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Program Evaluation in a Residential Youth Care Facility: The Case of Project PATCH

By Theodore W. McDonald

Well-designed program evaluations can be useful tools for organizations and agencies in both the business and social service sectors; they help organizations make important assessments about the strengths and weaknesses of their programs, areas in which their programs are meeting their goals, and areas in which their programs can be improved (Hoefler, 1994; Pfeiffer & Shott, 1996). Such evaluations have been conducted successfully in a number of residential treatment facilities (Bidgood & Pancer, 2001; Blackman, Eustace, & Chowdhury, 1991; Busch, 2003; Cote, Harris, & Vipond, 1986; Richardson, 1992) and have provided administrators and staff with valuable knowledge on how to improve their programs and services.

Several authors have commented on the methodologies necessary for quality program evaluations of residential treatment facilities. There seems to be some consensus that quality evaluations in the residential care arena feature assessment from intake to after discharge (Blackman et al., 1991; Busch, 2003; Cote et al., 1986; Mecca, Rivera, & Esposito, 2000; Whittaker, Overstreet, Grasso, & Tripodi, 1988) and involve collaboration among outside experts, facility administrators, staff, and youth enrolled in residential care, and their family members (Mecca et al., 2000; Pancer, 1985; Osher, van Kammen, & Zaro, 2001).

This article discusses an evaluation of the residential care program operated by Oregon-based Project PATCH (Planned Assistance for Troubled

Children). This evaluation used the critical methodologies described above, such as longitudinal assessment and collaborative efforts. This article aims to demonstrate how the success of the Project PATCH intervention was measured and to provide a framework for other residential treatment facilities to design and conduct program evaluations of their own.

Background and Methodology

Project PATCH, an organization dedicated to serving youth from troubled families, operates a residential care facility in Garden Valley, Idaho. For several years, the administrators, staff, and the board of directors had wanted to conduct an assessment of their services. In early 2003, the agency's treatment coordinator contacted the psychology department at Boise State University to ask if a faculty member or advanced student would be willing to help conduct such an evaluation.

Throughout the early spring, a team of faculty and students worked together with Project PATCH staff to develop a survey to assess the extent to which the program was meeting its unique goals, which included helping enrolled youth improve the quality of their interactions with family members and peers, reducing emotional distress, and increasing personal competencies. The investigators created a survey instrument with distinct subscales to measure each of these important target areas.

The first survey subscale, Family/Peer Interaction, asked parents to rate

their children for frequency of behaviors that indicate healthy social interaction (for example, willingly following family rules) and unhealthy social interaction (for example, hostility following a disagreement) both before and after the Project PATCH intervention.

The second subscale, Emotional Distress, asked parents to rate the frequency of feelings and behaviors that indicate emotional and behavioral problems (for example, feelings of depression, social isolation) before and after the Project PATCH intervention.

The final subscale, Personal Competency, asked parents to rate the frequency of behaviors that indicate adaptive social functioning (such as willingness to listen to others, showing responsibility, and setting goals) before and after the Project PATCH intervention.

Each question asked parents to rate behaviors on a 7-point Likert-type scale, with response values for behaviors ranging from "very rare" to "very frequent." By measuring the frequency of each behavior before and after Project PATCH participation, researchers were able to probe for statistically significant changes in behavior. The survey was mailed to parents of 138 youth who had previously been enrolled in Project PATCH. Forty-seven parents returned completed surveys.

Results

Average (mean) responses were calculated for each item concerning the frequency of child behaviors before and

after the Project PATCH intervention. Correlated groups' t-tests were used to measure for statistically significant differences in reported frequency of behavior before and after the intervention.

Family/Peer Interaction Subscale

Statistically significant differences in behavior frequency before and after Project PATCH were found for all eight items on the Family/Peer Interaction subscale (see Table 1). In other words, parent ratings of their children's behavior before and after Project PATCH differed markedly. As Table 1 shows, the parents in the sample found their children, after the Project PATCH intervention, to be

- more willing to be involved in family activities,
- more willing to follow family rules;
- less likely to be in conflict with family members,
- less likely to yell at or verbally abuse others,
- less likely to hit others or objects;
- less likely to show anger toward others,
- less likely to show hostility following a disagreement, and
- less likely to be involved in physical fights.

Although all of these changes were statistically significant, several were particularly dramatic. For example, post-

intervention or "after-PATCH" ratings of the frequency of conflict with family members fell 2.43 scale points from before the intervention, after-PATCH ratings of the frequency of showing anger toward others fell 2.28 scale points from before the intervention, and after-PATCH ratings of the frequency of willingly following family rules increased 2.04 scale points from before the intervention.

