## **EVALUATION RESEARCH PROJECT**

ON

### **NEW LEASH ON LIFE PROGRAM**

**CBR YouthConnect / Colorado Boys Ranch** 

# FINAL REPORT

# **Submitted by**

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### **Executive Summary**

In 1997, Colorado Boys Ranch (CBR) initiated and participated in efforts to secure an independent research entity, a research design and multi-year funding to measure what was perceived as therapeutic benefits of animal assisted' therapy and applied learning.

In this study, the therapeutic impact of the human-animal bond with mentally ill male adolescent youth in a fully accredited national psychiatric residential treatment and educational center was evaluated. The "New-Leash-on-Life" dog program (NLOL) at Colorado Boys Ranch (CBR) rescues and rehabilitates dogs otherwise destined for euthanasia by pairing these dogs with resident youth who care for them and train them in obedience preparatory to the dogs being adopted by welcoming families.

CBR youth present a full range of adolescent and pre-adolescent mental health diagnoses and needs. This includes youth with multiple Axis I diagnoses and histories of multiple treatment interventions and placements. On average, CBR serves 120 youth annually representing a full spectrum of cultural and socio-economic profiles from across the United States. The youth typically have had multiple contacts with child welfare, mental health, special education and juvenile justice systems. Most of the youth have experienced repeated failures (between six and eight) in other facilities and programs, prior to being placed at CBR.

The NLOL program is part of the extensive array of CBR treatment services and applied learning options available on an individualized basis. As such, NLOL is incorporated into an integrated treatment and educational system involving youth, parents and referring professionals with a multidisciplinary CBR team. The youth provide ten weeks' of care' with the dogs after which the dogs are adopted out. The dogs reside on the CBR campus in a specially designed kennel funded by the Animal Assistance Foundation. Participating dogs are provided a health screening by veterinarians and receive updated vaccinations prior to admission into NLOL. The dogs receive medical care, customized nutrition, regular companionship, training, playful interaction, and exercise. CBR administration and staff strongly support the program for its perceived impact on the therapeutic growth of resident youth and its ability to save and train dogs. Since the beginning of the program in September 1995, 168 dogs have completed their training and have been successfully adopted out. There is a waiting list for the program's newly "educated dogs" that are "matched" with adoptive families. The adolescent trainers assist with - and participate in - an adoption ceremony that marks the completion of each dog's period of training. Special note: Animal Planet television features the NLOL program in its series - "Adoption Tales."

The study used an experimental design with random assignment to study and control groups and multiple pre-post measures. Two interlinked statistically significant outcomes of note emerged from the analysis of data collected. These outcomes included: increased levels of dog/boy bonding in the study group and an increase in the positive social performance of NLOL boys compared to boys in the control group. The latter finding represents an important and critical gain for the educational and social development of these troubled youth. The difference between the social performance ratings at the beginning and end of the project - as judged by staff, teachers and therapists - of boys in the NLOL program and boys in the control group suggests a positive improvement in pro-social behaviors (and skills) in peer and adult

interactions by boys in the NLOL program. .

Other quantitative data analysis and statistical tests on the remaining variables of interest (i.e., levels of empathy and degree of self-disclosure) did not show statistically significant differences between the study and control groups. This may in part be due to the small number of participants in the study, and that the Balanced Emotional Empathy Scale (BEES) is a more appropriate instrument for larger numbers and older subjects.

The results of the study support the use of NLOL as a positive educational and therapeutic intervention for a critical behavioral feature and skill deficit for boys referred to CBR. While the results of this research cannot be generalized to other populations and other residential treatment facilities, it is noteworthy that the behavioral features and skill deficits that were positively impacted by the NLOL program at CBR are behaviors and deficits viewed by many as generic to youth referred to residential treatment facilities.

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There is need for continued research in validating the NLOL program in other settings and with similar populations, as well as developing and refining instruments to effectively measure the therapeutic impact on troubled youth of training dogs and, by extension, of human-animal interactions. Additionally, the enduring impact of the NLOL program should be investigated by designing a longitudinal study to address the sustainability of positive outcomes by study group participants.

