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Differences between Reports of Former Adolescent Psychiatric Patients and Their Parents with Regard to Post-Discharge Behavior

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DIFFERENCES BETWEEN REPORTS OF FORMER ADOLESCENT PSYCHIATRIC PATIENTS AND THEIR PARENTS WITH REGARD TO POST-DISCHARGE BEHAVIOR

by

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INTRODUCTION

Adolescent psychiatric programs have grown in number greatly since 1960 (Garber, 1972; Gossett, Lewis, & Barnhart, 1983). While the need for specially tailored adolescent programs has been addressed by this increase, there has been little research on the unique aspects of adolescent programs or adolescent patients. Further, little is known empirically about the effectiveness of such programs, and the behaviors of participants after leaving the program. Authors of research on adolescent psychiatric patients often mention the need for more follow-up research of adolescents (Ellsworth, 1979; Garber & Polsky, 1970; Garber, 1972; Gossett, Lewis & Barnhart, 1983; Pavenstedt, 1969). Further, methods for evaluating the effectiveness of such programs need to be studied. This study addresses one methodological question regarding the evaluation of such programs. Who should be asked to evaluate the adolescent's post-program behavior, and how does the choice of who is asked affect the evaluation of the program?

This study compared the responses of former adolescent psychiatric patients and their parents in a postdischarge interview conducted in 1982 and 1983. Two components of the Strupp and Hadley (1977) tripartite model of defining

psychotherapy outcomes by the vantage point of the observer were tested. According to this model, therapists, significant others, and the patients themselves tend to have different criteria for judging the effectiveness of a psychotherapy program. It was predicted that adolescents' perceptions of program effectiveness will be predicted by their perceptions of the quality of their relationships, and that parents'perceptions of program effectiveness will be predicted by their perceptions of the adolescent's rule following behavior. This study also examined the reports of both former adolescent psychiatric patients and their parents across several behavioral and factual interview items. If systematic differences exist between the parents' and the adolescents' reports, they could affect conclusions drawn by program evaluators about the observed effect of a program when limited to one data source.

Given such systematic differences between adolescents' and parents' reports, a program can appear more or less effective due to the choice of respondent population rather than due to actual program effect. This is perhaps the most important implication of such differences. For example, if parents tend to view school behavior more positively than do the adolescents, then the evaluator who chooses to interview parents will find more positive school

outcomes than would the evaluator who interviews adolescents. Thus, the evaluator can gain a more complete picture of the outcomes and the effectiveness of the program by collecting data from multiple sources.

REVIEW OF RELATED LITERATURE

Tramontana (1980) in a critical review of research on psychotherapy outcome with adolescents comments on the present state of empirical knowledge in this area:

> Answers are not readily provided, however, when more meaningful and open-ended questions are asked. For example, given a particular type of psychotherapeutic intervention what types of change occur when it is successfully applied? Who are the adolescents that are helped by the intervention? What type of adolescent may instead be hindered by it? What are the therapist qualities that are necessary for the intervention to be helpful? How can the intervention be applied most efficiently; that is, what are its essential ingredients? What additional resources are needed for the therapy to have an impact and for its effects to endure? Obviously, existing research is far from permitting answers to questions such as these. Judging by the studies in this review, there is presently lacking an empirical base on which to specify particular therapeutic conditions that will lead to particular types of change for particular types of adolescents. At best, there is only the crudest knowledge of conditions under which psychotherapy is more or less likely to be effective. (p. 446)

Strupp and Hadley (1977) suggest that in order to fully understand psychotherapy outcomes one must use multiple data sources: "...if one is interested in a comprehensive picture of the individual, evaluations based on a single vantage point are inadequate and fail to give necessary consideration to the totality of an individual's functioning" (p. 190). Strupp and Hadley (1977) propose a tripartite model of mental health and therapeutic outcomes.

They suggest that the three major vantage points for evaluating outcomes are society (including significant others), the individual patient, and the mental health professional. Each has a unique criterion for such evaluation, and thus different definitions for a positive or a negative outcome. Society bases its definition of mental health on behavioral stability, predictability, and conformity to the social code. The individual patient tends to define mental health in terms of highly subjective feelings of well-being, concerned mainly with being happy or content. The mental health professional tends to define mental health as a theoretical model of a healthy personality structure that can yield an assessment of the patient that is different than either that of the individual or society. Given these criteria, a person's level of functioning or mental health may be judged differently depending on the vantage point. Also, conflict or discrepancy may arise when more than one viewpoint is considered simultaneously. Given the three vantage points, eight combinations of positive or negative outcomes for a patient are possible. For example, an individual may feel that his or her subjective well-being is at a high level, but society may feel that the person's overt behavior does not meet societal standards or is destructive, and the mental health professional may feel that the person's psychological

structure is not healthy. This combination could be represented for instance by a sociopath who is content, but engages in aggressive social behavior and has poor reality testing and insight. Another example, at an extreme, would be the person who is content, engages in societally approved overt behavior, and has a well functioning ego. This person would be deemed an adjusted, well functioning individual from all three viewpoints. This tripartite model leads to several hypotheses concerning the parent and adolescent data to be considered here, but first the adolescent follow-up literature will be considered.

Adolescents are important to study in this context, because adolescents are likely to be different than their parents with respect to views of adolescent postdischarge behavior. The parents are adults, typically economically independent and more completely socialized into adult American culture. Adolescents on the other hand are largely dependent upon their parents, in a different developmental stage (Blos, 1962). Adolescents are no longer children, but not yet adults. They are individuating and beginning to separate from the family in some respects, but remain somewhat dependent as well. The parent interacts with and observes the adolescent as a dependent becoming independent. The adolescent is still undergoing earlier stages of

socialization into adult society. The adolescent is usually still completing their education, not yet accepted for higher level jobs, able to vote, buy liquor, and the like. So, the parent is not likely to see things the same way that the adolescent does.

While some follow-up studies of adolescent psychiatric inpatients have been done, most have been concerned with either the stability of diagnoses (e.g. Weiner & DelGaudio, 1976; Welner, Welner & Fishman, 1979), the natural history of particular diagnostic groups (e.g. King & Pittman, 1970), or finding correlates of later overall functioning. Most follow-up studies concerned with identifying variables with predictive or prognostic validity have attempted to measure outcome with a single overall rating of the former patient's functioning that is derived from a clinician consensus or single clinician's decision (e.g. Forness & Barnes, 1981; Garber, 1972; Gossett, Barnhart, Lewis & Phillips, 1977; Gossett, Lewis & Barnhart, 1983; Herrera, Lifson, Hartman & Solomon, 1974; Masterson, 1967). While these overall ratings of functioning are often based on operationally explicit or objective variables (e.g. employment, grade averages, specific types of social or sexual activity), the analyses in these studies usually focus primarily on the overall rating which is based on a nonexplicit combination of these and other variables

concerning the former patient. Tramontana (1980) points out that comparing rates of broad outcome categories for groups with and without psychotherapy provides generalizations which hide a great deal of variablity. Tramontana found that among the studies he reviewed, positive outcome rates for groups with psychotherapy ranged from 35% to 100%, and for groups without psychotherapy the range was 0% to 75%. The types of adolescents treated, their specific problems, the type of treatment employed, the methodological quality, and the outcome criteria varied among these studies. Also,

> Another major problem with simply comparing the overall rates of positive outcome for treated and untreated adolescents is that it tells nothing about the process of change in either case. Simply noting that about 75% of all adolescents receiving psychotherapy show a positive outcome in no way contributes to an understanding of the specific therapeutic conditions that lead to specific kinds of change for specific kinds of adolescents. Likewise, to note that about 39% of those not receiving psychotherapy show a positive outcome and to attribute this simply to spontaneous remission is absolutely without heuristic value. It implies that the change process in this case is random and therefore not specifiable, when in reality there probably are complex but systematic factors operating to produce change in the absence of formal psychotherapy. The concept of spontaneous remission is simply a reflection of ignorance as to what these factors are and tends to deflect investigators from pursuing a better understanding of those naturally occuring events that induce positive change. These are familiar issues that have been well articulated by various reviewers of the adult psychotherapy literature... (p. 443)

Tramontana also believes that "to focus only on target

symptoms will not provide findings of much substance because these may be only transitory or fluctuating phenomena at particular points in the adolescent's development" (p. 447). While some objective indices of therapeutic effectiveness have been used, these present the problem of viewing outcome as an all or none phenomenon. Tramontana advises that such gross measures are too insensitive to measure subtle changes produced by therapy. Since it is unethical to withhold treatment from some adolescents for the sake of providing a comparison group, it is also difficult to compare or evaluate various types and levels of treatment. Finally, Tramontana suggests the development of metacontrol (a comparison group developed through the quantitative combining of many studies) through a more explicitly detailed cumulative literature. This would provide a solution to dealing with the variability of the evaluative studies, the lack of comparison groups, and answers to specific questions regarding (potentially complex) patterns of variables and outcomes. It is to this cumulative literature that this study attempts to contribute.

Types of Dependent Variables Used

Many of the follow-up studies that are published have used a semistructured face to face interview (Forness & Barnes, 1981; Garber & Polsky, 1970; Garber, 1972; Herrera, Lifson, Hartman & Solomon, 1974; Masterson, 1967), or a semistructured phone interview (Levy, 1969). In some cases, data were collected by multiple means (e.g. Garber, 1972; Gossett, Lewis & Barnhart, 1983; Herrera, Lifson, Hartman & Solomon, 1974; Pichel, 1974). When face to face interviews could not be carried out, phone interviews or mailed questionnaires were used, and then all data were combined to maximize response rates.