Emotional Distress Subscale

All four items on the Emotional Distress subscale yielded statistically significant differences in the frequency of feelings and behaviors, suggesting that involvement in Project PATCH led to measurable changes in participants' feelings and behavior. As Table 2 shows, the parents in the sample found their children, after the Project PATCH intervention, to exhibit

- fewer feelings of depression, hopelessness, and despair,
- fewer feelings or worry, anxiousness, or irritability,
- less isolation from social contacts, and
- fewer feelings of lethargy or lack of energy.

Clearly, these are all highly desirable results. The findings regarding the changes in perceived frequency of depression (a reduction of 1.95 scale

points) and anxiety (a reduction of 1.86 scale points) before and after the intervention were particularly encouraging.

Personal Competency Subscale

As Table 3 illustrates, all nine items on the Personal Competency subscale yielded statistically significant differences in the frequency of child behaviors before and after the Project PATCH intervention. The mean ratings given by parents in the sample suggest that after the Project PATCH intervention, children were

- more willing to express their feelings,
- more willing to discuss their problems,
- more willing to listen to others,
- more respectful of the views and opinions of others,
- more trustful of others,
- more respectful of others,
- more willing to work individually on projects such as chores and schoolwork,
- more likely to show responsibility, and
- more able to set and follow personal goals.

Although all of these results are highly desirable, some of the changes seemed particularly noteworthy. For example, parents' mean ratings revealed large changes in the frequency of respecting the views and opinions of others (an increase of 2.33 scale points), showing respect for others (an increase of 2.29 scale points), and showing responsibility (an increase of 2.05 scale points).

Satisfaction with Program Staff and Facilities

Although the goal of Project PATCH staff and administrators is to effect change in the behavior of program participants, they also want to make sure children's parents are satisfied with the quality of the staff and facilities at the youth ranches. To measure parent satisfaction with staff and facilities, two questions on the survey addressed these variables. Both asked parents to use

Table 1: Mean Behavior Frequency Ratings on Family/Peer Interaction Items Before and After Project PATCH

<u>Behavior Rated on Frequency</u>	<u>Before PATCH</u>	<u>After PATCH</u>
Being willingly involved in family activities	2.98* (1.70)	4.44* (2.02)
Willingly following family rules	2.39* (1.17)	4.43* (1.96)
Being in conflict with family members	5.87* (1.04)	3.44* (1.82)
Yelling at or verbally abusing others	4.58* (1.97)	2.80* (1.91)
Striking or hitting others or objects	2.93* (2.12)	1.68* (1.22)
Showing anger toward others	5.30* (1.75)	3.02* (1.84)
Showing hostility following a disagreement	5.21* (1.88)	3.30* (1.97)
Being involved in physical fights	2.50* (1.88)	1.61* (0.99)

Note. Standard deviations (in parentheses) indicate level of agreement in ratings across parents; higher standard deviations indicate less agreement in parent ratings. All ratings were made on 7-point scales where 1 = "very rare" and 7 = "very frequent"; thus, higher numbers reflect greater perceived behavior frequency. Asterisks indicate statistically significant changes in behavior frequency ($p < .05$) before and after the Project PATCH intervention.

Table 2: Mean Behavior Frequency Ratings on Emotional Distress Items Before and After Project PATCH

<u>Behavior Rated on Frequency</u>	<u>Before PATCH</u>	<u>After PATCH</u>
Feelings of depression, hopelessness, or despair	5.65* (1.48)	3.70* (1.83)
Feelings of worry, anxiousness, or irritability	5.56* (1.50)	3.70* (1.73)
Isolating himself or herself from social contacts	3.48* (2.13)	2.55* (1.85)
Feelings of lethargy or lack of energy	4.00* (2.28)	3.33* (2.11)

Note. Standard deviations (in parentheses) indicate level of agreement in ratings across parents; higher standard deviations indicate less agreement in parent ratings. All ratings were made on 7-point scales where 1 = “very rare” and 7 = “very frequent”; thus, higher numbers reflect greater perceived behavior frequency. Asterisks indicate statistically significant changes in behavior frequency ($p < .05$) before and after the Project PATCH intervention.

