common theme was getting along, with 22 (42%) responses. Often the adolescents used the term "getting along" when describing their positive and negative relationships with their parents. The following are three examples of either positive or negative descriptions:

I have a great relationship with my mom. She is always there for me. I can get along with her really well.

Pretty crappy. Really don't get along well because she tries to control everything in my life.

We get along really well. All my friends get along with her. We are together pretty much 24/7 since I dropped out of school. We have our normal teenage-mother arguments. We have the same outlook on life except with my piercings, but she gave into that. She lets me do whatever, as long as I am honest.

Communication

Communication was another common theme with 19 (37%) responses focusing on this aspect of the relationship. The judges labeled these 19 responses "communication" because each response either used the word communication or dealt with verbal communication of either a positive or a

negative nature. The following are three examples of communication. The first specifically used a form of the word communication. The second indicates positive verbal communication and the third illustrates negative communication:

It was bad, but we are getting along a lot better now. I have a problem communicating but other than that, we have a good relationship.

We are open and I try to tell her everything. I don't think I will have to lie to her anymore.

We got into a lot of arguments when I was using, about using often. He is not home a lot because he works a lot. We got into fights a lot.

Trust

Although trust was not as frequently talked about as the two previous themes, the 9 (17%) responses that focused on it seemed to place a substantial amount of value on the importance of trust or the lack of it. The theme trust was identified by the adolescents' use of the word trust and/or terms relating to trust such as openness and honesty.

We are open and I try to tell her everything. I don't think I will have to lie to her anymore.

It is a lot better. It is a lot easier to tell her about recovery. Easier because I am not lying to her.

Not too much trust and not good communication. Overall we get along but there are a lot of bumps.

Use of Alcohol and/or Other Drugs

The theme of use of alcohol and/or other drugs focused on the adolescent's substance abuse as well as their description of their parents' substance use, including some parents who provided alcohol and/or other drugs to their child. Of the responses, 8 (15%) focused on the use of alcohol and/or other drugs; following are three examples:

I bond more to my mom than my dad because she let me drink beer with her. I help her out whenever I can. I appreciate what she does for me. She wants me to be happy.

We have a fairly good relationship up until she found out I did drugs. Then it became bad, but it is getting better.

There was pretty much no communication between the two of us when I was still living with her. We fought a lot and could hardly stand to be in the same room together. Sometimes she has severe alcoholism and I was in the beginning stages of my addiction. Now that I live with my grandmother, our communication and respect for each other has grown immensely, but I still believe our relationship could improve a lot more with family counseling.

Table 6

Frequency of Major Themes in Adolescents' Qualitative Responses Describing Their Adolescent-Parent Relationships

Theme	Pre-test		Post-test		Total
	Positive	Negative	Positive	Negative	
Getting Along	17 (77%)	3 (14%)	2 (09%)	0 (0%)	22
Communication	5 (26%)	7 (37%)	7 (37%)	0 (0%)	19
Trust	2 (22%)	2 (22%)	5 (56%)	0 (0%)	9
Use of Alcohol and/or Other Drugs	0 (0%)	5 (63%)	3 (38%)	0 (0%)	8
Total	24 (59%)	17 (41%)	17 (100%)	0 (0%)	58

Improvement Within the Parent-Adolescent Relationship

The pre-test and post-test qualitative responses were also analyzed as to whether the adolescents described a more positive relationship after four weeks of multi-family therapy group. A very large number of post-test responses were more positive and recognized improvements within the

relationships. Of the 10 adolescents who responded to the qualitative item in the post-test, 7 reported improvements and 2 reported that their parent-adolescent relationship remained good (see Table 7). One adolescent reported that their relationship was negative (“pretty crappy”) before therapy and remained negative after therapy. The following are three examples of post-test responses that indicated a more positive relationship after four weeks of multi-family therapy group.

Easier to talk to him because I have done good in recovery and I don’t have to lie to him.
Easier to talk about feelings and not lie when I am not using.

Good. She trusts me more.

I want a better relationship and I think I can. They notice I am much better (attitude) and nicer.