In the interviews, questions are usually asked about school behavior, quality of relationships with family and peers, transgressive behavior in the community, drug usage, involvement in later therapy, retrospective perceptions of the treatment program and its effect. Questions about school behavior typically concern types of schools attended, degrees achieved, grade average, and difficulties. Questions about relationships with parents typically concern estimates of the quality of each relationship, and the nature and frequency of contact and conflicts. Questions about relationships with peers and social life often con-

cern marital status, sexual activity, numbers of friends, and estimates of the quality or satisfaction of these relationships. Questions about transgressive behavior usually concern number and types of arrests. Drug usage is often addressed by asking the frequency of usage of the various categories. Later involvement in therapy usually involves questions about rehospitalization, types of later therapy, use of medication, and estimated benefits. Retrospective perceptions of the treatment program are assessed with questions about global feelings regarding the effectiveness of the program, questions about the most positive and negative aspects of the program, and relationships with various types of staff. For appendices with elaborate descriptions of interview protocols, see Garber (1972) and Gossett, Barnhart and Lewis (1983).

Some studies have focused primarily on one area of outcome. For example, Shore and Massimo (1966, 1969, 1973) conducted follow-up studies that focused mainly on later employment of delinquents who underwent comprehensive vocationally oriented psychotherapy. In these reports, employment is covered in depth, and little else is reported. Another example, Forness and Barnes (1981) focused only on later school adjustment of adolescent psychiatric inpatients.

In many of the adolescent follow-up studies, an overall rating of the former patient's functioning was derived by combining the answers to the specific questions. For example, Garber (1972) describes taking the data from the semistructured interviews and immediately having the interviewer record them on a structured questionnaire. The questionnaires were then given to two independent raters who were therapists not directly involved in the research project. The raters gave scores of one to five to each of the cases for each of nineteen dimensions (e.g. employment, interpersonal relations, etc.) based on their clinical impressions. If the two raters' ratings were not the same, it was resolved by a third rater making the final decision. The nineteen ratings were then summed to give a final overall score. Garber adds that this score was then adjusted for age and sex, but does not specify in what way.

Similarly, Gossett, Barnhart and Lewis (1983) describe having independent raters, in this case three experienced mental health professionals from outside the Timberlawn Psychiatric Center. These raters gave each case a rating of either good, fair, or poor for three dimensions: peer and social functioning, relationship with parents, and occupational functioning. A "global" level of function rating was derived by taking the modal peer, family, and vocational score, or taking the median if the mode was not

appropriate. The interrater reliability coefficients for each of the four ratings over the three independent raters ranged from .68 to .84.

Many of the other studies combined data to derive overall scores for level of functioning, but do not report the method for combining the data or do so subjectively (e.g. Garber & Polsky, 1970, Levy, 1969, Masterson, 1967, or Pichel, 1974). It seems that there is a great need to assess and improve interrater and interstudy reliabilities in this area. This is perhaps another need which can be met by a metacontrol or cumulative literature.

Research on Comparisons of Data Sources

Based on the adolescent psychiatric follow-up literature reviewed here, it appears that no studies have dealt directly with comparing the various potential populations' reports with regard to particular items, variables, or sets of variables. It would seem that given the important role that various significant others play in adolescents' lives, and their opportunities for observing the behavior of the adolescents, program evaluators and follow-up researchers would want to use multiple sources of information on postdischarge behavior.

The list of significant others would include parents, siblings, teachers, therapists, friends, and others. The use of multiple sources of information might provide a larger picture of the adolescents' postdischarge behavior, and comparisons among different data sources might reveal any systematic differences in reporting.

While no study specifically focuses upon differences between various data sources, some indirectly address the issue. First, turning for a moment to the adult follow-up literature, Fontana and Dowds (1975) comment: "Although patients' and therapists' reports have often been compared, there has been little systematic comparison of patients' and their families' reports of the former's adjustment in the community" (p. 222). When examining such differences, they found a substantial degree of agreement between patients and significant others about relative adjustment. However, such comparisons have not been made with adolescents. While several studies describe collecting reports from significant others, such as parents or postdischarge therapists, it is usually only done as a secondary measure to fill in the missing information for former adolescent patients that could not be contacted. Then, assuming that there are no systematic differences in reporting between various data sources, the reports from significant others are added to the data collected from

former patients.

One slight exception to this is the study by Pichel (1974). Pichel, in questioning the comparability of mailed questionnaires and face to face interviews with the former patient, interviewed ten randomly selected parents and therapists of former patients who had returned questionnaires. Although Pichel found agreement between his clinical impressions from the interviews and the therapists' reports, he found less agreement between subject assessment and parental reports. Parents varied from the assessments in both positive and negative directions. Pichel concluded that for the purpose of the study, "...reasonably valid responses could be obtained from the questionnaire method" (p. 141). Note that this was based on a very small group, quite likely not representative of all adolescents in a particular program. Pichel provides this comparison as an aside, not devoting more than a few sentences to it.

Turning for another moment to adolescents who are not psychiatric patients, some research has examined the perceived systematic differences between parents and adolescents. Moore (1984) had college freshmen rate the degree to which they had difficulty leaving home on a nine point scale. Subjects were then asked to rate a set of 20

items which were terms representing aspects of home-leaving. Subjects rated these twice on a nine point scale in terms of their importance for deciding whether they had left home, once for their own perceptions and secondly how they believed their parents would respond. It was believed that perceived discrepancies would be related to self-reported difficulty leaving home. The results generally supported the hypothesis, although the relationship was stronger for females than for males. In a study concerning adolescent self-image, Offer, Ostrov, and Howard (1982) found that less discrepancy between parents' perceptions of the adolescent's self-image and the adolescent's reported self-image, the "healthier" the adolescent's self-image was. In another study by Offer (1980), he suggests that adolescents fall into one of three groups described as "continuous growth, surgent growth, and tumultuous growth". Offer concludes that understanding between generations (and thus possibly agreement about perceptions of the adolescent's behavior) is greatest for the continuous growth group, least for the tumultuous growth group, with the surgent growth group between the other two.

Each of these studies concerned perceived parent-adolescent discrepancies with regard to the behavior of the adolescent. In each, not only were discrepancies found, but the differences were related to other factors. Self-

image, affective relationships with parents, and home-leaving are each important issues in the life of adolescent psychiatric patients.

Program evaluators have discussed using broad measures of former patient functioning as outcome data for evaluating mental health programs (Ellsworth, 1979; Posavac & Carey, 1985). Although many instruments and methods of determining patient functioning have been criticized psychometrically, some have been developed which meet satisfactory psychometric standards.

Ellsworth (1979) also points out that when taken as group data, substantial agreement is found in interview ratings from patients and significant others regarding the effectiveness of mental health programs. Despite finding a lack of agreement between sources when rating an individual patient, group data showed fairly consistent agreement in discriminating the most effective program.

Hypotheses

Based on Strupp and Hadley's (1977) tripartite model, it was predicted that parents' ratings of the program's effectiveness would be significantly related to the items regarding rule adherence, school, and work quality, since

these items concern the former patient's overt behavior in following the social code. Also, it was predicted that the same relationship would be significantly less for the adolescents' data.

Second, again based on the tripartite model, it was predicted that former patients' ratings of the program's effectiveness would be significantly related to the quality of relationship items (e.g. with mother, father, siblings, and friends), and that the same relationship would be significantly less for the parents' data. This was predicted because the quality of relationships would likely be related to the former patient's subjective well-being, and it is such well-being that the individual considers in evaluating outcomes according to the tripartite model.

The questions used in the follow-up interviews (see method) can be divided into types three ways. First, by the type of information they concern: factual (generally nonvoluntary aspects of behavior), opinion or attitude questions, and behavior questions (concerning generally voluntary aspects of behavior). Second, by content domains: school behavior, living situation, rule adherence, quality of relationships, work, drug usage, later therapy, and perceptions of the program. Third, by level of measurement: nominal or categorical, and ordinal, interval, or ratio. Table 1 lists which questions fall

Table 1. Interview items within question categories.

Item Type-

Factual: questions 1,3,5,6,7,8,10,15,15A,17,18,19,24,25

Opinion or Attitude: questions 2,9,11,12,13,14,16,26,27,28

Behavior: questions 4,20,21,22,23

Content Domains-

School: questions 1,2,3,4,5

Living Situation: questions 6,7,8,10

Rule Adherence: questions 9,17,18,19

Quality of Relationships: questions 11,12,13,14

Work: questions 15,15A,16

Drug Usage: questions 20,21,22

Later Therapy: questions 23,24,25

Perceptions of Program: questions 26,27,28

Level of Measurement-

Nominal or Categorical: questions 1,5,6,7,8,10,15,17,19,20, 21,23,24,25,27,28

Ordinal, Interval or Ratio: questions 2,3,4,9,11,12,13,14, 15A,16,18,22,26

under each of these categories (see appendix for interview forms).

Third, it was predicted that the factual items will show the least discrepancy between parent and adolescent reports, because these items concern information which is generally available to both the parents and the former patients (such as school situation, living situation, etc.).

Fourth, it was predicted that the behavioral questions (such as days missed from school, drug usage, etc.) would show higher frequencies in the reports from former patients than from parents, because the information of this type is more available to the adolescent, and is not always shared with the parents.

Program Description

The adolescent psychiatric program of the Mental Health Unit of Alexian Brothers Medical Center typically contains ten adolescents in a locked unit. The unit consists of a large dayroom with a nursing staff desk on one side of it near the doors to the "open unit" on the other side of the building. There are two hallways or wings of two-person rooms extending from either side of the dayroom,

each of which contain a number of meeting rooms. This closed unit is shared with an adult population of about eighteen patients, although the nursing staff are designated as working with either the adolescent or the adult program. The adolescent treatment program does not have a single guiding philosophy or therapy technique. Rather, it tends to be eclectic, varying from case to case.

