Parenting With Love and Limits® (PLL) Research Evaluation

2010-11 Outcomes

September 2011

A Research Report Submitted to:

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Program Accountability

Parenting with Love and Limits® (PLL) is committed to the continuous performance monitoring of service delivery to the Idaho Department of Health and Welfare. To this end, Parenting with Love and Limits is providing this annual evaluation of program outputs and outcomes.

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Executive Summary

The following report presents an evaluation of the third year of the Parenting with Love and Limits® (PLL) program implementation delivered through the Idaho Department of Health and Welfare (DHW), Children's Mental Health (CMH) Division in Regions 1-7.

In its third year of services in Idaho, PLL served 154 new youths and families. Key findings include:

Family engagement: PLL substantially expanded the engagement of parents/caregivers in their youths' treatment. Over 90% of the youths and families who started PLL completed the program.

Length of Stay: In comparison to other CMH and Psychosocial Rehabilitation (PSR) services that typically last 12 months and 24 months on average respectively, clients served through PLL programming completed treatment in 63 days on average.

Cost of Care: PLL services are substantially less than other CMH and PSR interventions. A comparison of the costs of care for the 154 clients served by PLL reveals a cost savings of $261,000 compared to other CMH services and $470,000 compared to PSR programming.

Expansion of CMH Services: PLL continued to broaden the service delivery of CMH by serving a court-involved population of youths. Similar to year two, two-thirds of the PLL youth were involved in the court system.

Emotional/Behavioral Problems: PLL significantly reduced severe emotional and behavioral problems among youth served as measured by the Child Behavior Checklist (CBCL).

Introduction

Parenting with Love and Limits® (PLL) is an evidence-based treatment model[1] for adolescents, aged 10-17, with extreme emotional and behavioral problems. PLL is the first program of its kind to combine parenting management group therapy, family therapy, and wound work into one system of care to quickly engage resistant parents and their teenagers.

Beginning in June 2008, the PLL program commenced services through the Department of Health and Welfare (DHW) Children's Mental Health (CMH) Division in Regions 1-7. The current evaluation examines services provided between June 13, 2010 and June 12, 2011.

PLL was funded to address the following gaps in service delivery:

- Limited to No Parent or Family Involvement: Most programming focused on serving only the individual child, with little focus on serving the family;
- Lengthy Treatment Periods: The average length of stay for a youth in CMH is 12 months, while Psychosocial Rehabilitation (PSR) averages 24 months in duration; in contrast, PLL is a brief treatment model with an average length of stay of two to three months;
- High Costs of Care: The average cost per child for CMH is approximately $3,578, and $4,940 for PSR services; in contrast, the PLL cost of care is $1,883 per youth; and
- Program Accountability: In the 2008 WICHE Report[2], Idaho Senator Joe Stegner noted, "One of the biggest gaps involves oversight of local providers. We have a multitude of providers delivering services with varying degrees of competence and effectiveness." PLL is committed to program accountability through annual evaluations of services.

Parenting With Love and Limits Model

The Idaho Department of Health and Welfare, through the Children's Mental Health Division, oversees the delivery of a community-based System of Care for children with severe emotional

[1] PLL has been recognized as an evidence-based model by the following research organizations: SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP), the Office of Juvenile Justice and Delinquency Prevention- Exemplary Rating, the Center for Substance Abuse Prevention, the Promising Practices Network, and the Florida Department of Juvenile Justice.

[2] Western Interstate Commission for Higher Education (WICHE) (2008). *Idaho Behavioral Health System Redesign: Findings and Recommendations for the Idaho State* Legislature. Boulder, CO: WICHE.

disturbance (SED) and their families. To address the needs of this population, the PLL model provides intensive services through the following delivery system:

Week	PLL Group	PLL Individual Coaching
Week 1	Group 1: Venting	No coaching first week
Week 2	Group 2: Button Pushing + ⇨	Coaching #1 – Deciding on the Problem to Fix Fast
Week 3	Group 3: Contracting + ⇨	Coaching #2 – Writing a Loophole Free Contract
Week 4	Group 4: Putting the Contract Together as a Group + ⇨	Coaching #3 – Present Typed Contract to Teenager with Role Plays to Practice
Week 5	Group 5: Creative Consequences + ⇨	Coaching #4 – Relapse Prevention: Assess whether contract worked or tweak contract so it will work better
Week 6	Group 6: How to Start Liking Each Other Again - Restore Closeness + ⇨	Coaching #5 – Wound Work: Produce a Wound Playbook and Role Play
Week 7	No Group	Coaching #6 – Relapse Prevention: Determine if Wounds Healed

As illustrated in the grid above, the core skills are provided in group treatment sessions. Family therapy "coaching" then shows the parent and child how to use their newly acquired skills through the use of extensive role plays.

Youth are deemed to have graduated from PLL programming when:

- They have successfully attended at least 5 of 6 group therapy sessions,
- Attended a minimum of 4 family therapy coaching sessions for low risk youth or 6 sessions for SED or high risk youth, and
- They meet the graduation criteria of:
    - In home – no reports of curfew violations or running away;

- In school – no further reports of truancy or failing grades;
- Out of trouble – no further reports of law violations or problems in the home; and
- Mental Health issues have stabilized (other than the medication management of problem symptoms such as clinical depression, anxiety disorders, Attention Deficit Disorders, etc.).