Each of the preceding examples displayed not only a more positive relationship, but a more positive outlook on the relationship, including hope that the relationship will continue to improve. It is important and helpful to recognize that in the adolescents’ opinions, their relationship with their mothers and fathers improved.

Table 7

Frequency of Change in Adolescent’s Qualitative Responses Describing Their Parent-Adolescent Relationships

Positive Change	Remained Good	Remained Bad	Total
7 (70%)	2 (20%)	1 (10%)	10

CHAPTER 5. CONCLUSIONS

The main focus of this research study was to examine parent-adolescent relationships and determine if the adolescents' perceived level of communication and closeness would change after four weeks of multi-family therapy group. In addition to a demographic questionnaire, two instruments were used to measure communication, one instrument was used to measure closeness, one instrument was used to measure relationship change, and an open-ended instrument was developed and used to gather qualitative information.

Implications

The implications from this research study can benefit the field of adolescent chemical dependency treatment. There is a need for more research focused on the adolescent substance abuser beyond the statistics that focus on the quantity and frequency of use. Adolescent substance abuse continues to be an issue parents, schools, and communities struggle with. By conducting more research on chemically dependent adolescents, they will be better understood. As knowledge increases, parents, teachers, and therapists will be better equipped to address the problems experienced by these chemically dependent adolescents.

It also will be important for future researchers to study the chemically dependent population so treatment facilities can improve their programs. Most treatment programs strive to be the most effective in addressing their clients' issues. However, some individuals are unable or unwilling to be successful in certain programs. Consequently, by learning the most effective approaches and the important components of a successful program, treatment programs will continue to improve and be more suited to address their clients' needs.

Another implication for the chemical dependency field is the parent-adolescent relationship. In multi-family therapy group, attendance is one of the most important factors. What message is sent to a child whose parents minimally attend? Unfortunately, only the individual who lives in the residential facility is considered the client. By making this distinction, emphasis is taken away from

the family and put on the individual family member in treatment. As more researchers study the parent-adolescent relationship, not only will the chemical dependency field increase their emphasis on the need for all family members to be involved in therapy, but referral sources such as the Department of Human Services and juvenile court system will increase their pressure on family members to become involved in family therapy. In addition, the research can also educate insurance companies and other funding sources that have not always been supportive of family therapy. Until funding sources recognize the need for family involvement, they will minimally pay for the services, and until services are covered, families will not utilize them. This is an extremely important sequence of if-thens related to the findings of this research that parent involvement in substance abuse treatment needs to be recognized as a critical part of the process.

Limitations

The study focused on the effectiveness of four weeks of multi-family therapy group within an adolescent residential chemical dependency treatment program. Because the census was low at the residential program at the time of data collection, the number of available participants was low to begin with. In addition, several of the potential participants chose not to participate in the study and of those who chose not to participate, most appeared upset with being in residential treatment and unwilling to help others unless they perceived that they directly benefited.

Another issue was getting the participants to complete the post-test four weeks later at discharge. A system had been set up so that the researcher would be notified when a participant was nearing discharge. Unfortunately, some clients telephoned their parents and complained about being in treatment and the parents pulled their child from the treatment program before completion. In these situations, it was impossible to foreshadow the early discharge, so the post-test questionnaires were not completed. On the other hand, two participants who completed the pre-test and stated a willingness to complete the post-test refused to participate further when it came time to complete the post-test. On each occasion, the adolescent had not been successful in the current treatment program

and was transferred to another program the next day. These examples might indicate that those who left before the post-test were in greater need of treatment. Possibly the cases which needed family therapy the most and may have benefited more, chose not to be involved.

Because of the low census at the residential program and the participants who dropped out before completing the post-test, the sample size was small making it difficult to get statistically significant results. In addition, it is important to question why certain adolescents agreed to participate in the beginning and others chose not to. It appears that the adolescents who chose not to participate were more oppositional, had behavioral issues, and were less willing to help others. Through verbal and non-verbal communication, they voiced their opposition to cooperating with the study; some were even opposed to participating in the initial meeting that explained the study. It is interesting to note that only one of the participants had been diagnosed with Conduct Disorder. However, Conduct Disorder is a moderately common diagnosis of adolescents in residential chemical dependency treatment.

