Boys Town National Research Institute 2016 Annual Report

The Boys Town Model of Care is an adaptation of the Teaching-Family Model developed in an applied research center at the University of Kansas. Applied research has continued at Boys Town focusing on understanding the nature of problems children and their families face and the identification and refinement of interventions to help them. Research at Boys Town began in 1980 with a long-term, quasi-experimental study about the Family Home Program. Over 500 youth in that study were followed into adulthood to test long-term outcomes. Next a series of studies were conducted to also adapt and evaluate the Teaching-Family Model to residential treatment centers, short-term residential care, foster care, parent training, and in-home services. That was followed by practical program evaluation studies focused on scale up of these programs at Boys Town sites. More recently, with the growing emphasis on evidence-based practices, a series of large, rigorous studies are being conducted to evaluate the evidence base for these programs. Along the way, we have also continued to support ongoing program development and refine methods to facilitate program scale up with model fidelity. Finally, our most recent research focuses on identification of risk and protective factors that influence child and family well-being in addition to testing intervention effectiveness and broad scale implementation at Boys Town sites and beyond.

We also conduct smaller pilot projects to address important clinical questions and we conduct follow-up interviews with youth and families served by selected programs to monitor their ongoing progress over time. This research has been disseminated in over 50 published journal articles or book chapters and 25 presentations given at professional conferences in 2016. Our research would be considered translational science, which has an emphasis on collaboration between researchers and practitioners toward the goal of translating research into real-world practice.

Major current research projects are summarized in the pages which follow. For example, Common Sense Parenting was tested as a community prevention program for at-risk students entering high school. On the Way Home is being tested to see if a combination of school and family support after a stay in therapeutic residential care will improve long-term outcomes. The In-Home Family Services program is being tested to see if providing family centered parenting along with social and concrete supports will help reduce parenting stress, improve parenting skills, and reduce child behavior problems for at risk families. The Parent Connectors program is being tested to see if veteran parents can help other parents engage in services and increase their support system in the community. Finally, we have just begun testing the Well Managed Schools program in a very large, rigorous trial as it is being implemented in schools across Nebraska and Iowa. All of these programs have shown positive results in preliminary studies and they are now being tested in scientifically rigorous trials to evaluate their evidence base and discover new intervention and implementation methods which may be helpful.

The Pathways to Risk and Resilience Study is an example of developmental research that helps to identify risk and protective factors in vulnerable children and families, clarify intervention targets to reduce risk and enhance protection, and inform the optimal timing of intervention delivery. A second developmental study called the Longitudinal Executive Control Study has also just begun. In this study children who have been followed from an early age are being followed up again in adolescence to track the development of higher level cognitive information processing (executive control) and its relationship to conduct problems and substance use. There is emerging evidence of the relationship between executive control and adolescent behavior problems, and this study will add to that knowledge.

We also continue to do studies and publish papers about our flagship intervention, the Family Home Program. Residential care has come under attack from segments of both the scientific community and public policy agencies. The predominant public policy focus is now focused on reducing the length of stay in out of home care and providing treatment to at-risk children in their family setting. We are sympathetic to this viewpoint but also suggest that for some at-risk youth they can benefit from high quality therapeutic residential care, but the intervention model needs to have demonstrated evidence to produce positive outcomes for at-risk youth and their families. As a result, a comprehensive initiative has been pursued to advocate for high quality therapeutic residential care for some youth. This initiative has been supported by the numerous studies about residential care that have been completed at Boys Town, and we are also pursuing opportunities to conduct more rigorous studies to continue to provide scientific evidence to inform policy and practice.

Finally, two new areas of Boys Town research were recently initiated. The first is our collaboration with the Center for Neurobehavioral Research at the Boys Town National Research Hospital. Scientists there have been conducting studies to identify biological markers for adolescent behavior problems with the goal that this will lead to new knowledge about the etiology of behavior problems, as well as broaden the range of effective interventions. The second new research initiative is the evaluation of our community intervention and impact pilot projects at four Boys Town sites around the country.
NRI 2016 Annual Report

Aftercare Research

On the Way Home

On the Way Home (OTWH) provides youth and their families with parent training, using Boys Town’s Common Sense Parenting program, as well as school and homework supports to promote a positive transition out of residential care. An OTWH consultant coordinates these efforts by working with Family-Teachers, schools, and parents before, during, and after this transition. Developing a strong transitional program will help ensure that the gains made by our youth while in residential care will be sustained long after they leave Boys Town.