Graduating families receive callbacks every 30 days for a period of 3 months thereafter by the PLL therapist to collaboratively determine if there have been any relapses and if additional "tune-up" PLL family therapy sessions are needed to maintain changes.

Research Questions

Prior to the commencement of services in 2008, DHW met with PLL developer, Dr. Scott Sells, to formulate the five central research questions that would inform program evaluation:

Question 1: Will PLL significantly improve parental engagement and total family involvement with participation rates of 70% or greater?

Question 2: Will PLL lower overall lengths of stay compared to the current average of 12 months for CMH services and 24 months for Psychosocial Rehabilitation (PSR)?

Question 3: Does PLL significantly lower the costs of care per child as compared with other services in CMH and PSR?

Question 4: Will PLL help improve services with CMH from a traditional SED (severely emotionally disturbed) population into the areas of probation and diversion youth referred within the juvenile justice system?

Question 5: Will PLL show statistically significant changes in children's severe emotional and behavioral problems (Aggression, Hyperactivity, Bullying, Conduct Problems, Anxiety/Depression, Defiance, and Violence) as measured by the Child Behavior Checklist (CBCL)?

Evaluation Outcomes

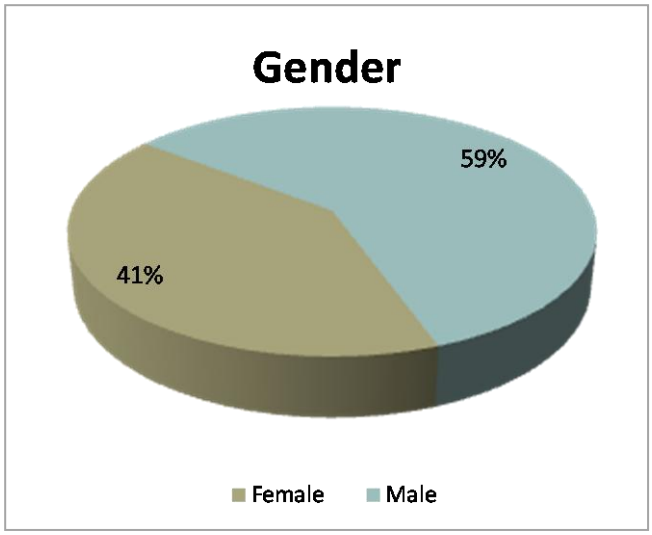
The current evaluation examines 2010-11 PLL program outputs and outcomes relative to each of the five research questions. In addition, trends are assessed by comparing second year results to the third year outcomes. Calculations are presented only for youth and families who had concluded services during the 2010-11 evaluation period.[3] Clients still receiving PLL services beyond this period are not presented in the results. Additionally, while siblings of the primary client are involved in PLL service delivery, they are not included in the numbers reported here.

[3] The evaluation period runs from June 13, 2010 to June 12, 2011.

Characteristics of Youth Served

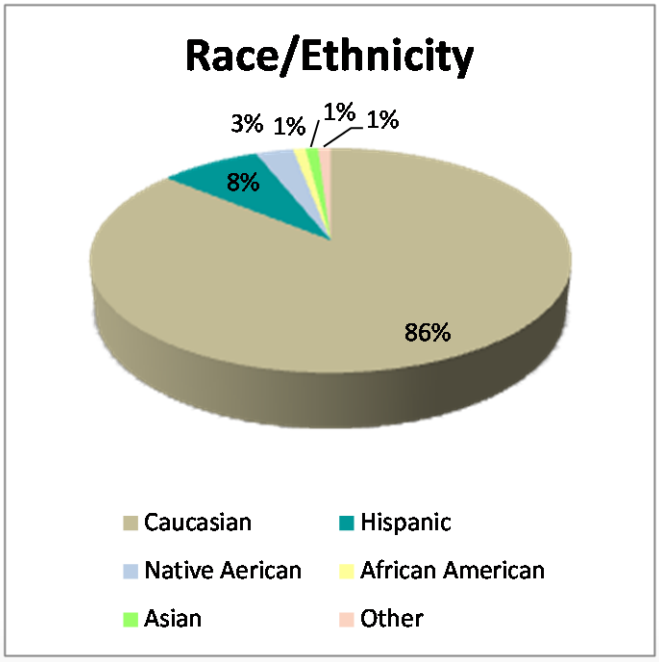
During the third year of PLL programming, 135 youths and their families concluded services. The majority of youths were male (59%), Caucasian (86%) and between the ages of 13 to 16 years of age (71%). (See Figures 1 through 3 below)