Adolescents in the program typically stay about four to six weeks, although some leave sooner and some stay longer. Adolescents have two one-to-one meetings per day with a member of the nursing staff (nurses and mental health workers) assigned to them. There are two group therapy meetings each day, each meeting run by two members of the nursing staff. Adolescents see their psychiatrists about once a day. During the week, there is a school program and two teachers to facilitate and continue the adolescents' outside education. School hours are similar to those of a regular school, starting in the morning and ending in the afternoon. Once a week, a family conference is held with the adolescent's primary therapist and a family therapist.

Adolescents are assigned a privilege level based on a weekly evaluation of their progress in the program. A point contract subprogram is often used to provide additional structure for particular adolescents. In this case,

the adolescent carries a "contract", a sheet of paper with points earned for constructive and therapeutic activities and points spent for various desired activities, such as having a snack, playing a game, or staying up a half hour later at night. When rules are broken, adolescents are given a warning, and when five warnings are received, the adolescent drops one privilege level. When on the point contract system, the adolescent spends time out in a seclusion room instead of receiving a warning.

After discharge, family conferences are often continued, the adolescent is encouraged to attend a postdischarge support group run by nursing staff, and sometimes one to one meetings with a member of the nursing staff are continued.

In the years since the data were collected, the program has expanded and changed a great deal. The entire closed unit is now devoted to the adolescent program, which maintains twenty eight patients.

METHOD

Design

The design is a two group posttest only survey, with two data sources reporting on measures of the former adolescent psychiatric patients' postdischarge behavior. Respondents were interviewed by phone one year after discharge from a locked mental health unit containing an adolescent program. The former patient and one parent were interviewed.

Subjects

The subject population consisted of all adolescent psychiatric patients admitted to the mental health unit at Alexian Brothers Medical Center during 1981, with the exception of those that were discharged in the care of the Department of Children and Family Services, because they were transferred to other institutions and not returned to families. No attempt was made to contact those former patients who were discharged to the care of the Department of Children and Family Services. This was done for two reasons. First, it might compromise confidentiality of the

former patient by asking the institution or guardian for permission to interview, and second the guardian or institution is quite different from a parent. Therefore, results will be limited in generalizability to nonDCFS adolescent psychiatric patients. There were a total of 106 adolescents admitted to the unit during 1981. Of the 106 cases in the entire 1981 population, 55 adolescents and 64 parents were interviewed. This means that 52% of the adolescents were surveyed and 60.4% of the adults (one parent of the family). There were 50 cases where both the adolescent and a parent were interviewed. Although both interviews were completed, it should be noted that due to the nature of some of the items a substantial amount of missing data exists. For example, the question about the quality of relationships with siblings (item 11) can not be answered if there are no siblings, or the question about the quality of work behavior (item 16) can not be answered if the adolescent is not working. For this reason, the number of cases included in an analysis may differ greatly depending on whether listwise or casewise deletion is used, so for the bivariate correlations with regression analysis items both are presented.

Table 2 presents breakdowns of the entire 1981 adolescent patient population. The great majority of patients where white (93.4%). Most had not been previously

Table 2. Frequencies and Means for Adolescent Variables for Entire 1981 Patient Population

Variable	N	Percent
Race		
White	99	93.4
Black	5	4.7
Hispanic	1	0.9
Other	1	0.9
Previous Hospitalization		
No Previous Hospitalization	80	75.5
Previously Hospitalized	26	24.6
Sex		
Male	43	40.6
Female	63	59.4
Religion		
Catholic	48	45.7
Protestant	16	15.2
Lutheran	8	7.6
Methodist	3	2.9
Presbyterian	2	1.9
Jewish	2	1.9
None	11	10.5
Other	15	14.3

Table 2 continued.

Variable	N	Percent
Family Structure		
Nuclear Intact	51	48.1
Blended (Divorced and Remarried)	17	16.0
Single Parent	24	22.6
Adoptive	6	5.7
Other	3	2.8
Unknown	5	4.7

Variable	N	Mean
Age	106	16.6
Length of Stay (Days)	106	33.9
Family Conferences Held	106	3.7

hospitalized for psychiatric reasons (75.5%). Somewhat more than half were female (59.4%). The religion most largely represented was Catholic (45.7%), which is probably due to Alexian Brothers Medical Center being a Catholic medical center. Slightly less than half of the adolescents were from intact nuclear families (48.1%). The mean age was 16.6 years old, the mean number of family conferences held was 3.7, and the mean length of stay was 33.9 days.

Comparison of Those Interviewed and Those Not Interviewed

There were 106 cases included in the sample. Of these, 55 (51.9%) adolescents were interviewed, and 64 (60.4%) of the parents were interviewed.

In examining for systematic differences between those who responded to the survey and those who did not, a number of variables regarding the adolescent and the adolescent's hospital stay were available. Chi-square analyses were run on the adolescent and parent response rates and adolescents' sex, previous hospitalization, point contract program participation at discharge, medication use, involvement in program aftercare, use of state funding, and participation in the summer or nonsummer program (which differs mainly in school schedules). Table 3 presents the response rates for each of these groups. Table 4 presents the response rates

Table 3. Percent Response Rates and N's for Adolescents and Parents By Various Adolescent Variables

Adolescent Variable	Adolescents		N		Parents		N	
Sex	Male	51.6	22		Male	58.1	25	
	Female	52.4	33		Female	61.9	39	
Previous hospitalization	Yes	34.6	9		Yes	50.0	13	
	No	57.5	46	*	No	63.8	51	
Discharged on point contract	Yes	51.1	23		Yes	60.0	27	
	No	52.5	32		No	60.7	37	
Medication use	Yes	70.8	17		Yes	75.0	18	
	No	46.3	38	*	No	56.1	46	
Involved in aftercare	Yes	70.5	31		Yes	75.0	33	
	No	38.7	24	**	No	50.0	31	**
Received state funding	Yes	27.3	3		Yes	27.3	3	
	No	54.7	52		No	64.2	61	*
Participated in summer program	Yes	47.6	10		Yes	66.7	14	
	No	52.9	45		No	58.8	50	

* p<.05. ** p<.01.

Table 4. Percent Response Rates and Number Responding for Various Subgroups with Small Cell N's

Variable	Adolescents	N	Parents	N
Living Situation				
With Parents	85.3	52	90.2	55
Residential Treatment Center	100.0	1	100.0	1
With Relatives	50.0	1	50.0	1
Group Home	0.0	0	100.0	1
Run Away	0.0	0	100.0	1
With Nonrelative	33.3	1	100.0	3
Other	0.0	0	50.0	1
Religion				
Catholic	58.3	28	66.7	32
Protestant	62.5	10	62.5	10
Lutheran	37.5	3	75.0	6
Methodist	66.7	2	66.7	2
Presbyterian	100.0	2	100.0	2
Jewish	0.0	0	50.0	1
Other	45.5	5	54.6	5
Race				
Caucasian	52.5	52	62.6	62
Black	40.0	2	20.0	1
Hispanic	0.0	0	0.0	0
Other	100.0	1	100.0	1

Table 4 Continued.

Variable	Adolescents	N	Parents	N
Family Structure				
Nuclear	64.7	33	74.5	38
Blended (Remarried)	29.4	5	52.9	9
Single Parent	50.0	12	45.8	11
Adoptive	66.7	4	83.3	5
Other	33.3	1	33.3	1
Admitting Diagnosis				
Depression	56.1	32	63.2	36
Drug Overdose or Intoxication	72.7	8	72.7	8
Unspecialized Aggressive Reaction	50.0	1	100.0	2
Drug Dependency	50.0	1	100.0	2
Anxiety Reaction	0.0	0	100.0	1
Conduct Disorder	47.4	9	42.1	8
Tourette's Syndrome	50.0	1	100.0	2
Cyclothymic Disorder	0.0	0	0.0	0
Other	27.3	3	45.5	5

Table 4 Continued.

Variable	Adolescents	N	Parents	N
Final Primary Diagnosis				
Adjustment Reaction	25.0	1	25.0	1
Conduct Disorder	38.7	12	45.2	14
Depression	61.8	21	61.8	21
Anxiety Reaction	0.0	0	100.0	2
Schizoaffective Disorder	100.0	1	100.0	1
Major Depression	69.6	16	78.3	18
Cyclothymic Disorder	50.0	2	75.0	3
Drug Abuse and Alcohol Addiction	33.3	1	66.7	2
Other	25.0	1	50.0	2

for subgroups based on variables where there were too few cases to run a chi-square analysis. These variables include the adolescent's final primary diagnosis, admitting diagnosis, religion, race, family structure type, and post-discharge living situation. Also, t-tests were run on the adolescents' age, length of stay, number of family conferences held, and privilege level achieved at the time of discharge. Table 5 presents these means. Note that in Tables 3 through 5 the categories represent the adolescent and not the parents. So, although analyses are conducted for parents and adolescents separately, the category in which the respondent falls depends on the value of the variable for the adolescent. This was the case because this information was not available for the parents, only for the adolescents.