A randomized pilot study of OTWH was completed in 2012. Results indicated that the program helped youth stay in the home and remain enrolled in school. A larger 4-year randomized trial is now underway. This trial is now in its fourth year and 192 youth are enrolled in the study. Preliminary data collected to date continue to suggest positive outcomes for youth enrolled in the program. One difference in the current study is that youth are staying in residential programs for shorter periods of time, so it will be important to test the relationship between residential length of stay and OTWH outcomes. We also replicated the program at the Boys Town South Florida site with positive results, and we plan to expand the program to one or two additional sites in the near future. The long-range goal is to have an evidence-based aftercare intervention as part of the Boys Town Integrated Continuum of Care, as well as for other community settings.

Funded by the Institute of Education Sciences. Primary investigator: Alex Trout, UNL.

In-Home Family Services

Nebraska Family Study

A number of preliminary descriptive and outcome studies have been completed and published about the Boys Town In-Home Family Services (IHFS) program. Results have indicated that families served have significant stressors, including child behavior problems, but they make positive gains during the intervention, and a substantial number of families remain intact up to 12 months after case closure. However, no scientifically rigorous outcome studies have been completed with this program.

The aim of the Nebraska Family Study is to conduct a randomized clinical trial of Boys Town IHFS among a sample of at-risk families, many of whom have had some previous contact with Child Protective Services and/or other public service agencies. The trial began in August 2012, using the Nebraska Family Helpline as a vehicle for recruiting families. Thus far 301 families have been recruited into the study. Families are randomly assigned to either the IHFS program or receive the standard Help Line service (telephone counseling, information, and referral). A recent project study published in the Journal of Public Child Welfare described the family consultant adherence to and quality of delivery of the IHFS core model components. Implementation studies are critical to understanding the degree to which an intervention is delivered as designed. Findings from this trial will help build the evidence base for IHFS by allowing us to systematically compare the outcomes of families facing similar issues who received IHFS to those families who did not. We also hope to learn more about how to implement the program with non-system families in particular.

Funded by Boys Town. Primary investigator: Kristin Duppong Harley, UNL.

Community Support Services

Parent Connectors

Parent Connectors (PC) is a community and school-based intervention developed to provide support for families of youth with emotional and behavioral problems. The intervention uses weekly phone calls with a trained parent who also has a child with emotional and behavioral problems. These trained parents encourage other parents to engage in their child’s school, mental health services, and family’s informal support network.

Two randomized trials have demonstrated positive results, and a grant was funded in 2013 to conduct a larger clinical trial in Nebraska. A recent evaluation published in the Journal of Child and Family Studies describes positive improvements in parents’ perception of social and concrete support after participating in the PC program. Pilot projects also are underway at Boys Town California and the Boys Town South Omaha location to provide this intervention linked to Boys Town community intervention services. These studies are intended to increase family engagement by empowering parents to become more involved in their child’s psychoeducational interventions. The long-range goal for PC is to continue to expand this program to other Boys Town sites as part of the Integrated Continuum of Care.

Funded by the Institute of Education Sciences. Primary investigator: Kristin Duppong Harley, UNL.