Figure 1. Gender of PLL Youth Served



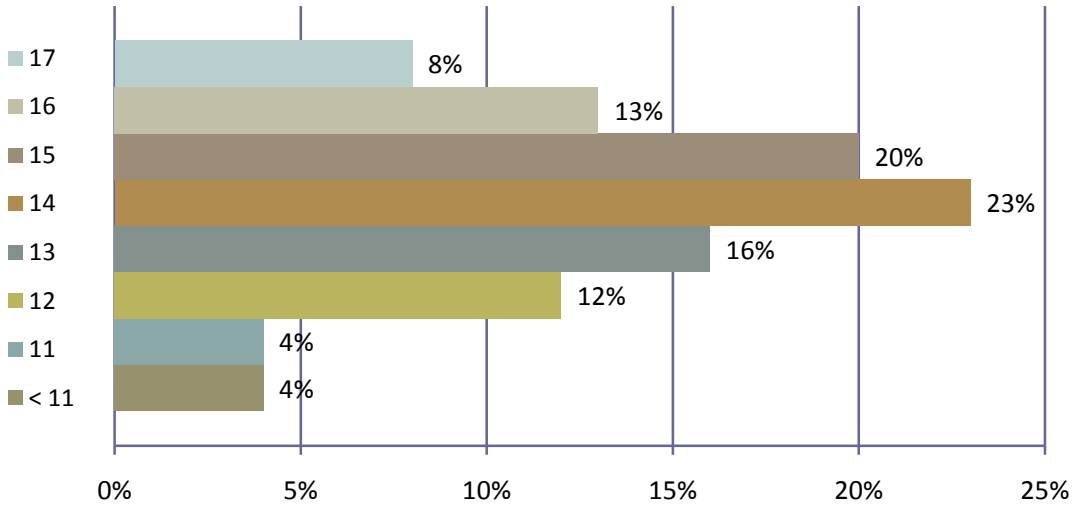
A total of 79 male youths (59%) and 56 female youths (41%) were admitted to the PLL program in 2010-11. This compares to the second year of PLL programming in which 63% (n=120) of the youth served were male and 37% (n=72) were female.

Figure 2. Race/Ethnicity of PLL Youth Served



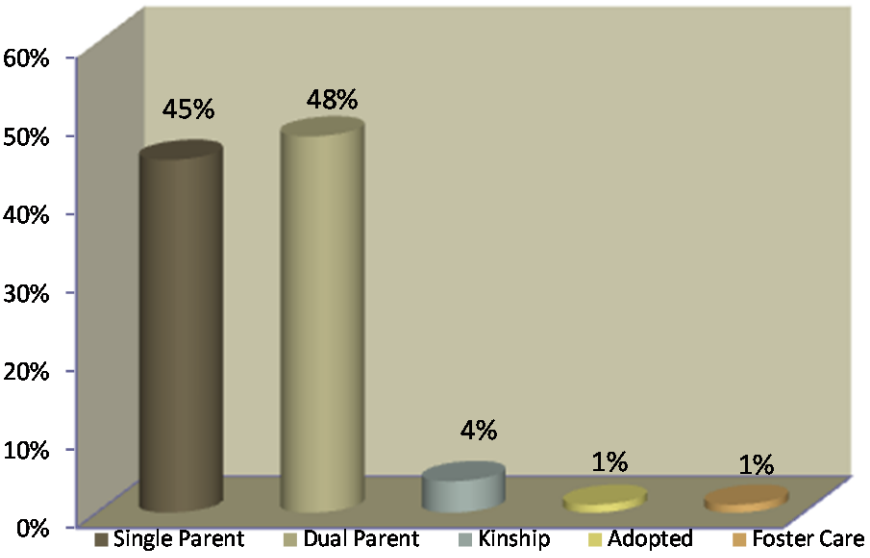
Of the 135 youths served by PLL in 2010-11, 116 (85%) were Caucasian. Eleven youths (8%) were of Hispanic descent, four youths (3%) were Native American, one youth (1%) was African American and one (1%) was of Asian dissent. Two youths (2%) did not fall within any of the 5 categories. Similar figures were found for the first two years of PLL services, with the majority of youth served being Caucasian. In Year One, 82% were Caucasian and in Year Two, 83% were Caucasian.

Figure 3. Age Distribution of Youth Admitted to PLL



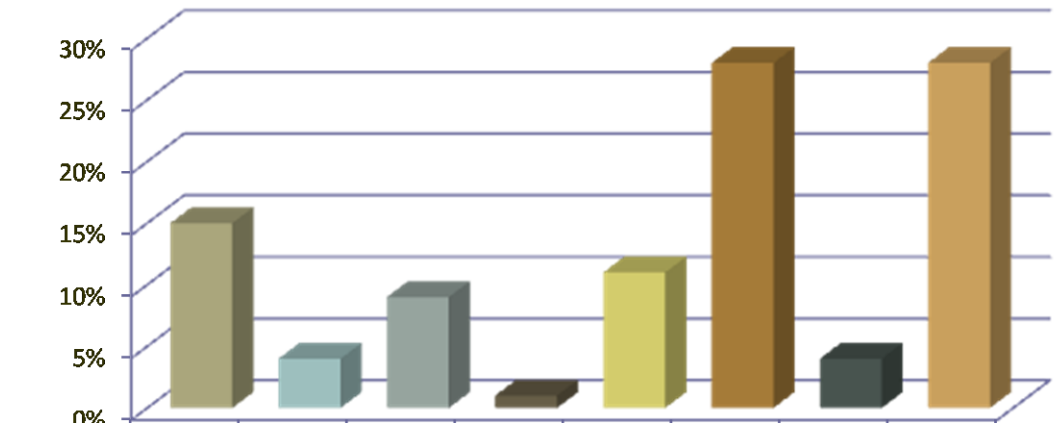
The family-centered PLL treatment model works with a variety of caregiver units. Slightly less than half of the youth (45%) participated with a single parent in the treatment process; while almost half had two parents participate in PLL programming. Roughly similar proportions participated with their adoptive (1%), foster (1%), or kinship (4%) caregivers.