Adolescent respondents differed significantly from nonrespondents on five variables: previous hospitalization, medication use, involvement in aftercare, length of stay in days, and number of family conferences held. The response rate for adolescents who were not previously hospitalized was higher (57.5%) than that for adolescents who were previously hospitalized (34.6%, chi-square $(1, N=106)=4.12$, $p=.04$). The response rate for adolescents who were given medication during their hospital stay was higher (70.8%) than that for adolescents who did not

Table 5. Means for Interval Level Hospital Stay Variables by Responders and Nonresponders

Variable	Adolescents		Parents	
	Responders	Non	Responders	Non
Age	16.7	16.6	16.7	16.5
Length of Stay in Days	39.9	27.5 **	38.8	26.6 **
Number of Family Conferences	5.0	3.3 *	4.8	3.1 *
Privilege Level at Discharge	2.4	2.2	2.4	2.1

* $p < .05$

** $p < .01$

receive medication (46.3%, chi-square(1,N=106)=4.46, p=.03). The response rate for adolescents who were involved in aftercare was higher (70.5%) than that for adolescents who were not involved in aftercare (38.7%, chi-square(1,N=106)=10.39, p=.001). The mean length of stay among adolescents who were interviewed (39.9 days) was longer than that for those who were not interviewed (27.5 days, t(104)=2.91, p=.004). The mean number of family conferences held during hospitalization was greater for adolescents who were interviewed (5.0) than for adolescents who were not interviewed (3.3, t(104)=2.35, p=.02).

Parent responders differed from parent nonresponders significantly on four adolescent variables: involvement of the adolescent in aftercare, using state funding for hospitalization, length of stay in days, and number of family conferences held during the adolescent's hospitalization. The response rate for parents with an adolescent who was involved in aftercare was higher (75.0%) than that for parents with an adolescent who was not involved in aftercare (50.0%, chi-square(1,N=106)=6.72, p=.009). The response rate for parents who did not use state funding to pay for hospitalization was higher (64.2%) than that for parents who did use state funding (27.3%, chi-square (1,N=106)=5.62, p=.01). The mean length of stay for the adolescents of the parents who were interviewed (38.7 days)

was longer than that for adolescents of parents who were not interviewed (26.6, $t(104)=2.80$, $p=.006$). The mean number of family conferences held with parents who were interviewed (4.8) was greater than that for parents were not interviewed (3.1, $t(104)=2.33$, $p=.02$).

Procedure

Interviewers were nursing staff working on the Alexian Brothers Medical Center Mental Health Unit Adolescent Program. There were ten interviewers, all of whom met at least once to discuss the procedure with the investigators (the author and the Adolescent Program Director). About one week before the interview was to be conducted, a letter explaining the study was sent to each former patient and his or her parents. Upon reaching the family by telephone, the interviewer asked if the respondent had received the letter. If the respondent had received the letter, the interviewer requested permission to do the interview and then if granted continued with the introduction to the interview. If the respondent had not received the letter, then the interviewer briefly explained the contents of the letter (this included the purpose of the interview and study, see appendix for a copy of the letter). Following

completion of an interview, the respondent was thanked verbally and then was sent a letter thanking them again.

Coding of Nondiscrete Interview Items

For statistical analyses, nondiscrete interview items were coded such that possible responses were given a contiguous set of positive integers ranging from either one or zero. Interview items 2, 9, 11, 12, 13, 14, and 16 all had a similar response format, and were coded as "very well"=5, "well"=4, "fair"=3, "poor"=2, and "very poor"=1. Item 3 asks for the adolescent's grade average, which was coded as "A"=5, "B"=4, "C"=3, "D"=2, and "F"=1. Items 4 and 18, which ask for the number of school days missed and the number of times that the adolescent has been arrested, were coded as the number specified by the respondent (ranging from zero upward). The final item, 26, asks how effective the respondent thought the program was, and was coded as "not effective"=1, "somewhat effective"=2, "very effective"=3.

RESULTS

Interviewer Effects

In order to test for the unintended effect that particular interviewers may have had, an analysis of variance was run on all continuous items, in which the interviewer served as a nominal level independent variable.

There were no significant interviewer effects on items 2, 3, 4, 9, 11, 12, 14, 18, nor 26. Although there was a significant interviewer effect for item 13, which asks about the quality of the adolescent's relationship with the father ($F(8,97)=2.06$, $p=.047$). A post hoc Newman-Keuls analysis was run on the interviewer means for item 13, which revealed that the only significant difference between interviewers was that between interviewer 2 and interviewer 5. Thus, it is unlikely that a systematic interviewer bias was operating.

Hypothesis 1: Rule Adherence and Program Effectiveness

In order to test the first hypothesis, that parents who considered the program effective would rate rule adherence items and school and work quality items higher than would adolescents, a multiple regression analysis was

run for each group. This analysis provided a multiple correlation between the items related to rule adherence (items 2, 9, 16, and 18) and the perception of the program's effectiveness (item 26).

In both the parent and adolescent group, there was not a significant linear relationship between the rule adherence items and the program effectiveness item. For the parent group, $F(4,16)=2.14$, $p=.12$, and for the adolescent group, $F(4,13)=2.94$, $p=.06$. Thus, the R-squared was not significantly different than zero in either group. Table 6 presents the results of this analysis.

Table 7 presents the adolescent means for each of the predictor variables by each value of the predicted variable, the perception of program effectiveness item (26). It can be seen that in two of the four predictors, quality of school behavior and following household rules, the means run somewhat counter to the hypothesis. The highest means are under the not effective category, and do not consistently rise across levels of the dependent variable. Means for number of arrests decrease as predicted, but the mean under the not effective category is based on only two cases, one of which had one arrest. So, this mean is probably unreliable. Quality of work behavior means decrease, which is exactly counter to the hypothesis.

Table 6. Rule Adherence Regression Analyses

	Adolescents	Parents
F value	2.94	2.14
Total Degrees of Freedom	17	20
Adjusted R-squared	.31	.19
Variable	Beta	Beta
Intercept	2.59	1.95
Question 2 Following School Rules	-0.48	0.18
Question 9 Following Household Rules	0.71	0.33
Question 16 Quality of Work	-0.19	-0.34
Question 18 Number of Arrests	-1.16 *	0.07

* $p<.05$.

Table 7. Mean Adolescent Responses to Rule Adherence Items by Values of the Perception of Program Effectiveness Item

	Program Effectiveness Item (item 26) Values		
Variable	(1) Not Effective	(2) Somewhat Effective	(3) Very Effective
Quality of School Behavior (Item 2)	5.00	4.00	4.20
Following Household Rules (Item 9)	4.50	3.67	4.20
Quality of Work Behavior (Item 16)	5.00	4.67	4.30
Number of Arrests (Item 18)	0.50	0.17	0.00

behavior. The not effective category contains only two cases here, one who had zero arrests, and one who had one arrest. Thus, there is a high mean of 0.5 arrests for this category. Since this mean is largely attributable to only one of the two cases, it is probably unreliable.

When examining the bivariate correlations between the predictors and the perception of program effectiveness item (Table 8) for adolescents, it can be seen that the single best predictor is number of arrests, $r(16)=-.49$, $p=.04$. As above, this finding may be unreliable due to having only two cases included here reporting an arrest (each reported only one arrest). The second best individual predictor is quality of work behavior, $r(16)=-.40$, $p=.10$. The third best predictor is quality of school behavior, $r(16)=-.22$, $p=.36$. The least good predictor is following household rules, $r(16)=.09$, $p=.73$.

Since many cases are lost to listwise deletion in the regression analysis, adolescent bivariate correlations for the entire sample might be considered (Table 9). Whereas only 18 cases were included in the regression analysis, from 25 to 54 cases are included here. Quality of work behavior becomes the best predictor, $r(23)=-.35$, $p=.08$, but is not in the predicted direction. Following household rules becomes the second best predictor, although in the predicted direction, $r(50)=.32$, $p=.02$. Number of arrests

Table 8. Correlations Between Rule Adherence Items and Perceptions of Program Effectiveness (Item 26) For Cases Included in the Rule Adherence Regression Analyses

	Adolescents		Parents	
Variable	r	r-squared	r	r-squared
Question 2 Quality of School Behavior	-.23	.052	.39	.152
Question 9 Following Household Rules	.09	.007	.42	.176
Question 16 Quality of Work Behavior	-.40	.164	-.16	.025
Question 18 Number of Arrests	-.49	.238 *	-.13	.017

* p<.05.

Table 9. Correlations Between Rule Adherence Items and Perceptions of Program Effectiveness (Item 26) For Entire Sample

	Adolescents		Parents	
Variable	r	r-squared	r	r-squared
Question 2 Quality of School Behavior	.09 (41)	.007	.25 (46)	.062
Question 9 Following Household Rules	.32 (52)	.106 *	.54 (61)	.295 **
Question 16 Quality of Work Behavior	-.35 (25)	.124	-.22 (30)	.048
Question 18 Number of Arrests	-.25 (54)	.061	-.30 (62)	.092 *

Note. The numbers in parentheses are the number of cases included in each correlation.

* $p<.05$. ** $p<.01$.

becomes the third best predictor, also in the direction hypothesized, $r(52)=-.25$, $p=.07$. Finally, quality of school behavior barely provides any predictive information, $r(39)=.09$, $p=.59$.

Table 10 presents the mean adult responses to each of the rule adherence items by levels of the perception of program effectiveness item. Only the quality of work behavior item means do not follow the hypothesized direction. The quality of school behavior and following household rule items means run according to the hypothesis. In both, the means are lowest in the not effective category and highest in the very effective category. Number of arrests practically remains at zero across all three levels of program effectiveness.

When examining the bivariate correlations between rule adherence items and program effectiveness (Table 8) for adults, it can be seen that following household rules is the best individual predictor, $r(19)=.42$, $p=.06$. Quality of school behavior is the second best predictor, again in the predicted direction, $r(19)=.39$, $p=.08$. Quality of work behavior is the third best predictor, in the nonpredicted direction, $r(19)=-.16$, $p=.50$. Lastly, number of arrests predicts program effectiveness least well, $r(19)=-.13$, $p=.57$.

