

## **Follow-Up Report**

### **Jasper Mountain Aggregate Data**

1/25/09

#### **Overview**

This is the thirteenth report on follow-up data obtained from graduates and their families. Since January of 1998, we have kept in touch with our graduates and compiled information on these contacts either on a six-month or yearly basis. The first set of data obtained in early years ago reflected a picture that at the time was surprising in its positive reflection of the children. The question was if this trend would be maintained with the addition of more children and for longer periods of time. Over the last decade the numbers of interviews has continued to grow and the results have maintained a very positive reflection of how the children are doing years after graduation. We continue to formally obtain data on all children out of the intensive residential program from 6 to 60 months. This thirteenth report includes all data obtained to date. Although the overall positive themes are consistent in all 13 reports, there are minor differences. Our efforts to contact the children have been successful in interviewing the majority of the children who have left the program for any reason over the years. Each report reflects a higher numbers of children and because of this, the data has increasing value in providing an accurate picture. We now have 392 follow up interviews and the data has been generally consistent since 1998.

It is important to remember that the children reflected in this data are the most challenging in our system of care. Our success with this population has been a factor in our national reputation and the increased numbers of referrals coming to the program from across the United States.

#### **Procedure**

The follow-up procedure involves tracking information in five areas important to the treatment programs:

- x Personal independence/daily living skills,
- x Social skills/success in school
- x Communication skills
- x Problem behaviors
- x Personal information coming from the former resident

Twenty-one total questions were asked under the above headings. Information in the first four areas was provided by adults who are the most familiar with the former resident. This was done to prevent overestimations of progress by the graduate. Information from the

child's current parent figure has been deemed the best easily obtainable reflection of the child's progress. This report does not assume that the parent's reflection is always accurate. In fact, in some cases we have other information that the parent's reflections are probably inaccurate in the negative direction regarding a child. It must be stated that all children are contacted, including cases where parents or payer withdrew the child against advice and before the child could take full advantage of the program. Most parents have very positive views of our agency and cooperate with our interviews, but there are some who react negatively when contacted years later.

Even though we know some parents are overly negative in viewing their child (some parents have given their child negative marks in all areas), it is also probable that some parents gave their child somewhat higher marks than the child may deserve. For example, we are interested in the child's progress over time but the parent may have been called on a very good day or very bad week and this may affect the data we obtain. Research on reports from parents has indicated bias in both negative and positive directions, but parental reports are valuable in efforts like our follow-up as one of the best overall reflections of how the child is functioning. It is assumed that overly positive and overly negative scores will balance out. We also continue to ask former residents to answer several questions including memories of the program and goals for the future.

A staff person from Jasper Mountain does the detective work to, first of all, find the former residents, and then to obtain the necessary cooperation to get the data. It is interesting that nearly all children have agreed to provide information, but not all adults have cooperated with the follow-up study. As has been the case in each of follow-up data collection efforts, some adults did not want the child to be interviewed because they wanted to "leave the past behind." However, the vast majority of parents have been very helpful in obtaining the follow-up information, and have allowed us to interview the former resident.

Data has been divided into four time periods to obtain a measurement at different time intervals. The procedure identifies the collection of data at six months, twelve months, thirty-six and sixty months. In addition, the data is divided up by children who are twelve and older or eleven and younger. The data has been divided by age to track differences in the data based on age as well as by length of time out of the program. An additional analysis has been conducted related to length of stay. As can be seen in the results, there were differences associated with length of time out of the program, age of the child during treatment, and length of stay in the program.

## **Results**

Follow-up information has been obtained from 392 interviews of the former residents of the intensive residential program. The breakdown of responses by time periods is as follows: six months - 99, twelve - 125, thirty-six - 101, and sixty - 67. The numbers reflect that the longer the child is out of the program the more difficult it is for us to find and interview the parent and child. However there are sufficient numbers in all of the areas to obtain a view of the children in groups of time out of the program.

The substantial amount of information coming from the interviews has been broken into several aspects to provide results that can potentially reflect trends. Three steps have been taken to analyze the data. First the data has been divided by time frame (6, 12, 36, 60 months) and by age of the child (11 and under, 12 and over). Second, the aggregate data has been reviewed and broken into positive and negative replies. Third, any area that reflects it is true for greater than 60% of the graduates have been considered significant either in a positive direction strength) or negative direction (a weakness). A 'forced choice' format (Yes or No) was chosen over a Likert scale to avoid middle of the road responses.

Positive responses were those that indicated an increased or improved capacity to be successful in the area being measured. The trend from the first review of the data has continued reflecting that overall the strengths of the children as measured by positive responses from parents, out number the weaknesses or negative responses by 11 to 1.