Figure 4. Family Structure of PLL Youth Served



PLL youth may be further classified in terms of their underlying delinquency histories. As shown in Figure 5, many had been charged with a violent offense or a threat of violence (15%), while others had a mischief (11%) or drug (9%) charge. Small percentages of the youth receiving PLL services in 2010-11 had been referred for a sex offense (1%), or were involved with property offending (4%). Given that the primary condition of many of the PLL youth was severe emotional disturbance, it is not surprising to find that 28% had no charges or had been referred for a school offense (4%).

Figure 5. Delinquency Profile of PLL Youths

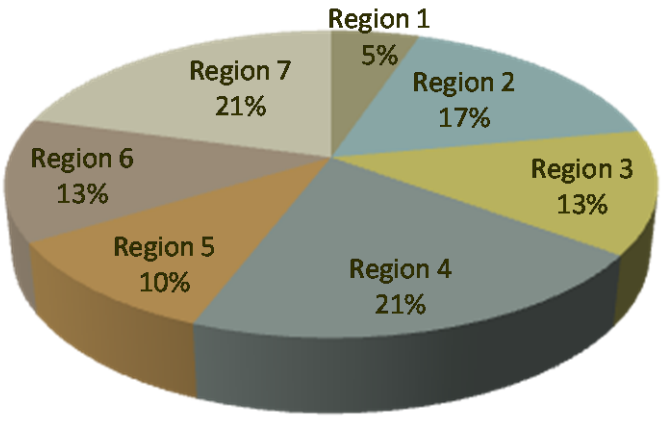


	Violent Offense	Property Offense	Drug Offense	Sex Offense	Criminal Mischief	Other Offense	School Offense	No Charges
Percentage	15%	4%	9%	1%	11%	28%	4%	28%

* Other offenses include Runaways, out of control child, disturbing the peace, child protection, etc.

As noted previously, PLL interventions are being provided in Regions 1-7 in Idaho. Among the youth admitted to PLL in the last year, Region 4 and Region 7 had the greatest number of admissions, with 32 new families served respectively. Regions 2 admitted 26 youths to PLL in 2010-11. With slightly fewer admissions, Region 3 and Region 6 both served 20 youths, while Region 5 admitted 16 youths.

Figure 6. PLL Admissions by Region



Region 1 served 8 new families but it is noted that the clinician in Region 1 was on maternity leave for a portion of the year along with transitioning into the new role of functioning as CMH's internal PLL clinical supervisor and fidelity monitor.

Family Engagement

One of the primary goals of PLL is the effective engagement of parents/caregivers in their child's treatment. Historically, interventions for at-risk and delinquent youths have been youth-centered, with little emphasis on the necessity of parental engagement and total family involvement. From the onset of PLL services, PLL therapists employ motivational interviewing techniques to engage families in the therapeutic process. Youth and families participate in individual and group coaching sessions over the course of six to eight weeks.

As depicted in Table 1 below, during the third year of PLL programming in Idaho, a total of 135 youth and their families concluded services. This is a 30% decrease in the number of new families served from the previous year. This decrease is attributed to staff attrition in two regions (Region 4 & 5) along with the internal role changes in Region 1. Of the youth/families entering PLL, 92% (n=124) graduated from the program, representing a 23 percent increase from 2009-10, and a 32% reduction in the annual attrition rate.

Table 1. PLL Admissions, Graduates and Graduation/Attrition Rates, 2009-10 and 2010-11

Admission/Graduation	2009-10 Total	2010-11 Total	Percentage Change
Number of Admissions	192	135	30% decrease
Number of Graduates	144	124	14% decrease
Graduation Rate	75%	92%	23% increase
Attrition Rate	25%	8%	32% decrease