Table 3: Mean Behavior Frequency Ratings on Personal Competency Items Before and After Project PATCH

<u>Behavior Rated on Frequency</u>	<u>Before PATCH</u>	<u>After PATCH</u>
Willingness to express feelings	3.16* (1.89)	4.69* (1.86)
Willingness to discuss problems	2.49* (1.58)	4.39* (1.74)
Willingness to listen to others	2.76* (1.55)	4.60* (1.64)
Respecting the views and opinions of others	2.38* (1.13)	4.29* (1.51)
Trusting others	3.05* (1.54)	4.29* (1.51)
Showing respect for others	2.42* (1.10)	4.71* (1.54)
Working individually on projects (chores, schoolwork)	2.51* (1.66)	4.24* (1.93)
Showing responsibility	2.38* (1.19)	4.43* (1.95)
Setting and following personal goals	1.91* (.98)	3.86* (2.14)

Note. Standard deviations (in parentheses) indicate level of agreement in ratings across parents; higher standard deviations indicate less agreement in parent ratings. All ratings were made on 7-point scales where 1 = “very rare” and 7 = “very frequent”; thus, higher numbers reflect greater perceived behavior frequency. Asterisks indicate statistically significant changes in behavior frequency ($p < .05$) before and after the Project PATCH intervention.

7-point Likert-type scales to rate their satisfaction from “very dissatisfied” to “very satisfied.” As Table 4 shows, mean satisfaction ratings for both program leaders/staff and Project PATCH facilities were quite high (5.60 and 5.87, respectively, well above 4.00, the midpoint of the scale). These results suggest that the parents in the sample, as a whole, felt positively about the quality of the staff who interacted with their children, and the quality of the facilities at the ranch.

Perceptions of Overall Program Success

The success of Project PATCH was measured in two ways. The first involved measuring change in relevant participant feelings and behaviors before and after the intervention. The second was through two items at the end of the survey that simply asked parents to respond “yes” or “no” to questions about overall program success. The first question asked whether parents felt that, overall, the intervention had helped their children overcome problem behaviors; and the

second asked parents whether they would recommend Project PATCH to other families whose children were experiencing difficulties. The responses to these indicators were quite favorable (see Table 4). Of the parents who completed these items, 2 out of 3 felt the Project PATCH intervention had been successful overall, and nearly 9 out of 10 reported that they would recommend the program to other families (see Table 5).

Conclusions

The program evaluation was created to feature the methodologies considered crucial for residential treatment assessments (for example, longitudinal measurement and collaboration among interested parties), and used precise statistical tests designed to probe for significant program effects on key behavioral criteria. These procedures and methodologies increase the confidence in the validity of the evaluation’s results.

The success of this residential treatment program was immediately clear to the evaluators. Parents of the children enrolled in the program rated their children as better behaved, more emotionally healthy, and more personally and interpersonally competent on every outcome criterion.

These results obviously reflect extremely well on Project PATCH, as well as its facilities and staff. But they also provide important information for Project PATCH administrators about the areas in which the program is most successful, and areas in which the program is somewhat less successful. In short, a program evaluation like the one conducted for Project PATCH can make an already strong residential treatment program even more effective.

Administrators and staff at residential treatment centers everywhere can use many of the same procedures described in this article to conduct

program evaluations of their own. Several of these steps can be followed with some degree of ease, and doing so can ensure the program evaluation will not only be successfully conducted but will also yield important information.

The first important step involves contacting an outside evaluator with the expertise and ability to conduct an evaluation and the reputation to lend credibility to the results. Many residential treatment facilities are located near a college or university, and faculty and advanced students at these institutions are often willing to conduct such evaluations at no charge.

The second step requires discussions among the evaluators, program administrators and staff, and clients of the program to determine the program's key goals, and how they can best be measured.

The third step requires a survey instrument or other assessment tool that enables the evaluators to measure differences between feelings and behaviors at intake and after discharge.

The fourth step involves contemporary statistical methods and cogent report writing to provide the administrators and staff of a program with results they can use.

These procedures should ensure that a residential treatment facility or program can be effectively evaluated so relevant program staff can build on program strengths and address organizational shortcomings.

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Table 4: Parent Satisfaction with Project PATCH Staff and Facilities

Item	Satisfaction Rating (M)
How satisfied were you with the Project PATCH program leaders/staff?	5.60 (1.67)
How satisfied were you overall with the Project PATCH facilities?	5.87 (1.58)

Note. Standard deviations (in parentheses) indicate level of agreement in ratings across parents; higher standard deviations indicate less agreement in parent ratings. Both satisfaction ratings were made on 7-point scales where 1 = “very dissatisfied” and 7 = “very satisfied”; thus, higher numbers reflect greater satisfaction.

Table 5: Perceptions of Overall Program Success of the Project PATCH Intervention

Item	Yes	No
Overall, do you feel that Project PATCH has been successful in helping your child overcome problem behaviors?	66.7%	33.3%
Would you recommend Project PATCH to other families with children who are experiencing difficulties?	88.4%	11.6%

Note. Five parents (10.6% of the sample) did not respond to the item asking about overall program success; four parents (8.5% of the sample) did not respond to the item asking about program recommendations.

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Theodore McDonald is Assistant Professor, Department of Psychology, Boise State University.