When considering adult bivariate correlations for the

Table 10. Mean Adult Responses to Rule Adherence Items by Values of the Perception of Program Effectiveness Item

	Program Effectiveness Item (item 26) Values		
Variable	(1) Not Effective	(2) Somewhat Effective	(3) Very Effective
Quality of School Behavior (Item 2)	3.33	3.83	4.50
Following Household Rules (Item 9)	3.00	3.83	4.25
Quality of Work Behavior (Item 16)	5.00	4.50	4.58
Number of Arrests (Item 18)	0.00	0.17	0.00

entire sample, rather than just for those cases surviving listwise deletion in the regression analysis, the number of cases increases from 21 to between 30 and 62 (Table 9). Following household rules remains the best individual predictor, still in the predicted direction, $r(59)=.54$, $p=.0001$. Number of arrests becomes the second best predictor, still in the predicted direction, $r(60)=-.30$, $p=.02$. Quality of school behavior becomes the third best predictor, also in the predicted direction, $r(44)=.25$, $p=.09$. Quality of work predicts least well, but in the opposite direction, $r(28)=-.22$, $p=.24$.

Thus, the first hypothesis was generally not supported, although some of the bivariate correlations were significant and others showed possible trends.

Hypothesis 2: Quality of Relationships and Program Effectiveness

In order to test the second hypothesis, that adolescents who considered the program effective would rate the quality of relationship items higher than would parents, a multiple regression analysis was run for each group. This analysis provided a multiple correlation between the items related to quality of relationships (items 11, 12, 13, and 14) and perception of the program's

effectiveness (item 26).

For the parent group, no significant linear relationship was observed between the quality of relationships items and the program effectiveness item, $F(4,38)=2.25$, $p=.08$. However, for the adolescent group, there was a significant linear relationship, $F(4,35)=3.73$, $p=.01$, adjusted R-squared=.22. Table 11 presents the results of these analyses.

Table 12 presents the adolescent means for each of the quality of relationship items by each level of the perception of program effectiveness item. Consistent with the hypothesis, quality of relationships with siblings and quality of relationship with father both ascend across levels of program effectiveness. Only partially consistent with the hypothesis, quality of relationship with mother and quality of relationships with friends do not consistently rise across levels of program effectiveness.

Table 13 presents the bivariate correlations between the quality of relationship items and the perception of program effectiveness item for cases included in the regression analyses. When considering the adolescent correlations, the best individual predictor of perceived program effectiveness is quality of relationship with father,

Table 11. Quality of Relationships Regression Analyses

	Adolescents	Parents
F value	3.73 *	2.25
Total Degrees of Freedom	39	42
Adjusted R-squared	.22	.11
Variable	Beta	Beta
Intercept	1.66 *	1.78 *
Relationships with Siblings (question #11)	0.06	-0.18
Relationship with Mother (question #12)	0.14	0.32 *
Relationship with Father (question #13)	0.23 **	0.07
Relationships with Friends (question #14)	-0.21	-0.05

* $p<.05$. ** $p<.01$.

Table 12. Mean Adolescent Responses to Quality of Relationship Items by Values of the Perception of Program Effectiveness Item

Variable	Program Effectiveness Item (item 26) Values		
	(1) Not Effective	(2) Somewhat Effective	(3) Very Effective
Relationships with Siblings (Item 11)	3.75	3.78	4.00
Relationship with Mother (Item 12)	4.00	3.56	4.44
Relationship with Father (Item 13)	2.75	2.89	4.06
Relationships with Friends (Item 14)	4.25	4.44	4.17

Table 13. Correlations Between Quality of Relationship Items and Perceptions of Program Effectiveness (Item 26) For Cases Included in the Quality of Relationships Regression Analyses

	Adolescents		Parents	
Variable	r	r-squared	r	r-squared
Question 11 Relationships With Siblings	.16	.024	.12	.014
Question 12 Relationship With Mother	.30	.089	.40	.158 **
Question 13 Relationship With Father	.46	.210 **	.28	.079
Question 14 Relationships With Friends	-.13	.017	.13	.016

* p<.05. ** p<.01.

$r(38)=.46$, $p=.003$. The second best predictor is quality of relationship with mother, $r(38)=.30$, $p=.06$. The third best predictor is quality of relationships with siblings, $r(38)=.16$, $p=.34$. The least good and only predictor not in the hypothesized direction is quality of relationships with friends, $r(38)=-.13$, $p=.42$.

Table 14 presents the bivariate correlations between the quality of relationship items and the perception of program effectiveness item for the entire sample. By considering the entire sample instead of just the cases included in the regression analysis for the adolescents, the number of cases jumps from 40 to between 47 and 54. When examining these correlations for the adolescent group, quality of relationship with father remains the best predictor of program effectiveness, $r(45)=.38$, $p=.009$. Quality of relationship with mother remains the second best predictor, $r(52)=.24$, $p=.07$. Quality of relationships with siblings remains the third best predictor, $r(45)=.16$, $p=.30$. Also, quality of relationships with friends remains the least predictive, $r(52)=-.13$, $p=.35$.

Table 15 presents the adult means for each of the quality of relationships items by each level of the perception of program effectiveness item. Relationship with mother means run according to the hypothesis as they ascend from the not effective category to the very effective

Table 14. Correlations Between Quality of Relationship Items and Perceptions of Program Effectiveness (Item 26) For Entire Sample

	Adolescents		Parents	
Variable	r	r-squared	r	r-squared
Question 11 Relationships With Siblings	.16 (47)	.024	.16 (54)	.025
Question 12 Relationship With Mother	.24 (54)	.060	.44 (62)	.191 **
Question 13 Relationship With Father	.38 (47)	.143 **	.29 (57)	.082 *
Question 14 Relationships With Friends	-.13 (54)	.017	-.24 (55)	.058

Note. The numbers in parentheses are the number of cases included in each correlation.

* $p<.05$. ** $p<.01$.

Table 15. Mean Adult Responses to Quality of Relationship Items by Values of the Perception of Program Effectiveness Item

	Program Effectiveness Item (item 26) Values		
Variable	(1) Not Effective	(2) Somewhat Effective	(3) Very Effective
Relationships with Siblings (Item 11)	3.50	3.38	3.71
Relationship with Mother (Item 12)	3.17	3.31	4.19
Relationship with Father (Item 13)	2.67	2.56	3.48
Relationships with Friends (Item 14)	3.83	3.63	4.00

category. The other three quality of relationship items, with siblings, father, and friends, each drop when moving from the not effective category to the somewhat effective category, which is counter to the hypothesis. All three then go up when moving to the very effective category.

As would be expected from the above adult means, the quality of relationship with mother is the best individual predictor of program effectiveness for adults, $r(41)=.40$, $p=.008$ (Table 13). Quality of relationship with father is the second best individual predictor, $r(41)=.28$, $p=07$. Quality of relationships with friends becomes the third best predictor, $r(41)=.13$, $p=.42$. Lastly, quality of relationships with siblings provides the least predictive information, $r(41)=.12$, $p=.45$.

When considering the adult bivariate correlations between each of the quality of relationship items and perception of program effectiveness for the entire sample (Table 14), the number of cases included jumps from 43 to between 54 and 62. Quality of relationship with mother remains the strongest predictor of program effectiveness, $r(52)=.44$, $p=.0004$. Quality of relationship with father remains the second best predictor, $r(55)=.29$, $p=.03$. Quality of relationships with friends is the third best predictor, $r(53)=-.24$, $p=.08$. Finally, quality of re-

lationships with siblings provides the least predictive information, $r(52)=.16$, $p=.25$.

In summary, the hypothesis was generally supported as there was a linear relationship between the relationship items and the program effectiveness item for the adolescents but not for the parents. Bivariate correlations with the relationship with mother or father items were almost all significant. Correlations with relationships with friends and siblings were not significant.

Hypothesis 3: Factual Items

In order to test the third hypothesis, that there will not be significant differences between parents and adolescents with regard to responses on factual items, chi-square tests were run on items 7, 10, 15, and 25. T-tests were run on items 3 and 15A.

Item 7 asked whether the adolescent has lived at home continuously since discharge from the program. There was no significant difference between parents and adolescents on this item, chi-square$(1,N=119)=0.002$, $p=.96$ (Table 16). There were only slightly more parents reporting the adolescent living at home continuously (68.2%) than adolescents (67.9%).

Item 10 asked whether the adolescent has any siblings

Table 16. Responses to Question Asking if the Adolescent Has Lived at Home Continuously Since Discharge (Item 7) for Parent and Adolescent Groups.

	Yes	No
Adolescents	38	18
Parents	43	20

living at home. There was no significant difference between parents and adolescents on this item, chi-square (1,N=119)=0.112, p=.74 (Table 17). There were slightly more adolescents reporting siblings at home (89.3%) than were parents (87.3%).

Item 15 asked whether the adolescent is working at the time of the interview. There was no significant difference between parents and adolescents on this item, chi-square (1,N=118)=0.099, p=.75 (Table 18). Slightly more adolescents reported that they were working (46.4%) than parents reported the adolescent was working (43.6%).

Item 25 asked whether the adolescent has been rehospitalized for psychiatric problems since discharge from the program. There was no significant difference between parents and adolescents on this item, chi-square (1,N=119)=0.0, p=1.0 (Table 19). As can be seen from the zero value for chi-square here, there was no difference at all in the number of parents or adolescents reporting rehospitalization (14.3% for both groups).

Item 3 asked what the adolescent's average letter grade in school is at the time of the interview. Converting the letter grade response to a grade point average, there was no significant difference between adolescents and parents on this item (t(77)=1.15, p=.25). Table 20 pre-

Table 17. Responses to Question Asking if the Adolescent has Siblings Living at Home (Item 10) for for Parent and Adolescent Groups.