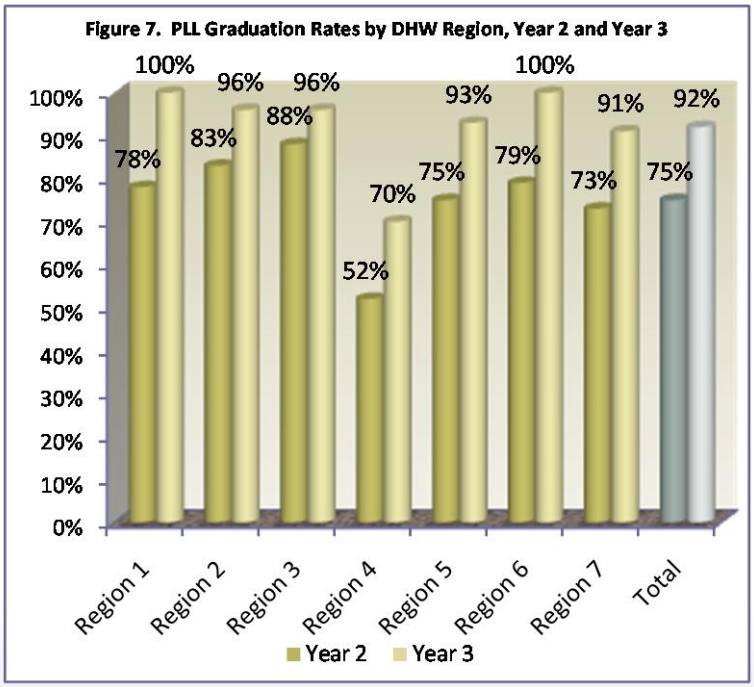
Research Question 1 ✓

Rates of family engagement achieved by Parenting with Love and Limits represent a significant improvement over traditional Children's Mental Health Interventions.

Like the first two years of the PLL program, graduation rates for year three exceeded the original benchmark goal of 70% parent and youth participation. The overall 92% graduation rate and reduction in the attrition rate over last year's outcomes demonstrates that the PLL program successfully engaged families in their child's treatment interventions. Graduation rates varied across the seven regions implementing PLL services. Regions 1 and 6 had the highest rate with 100% of the youths and families starting services successfully completing the PLL graduation requirements. In contrast, Region 4 had a 70% graduation rate. Overall, six of the seven regions surpassed the benchmark goal of 70% youth/family engagement and successful participation (see Table 2 below), and for the first time, all seven regions met the benchmark goal of 70%. As such, PLL outcomes reflect a significant improvement in the engagement of families in their child's treatment process.

Table 2. PLL Admissions, Graduates and Graduation/Attrition Rates by DHW Region, 2010-11

PLL Program	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Total
Number of Families Served	9	26	22	20	15	20	23	135
Number of Graduates	9	25	21	14	14	20	21	124
Graduation Rate	100%	96%	96%	70%	93%	100%	91%	92%
Attrition Rate	0%	4%	4%	30%	7%	0%	9%	8%



An examination of graduation trends by region illustrates that in all seven regions the PLL graduation rate increased between Year 2 and Year 3 (see Figure 7).

Region 1 and Region 6 demonstrated the greatest increase over the two-year period, with 22 and 21 percentage point increase in 2010-11.

Length of Stay and Case Closure

According to DHW, the average length of stay for CMH services is 12 months, while the average for Psychosocial Rehabilitation (PSR) cases is 24 months. In contrast, the average length of stay for youth and families completing PLL services in 2010-11 was 63 days.

In addition to longer lengths of stay, CMH agencies across all seven regions have historically had a difficult time closing cases. In turn, this can lead to long waiting lists and inefficiencies in service delivery. If the average caseload per CMH therapist is 20 to 30 clients at a given time, and the average length of stay is 12 months, there are far fewer openings for new referrals than that available through PLL treatment, which combines reduced lengths of stay with an emphasis on successful case closure rates.

As illustrated in Table 3 below, 81% of all the CMH cases opened

Table 3. PLL Graduates & CMH Case Closure Rates by Region, 2010-11

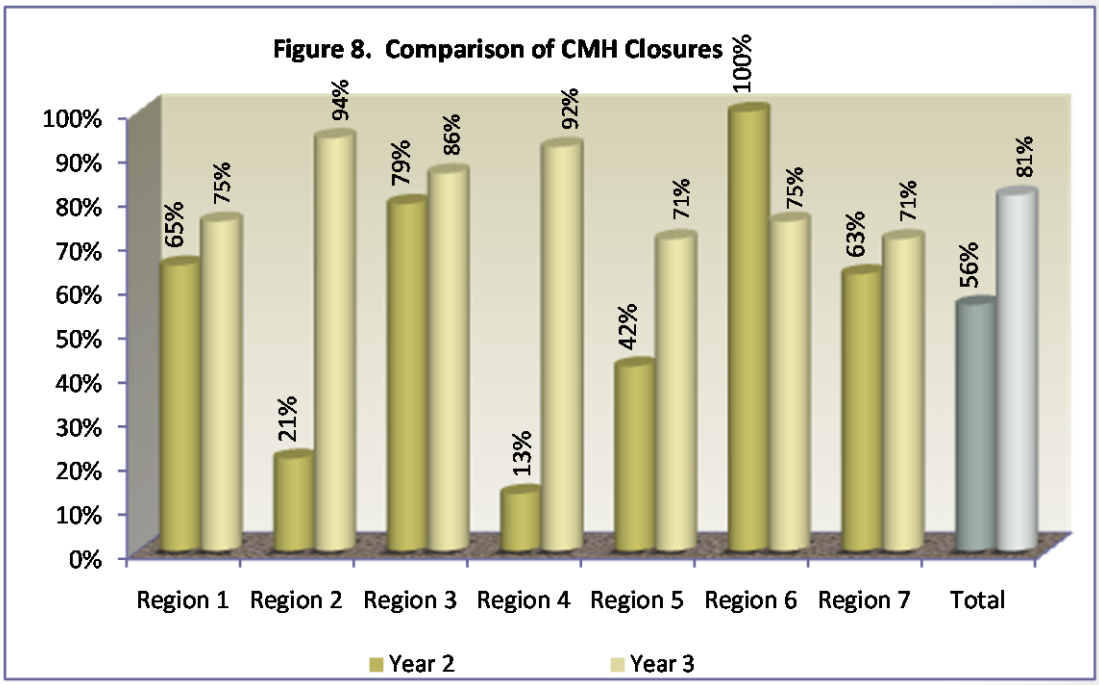
Region	Total Graduates	Case Closure of PLL Graduates (Percent)			
		CMH Case Closed	CMH Case Closed with Medication Management	CMH Case Open	Non-CMH Case[4]
Region 1	9	75%	0%	25%	5
Region 2	25	50%	44%	6%	7
Region 3	21	67%	19%	14%	0
Region 4	14	92%	0%	8%	1
Region 5	14	71%	0%	29%	0
Region 6	20	70%	5%	25%	0
Region 7	21	71%	0%	29%	0
Total	124	69%	12%	19%	13

