



# 50 YEARS OF **The Teaching-Family Model at Boys Town**

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EDITED BY PATRICK M. TYLER, KRISTIN DUPPONG HURLEY,  
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Edited by Patrick M. Tyler, Krisn Duppong Hurley, Jonathan C. Huefner, Robert G. Oats, and Colson D. Chupp

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## Introducton to the 50th Anniversary of the Teaching-Family Model at Boys Town

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## Introducon to the 50th Anniversary of the Teaching-Family Model at Boys Town

This special issue commemorates the 50<sup>th</sup> anniversary of the Teaching-Family Model (TFM) at Boys Town in Nebraska, United States. The included arcles illustrate the confluence of the TFM and Boys Town resuling in a commitment to values, evidence-based pracce, implementaon science, and research innovaons to meet the evolving needs of children and families. The issue demonstrates how a child caring organizaon that was started in 1917 by an Irish Catholic priest, Fr. Edward J. Flanagan, for children of all races and religions, grew and adapted with the aid of the Teaching-Family Model.

The TFM, developed at the University of Kansas, was introduced to Boys Town in the 1970s. At that me, Boys Town needed to adapt its approach to meet societal changes impacng youth, such as an increase in teen drug use and disrupons to family structure (e.g., increased divorce rate). Fr. Robert Hupp at Boys Town, the second successor of Fr. Flanagan, invited Mont Wolf, Lonnie Phillips, and their team of experts from the University of Kansas to spark a “revoluon in youth care” by bringing the family-style TFM to Boys Town (Hupp & Limprecht, 1992). The nine arcles in the special issue provide some of the lessons learned over the last 50 years, and examples from recent research that highlight hallmarks, elements, and core systems that are part of the TFM sll today.

The issue is framed based on four of the key hallmarks of the TFM: care that is effecve, replicable, individualized, and humane (Wolf et al., 1995). The keynote arcle “50 Years of the Teaching-Family Model at Boys Town: Keys to Sustainability” (Tyler, Daly et al., 2025) contains lessons learned from some of the original developers of the TFM. As the saying goes, “you can see far when you stand on the shoulders of giants.” The arcle contains the wisdom from Dr. Dean Fixsen, Dr. Dan Daly, and Dick Baron, along with contribuons from Pam Daly and Dr. Karen Blase, on keys to adopng and sustaining the evidence-based TFM over 50 years. The arcle discusses the process of organizaonal change and key elements of sustainability, such as an emphasis on quality and defined standards, using data effecvely, model expere, and research focus, ending with consideraons for ongoing sustainability. The second arcle, “Sustaining Fidelity for 50 Years: Boys Town and the Teaching-Family Model,” was led by renowned implementaon science expert, Dr. Dean Fixsen. This arcle takes a deeper look into implementaon science and the important role that fidelity has played in sustaining the TFM at Boys Town.

“Effecveness” is the first hallmark of the TFM presented in arcles of the special issue. Two arcles extend the body of research conducted over the decades to evaluate the posive treatment effects of the TFM. “Evaluang Youth Needs and Response to Services in a Residenal Program Based on Neighborhood Factors” (Tyler, Nguyen et al., 2025) highlights the importance of assessing neighborhood factors related to child development by evaluang how youth from varied commuities responded to the Family Home Program in the Village of Boys Town in Nebraska from 2013-2023. The next arcle, “Threat Sensivity of Adolescents with Abuse Histories: The Impact of Residenal Care” (Blair et al., 2025), evaluated the impact the Boys Town Family Home Program had on child and adolescent

neurodevelopment. This groundbreaking study, conducted by eminent neuroscientists Dr. Karina Blair and Dr. James Blair, used fMRI neuroimaging to assess changes over time in brain responses related to threat sensitivity in youth while they were in the program.