2016 Publications by Category

<table>
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<tr>
<th>Category</th>
<th>Total 2016 Publications</th>
<th>Promo 2016 Publications</th>
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<tr>
<td>Psychosocial Development &amp; Risk</td>
<td>8, 10%</td>
<td>3, 26%</td>
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<tr>
<td>Behavioral Theory &amp; Interventions</td>
<td>6, 12%</td>
<td>3, 6%</td>
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<tr>
<td>Family Homes</td>
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<td>Common Sense Parenting</td>
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<tr>
<td>Research Methodology</td>
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<td>In-Home Family Services</td>
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<tr>
<td>Miscellaneous</td>
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<td>Integrated Continuum of Care</td>
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<td>Outpatient Behavioral Health</td>
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<tr>
<td>Neurobehavioral Development</td>
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<tr>
<td>Education of At-Risk Youth</td>
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<td>2, 4%</td>
</tr>
<tr>
<td>Parent Connectors</td>
<td>2, 4%</td>
<td>2, 4%</td>
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</tbody>
</table>

Published in

• 41 Journals
• 9 Books

Publication status

• 24 In-Press
• 26 Published
• 50 TOTAL

2016 Publications within Journals

• Addictive Behaviors (2)
• American J. of Orthopsychiatry
• Assessment
• Child & Family Behavior Therapy
• Child & Youth Care Forum
• Children and Youth Services Review
• Clinical Practice in Pediatric Psychology
• European J. of Psychological Assessment
• Evaluation and Program Planning
• J. of Abnormal Psychology
• J. of Applied Developmental Psychology
• J. of Child & Adolescent Substance Abuse
• J. of Child and Family Studies (5)
• J. of Child Psychology and Psychiatry
• J. of Early Adolescence
• J. of Emotional and Behavioral Disorders (3)
• J. of Evidence-Informed Social Work
• J. of Family Psychology
• J. of Pediatric Psychology
• J. of Public Child Welfare
• J. of Youth and Adolescence (3)
• Prevention Science
• Psychiatric Research: Neuroimaging
• Residential Treatment for Children & Youth (2)
• School Psychology Quarterly
• Small Group Research
• Substance Abuse
• Substance Use and Misuse
• The American J. of Family Therapy
• The Behavior Analyst
• The J. of Family Social Work
Well Managed Schools

Well Managed Schools (WMS) is a universal classroom management program designed to help teachers build positive relationships, teach and reinforce school success skills, and respond to inappropriate behavior in their interactions with students. The program is offered as a two-day training workshop followed by regular consultation visits that provide observation of teachers in the classroom and guided feedback. WMS is widely implemented in schools throughout the country.

Currently, a randomized trial of WMS is underway. In this study, 440 teachers of students in grades 1-5 in school districts located primarily in Iowa and Nebraska are being recruited and randomly assigned to either a WMS program condition or a no-intervention (usual classroom practices) control condition. Both teachers and students are completing assessments on classroom climate, teaching skills, and student behavior and performance. The project has just begun. The first group of teachers has been recruited, and additional recruitment will occur in subsequent years to reach the targeted total sample size. If results from the trial are positive, then WMS could be designated as an evidence-based program with the potential for expanded dissemination.

Funded by the Institute of Education Sciences, Primary Investigators: Cleve Redmond, Iowa State University and Alex Mason, Boys Town.

Psychosocial Development and Risk

Pathways to Risk and Resilience Study

Pathways is a three-year project that involves a formal collaboration between investigators at the Boys Town National Research Institute and at the University of Michigan. The project conducts secondary analyses of existing data from a unique data set, the 1986 Northern Finland Birth Cohort Study. This is a longitudinal study of a cohort of over 9,000 children, with data collected from the prenatal period through adolescence and beyond. The goal of the project is to examine the development of vulnerable children exposed to multiple risk factors, such as poverty and parental substance abuse, early in life and to identify factors that can build resilience in youth.

Now in its final year, the project currently has five published/accepted papers and four papers under review. Additional analyses also are in development. This work is showing long-term associations of contextual risk factors as early as the prenatal/birth period with substance use and related outcomes (e.g., internalizing symptoms) in adolescence and even into young adulthood. A key question is how these long-term effects unfold over time. Analyses have shown, for example, that childhood contextual risk factors are associated with adolescent academic failure and substance use, which are associated, in turn, with young adult criminal convictions. Another analysis has shown that parental facilitation of child reading engagement can help reduce the impact of contextual risk factors on substance abuse, thereby building resilience in vulnerable children. The types of findings mentioned above will be useful for guiding intervention efforts by helping us better identify those in need and by elucidating new targets and windows of opportunity for intervention.