The present research study collected only self-report data from the adolescents' perspective. The adolescents might have tried to respond in a socially desirable manner. It would be interesting to have gotten the parents' perspective. Other types of data collection could have been utilized such as testing the parents' and the multi-family therapy group counselors' perspectives. A more in-depth qualitative method could have been used. By gathering data from multiple people and through multiple methods, the information may have been more in-depth and more insightful, making the study more reliable or trustworthy.

The data were gathered while the adolescent was still in the treatment facility. Although some of the adolescents earned time with their parents, at the time of the post-test, they were still living away from their parents. It would be interesting to examine if the improvements that were gained during the four weeks of treatment lasted once they returned to their home, back in their old environment where the problems developed. Treatment times are at a bare minimum due to decreases

in funding sources. A longer period of treatment and thus more multi-family therapy groups for the parents to become involved in might enhance the overall treatment outcomes.

Although it is important for future research to focus on the chemically dependent adolescent and his/her family, it is time-consuming. As in the current study, the sample size is dependent on the treatment programs' census and the adolescents' willingness to participate. Because the census can waiver from month to month, it can take a considerable length of time to gather a substantial number of participants. Another helpful research endeavor would be to analyze adolescents from various residential treatment programs. In the current study, there is no measure, which gives us insight into the efficacy of the program involved. The current study is built on the premise that the program will impact the adolescents positively. It is important to understand the program content and the processes through which delivery is made.

APPENDIX A

DIAGNOSTIC CRITERIA FOR SUBSTANCE DEPENDENCE

Diagnostic Criteria for Substance Dependence (American Psychiatric Association, 2000, p. 197)

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

- (1) tolerance, as defined by either of the following:
 - (a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect
 - (b) markedly diminished effect with continued use of the same amount of the substance
- (2) withdrawal, as manifested by either of the following:
 - (a) the characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria sets for Withdrawal from the specific substances)
 - (b) the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
- (3) the substance is often taken in larger amounts or over a longer period than was intended
- (4) there is a persistent desire or unsuccessful efforts to cut down or control substance use
- (5) a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects
- (6) important social, occupational, or recreational activities are given up or reduced because of substance use
- (7) the substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption).

APPENDIX B
INFORMED CONSENT FORM

Informed Consent Letter

Parent Adolescent Communication Study
Andrea Dickerson

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time.

The purpose of this study is to learn more about parent-adolescent relationships. Through this knowledge, I believe other adolescents may be helped. You are being invited to participate in this study because I want to study how multi-family therapy group influences parent-adolescent relationships and only you can help me better understand your relationship with your parents.

Please read the following statements.

- The purpose of the study is to examine parent-adolescent communication and the changes after four weeks.
- I understand I will complete questionnaires at two different times, four weeks apart.
- I will complete the questionnaires measuring parent-adolescent communication and parent-adolescent closeness during the first time.
- Four weeks later, in addition to completing the questionnaires I completed the first time, I will also complete a questionnaire that measures the change in quality within the parent-adolescent relationship after four weeks.
- There are no foreseeable risks at this time from participating in this study.
- The information I provide will be kept confidential according to Federal confidentiality laws. To ensure confidentiality to the extent permitted by law, the following measures will be taken (a) subjects will be assigned a unique code to be used on forms instead of their name, (b) all records will be kept in a locked filing cabinet, and (c) data analysis will be kept in a password protected computer file. The data will be retained for one year. If the results are published, identity will remain confidential.
- Participation in this study is voluntary. I may refuse to participate or leave the study at any time without being penalized.
- I understand that Andrea Dickerson is an outpatient counselor and I may possibly have contact with her on an outpatient basis.

You are encouraged to ask questions at any time during the study. For further information about the study contact Andrea Dickerson at (515) 663-8055 or Sedahlia Jasper Crase at (515) 294-6135. If you have any questions about the rights of research subjects or research-related injury, please contact the Human Subjects Research Office, 2810 Beardshear Hall; (515) 294-4566; medlrem@iastate.edu or the Research Compliance Officer, Office of Research Compliance, 2810 Beardshear Hall, (515) 294-3115; dament@iastate.edu

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered. You will receive a copy of the signed and dated written informed consent prior to your participation.