[4] Non-CMH cases are probation-only cases from the Total Graduates.

Research Question 2 ✓

Parenting with Love and Limits lengths of stay were considerably lower than the standard non-PLL, Children's Mental Health case and the standard Psychosocial Rehabilitation case.

using PLL were closed or closed with medication management only at graduation within a 2 month period. In contrast, non-PLL cases remained open for 12 months or longer on average. Closure rates varied among the 7 regions. In all 7 regions, the rate of case closure exceeded 70%. Region 2 had the highest closure rate (94%), with only one of the 17 open CMH cases remaining open upon PLL graduation. The closure rates in Regions 3 (86%) and 4 (92%) averaged 89%, while regions 5 & 6 had closure rates of 75% respectively and regions 1 and 5 had rates of 71% each.



Closure rates increased in six of the seven regions between the second and third year of PLL programming in CMH.

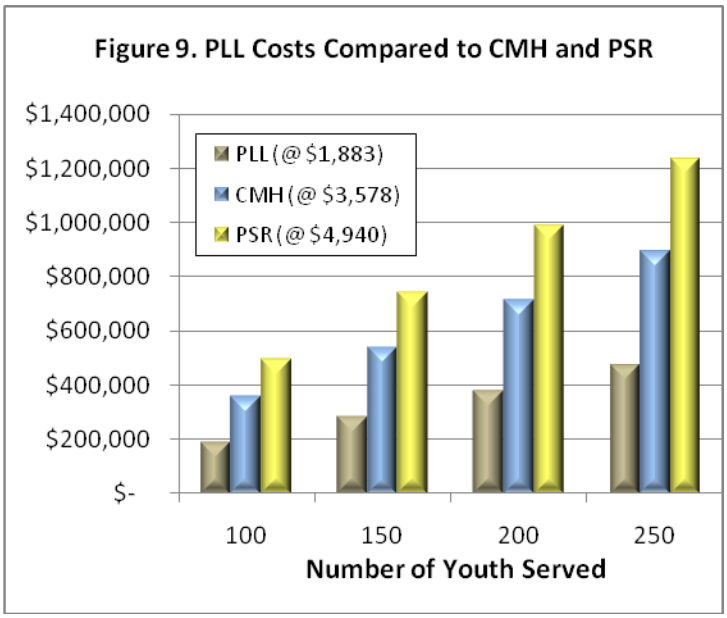
The ability to treat youth and their families more effectively, while at the same time more efficiently (moving from a 12-month average length of stay to 2 months) is a significant paradigm shift for the mental health system in Idaho. This approach using Parenting with Love and Limits for CMH cases has long range implications in (a) lowering waiting list times, (b) reducing costs, (c) increasing capacity, and (d) increasing efficiency in service delivery.

PLL Cost of Care

Statewide average annual costs per child comparisons are as follows:

- ✓ Parenting with Love and Limits: $1,883
- ✓ Children's Mental Health (CMH): $3,578
- ✓ Psychosocial Rehabilitation (PSR): $4,940

Over the past year, PLL served 154 CMH families across Regions 1-7. In turn, the cost savings were significant to the state of Idaho by reducing the length of stay from an average of 12 months to 2 or 3 months.