	Siblings at Home	No Siblings at Home
Adolescents	50	6
Parents	55	8

Table 18. Responses to Question Asking if the Adolescent Is Employed and Working at the Time of the Interview (Item 15) for Adolescent and Parent Groups.

	Working	Not Working
Adolescents	26	30
Parents	27	35

Table 19. Responses to Question Asking if the Adolescent has been Rehospitalized for Psychiatric Problems since Discharge (Item 25) for Adolescent and Parent Groups.

	Rehospitalized	Not Rehospitalized
Adolescents	8	48
Parents	9	54

Table 20. Means for Adolescent and Parent Groups for Estimate of Adolescent's Current Grade Average (Item 3) and Estimate of Adolescent's Average Number of Hours Worked Per Week (item 15A).

Group	N	Mean	Standard Deviation
Grade Average			
Adolescents	42	2.40	0.83
Parents	43	2.65	1.13
Work Hours			
Adolescents	55	9.89	13.41
Parents	58	8.21	11.86

sents these means. The parent mean (2.7, where 3=C) was slightly higher than the adolescent mean (2.4).

Item 15A asked the average number of hours that the adolescent works in one week. Parents and adolescents did not significantly differ on this item ($t(111)=0.71$, $p=.48$). Table 20 presents these means. The adolescent mean (9.89 hours) was slightly higher than the parent mean (8.21 hours).

Hypothesis 4: Behavioral Items

In order to test the fourth hypothesis, that adolescents and parents will differ significantly with regard to behavioral items, chi-square tests were run on items 20, 21, and 23. A t-test was run on item 4.

Item 20 asked if the adolescent has used any street drugs since discharge from the program. Adolescents and parents did not differ significantly on item 20, chi-square($1, N=115$)$=0.348$, $p=.55$ (Table 21). Although insignificant, somewhat more adolescents reported using drugs (30.4%) than did parents report the adolescent using drugs (25.4%). This was in the hypothesized direction, with adolescents reporting more usage.

Item 21 asked if the adolescent has had alcoholic beverages since discharge from the program. Adolescents

Table 21. Responses to Question Asking if the Adolescent Has Used Any Street Drugs Since Discharge (Item 20) for Parent and Adolescent Groups.

	Used Drugs	Did Not Use Drugs
Adolescents	17	39
Parents	15	44

and parents did not differ significantly on this item, chi-square(1,N=117)=0.134, p=.71 (Table 22). Slightly more adolescents reported drinking alcoholic beverages (60.7%) than did parents report the adolescent drinking alcoholic beverages (57.4%).

Item 23 asked if the adolescent is in some type of counseling, therapy, or support group at the time of the interview. Adolescents and parents did not differ significantly on this item, chi-square(1,N=118)=0.342, p=.56 (Table 23). In the hypothesized direction, a somewhat larger proportion of adolescents reported being in some type of counseling, therapy, or support group (35.7%) than did parents (30.7%).

Item 4 asked the respondent to estimate how many days per month the adolescent was absent from school per month during the last school semester. Adolescents and parents did not differ significantly on this item, t(67.8)=0.71, p=.48 (Table 24). Again, although not significant yet in the hypothesized direction, the adolescent mean (4.86 days) was higher than the parent mean (3.98 days).

Summary of Results

In conclusion, rule adherence items did not signif-

Table 22. Responses to Question Asking if the Adolescent Has Drank Any Alcoholic Beverages Since Discharge (Item 21) for Parent and Adolescent Groups

	Drank Alcohol	Did Not Drink Alcohol
Adolescents	34	22
Parents	35	26

Table 23. Responses to Question Asking if the Adolescent Is Presently in some Type of Counseling, Therapy, or Support Group (Item 23) for Parent and Adolescent Groups

	Therapy	No Therapy
Adolescents	20	36
Parents	19	43

Table 24. Means for Adolescent and Parent Groups for Estimate of Number of Days per Month that the Adolescent Was Absent From School During the Last School Semester (Item 4)

Group	N	Mean	Standard Deviation
Adolescents	42	4.86	6.85
Parents	41	3.98	4.14

icantly predict perceptions of program effectiveness for either adolescents or parents. Bivariate correlations between three of the four rule adherence items and the perception of program effectiveness item were consistently in the predicted direction to that hypothesized for both adolescents and parents. These were quality of school behavior, following household rules, and number of arrests. Those reporting higher quality of school behavior and a high degree of following household rules were more likely to see the program as effective. Those with less arrests were more likely to see the program as effective. Although not significant, the only rule adherence item that related to program effectiveness in the opposite direction was quality of work behavior. Those reporting a higher quality of work behavior were less likely to see the program as effective. Following household rules and number of arrests were the only items to correlate significantly with perception of program effectiveness however.

The quality of relationship items did not significantly predict perceptions of program effectiveness for the parent group. However, the quality of relationship items did significantly predict perceptions of program effectiveness for the adolescent group, in the direction hypothesized. Bivariate correlations between the quality of relationship items and the perception of program effective-

ness item were consistently positive, which is consistent with the hypothesis. So, in general those who reported higher quality of relationships with parents, siblings, and friends tended to see the program as more effective. Quality of relationships with mother or father correlated significantly with perception of program effectiveness, but quality of relationships with siblings or friends did not.

Regarding factual and behavioral items, there were no significant differences between parents and adolescents. This was predicted for the factual items, but not for the behavioral items. It was hypothesized that adolescents would report higher frequencies on behavioral items, because the adolescent would have more knowledge of their own behavior than would parents. Although not significant, adolescents did report higher frequencies of drug usage, drinking alcoholic beverages, involvement in therapy, and number of school days missed.

DISCUSSION

Rule Adherence, Quality of Relationships and Program Effectiveness

Since the rule adherence items were not significantly related to the perceptions of program effectiveness for either the adolescent or parent groups, the Strupp and Hadley (1977) hypothesis that significant others view program effectiveness primarily in terms of the former patient following the social code is not supported. However, three of the four individual rule adherence items ran fairly consistently in the hypothesized direction, such that higher rule adherence was (usually insignificantly) associated with higher perceptions of program effectiveness. Only quality of work behavior showed a somewhat consistent negative relationship with perceptions of program effectiveness, and then only at insignificant levels. So, higher rule adherence, as measured here, did not significantly predict perceptions of program effectiveness.

The Strupp and Hadley (1977) hypothesis that the former patient primarily views program effectiveness in terms of subjective well-being was supported. The R-squared was significantly greater for the adolescent group,

since the quality of relationships items were significantly related to the perception of program effectiveness for the adolescent group and not for the parent group. Further, each of the quality of relationships items were consistently positively correlated with perception of program effectiveness. Only quality of relationships with friends showed any tendency toward a negative relationship with perception of program effectiveness, and then only at insignificant levels. So, the hypothesis was supported. Higher quality of relationships were associated with higher perceptions of program effectiveness.

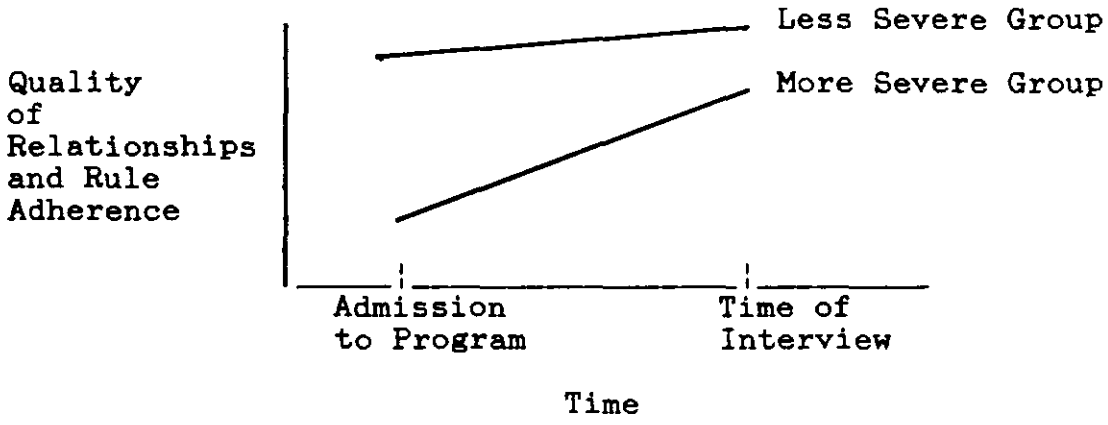
Several methodological factors limit the validity of these findings. First, each of the variables which Strupp and Hadley (1977) include in their model were measured indirectly. Also, there was only one item measuring program effectiveness, and certainly there are many dimensions of program effectiveness. So, these findings are limited only to a very global view of program effectiveness.

Also, the sample sizes were somewhat small after the listwise deletion of cases for missing data. Thus, statistical power is less than optimal. Given these limitations, perhaps it is likely to commit a Type II error. For example, rule adherence items may relate to perceptions of program effectiveness in reality, but due to measurement limitations and small sample size such relationships are

not found. Also, if this is true then it may provide stronger evidence that the quality of relationships and program effectiveness perception are related in a positive direction for the adolescent group, since these limitations provide a more conservative test.

One more factor must be considered which was not included in this study. The degree of improvement of rule adherence or quality of relationships since admission to the program may play a factor in perceptions of program effectiveness. Since former patients and parents were interviewed only at one point in time, improvement could not be measured. Yet another factor that might affect improvement would be the severity of problems presented by the patient or family upon admission. It is possible, due to either regression to the mean or differential benefits of the program, that different levels of initial severity are related to different levels of improvement. In other words, there may be an interaction between initial severity and improvement, and ultimately between initial severity and perception of program effectiveness. Figure 1 presents such an interaction in graphic form.