Subject's Name (printed)

(Subject's Signature) (Date)

(Advocate's Signature) (Date)

I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that the participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate. An advocate on the participant's behalf was also present and endorsed the letter of consent.

(Signature of Person Obtaining Informed Consent)

(Date)

APPENDIX C
DEMOGRAPHIC INFORMATION

Demographic Information

Please read and respond to each question. This information will provide a general overview of the adolescents who participate in this research.

1. What is your gender? _____
2. What is your age in years? _____
3. What is your ethnicity? Please circle

African American	Asian American
Caucasian	Hispanic
American Indian	Other (please specify) _____
4. Which treatment facility are you currently in? ☐ Primary ☐ Extended
5. How long, in weeks, have you been in this current treatment facility? _____
6. How old were you the first time you consumed alcohol or other drugs? _____
7. Have you ever been diagnosed with any of the following mental health conditions?

yes <input type="checkbox"/> no <input type="checkbox"/> Depression	yes <input type="checkbox"/> no <input type="checkbox"/> ADHD/ADD
yes <input type="checkbox"/> no <input type="checkbox"/> Conduct Disorder	Other (please specify) _____
8. How many adults, age 18 or older, live in your home? _____
9. Are your biological or adoptive parents currently married to each other? yes ☐ no ☐ _____
10. If not, what is the current marital status of your biological or adopted mother? _____
11. If not, what is the current marital status of your biological or adopted father? _____
12. What is your living situation outside of treatment?

<input type="checkbox"/> Both biological/adoptive parents	<input type="checkbox"/> Step-mother and father
<input type="checkbox"/> Step-father and mother	<input type="checkbox"/> Mother only
<input type="checkbox"/> Father only	<input type="checkbox"/> Foster home
<input type="checkbox"/> Other relatives	<input type="checkbox"/> Other (please specify) _____
13. How far is your home from treatment?

<input type="checkbox"/> Less than 15 minutes	<input type="checkbox"/> Between 1 hour and 2 hours
<input type="checkbox"/> Between 16 and 30 minutes	<input type="checkbox"/> More than 2 hours
<input type="checkbox"/> Between 31 minutes and 1 hour	
14. Who referred you to your current residential treatment? Please circle all that apply.

Juvenile Court Services	Department of Human Services
Parents	A counselor
Other (please specify) _____	

Thank you for responding!!

APPENDIX D
ADOLESCENT'S PERCEPTION OF THE
RELATIONSHIP WITH PARENTS

Please describe, in your own words, your relationship with your mother.

Please describe, in your own words, your relationship with your father.

APPENDIX E

PARENT-ADOLESCENT COMMUNICATION SCALE

Parent-Adolescent Communication Scale
 (Adolescents' perceptions of communication with their mother)

These statements are about your communication with your mother. Please indicate the degree to which you agree or disagree with each of the statements using the choices 1 – 5, listed below.

Response Choices

1	2	3	4	5
Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree

- _____ 1. I can discuss my beliefs with my mother without feeling restrained or embarrassed.
- _____ 2. Sometimes I have trouble believing everything my mother tells me.
- _____ 3. My mother is always a good listener.
- _____ 4. I am sometimes afraid to ask my mother for what I want.
- _____ 5. My mother has a tendency to say things to me which would be better left unsaid.
- _____ 6. My mother can tell how I'm feeling without asking.
- _____ 7. I am very satisfied with how my mother and I talk together.
- _____ 8. If I were in trouble, I could tell my mother.
- _____ 9. I openly show affection to my mother.
- _____ 10. When we are having a problem, I often give my mother the silent treatment.
- _____ 11. I am careful about what I say to my mother.
- _____ 12. When talking to my mother, I have a tendency to say things that would be better left unsaid.
- _____ 13. When I ask questions, I get honest answers from my mother.
- _____ 14. My mother tries to understand my point of view.
- _____ 15. There are topics I avoid discussing with my mother.
- _____ 16. I find it easy to discuss problems with my mother.
- _____ 17. It is very easy to discuss problems with my mother.
- _____ 18. My mother nags/bothers me.
- _____ 19. My mother insults me when she is angry with me.
- _____ 20. I don't think I can tell my mother how I really feel about some things.