Research Question 3 ✓

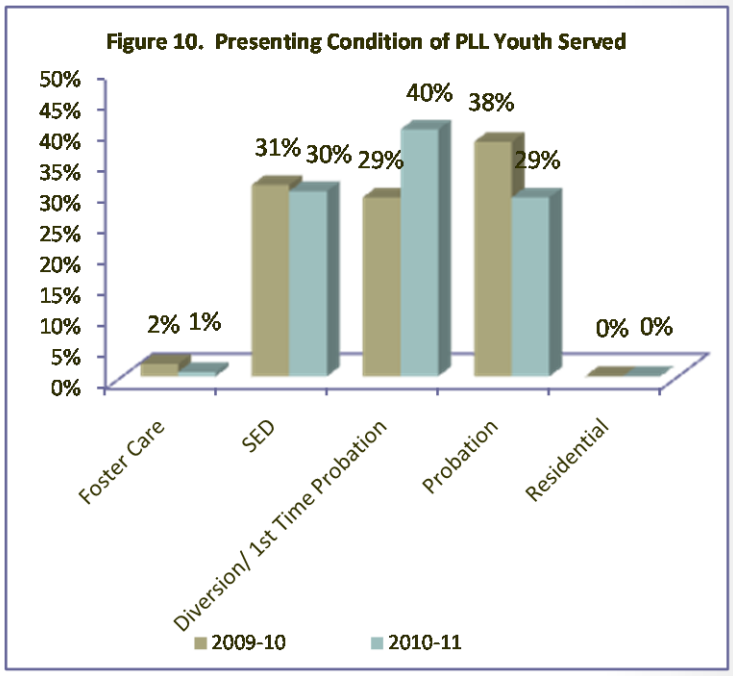
The cost of care for Parenting with Love and Limits is substantially lower than other services in Children's Mental Health and Psychosocial Rehabilitation.

Research Question 4 ✓

Parenting with Love and Limits expanded Children's Mental Health services from a traditional Severely Emotionally Disturbed population to serving probation and diversion youth referred within the juvenile justice system.

Expansion of CMH Services

During the third year, PLL continued to partner with CMH to provide services to diversion, first-time probation, and probation youth. While the majority of youth served by PLL during 2010-11 were characterized by severe emotional disturbance, this was not always the only presenting condition or classification. As depicted in Figure 9, most of the children served (29%) were court-involved youths placed on probation. Slightly less than one-third of the PLL youths presented with only the condition of SED (note that while youth in the other categories may also be classified as SED, the youth represented in the 30% SED category are not represented among the other categories). While none of the youth had been committed to residential care, one youth was in foster care at the time of treatment. An additional 40% of the youth were placed on diversion or were first-time probationers. Thus, slightly more than two-thirds of the population receiving PLL therapeutic care was court-involved youths.



The implications of this expansion of services reflect a larger system impact and increased collaboration between mental health and juvenile justice in Idaho. Historically, these two systems have not

always worked well together. PLL, however, is acting as a catalyst for change in all of the regions.

Table 4. Presenting Condition of PLL Youth Served, 2010-11

Region	Presenting Condition of PLL Youth Served, 2010-11					Total Number of Youth
	Foster Care	SED	Diversion/ 1st Time Probation	Probation	Residential	
Region 1	0%	0%	22%	78%	0%	9
Region 2	0%	42%	8%	50%	0%	26
Region 3	5%	27%	63%	5%	0%	22
Region 4	0%	75%	0%	25%	0%	20
Region 5	0%	7%	93%	0%	0%	15
Region 6	0%	5%	95%	0%	0%	20
Region 7	0%	30%	13%	57%	0%	23
All Regions	1%	30%	40%	29%	0%	135
Total Youth	1	41	54	39	0	135

The presenting condition of youth served in 2010-11 is comparable to that found in the first two years of PLL programming. In year one, 53% were probation youth in Region 1. In year two, this figure increased to 75% and to 78% in Year three. Similar patterns were found in Regions 2 and 7 with a steady increase of probation youth. Correspondingly, the percentage of SED youth served in these three regions combined decreased by an average of 13 percentage points from year one to year three. Conversely, in Region 3 and Region 4, the proportion of SED youth increased between year two and year three of PLL program implementation. Region 5 remained steady in its division of youth served with a slight increase in both SED and Diversion/1st Time Probation Youth. Region 6 also decreased slightly in the number of SED youth while increasing sharply in the number of Diversion/1st Time Probation Youth between year two and year three, from 21% to 95%.

Research Question 5 ✓

Youth receiving Parenting with Love and Limits services exhibited significant decreases in severe emotional and behavioral problems (Aggression, Hyperactivity, Bullying, Conduct Problems, Anxiety/Depression, Defiance, and Violence) as measured by the Child Behavior Checklist (CBCL).

Emotional and Behavioral Problem Outcomes

A primary goal of the Parenting with Love and Limits model is to reduce emotional and behavioral problems among the youth served. To assess this goal over the course of PLL programming, the Child Behavioral Checklist[5] (CBCL) was administered to youths' parents/caregivers prior to the start of services and again at the conclusion of PLL treatment. The CBCL provides measures on scales including:

- Aggressive Behaviors
- Rule Breaking
- Conduct Disorder
- Oppositional Defiant Behavior
- Externalizing Behavior
- Internalizing Behavior

Data from each of the seven regions were combined into a single dataset to analyze change in youths' emotional and behavioral problems. A total of 100 clients had completed pre- and post-test CBCL assessments. The breakdown of assessments examined by region is presented below:

- Region 1 – 18 records
- Region 2 – 44 records
- Region 3 – 34 records
- Region 4 – 18 records
- Region 5 – 10 records
- Region 6 – 36 records
- Region 7 – 40 records

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[5] Achenback, T.M. (1991) Integrative Guide to the 1991 CBCL/14-18, YSR, and TRF Profiles. Burlington, VT: University of Vermont, Department of Psychology

The mean difference in pre- and post-test CBCL scores were calculated for each of the six scales noted above. Paired t-tests were then computed to determine whether the change in test scores was statistically significant at the 0.001 level.