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“Replicability” is the next hallmark of the TFM addressed in three articles. The original developers designed the TFM with a specified set of procedures so that it could be applied in different settings (e.g., community-based) (Wolf et al., 1995). The manuscript “Description of a School Support Program: A MultiTiered School-Based Parent Engagement Approach to Improve School-Based Outcomes” (Ringle et al., 2025) illustrates the logic model and pilot data of an intervention adapted from the Model so it could be implemented in schools to improve support for students, parents, and teachers. In the paper “Replicating the Teaching-Family Model: In-Home Family Services Across Different Types of Service Settings: (Duppong Hurley et al., 2025) compared implementation and outcome data across service settings (e.g., child welfare, juvenile justice) to examine the ability of the In-Home Family Services adaptation of the TFM to be replicated using identical intervention training and supervision approaches. “Impact of Implementing the Boys Town Family Home Model on Organizational Climate in an Australian Residential Program” (Huefner et al., 2025) provides an exemplar of implementing the Model in a residential program at the Dunlea Centre in Australia, showing that successful implementation of an evidence-based milieu program had a significant positive impact on organizational climate.

“Individualization” is the third hallmark represented in the issue. Helping youth achieve their goals by providing “individualized” skills teaching in a positive, reinforcing, and supportive way is an important trait of the TFM (Wolf et al., 1995). The article “Developing a Boys Town Social Skills Assessment: Psychometric Properties and Pilot Testing” (Tyler, Day et al., 2025) demonstrates how a core component of the TFM, i.e., social skills teaching, can be tailored to meet the specific needs of students. The paper describes the development and preliminary psychometrics of a social skills assessment for students in the school setting.

The last hallmark of the TFM that is highlighted in the issue is “humane” treatment. The TFM includes routine feedback systems to evaluate consumer satisfaction, program practices, and outcomes to ensure “humaneness” and detect inhumane care (Wolf et al., 1995). The paper “International Collaboration to Explore Elements for an Effective Residential Childcare Workforce” (Siemionow et al., 2025) provides insights into how residential programs in three different countries (Poland, Spain, United States) were supporting residential childcare workers. Though the three programs implemented different treatment models, the four core systems of the TFM, i.e., training, supervision, evaluation, and administrative data systems, provided a framework to compare the support residential childcare workers received in the programs to provide humane care. The manuscript presents findings from this international collaboration to promote ongoing conversations on how to improve training and support for residential childcare workers.

In summary, the special issue of the 50<sup>th</sup> anniversary of the TFM at Boys Town shares research on providing effective, replicable, individualized, and humane care by 1) adopting and adapting interventions (and core components) as part of organizational change and growth; 2) developing evidence-based practices and monitoring implementation and outcomes; 3) and collaborating and innovating to respond to the evolving needs of youth, families, and communities. Though the issue highlighted a specific treatment model (i.e., TFM) and organization (i.e., Boys Town), we acknowledge the other organizations and evidencebased practices that share a similar heritage and purpose. As researchers, we are blessed to be the scientific witnesses of the benevolent work in this field aimed at providing meaningful service to communities around the world. We hope that this special issue contributes to the ongoing collegial conversations aimed at elevating the quality of services for children and families in our global community.

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## 50 Years of the Teaching-Family Model at Boys Town: Keys to Sustainability

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### Abstract

This review article is part of a special issue of *Residential Treatment for Children and Youth* celebrating the 50<sup>th</sup> anniversary of the Teaching-Family Model (TFM) at Father Flanagan’s Boys’ Home, Boys Town, Nebraska. The manuscript provides a historical account from experts of the TFM who initially created the organizational changes at Boys Town for the TFM to be used as intended and sustained for 50 years. Resources that were essential for the organizational changes included the technology of the TFM (i.e., administration, training, consultation, and evaluation systems), consumer orientation, feedback, and

teaching skills. Additionally, the article describes five factors that have contributed to sustainability, such as 1) using data effectively, 2) culture of success, 3) model expertise, 4) quality standards, and 5) research focus. The review concludes with implications for future practice and research.