Other trends of previous data have been supported: significant positive responses overall tended to maintain or slightly increase one or more years out of the program, and negative responses remained at a low level and were much less pronounced than strengths. The two consistent areas of weakness reported at most time interval was that the child was not ready to live independently, and the parent was suspicious of covert behavior. Regarding independence, we don't expect the child to be ready to live independently, we ask the question to see if a move toward independence is reflected over time. There was improvement (95%, 91%, 80% and 72%) in this area with every subsequent time period. The areas of strength have been consistent since the data has been collected starting in 1998. The following information is a cumulative report of all responses to date.

## **Six Months**

At the six month time frame, the following nineteen areas received positive responses: working on educational and work goals—97%, no involvement with the police or courts--94%, obtaining passing grades in school--89%, improved behavior--88%, having activities s/he does alone--87%, ability to communicate personal needs--86%, demonstrating good personal hygiene--80%, no illegal behavior—78%, showing more personal independence--77%, ability to appropriately meet personal needs--76%, showing the personal drive to succeed in school—74%, ability to communicate with peers and adults--72%, reading and writing at grade level—71%, not being a victim—70%, no violent or sexual behavior--69%, communicate long distance with others—68%, making wise choices—65%, improved social skills—60%, and make and maintain friendships—60%.

At six months parents identified only one area of personal weakness, the children were not ready to live independently—95%. Although we do not expect young children to be ready to live independently, we track whether the answer to this question improves over time the child is out of the program (which it does).

## **Twelve Months**

At the one-year mark the trends toward strengths or positive responses continue with sixteen strengths. Positive responses were: working on educational and vocational goals--93%, getting passing grades in school--91%, letting others know your personal needs--86%, no police or court involvement--83%, communicating with adults and peers--80%, enjoying solitary activities--80%, showing more independence--79%, showing the personal drive to succeed in school--79%, good hygiene--77%, showing improved behavior--77%, appropriately meeting personal needs--74%, no illegal behavior--72%, making good choices--72%, learning not to be a victim--72%, reading and writing skills to meet goals--70%, and communicate long distance with others--60%.

At twelve months three areas were identified as weaknesses including living independently, which went from 95% down to 91%: parents being suspicious of covert activity by the child--67%, and the child being avoided by others 72%.

## **Thirty-Six Months**

At thirty-six months positive skills continue to be maintained (13 areas), and the negative issue continue to be minimal (1). Positive responses were obtained for: activities working on educational and work skills--96%, showing improved behavior--84%, activities s/he does alone--83%, letting others know personal needs--82%, communicating with adults and peers--81%, showing more independence--78%, reading and writing skills to meet goals--78%, good hygiene--77%, not being a victim--71%, no police or court involvement--70%, no illegal behavior--65%, no violent or sexual behavior--63%, and staying in communication with others from a distance--60%.

Other than not being able to live independently (now down from 91% to 80%), there were no weaknesses identified for the group at the three-year mark from graduation.

## **Sixty Months**

There were fourteen areas of strength and one area of weakness. Areas of strength included: solitary activities--90%, working on educational and work skills--89%, communicating needs and wants--88%, good personal hygiene--87%, improved behavior--86%, enjoying reading and writing sufficient to meet goals--83%, showing more independence--83%, communication with adults and peers--78%, having no violent or sexual behavior--71%, making and keeping friends and developing a support system--70%, no police or court involvement--66%, staying in communication with others by mail and electronic means--63%, having realistic goals for the future--63%, and showing good social skills--63%.

The two identified areas of weakness at five years are suspicions of covert behavior--61% and the ability to live independently now down to 72%. Although not being ready to live independently was a weakness in all time periods, the percentage dropped progressively from 95%, 91%, 80% to 72% over time.

## **Differences Based on Age during Treatment**

As was mentioned earlier, the data was collected by age. This was originally done to modify the questions to make them more appropriate for different aged children. To do this we collected data for children eleven and under and twelve and older. Since the first report a pattern was noticed--there was a significant difference on the same question due to the age of the child, and in a direction that does not immediately seem logical. The pattern was observed that children who were under eleven actually did better on specific issues than children twelve and older. It would seem to make more sense to think that older children would show more skills or progress due to developmental improvement, but that is not what the parents have reported over the years. In the majority of issue areas, younger children showed more strength than older children. For example, the following areas reflect better progress for children entering the program at a younger age: level of improved behavior, social skills, not being a victim, drive to meet goals, not being avoided, communication skills, no illegal behavior, realistic goals, reading and writing at grade level.