Figure 1. Possible Interaction of Severity of Problems At Admission With Improvement in Rule Adherence and Quality of Relationships



Factual and Behavioral Item Discrepancy

Adolescent and parent groups were not found to differ significantly on any of the factual nor behavioral items. Therefore, the hypothesis that these two groups will differ with respect to these types of items is not supported. Apparently adolescents and parents report factual and behavioral aspects of postdischarge behavior in a similar manner. Although, the direction of the observed insignificant differences varied from item to item with the factual questions. This was not true for the behavioral items. In the direction hypothesized, adolescents reported higher frequencies of each behavior than did the parents. So, this pattern may suggest that adolescents do systematically report higher frequencies on behavioral items, but only at a slightly higher level.

Overall Conclusions

Two of Strupp and Hadley's (1977) tripartite model components were tested, and support was found for only one. The notion that significant others of mental health program patients view success of the program in terms of the patient's following rules and social codes in their overt

behavior was not supported. Support was found for the notion that former patients themselves will view success of the program in terms of their subjective well-being, at least with respect to the quality of their relationships with those around them. In fact, support was found for the idea that former patients reporting better relationships will perceive the program to be more effective.

Regarding the rule adherence items, there was a general pattern of positive correlations between rule adherence and perception of program effectiveness. Although, the one item that mentioned following rules explicitly was the least predictive of program effectiveness (item 9, following household rules). Thus, there is even less support for the hypothesis. The only item that ran against the hypothesized direction consistently was quality of work behavior. Perhaps there is something unique about work behavior that leads adolescents and parents not to relate it to program effectiveness, unlike the other items. For example, it may be that because most adolescents enter the program for problems with school behavior or following rules at home rather than work problems, work behavior is not salient when assessing the program's effectiveness. Or perhaps the program is successful in improving the following of household rules, quality of school behavior, and possibly avoiding criminal behavior or arrest, but not in improving

work-type behavior.

Regarding quality of relationships items, there was a consistent pattern of positive correlations between quality of relationships and perception of program effectiveness. Perhaps there was something unique about quality of relationships with friends, since this was the only item that showed any negative correlation. This item was the only one that concerned relationships with persons outside the family, so there may be a difference between intrafamilial and extrafamilial relationships with regard to perceptions of program effectiveness. For example, since the program tends to involve family members (in family conferences, visiting, and the like) as part of the treatment, but does not include friends, relationships with friends may change less than those with family members. This may lead the former patient or parent to think of program effectiveness primarily in terms of family relationships, and for relationships with friends to be less salient.

It was found that parents and adolescents did not differ with respect to viewing several of the factual (demographic) and behavioral aspects of the former patient's postdischarge situation. But the consistent pattern of adolescents reporting slightly higher frequencies on the behavioral items may lend weak support to the idea that

adolescents do have more knowledge about their postdischarge behavior than do their parents. This may be especially true regarding less socially acceptable behaviors such as street drug usage, drinking alcohol, and missing school.

Given the findings of this study, the evaluator who chooses either adolescents or parents alone as a source for evaluative data will probably not find tremendous differences in program effect, or in the relationship of rule adherence and perceived program effectiveness. However, there is evidence that the evaluator who chooses to interview only adolescents will find more of a positive relationship between quality of relationships and perceived program effectiveness than if they interviewed only adults. Also, there is weak evidence that the evaluator who chooses to interview only adolescents will find slightly higher reported levels of street drug usage, drinking alcoholic beverages, and missing school than if they were to interview only adults.

Interviewer Effects

No interviewer effects were found on any items, except item 13 which asks about the quality of the former patient's relationship with their father. Interviewer 2 and

interviewer 5 only accounted for 15 cases in the entire sample, and only 6 cases involved in the one analysis that involves item 13. It must be kept in mind, however, that interviewer effect analyses were run on 10 items. So, the fair possibility of a Type I error remains. Given the only difference between the 10 interviewers was that between number 2 and 5, for which there was no theoretical reason to expect any, and given that this difference showed up on only one item, it seems unlikely that there was a systematic interviewer bias operating.

External Validity

Several factors limit the generalizability of this study's findings. First, no attempt was made to contact those former patients who were discharged to the care of the Department of Children and Family Services. This was not done for two reasons. First, it might have compromised confidentiality of the former patient by asking the institution or guardian for permission to interview, and second the guardian or institution is quite different from a parent. So, findings are relevant only for adolescent psychiatric patients who are not discharged to DCFS.

Second, all the adolescents and parents interviewed

were sampled from only one program. For these results to be generalizable beyond this program the findings should be replicated at other sites with other programs. It is possible that unique aspects of either the program or the client population that the program draws could affect the outcome of this study. For example, other programs may have more or less structure, a higher or lower patient to staff ratio, or other differences. Also, although the program draws clients from throughout the greater Chicago area, the majority come from the northwest suburbs, and the majority of adolescents in the program are white and speak English as their primary language.

Third, several systematic differences were found between respondents and nonrespondents. For adolescents, those who responded were more likely to have been given medication during hospitalization, been involved in aftercare, not been previously hospitalized, have stayed in the hospital longer, and had more family conferences. Some of these differences might be expected. Those who stayed in the hospital longer, had more family conferences, and were involved in aftercare were probably involved in the program to a greater degree, more likely to update staff on phone and address changes, and more likely to have developed a relationship with the program staff. In at least one case, the respondents refused to be interviewed because the ado-

lescent had only been in the hospital for a few days, and they felt they did not know enough about the program. Since family conferences are held once a week (when possible), length of stay in days and number of family conferences held virtually measure the same thing. What is less clear is the meaning of previous hospitalization and medication use differences. It would seem that this might be related to severity of symptoms or problems leading to hospitalization, but then either both previously hospitalized and medication users would together have higher or lower response rates. This was not the case. While the adolescents who were given medication during hospitalization were likely those with greater severity of problems (requiring medication), those who were not previously hospitalized were not likely to have had as high a level of severity as those who had been previously hospitalized. So, the higher response rates among both medication users and nonpreviously hospitalized seems contradictory. Thus, these findings are more generalizable to nonpreviously hospitalized adolescents who were given medication during hospitalization, stayed in the hospital longer, and participated in aftercare.

For the parent group, respondents were more likely to have had an adolescent who participated in aftercare,

stayed in the hospital longer, and participated in more family conferences. The responding parents were also more likely to have not used state funding to pay for the hospitalization. As with the adolescent group, the parents were probably more likely to have stayed in touch with program staff when the length of stay was longer and when the former patient participated in aftercare. It seems likely that those parents who used state funding were more likely not to have an operational phone for financial reasons, and not to have a means to pay for aftercare, thus making these families less accessable.

Future Research

Without replication, it is difficult to maintain confidence in the findings of this study. In any future research that might be carried out on differences between parents' and adolescents' perceptions regarding adolescents' postdischarge behavior, several variations in the design might improve on the limitations of this study. Ideally, one might want to compare other sources of data on postdischarge behavior beyond parents and adolescents themselves. For example, it would be informative to also include therapists', teachers', employers', and even trained raters' observations. Interviews might be conduc-

ted at more than one point in time. Interviews could be collected at three months, six months, or every four months for two or three years after discharge, instead of at one year. This would allow measurement of the duration of any systematic data source difference effects. The number and types of items included in the interview could be expanded, and if models like the Strupp and Hadley (1977) model are tested then items should be written more directly to the theoretical components of the model. Program effectiveness, rule following behavior (conformity to the social code and predictability), and subjective well-being each should be covered more comprehensively in the interview with a series of items. Pretests at admission or during hospitalization could enable the computation of change or improvement scores, and identify possible interactions with improvement. Finally, larger sample sizes should be drawn from multiple sites. Such changes to the quasi-experimental design should help to provide a more complete picture of the varying, or not varying, vantage points on viewing adolescent postdischarge behavior.

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APPENDIX

ALEXIAN BROTHERS MEDICAL CENTER

ADOLESCENT FOLLOW-UP QUESTIONNAIRE

CASE NUMBER: _____

FORMER PATIENT'S NAME: _____

FORMER PARENT'S NAME: _____

TELEPHONE NUMBER: _____

Date of Attempts to Call and Result:

DATE	TIME	RESULT

PART ONE - PARENT INTERVIEW

FAMILY MEMBER INTERVIEWED: _____

I am going to be asking you some questions about how you think your son/daughter has been doing since discharge from Alexian Brothers Medical Center. For many of the questions I will give you the possible responses, for example, very well, well, fair, poor, or very poor. Please try to think about how you feel your son/daughter has been doing over the entire time since discharge, rather than just during the past few weeks when you give your responses, unless I ask for only more recent information. Any questions?

Okay, why don't we begin. The first few questions are about school. . . .

1. What is his/her present school situation?

Enrolled in college	2 3.2%	
Graduated from high school	4 6.5%	
Enrolled in high school	41 66.1%	
Enrolled in night school	0	
Dropped out	10 16.1%	(go to #6)
Expelled	0	(go to #6)
Working on G.E.D.	1 1.6%	(go to #6)
Other (specify)	4 6.5%	

FORMER PATIENT'S NAME:_____

2. Would you say he/she is do ing very well, well, fair, poor, or very poor in school?

Very Well	18	38.3%
Well	10	21.3%
Fair	12	25.5%
Poor	5	10.6%
Very Poor	2	4.3%
Don't Know		

3. What would you say is your son's/daughter's average letter grade at this time, A,B,C,D, or F?

Letter $\bar{x}=2.65$

Other (specify)_____

Don't Know_____

4. How many days per month during the last school semester would you say your son/daughter was absent from school, not counting week-ends or holidays?