Funded by the National Institute on Drug Abuse. Primary investigators: Alex Mason, Boys Town and Jukka Savolainen, University of Michigan.

Health Care/Youth Care

One of the goals of the current Boys Town Strategic Plan is to increase the collaboration between Health Care and Youth Care divisions. Some relevant preliminary research has been completed in the areas of physical health risks for youth placed in out-of-home care, utilization of psychotropic medication for at-risk youth, and building resilience in vulnerable children. The types of findings mentioned above will be useful for guiding intervention efforts by helping us better identify those in need and by elucidating new targets and windows of opportunity for intervention.

Funded by the National Institute on Drug Abuse. Primary investigators: Alex Mason, Boys Town and Jukka Savolainen, University of Michigan.

Physical Health Risks of Youth in Out-of-Home Care

Boys Town studies have shown that at-risk youth have increased general health problems in addition to psychological risks. Findings from initial studies of youth enrolled in family-style residential care at Boys Town indicate that: 1) approximately one-third of these youth had chronic general health problems; 2) youth with internalizing behavior problems (e.g., anxiety, withdrawal) tended to have medical problems, more prescription (non-psychoactive) medications, and higher rates of health care services utilization; and 3) poorer physical health status at intake was associated with poorer treatment outcomes.

A second series of studies is currently underway regarding health literacy of at-risk adolescents. Initial results suggest that at-risk adolescents would benefit from health literacy intervention, which will be the focus for future research.

Finally, a pilot study is underway to identify relationships between sleep disturbance and behavior problems in elementary school-age children. For example, a recent article from this project published in Clinical Practice in Pediatric Psychology indicated that a brief behavioral sleep protocol at the

2016 Conference Presentations

- 11 Conferences
- 16 Papers
- 9 Posters
- 25 TOTAL

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Presented at
- Annual Meeting of the Society for Prevention Research (3)
  San Francisco, CA
- Annual Convention of the American Psychological Association (2)
  Denver, CO
- Annual Meeting of the College on Problems of Drug Dependence (1)
  Palm Springs, CA
- Annual Meeting of the College on Problems of Drug Dependence (1)
  Portsmouth, NH
- National Association of School Psychologists Annual Convention (4)
  New Orleans, LA
- 60th Annual Conference of the Association of Children’s Residential Centers (4)
  Chicago, IL
- 17th Annual Engagement Scholarship Consortium (1)
  Omaha, NE
- 9th Annual Conference on the Science of Dissemination and Implementation (1)
  Washington, DC
- 2016 Annual Conference of the American Evaluation Association (2)
  Atlanta, GA
- Annual Meeting of the International Family Violence and Child Victimization Research Conference (1)
  Loughborough University, UK
- Annual Conference of the Teaching-Family Association (5)
  Philadelphia, PA

Presentations
- 16 Papers
- 9 Posters
- 25 TOTAL
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beginning of a standard behavioral intervention for child noncompliance can improve treatment outcomes. The ultimate goal of this sleep research is to develop an intervention protocol to treat youth sleep problems in outpatient behavioral health care settings. PIs: Tim Nelson & Alex Trout, UNL.

Psychotropic Medication Studies
Boys Town has hosted an NIMH-funded scientific conference on the topic of psychotropic medication use in residential care settings, and taken the lead in a special issue of a research and practice journal on this topic with contributions from scientists and practitioners from across the country. Additionally, Boys Town has conducted a series of studies focused on psychotropic medication use and behavioral treatment for youth. Results indicate that data-driven medication decisions can result in reduced psychotropic medication rates and still achieve positive results with behavior and psychological well-being. We have also conducted research examining the patterns of, and factors that predict, polypharmacy at the time of admission. Based on this work we are currently writing manuscripts that advocate for research-based medication decisions and a rationale for discontinuation for youth experiencing psychotropic polypharmacy. PI: Jon Huefner, Boys Town.