Stated in another way, younger children out scored older children 79% of the time, and older children outscored younger children only 21% of the time. What might cause this result that would not necessarily be expected? Considering this question over the last ten years has resulted in the theory we believe to be most likely. This age separation actually identifies in an aggregate way children who entered the program at young ages and those that entered the program at the upper age range of the program's target population. For example, if two children came out of the program one year ago and one was under ten and the other above twelve, this would say that the years of treatment for one occurred at a younger age than the other. Looking at the results from this point-of-view, it makes more sense. It has been our observation over the years (and now supported by brain research) that the younger the child receives the treatment they need, the shorter the treatment duration, the more progress they make, and the better the future outcomes. Although our theory cannot be confirmed by this data since this was not causal research, it suggests that younger children progress further in residential treatment when compared to older children. This information has become more important in the intake process when considering children for the program.

## **Conclusions**

The data to date points to developing trends that have been consistent over many years with a strong interview base of 392. The results suggest that children who graduated from the intensive treatment program are for the most part indicating significant gains in a vast majority of the twenty-one indicators measured. The pattern shows children are doing better at every follow up than at graduation. It also reflects that problem areas as a group are very few and this pattern of 11 positive for every negative persists for the full five years. Additionally children who come into the program before age 10 reflect more improvement than children coming into the program 11 and older. Finally data is now reflecting that shorter lengths of stay in intensive treatment are correlated to more deterioration over time on the measures collected.

It is important to point out that this data has limited longitudinal information. Because this data is reported as an aggregate over eleven years, this data does not compare specific individuals over time. To do this a report on longitudinal data is needed. The final disclaimer is that all information is self-report or observer report. Research studies have previously shown the possibility of error in both types of data.

As with the previous follow-up reports, we now have a full decade of data collection that indicates several trends.

*1. Children are demonstrating skills and successes following treatment.*

Considering the population that the agency accepts into residential treatment, this data overall is significantly weighted in the positive direction (by a factor of 11 to 1). Overall this data indicates that the children are functioning much better than they did before treatment in nearly all areas. At the same time, the children do not show any significant negative trends other than weaknesses that would be developmentally expected (not being ready to live independently).

*2. Improvement appears to continue with period of time out of the program.*

Due to the intensive setting of residential treatment where all environmental factors can be controlled, the question is often asked "will the positive improvement in the treatment setting carry over to a family setting." It is not unusual for children from some residential treatment programs to show deterioration in positive outcomes and an increase in negative symptoms the longer the timeframe out of the treatment setting. This data appears to indicate the opposite pattern, not only do treatment gains appear to carry over to less structured settings, but additional gains continue to be made. It must be pointed out that the advantage of working with young children is they tend to develop and mature with age. Therefore gains that a young child makes following treatment cannot be solely attributed to treatment, the gains may be due to maturation or other potential factors. However, severely abused and disturbed children often escalate problem behaviors with age rather than show improvement. It is quite possible that the trends of progressive improvement with time out of the program are in part the result of therapeutic steps to address factors that would have otherwise continued a negative rather than positive spiral as the child grows older.

*3. Negative traits and behaviors maintain at a low rate for years following treatment.*

With a decade of data and 392 interviews, the data indicates that graduates out of the program continue to improve for several years and then, for the most part, maintain this improvement for as long as we track them. Jasper Mountain's formal follow-up of all graduates for five years after graduation is the longest follow-up period by a treatment center we are aware of in the nation.

*4. Follow-up data does not explain the causes of why a child is doing well or poorly.*

Even if most graduates of Jasper Mountain are very successful following treatment, this does not prove that the program works, because factors other than this treatment program may be more influential in explaining this outcome. However, a significant pattern of positive growth is a much preferred finding than the opposite. For a treatment program, it is preferable to share credit for the successes than to share responsibility for the failures.

*5. We continue to follow the emerging trend that children who receive treatment in the program at young ages do significantly better in follow-up data than do children who are in the treatment program at older ages.*

This initially unexpected pattern has been monitored for eleven years with consistent results. The program has made adjustments in intake decisions based on this information. This trend appears to indicate that treatment efforts and funding are best spent on younger populations for our program.

*6. The length of stay in intensive treatment has an impact on improvement following treatment.*

Only recently have system factors intervened to shorten how long children receive intensive treatment with our agency. This has allowed us to track changes after treatment among children whose length of stay in intensive treatment was abbreviated due to financial or system considerations. All interviews prior to the system change in 2005 were compared to all interviews with child graduating after this system change who had significantly shorter lengths of stay in intensive treatment. The results reflect that of 41 measures 12 improved, 3 remained the same and 26 showed deterioration. Of the 12 that improved the average improvement was 1.8%. Of the 26 measures that deteriorated they averaged 4.5%. The only variable that changed in this data was length of stay, which resulted in deterioration in 63% of the measures and the deterioration was 2.5 times as strong as the measures indicating improvement. This suggests that length of stay in intensive treatment was correlated with deterioration in outcomes following treatment.