Number $\bar{x}=3.98$

Don't Know_____ (Probe: An approximation?)

5. Would you please briefly explain why your son/daughter was absent on those days?

_____

_____

Okay, the next few questions are about your son's/daughter's living situation. . . .

6. What is his/her present living arrangement?

_____

_____

7. Has your son/daughter continuously lived at home since discharge?

Yes 43 68.3% (go to #9)

No 20 31.8% (go to #8)

8. Where else has he/she lived and for how long?

_____

FORMER PATIENT'S NAME:_____

9. Since coming home from the hospital would you say your son/daughter has been able to follow the household rules very well, well, fair, poorly, or very poorly?

Very Well	16	25.8%
Well	20	32.3%
Fair	13	21.0%
Poorly	6	9.7%
Very Poorly	7	11.3%

The next few questions deal with relationships . . . .

10. Does your son/daughter have any brothers or sisters living at home?

Yes	55	87.3%
No	8	12.7% (go to #12)

11. Would you describe your son's/daughter's relationships with his/her brothers and/or sisters as very good, good, fair, poor, or very poor?

Very Good	4	7.3%
Good	31	56.4%
Fair	12	21.8%
Poor	5	9.1%
Very Poor	3	5.5%
Don't Know		

12. Would you describe your son's/daughter's relationship with you his/her mother, as very good, good, fair, poor, or very poor?

Very Good	15	23.8%
Good	27	42.9%
Fair	10	15.9%
Poor	7	11.1%
Very Poor	4	6.3%
Don't Know		

FORMER PATIENT'S NAME: _____

13. Would you describe your son's/daughter's relationship with you his/her father as very good, good, fair, poor, or very poor?

Very Good	12	21.1%
Good	15	26.3%
Fair	11	19.3%
Poor	10	17.5%
Very Poor	9	15.8%
Don't Know		

14. Would you describe your son's/daughter's relationships with his/her friends as very good, good, fair, poor, or very poor?

Very Good	13	23.2%
Good	29	51.8%
Fair	9	16.1%
Poor	3	5.4%
Very Poor	2	3.6%
Don't Know		

We are about half-way completed at this point. The next few questions are about work and how your son/daughter is doing on a day-to-day basis . . . .

15. Is your son/daughter presently employed and working?

Yes 27 43.5%

No 35 56.5% (go to #17)

Don't Know _____ (go to #17)

Qualifications (if given) _____

Average # of hours per week $\bar{x}=8.21$

16. Would you say your son/daughter is doing very well, well, fair, poor, or very poor at work?

Very Well	21	67.7%
Well	8	25.8%
Fair	2	6.5%
Poor	0	
Very Poor	0	
Don't Know		

FORMER PATIENT'S NAME:_____ PAGE -5-

17. Since discharge from ABMC has your son/daughter been arrested?

Yes 12 19.4%

No 50 80.6% (go to #20)

Don't Know_____ (go to #20)

Other (specify)_____

18. How many times has he/she been arrested?

Number $\bar{x}$=0.44

Don't Know_____ (Probe: An approximation?)

19. Would you please briefly explain what he/she has been arrested for?

_____

_____

20. Since discharge from ABMC has your son/daughter been using any street drugs?

Yes 15 25.4%

No 44 74.6%

Don't Know_____

21. Since discharge from ABMC has your son/daughter been drinking alcoholic beverages?

Yes 35 57.4%

No 26 42.6% (go to #23)

Don't Know_____ (go to #23)

22. How much alcohol on a weekly basis would you say your son/daughter drinks

Amount (specify)_____

Don't Know_____ (Probe: An approximation?)

23. Is your son/daughter presently in some type of counseling, therapy, or support group?

Yes 19 30.6%

No 43 69.4% (go to #25)

Don't Know_____ (go to #25)

24. What type?

_____

FORMER PATIENT'S NAME:_____

25. Since discharge from the Adolescent Program at ABMC, has your son/daughter been rehospitalized for psychiatric problems?

Yes 9 14.3%

No 54 85.7%

Don't Know_____

These last few questions are about your impressions of the Adolescent Program. . . .

26. Would you say the Adolescent Program at ABMC was very effective, somewhat effective, or not effective in helping to resolve the problems that brought your son/daughter to the hospital?

Very Effective 28 45.2%

Somewhat Effective 22 35.5%

Not Effective 12 19.4%

Other(specify)_____

27. What do you feel was best about the program?

_____

_____

28. What do you feel was least helpful about the program?

_____

_____

29. Thank you very much for your time, it was very helpful. Are there any final comments you would like to make?

_____

_____

Thank you again.
May I speak to . . . .
or end conversation.

FOR INTERVIEWER

Additional comments about the respondent:_____

_____

_____

Notes on implementation of interview:_____

_____

_____

PART TWO - ADOLESCENT INTERVIEW

Okay, the first few questions are about school. . . .

1. What is your present school situation?

Enrolled in college 3 4.0%
Graduated from high school 4 5.3%
Enrolled in high school 35 46.7%
Enrolled in night school 0
Dropped out 8 10.7% (go to #6)
Expelled 0 (go to #6)
Working on G.E.D. 23 30.7% (go to #6)
Other (specify) 2 2.7%

2. Would you say you are doing very well, well, fair, poor, or very poor in school?

Very Well 13 30.2%
Well 19 44.2%
Fair 9 20.9%
Poor 2 4.7%
Very Poor
Don't Know

3. What would you say is your average letter grade at this time, A,B,C,D, or F?

Letter $\bar{x}$=2.40
Other (specify)
Don't Know

4. How many days per month during the last school semester would you say you were absent from school, not counting week-ends or holidays?

Number $\bar{x}$=4.86
Don't Know (Probe: An approximation?)

5. Would you please briefly explain why you were absent on those days?

The next few questions are about your living situation. . . .

6. What is your present living situation?

7. Have you continuously lived at home since discharge?

Yes 38 67.9% (go to #9)

No 18 32.1% (go to #8)

8. Where else have you lived and for how long?

9. Since coming home from the hospital would you describe your ability to follow the household rules as very good, good, fair, poor or very poor

Very Good 12 22.2%

Good 23 42.6%

Fair 15 27.8%

Poor 4 7.4%

Very Poor 0

Don't Know

The next few questions deal with relationships. . . .

10. Do you have any brothers or sisters living at home?

Yes 50 89.3%

No 6 10.7% (go to #12)

11. Would you describe your relationship with your brother(s) and/or sister(s) as very good, good, fair, poor, or very poor?

Very Good 6 12.2%

Good 32 65.3%

Fair 10 20.4%

Poor 1 2.0%

Very Poor 0

Don't Know

12. Would you describe your relationship with your mother as very good, good, fair, poor, or very poor?

Very Good 17 30.4%

Good 23 41.1%

Fair 11 19.6%

Poor 3 5.4%

Very Poor 2 3.6%

Don't Know

13. Would you describe your relationship with your father as very good, good, fair, poor, very poor?

Very Good 7 14.3%

Good 19 38.8%

Fair 15 30.6%

Poor 3 6.1%

Very Poor 5 10.2%

Don't Know

14. Would you describe your relationships with your friends as very good, good, fair, poor, or very poor?

Very Good 24 42.9%

Good 26 46.4%

Fair 6 10.7%

Poor 0

Very Poor 0

Don't Know

We are about half-way completed at this point. The next questions are about work and how you're doing on a day-to-day basis. . . .

15. Are you presently employed and working?

Yes 26 46.4%

No 30 53.6% (go to #17)

Don't Know (go to #17)

Qualifications (if given)

Average # of hours per week $\bar{x}$=9.89

16. Would you say you are doing very well, well, fair, poor, or very poor at work?

Very Well 13 52.0%

Well 11 44.0%

Fair 1 4.0%

Poor 0

Very Poor 0

Don't Know

17. Since discharge from ABMC, have you been arrested?

Yes 13 23.2%

No 43 76.8%

Other (specify)

18. How many times have you been arrested?

Number $\bar{x}$=0.41

Don't Know (Probe: An approximation?)

19. Would you please briefly explain what you have been arrested for?

20. Since discharge from ABMC have you been using any street drugs?

Yes 17 30.4%

No 39 69.6%

Other (specify)

21. Since discharge from ABMC have you been drinking alcoholic beverages?

Yes 34 60.7%

No 22 39.3% (go to #23)

Other (specify) (go to #2

22. How much alcohol on a weekly basis would you say you drink?

Amount (specify)

Don't Know (Probe: An approximation?)

PART TWO

23. Are you presently in some type of counseling, therapy, or support group?

Yes 20 35.7%

No 36 64.3%

Other (specify)_____

24. What type?

_____

25. Since discharge from the Adolescent program at ABMC, have you been rehospitalized for psychiatric problems?

Yes 8 14.3%

No 48 85.7%

Other (specify)_____

These last few questions are about your impressions of the Adolescent program. . . .

26. Would you say the Adolescent program at ABMC was very effective, somewhat effective, or not effective in helping to resolve the problems that brought you to the hospital?

Very Effective 6 11.1%

Somewhat Effective 26 48.1%

Not Effective 22 40.7%

Don't Know_____

27. What do you feel was best about the program?

_____

_____

28. What do you feel was least helpful about the program?

_____

_____

29. Thank you very much for your time, it was very helpful. Are there any final comments you would like to make?

_____

_____

Thank you again.

APPROVAL SHEET

The thesis submitted by Michael Helford has been read and approved by the following committee:

Dr. Maryse Richards, Director
Assistant Professor, Psychology

Dr. Emil Posavac
Professor, Psychology and Department Chair, Psychology

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

10/7/87
Date

Maryse Richards
Director's Signature