Parent-Adolescent Communication Scale
(Adolescents' perceptions of communication with their father)

These statements are about your communication with your father. Please indicate the degree to which you agree or disagree with each statement using the choices 1 – 5, listed below.

Response Choices

1	2	3	4	5
Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree

- _____ 1. I can discuss my beliefs with my father without feeling restrained or embarrassed.
- _____ 2. Sometimes I have trouble believing everything my father tells me.
- _____ 3. My father is always a good listener.
- _____ 4. I am sometimes afraid to ask my father for what I want.
- _____ 5. My father has a tendency to say things to me which would be better left unsaid.
- _____ 6. My father can tell how I'm feeling without asking.
- _____ 7. I am very satisfied with how my father and I talk together.
- _____ 8. If I were in trouble, I could tell my father.
- _____ 9. I openly show affection to my father.
- _____ 10. When we are having a problem, I often give my father the silent treatment.
- _____ 11. I am careful about what I say to my father.
- _____ 12. When talking to my father, I have a tendency to say things that would be better left unsaid.
- _____ 13. When I ask questions, I get honest answers from my father.
- _____ 14. My father tries to understand my point of view.
- _____ 15. There are topics I avoid discussing with my father.
- _____ 16. I find it easy to discuss problems with my father.
- _____ 17. It is very easy to discuss problems with my father.
- _____ 18. My father nags/bothers me.
- _____ 19. My father insults me when he is angry with me.
- _____ 20. I don't think I can tell my father how I really feel about some things.

APPENDIX F

PARENT-ADOLESCENT COMMUNICATION INVENTORY

Parent-Adolescent Communication Inventory (Revision)
(Adolescent's perception of communication with their mother)

Instructions: Following are several different areas of communication representing general themes for discussion. Please rate your interactions with your mother on several dimensions for each of the areas.

In thinking about social issues such as drug and alcohol addiction, crime and abortion, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your tastes music, fashion, sports or social interests, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the sex roles that exist in our society, such as the function of sex roles, whether they are beneficial or detrimental to society, women in the workforce and the role of women and men in both the family and in society, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the role of the father and mother in your family, as well as the roles of husband and wife, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about issues such as the nature of human existence, the implications and validity of various religious perspectives, whether or not God exists or whether there is life after death, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your family's attitudes toward religion, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the function and importance of having social rules and the importance of such rules in your family, how would you rate you and your mother's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the function and importance of the family unit to society, including attitudes toward the family unit, marriage and divorce, how would you rate you and your mother's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the function and importance of sex in a relationship, whether sex should be confined to the marital relationship and your parents' attitudes in this area on your lifestyle how would you rate you and your mother's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the voting and political preferences of the members of your family, how would you rate you and your mother's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about when the parent is giving specific information about sexual behavior, sexual development, male and female physiological development, sexual behaviors, reproduction, contraception, masturbation, and sexually transmitted diseases, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your questions concerning the area of sexual behavior and development, your problems in understanding any of the information or problems that you might have come across in situations that you have experienced, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about any problems that you might be experiencing excluding the area of sexuality, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your plans for the future, how would you rate you and your mother's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

Parent-Adolescent Communication Inventory (Revision)
(Adolescent's perception of communication with their father)

Instructions: Following are several different areas of communication representing general themes for discussion. Please rate your interactions with your father on several dimensions for each of the areas.