Neurobehavioral Research
The Center for Neurobehavioral Research conducts research to advance the knowledge base about neurocognitive and social-emotional functioning for the most at-risk children. The Center's goals include: 1) determining the dysfunction in specific neuro-cognitive systems that underpin different forms of impaired mental health; 2) using fMRI and behavioral biomarkers developed under goal 1 to predict treatment response; 3) determining the efficacy of novel interventions on forms of dysfunction associated with disruptions in mental health.

The Center is beginning to publish preliminary findings targeting goal 1. For example, one study recently appearing in the Journal of Child Psychology and Psychiatry has identified a biomarker for the neural systems that, when dysfunctional, increases the risk for antisocial behavior. These findings stress the importance of Proactive Teaching and improving problem-solving strategies (interventions within the Boys Town Model) for helping youth with conduct problems. Because of these early successes, the Center can investigate the extent to which the Family Home Program improves the functioning of these, and other, brain regions. PIs: Kayla Pope & Stuart White, Boys Town.

Speaker Series
As part of our ongoing Speaker Series, we invited three researchers to present information to staff on Home Campus and at the Boys Town sites.

Dr. John Lyons, Senior Policy Fellow at the Chapin Hall Center for Children, gave a presentation titled, "Decision-Making in Child and Adolescent Service Systems.

Paul Marstonardi, Executive Director at the Dunlea Centre in Australia, gave a presentation titled, “Improving Residential Practice through Measurement.”

Dr. Mary Beth Rauktis, Assistant Research Professor at the School of Social Work at the University of Pittsburgh, gave a presentation titled, “The Experiences of White Mothers Parenting Black/White Children: Personal, Social, and Community Factors in Child Welfare Involvement.”

2016 Grants: Ongoing and Submitted

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<th>Amount</th>
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<tr>
<td>1) On the Way Home: Promoting Transition Outcomes in Youth with EBD or LD — An Efficacy and Replication Study</td>
<td>Institute of Education Sciences, Ongoing</td>
<td>Alexandra Trout, UNL</td>
<td>$3,487,223</td>
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<td>2) Parent Connectors: An Efficacy Study of Peer-Support for Parents of Middle-School Youth with Emotional Disorders</td>
<td>Institute of Education Sciences, Ongoing</td>
<td>Kristin Duppong Hurley, UNL</td>
<td>$3,206,013</td>
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<td>3) Role of Childhood Cumulative Risk in Substance Misuse and Co-occurring Problems</td>
<td>National Institute on Drug Abuse, Ongoing</td>
<td>Alex Mason, Boys Town; Julka Savolainen, UM</td>
<td>$743,669</td>
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<td>4) Nebraska Family Study</td>
<td>Boys Town, Ongoing</td>
<td>Ron Thompson, Boys Town</td>
<td>$621,989</td>
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<td>5) Testing the Efficacy of Embedded Social Skills within a Universal Classroom Management Program: Well-Managed Schools</td>
<td>Institute of Education Sciences, Ongoing</td>
<td>Cleve Redmond, ISU</td>
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<td>6) UNL and Boys Town Postdoctoral Fellowship: Research Training Focused on Youth with Emotional and Behavioral Disorders</td>
<td>Institute of Education Sciences, Ongoing</td>
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<td>1) PROSPER-Supported Integration of Behavioral Health Services for NGR Family Readiness</td>
<td>Department of Defense, Submitted</td>
<td>Alex Mason, Boys Town; Richard Spol, ISU; Robert Bray, RTTI</td>
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<td>2) Family-Focused Prevention of Co-occurring Teen Depression and Substance Misuse</td>
<td>National Institute on Drug Abuse, Submitted</td>
<td>Alex Mason, Boys Town; Kevin Haggerty, UW</td>
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<td>3) Risk and Resilience Processes Linking Child Maltreatment with Chronic Disease</td>
<td>National Institute on Aging, Submitted</td>
<td>Todd Herrenkohl, UW; Alex Mason, Boys Town</td>
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<td>4) Role of Neuro-computational Risks and Trauma in Adolescent Drug Abuse Relapse</td>
<td>National Institutes of Health, Submitted</td>
<td>Alex Mason, Boys Town; James Blair, BNTRH</td>
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Note: Submitted grant proposals are pending review and are awarded based upon successful review and availability of funds.