As the table below illustrates, outcomes improved between pre- and post-test administration on all of the CBCL scales. On average, PLL families reported fewer problems with their adolescents' rule breaking, aggressive behaviors, internalizing behaviors, externalizing behaviors, oppositional defiant behaviors, and conduct disorders following PLL interventions.

PLL programming achieved the greatest change in the Oppositional Defiant Scale. The mean score on this scale decreased by 8.83 over the course of PLL treatment, representing a statistically significant change (t[99]=6.87). Families likewise reported a decline in Conduct Disorder behaviors, as assessed by the CBCL. The average change on this scale among youth completing PLL was a decrease of 6.19 (t[99]=6.81; p<.001).

The mean score for the Externalizing Behavior Scale was significantly reduced between the pre- and post-test CBCL. The scale is comprised of items from the Delinquent Behavior and Aggressive Behavior sub-scales. Correspondingly, youths' assessed aggression, as measured by the Aggressive Behaviors Scale, decreased by 3.43 (t[99]=6.37). Parents reported fewer problems with Rule Breaking behaviors following PLL treatment, with a mean change of 5.40 (t[99]=6.48). The Internalizing Behavior Scale is comprised of items from the Withdrawn, Somatic Complaints and Anxious/Depressed scales. Overall, PLL clients exhibited statistically significant improvement in Internalizing Behaviors following program treatment (t[99]=7.24). Total CBCL scores improved significantly as well, with an average reduction in emotional and behavioral problems of 23.45 points (t[99]=7.64).

Table 5. Child Behavior Checklist Pre- and Post-Test Outcomes for PLL Youths, 2010-11

	CBCL Outcomes				
Scale	Pre-Test Mean	Post-Test Mean	Mean Change	t-score	Significance
Aggressive Behaviors	11.76	8.33	-3.43	6.37	0.000
Rule Breaking	18.77	13.37	-5.40	6.48	0.000
Conduct Disorder	18.51	12.32	-6.19	6.81	0.000
Oppositional Defiant	30.53	21.70	-8.83	6.87	0.000
Externalizing Behaviors	7.07	5.29	-1.78	7.07	0.000
Internalizing Behaviors	13.31	9.04	-4.27	7.24	0.000
Total Score	79.53	56.08	-23.45	7.64	0.000

Conclusion

Parenting with Love and Limits (PLL) represents a major shift in programmatic services offered through the Idaho Department of Health and Welfare, Children's Mental Health Division. Addressing a gap in services for youth presenting with emotional, behavioral, and delinquency problems, PLL engages the entire family in the treatment process. Siblings and parents/adult caregivers are brought into therapeutic group counseling that benefits all involved and facilitates client improvement. PLL services have achieved positive results in 2010-2011, with 135 families served and 92% completing the program successfully. This represents a significant outcome.

PLL is additionally able to serve more clients in a given year than other CMH or Psychosocial Rehabilitation (PSR) services in Idaho. This is possible because PLL services required only 63 days on average to complete the program. In comparison, an average caseload consists of 20-30 clients for CMH and PSR services, with average lengths of stay of 12 and 24 months, respectively.

Increased collaboration between mental health and juvenile justice in Idaho has been facilitated through the implementation of PLL programming for CMH clients. In its first year of operation, 54% of the youth served by PLL were court-involved (diversion or probation). By the conclusion of the third year of the PLL program, slightly more than two-thirds of the clients were involved in the juvenile court system. This represents a substantial expansion in CMH service delivery.

Whether PLL services ultimately reduce emotional and behavioral problems among clients is the key indicator of treatment effectiveness. This can be measured through internal assessments of client change and through post-program recidivism outcomes. Evaluation efforts are currently underway to examine the extent to which PLL youth subsequently recidivate. Internal client change was measured for the current evaluation using the Child Behavior Checklist (CBCL). A comparison of youths' pre- and post-test scores revealed significant decreases in each of the CBCL scales: Aggressive Behaviors, Rule Breaking, Conduct Disorder, Oppositional Defiant Behavior, Externalizing Behavior, and Internalizing Behavior. These results show that PLL has effectively reduced emotional and behavioral problems among clients served.

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[6] Child Behavior Checklist Outcomes Analysis was conducted by the Justice Research Center in Tallahassee, Florida

In sum, Parenting with Love and Limits exhibited positive results in its third year of implementation through CMH in Idaho. PLL program achievements included:

- ✓ Increased family engagement
- ✓ Reduced lengths of stay
- ✓ Reduced costs of care
- ✓ Expanded CMH services
- ✓ Reduced emotional and behavioral problems