In thinking about social issues such as drug and alcohol addiction, crime and abortion, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your tastes music, fashion, sports or social interests, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the sex roles that exist in our society, such as the function of sex roles, whether they are beneficial or detrimental to society, women in the workforce and the role of women and men in both the family and in society, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the role of the father and mother in your family, as well as the roles of husband and wife, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about issues such as the nature of human existence, the implications and validity of various religious perspectives, whether or not God exists or whether there is life after death, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your family's attitudes toward religion, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the function and importance of having social rules and the importance of such rules in your family, how would you rate you and your father's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the function and importance of the family unit to society, including attitudes toward the family unit, marriage and divorce, how would you rate you and your father's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the function and importance of sex in a relationship, whether sex should be confined to the marital relationship and your parents' attitudes in this area on your lifestyle how would you rate you and your father's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about the voting and political preferences of the members of your family, how would you rate you and your father's discussions of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about when the parent is giving specific information about sexual behavior, sexual development, male and female physiological development, sexual behaviors, reproduction, contraception, masturbation, and sexually transmitted diseases, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your questions concerning the area of sexual behavior and development, your problems in understanding any of the information or problems that you might have come across in situations that you have experienced, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about any problems that you might be experiencing excluding the area of sexuality, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

In thinking about your plans for the future, how would you rate you and your father's discussions in terms of:

<u>Frequency</u>	1 Rarely	2	3	4	5 Frequently
<u>Starting</u>	1 You always start the discussion	2	3	4	5 Parents always start the discussion
<u>Recognition/ Acceptance</u>	1 Your feelings/ views are not recognized/accepted	2	3	4	5 Your feelings/ views are always recognized/accepted
<u>Self-Disclosure</u>	1 Low	2	3	4	5 High
<u>Domination</u>	1 Parents totally dominate	2	3	4	5 You totally dominate
<u>Satisfaction</u>	1 You are very dissatisfied	2	3	4	5 You are very satisfied

APPENDIX G
PARENT-CHILD CLOSENESS

Parent-Child Closeness
(Adolescents' perception of closeness with their mother)

These statements are about your closeness with your mother. Please indicate the degree to which you agree or disagree with each of the statements using the choices 1 – 5, listed below.

Not at all

1

2

3

4

Very

5

- _____ 1. How openly do you talk with your mother?
- _____ 2. How comfortable do you feel admitting doubts and fears to your mother?
- _____ 3. How interested is your mother in talking to you when you want to talk?
- _____ 4. How often does your mother express affection or liking for you?
- _____ 5. How well does your mother know what you are really like?
- _____ 6. How close do you feel to your mother?
- _____ 7. How confident are you that your mother would help you if you had a problem?
- _____ 8. If you needed money, how comfortable would you be asking your mother for it?
- _____ 9. How interested is your mother in the things you do?

Parent-Child Closeness
(Adolescents' perception of communication with their father)

These statements are about your communication with your father. Please indicate the degree to which you agree or disagree with each of the statements using the choices 1 – 5, listed below.

-
- | | | | | |
|-------------------|----------|----------|----------|-------------|
| Not at all | | | | Very |
| 1 | 2 | 3 | 4 | 5 |
-
- _____ 1. How openly do you talk with your father?
 - _____ 2. How comfortable do you feel admitting doubts and fears to your father?
 - _____ 3. How interested is your father in talking to you when you want to talk?
 - _____ 4. How often does your father express affection or liking for you?
 - _____ 5. How well does your father know what you are really like?
 - _____ 6. How close do you feel to your father?
 - _____ 7. How confident are you that your father would help you if you had a problem?
 - _____ 8. If you needed money, how comfortable would you be asking your father for it?
 - _____ 9. How interested is your father in the things you do?

APPENDIX H
RELATIONSHIP CHANGE SCALE

Relationship Change Scale
(Adolescents' perception of the relationship with their mother)

The following questions ask whether, and in what ways, your relationship with your mother has changed in the LAST FOUR WEEKS. Pick one of the responses to complete the following 21 statements.