### **Project Objectives**

1. To standardize the implementation of the NLOL model developed by personnel at CBR.

Response: This objective was met through the development in writing of a more structured curriculum, including therapeutic rationale, and the systematic videotaping during the study period of NLOL interventions with each youth in the NLOL program. The improvement gained by committing the curriculum to writing provided the minimum standardized platform for implementation over multiple cohorts needed to meet research conditions. The videotapes provided oversight and an evidentiary base that the curriculum was, on the whole, delivered as planned. No notable evidence was uncovered during the study period that would suggest that anything but the uniform implementation of the NLOL program occurred across cohorts.

2. To work with personnel at CBR in designing and carrying out data collection protocol for the evaluation of the NLOL project.

Response: Administration, therapists, and staff at CBR were actively involved in the planning and data collection for the evaluation of the NLOL program. Several on-site meetings between the research team and CBR personnel early in the process allowed for open discussion of the project and the assignment of responsibilities to CBR personnel. A pilot phase was completed prior to the full implementation of the research design. Although labor intensive and time consuming, die pilot phase helped in solidifying working relationships and overcoming problems uncovered during this phase. There were frequent communications directed toward enhancing collaboration and ensuring adherence to research protocol. These activities were

successful in providing a cooperative climate for this lengthy project. CBR's executive director, Chuck Thompson, was very supportive of the project, as were CBR staff assigned project responsibilities. CBR personnel remained cooperative throughout the project time period and this study could not have been possible without their continued support and involvement.

3. To engage adolescent boys in NLOL as part of their educational and therapeutic plans and gain their consent to participate in the research on NLOL

Response: Adolescent boys were screened by CBR counselors/therapists' for participation in the NLOL program. Only those judged ready to engage in the humane treatment of animals were selected. Participation in NLOL was based on an adolescent's educational plans, including treatment needs. In addition, since this was a voluntary activity, students had to acknowledge their willingness to participate in the research by signing a consent form. Official parent/guardian permission also had to be obtained on the same consent form. These activities were successful in meeting this objective.

4. To assess the degree of animal/human bonding of youth trainer to dog in the NLOL program

Response: This objective was met through the adaptation and administration of the Canine Bonding Scale. In the scale used in the study the phrase "your dog" was substituted for the original scale's phrase "your pet." This adaptation was deemed necessary to ,avoid confusion, since the youth at CBR were training dogs for adoption by others as pets. The change was not thought to alter the main construct being measured, namely the degree of human/animal bonding. Comparing pretest and posttest scores using a paired-samples *t* test found increases in bonding on all 12 questions in the instrument: with 7 of the 12 achieving levels of statistical significance (p<.05). An aggregate variable was created by summing responses of all 12 Likert scaled questions and comparing pretest and posttest results. The mean (range: 15 to 90) of the pretest was 58.46, and the mean of the posttest was 67.0 (p<.05).

5. To assess the impact of the NLOL program on the social performance of adolescent boys in the NLOL program.

Response: Data sources from primary CBR clinical records generated by multiple staff observers in independent observations in multiple settings across the CBR campus were collected and collated into a single compilation instrument for analysis. An independent-samples I test comparing the mean scores of the study and control groups found a significant difference between the means of the two groups (/(35) = 2.32, p<.05). The mean of the study group was significantly higher (m = 6.76) than the mean of the control group (m = -6.35). There was a significant difference between the social performance ratings of the study group compared with the control group. Being in the study group improved social performance of those adolescent boys.

6. To assess the impact of the NLOL program on the level of empathy of adolescent boys in the NLOL program.

Response: To determine the effectiveness of NLOL participation toward improved levels of empathy, the Balanced Emotional Empathy Scale (BEES) was utilized in a pretest and posttest format. Data were collected by the youth's therapist. The data were not normally distributed so a Mann-Whitney U test was used to examine the difference is scores between the study and control groups. No significant difference in the results was found (p>.05). The findings could have been achieved by chance and no inferences can be drawn from these findings. Surprisingly, however, the differences in scores that were noted between the study and control groups were not in the predicted direction.

7. To assess the impact of the NLOL program on the degree of self disclosure of adolescent boys in the NLOL program.

Response: Primary data sources were from multiple CBR clinical records generated by the youths' therapists and combined into a single compilation instrument. An independent-samples I test was calculated comparing the mean scores of the study and control groups. No significant difference was found (/(35) = -.257, p>.05). The mean of the study group (m = 0.59) was not significantly different from the mean of the control group (m = 2.30). While both study and control groups showed improvement in self-disclosure, the findings could have been achieved through chance and no inferences can be drawn from them.