1	2	3	4	5
much less	less	unchanged	greater	much greater

1. Within the last four weeks, my satisfaction with myself as a person has become _____
2. Within the last four weeks, my satisfaction with my mother as a person has become _____
3. Within the last four weeks, my mother views me as a satisfactory child _____
4. Within the last four weeks, my mother views herself with satisfaction as a person _____
5. Within the last four weeks, the positive aspects of our relationship with each other have become _____
6. In comparison with four weeks ago, I understand my own feelings _____
7. In comparison with four weeks ago, I understand my mother's feelings _____
8. In comparison with four weeks ago, our ability to communicate has become _____
9. In comparison with four weeks ago, my sensitivity towards my mother as a person is _____
10. In comparison with four weeks ago, my concern and warmth toward my mother has become _____
11. In comparison with four weeks ago, my self-expression and openness in relation to my mother is _____
12. In comparison with four weeks ago, my ability to understand my mother's feelings is _____
13. In comparison with four weeks ago, my listening abilities with my mother are _____
14. In comparison with four weeks ago, my trust in my mother is _____
15. In comparison with four weeks ago, my confidence in my relationship with my mother is _____
16. In comparison with four weeks ago, my mom and I are able to handle disagreements constructively _____
17. In comparison with four weeks ago, my ability in talking with my mother is _____
18. In comparison with four weeks ago, my ability to express positive feelings toward my mother is _____
19. In comparison with four weeks ago, my capacity to believe and accept positive feelings my mother expresses toward me is _____
20. In comparison with four weeks ago, my capacity to deal constructively with negative feelings my mother expresses toward me is _____
21. In comparison with four weeks ago, my understanding of the kind of relationship I want to have in the future with my mother is _____

How many family groups has your mother attended in the last four weeks? _____

Relationship Change Scale
(Adolescents' perception of the relationship with their father)

The following questions ask whether, and in what ways, your relationship with your father has changed in the LAST FOUR WEEKS. Pick one of the responses to complete the following 21 statements.

1	2	3	4	5
much less	less	unchanged	greater	much greater

1. Within the last four weeks, my satisfaction with myself as a person has become _____
2. Within the last four weeks, my satisfaction with my father as a person has become _____
3. Within the last four weeks, my father views me as a satisfactory child _____
4. Within the last four weeks, my father views himself with satisfaction as a person _____
5. Within the last four weeks, the positive aspects of our relationship with each other have become _____
6. In comparison with four weeks ago, I understand my own feelings _____
7. In comparison with four weeks ago, I understand my father's feelings _____
8. In comparison with four weeks ago, our ability to communicate has become _____
9. In comparison with four weeks ago, my sensitivity towards my father as a person is _____
10. In comparison with four weeks ago, my concern and warmth toward my father has become _____
11. In comparison with four weeks ago, my self-expression and openness in relation to my father is _____
12. In comparison with four weeks ago, my ability to understand my father's feelings is _____
13. In comparison with four weeks ago, my listening abilities with my father are _____
14. In comparison with four weeks ago, my trust in my father is _____
15. In comparison with four weeks ago, my confidence in my relationship with my father is _____
16. In comparison with four weeks ago, my father and I are able to handle disagreements constructively _____
17. In comparison with four weeks ago, my ability in talking with my father is _____
18. In comparison with four weeks ago, my ability to express positive feelings toward my father is _____
19. In comparison with four weeks ago, my capacity to believe and accept positive feelings my father expresses toward me is _____
20. In comparison with four weeks ago, my capacity to deal constructively with negative feelings my father expresses toward me is _____
21. In comparison with four weeks ago, my understanding of the kind of relationship I want to have in the future with my father is _____

How many family groups has your father attended in the last four weeks? _____

APPENDIX I
CODE BOOK FOR QUANTITATIVE VARIABLES

The Code Book

Variable Label	Values and Value Labels
Age	Continuous
Gender	Male = 1; Female = 2
Ethnicity	Caucasian = 1; African American = 2; American Indian = 3; Hispanic = 4; Asian American = 5; Multi-Racial = 6
Length in Treatment at Pre-Test	Continuous
Age at First Use	Continuous
Other Diagnosis	
Depression	Yes = 1; No = 2
Conduct Disorder	Yes = 1; No = 2
ADHD/ADD	Yes = 1; No = 2
Number of Adults in the Home	Continuous
Parents Married to Each Other	Yes = 1; No = 2
Marital Status of Mother	Remarried = 1; Divorced = 2; Single = 3; Cohabiting = 4
Marital Status of Father	Remarried = 1; Divorced = 2; Single = 3; Cohabiting = 4
Living Situation Outside of Treatment	Both parents = 1; Step-father and mother = 2; Step-mother and father = 3; Mother only = 4; Father only = 5; Other relatives = 6; Other = 7; Foster home = 8
Distance From Home	Less than 15 minutes = 1; Between 16 and 30 minutes = 2; Between 31 minutes and 1 hour = 3; Between 1 hour and 2 hours = 4; More than 2 hours = 5
Referral Source	
Parents	Yes = 1; No = 2
Juvenile Court Services	Yes = 1; No = 2
Human Services	Yes = 1; No = 2
Another counselor	Yes = 1; No = 2
Number of Family Group Attended	
Mother	Continuous
Father	Continuous
Parents Attendance in Family Group	High = 3 or more groups; Low = 2 or less groups

The Code Book (continued)

Variable Label	Values and Value Labels
PACS #1 - #20 and Mean for Mother Pre-test and Post-test	1 = Strongly disagree; 2 = Moderately disagree; 3 = Neither agree or disagree; 4 = Moderately agree; 5 = Strongly agree
PACS #1 - #20 and Mean for Father Pre-test and Post-test	1 = Strongly disagree; 2 = Moderately disagree; 3 = Neither agree or disagree; 4 = Moderately agree; 5 = Strongly agree
PACS Sum for Mother Pre-test and Post-test	Range 20 – 100
PACS Sum for Father Pre-test and Post-test	Range 20 – 100
PACS Openness Factor Mean and Sum Mother Pre-test and Post-test	Range 9 – 45
PACS Openness Factor Mean and Sum Father Pre-test and Post-test	Range 9 - 45
PACS Problem Factor Mean and Sum Mother Pre-test and Post-test	Range 10 – 50
PACS Problem Factor Mean and Sum Father Pre-test and Post-test	Range 10 - 50
PACI Frequency for Mother Pre-test and Post-test	Range 14 – 70
PACI Initiation for Mother Pre-test and Post-test	Range 14 – 70
PACI Recognition for Mother Pre-test and Post-test	Range 14 – 70
PACI Self-Discipline for Mother Pre-test and Post-test	Range 14 – 70
PACI Domination for Mother Pre-test and Post-test	Range 14 – 70

The Code Book (continued)

Variable Label	Values and Value Labels
PACI Satisfaction for Mother Pre-test and Post-test	Range 14 – 70
PACI Frequency for Father Pre-test and Post-test	Range 14 – 70
PACI Initiation for Father Pre-test and Post-test	Range 14 – 70
PACI Recognition for Father Pre-test and Post-test	Range 14 – 70
PACI Self-Discipline for Father Pre-test and Post-test	Range 14 – 70
PACI Domination for Father Pre-test and Post-test	Range 14 – 70
PACI Satisfaction for Father Pre-test and Post-test	Range 14 – 70
Closeness #1 – #9 and Mean for Mother Pre-test and Post-test	1 = Not at all; 2 = A little; 3 = Somewhat; 4 = Usually; 5 = Very
Closeness #1 – #9 and Mean for Father Pre-test and Post-test	1 = Not at all; 2 = A little; 3 = Somewhat; 4 = Usually; 5 = Very
Closeness Sum for Mother Pre-test and Post-test	Range 9 – 45
Closeness Sum for Father Pre-test and Post-test	Range 9 – 45
Change #1 - #21 and Mean for Mother Pre-test and Post-test	1 = Much less; 2 = Less; 3 = Unchanged; 4 = Greater; 5 = Much greater
Change #1 - #21 and Mean for Father Pre-test and Post-test	1 = Much less; 2 = Less; 3 = Unchanged; 4 = Greater; 5 = Much greater

The Code Book (continued)

Variable Label	Values and Value Labels
Change Sum for Mother Pre-test and Post-test	Range 21 – 105
Change Sum for Father Pre-test and Post-test	Range 21 – 105
Completed the Post-test	1 = Yes; 2 = No

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