**Keywords:** Teaching-Family Model, evidence-based practice, residential programs, youth

## 50 Years of the Teaching-Family Model at Boys Town: Keys to Sustainability

### Introduction

Organizational change has been a focus for theory and practice for many years (Campbell, 1969; Lewin, 1951; Morgan & Ramirez, 1983; Weick, 1979), and sustaining positive change has been a continual concern (Lieberman, 1980; McIntosh et al., 2015; Moise et al., 2018; Wiltsey-Sprman et al., 2012). Very few attempts to use innovations are able to successfully negotiate the difficulties encountered during initial implementation, where the challenges are many, the supports for change are weak, and the inertia of the status quo is strong (Fixsen et al., 2019). This paper describes an example of purposeful organizational change based on the Teaching-Family Model (TFM) and sustainability for 50 years at Father Flanagan's Boys' Home, Boys Town, Nebraska.

### Teaching-Family Model

The TFM began in 1967 at Achievement Place, a group home for delinquent youth in Lawrence, Kansas. The project was made possible because of the support from Saleem Shah, who was the Director of the Center for Studies in Crime and Delinquency at the National Institute of Mental Health at the time. Lonnie and Elaine Phillips were the prototype Teaching-Parents who lived in the home with up to seven adjudicated youths referred by the local juvenile court. Montrose Wolf at the University of Kansas (KU) was a consultant to the Achievement Place board of directors. Jon Bailey and Dean Fixsen in the doctoral program at KU, were research assistants for experiments conducted at Achievement Place. From the beginning, systematic changes and data collection were part of daily life at Achievement Place (Bailey et al., 1971; Bailey et al., 1970; Fixsen et al., 1973; Fixsen et al., 1972; Phillips, 1968; Phillips et al., 1971).

The Teaching-Family Model is an early example of an evidence-based program. It was cited as a "model program" by the American Psychological Association in its initial review of "evidence-based programs" (Roberts & Hinton-Nelson, 1996), as one of three evidence-based residential programs in the Surgeon General's report (U.S. Department of Health and Human Services, 1999), and as perhaps the best developed and researched residential treatment models (see James, 2011) among those reviewed by the California Evidence Based Clearinghouse for Child Welfare (CEBC, 2024a). Subsequent meta-analyses have found the TFM to be one of three residential programs that produce positive and cost-beneficial outcomes (Lipsey & Wilson, 1998; Washington State Institute for Public Policy, 2016).

In the first grant application to support the research at Achievement Place, Wolf (1968) stated the purpose was to develop a treatment program that was humane, effective, individualized, satisfactory to consumers, cost-efficient, and replicable. Those remain the goals of the TFM and Boys Town to this day. The elements of the TFM are teaching, self-determination, relationships, family-sensitive approach, diversity, and professionalism, which are supported by four integrated systems of facilitative administration, training, consultation, and evaluation (see Teaching-Family Association, 2020).

As recounted elsewhere (Blase et al., 1984; Fixsen & Blase, 2018; Fixsen et al., 2001/2007), attempts to replicate the TFM in group homes around the country began in 1971. By 1975, there were 67 attempts to replicate the TFM. Eight of those homes were in Western North Carolina, where Gary

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Timbers, Karen Blase, and Dennis Maloney helped to start up the homes in rural communities. This team was responsible for preparing Teaching-Parents and sustaining quality youth outcomes. All three of these directors were graduates of the program at KU, and Gary and Barbara Timbers were Certified Teaching-Parents at Girls Achievement Place in Lawrence, KS. The program in Western North Carolina became the prototype Teaching-Family Site, an organization of Teaching-Family homes with one central administrator. Data on sustainability indicated that proximity to training and coaching staff was associated with continued use of the TFM in group homes (Blase et al., 1984; Fixsen et al., 2001/2007). This proximity was built into the definition of a Teaching-Family Site.

### **Father Flanagan's Boys' Home**

Fr. Edward J. Flanagan started Father Flanagan's Boys' Home (FFBH) in 1917 when he provided a home for five boys in downtown Omaha, Nebraska. As an orphanage for boys, FFBH grew and moved west of Omaha to Overlook Farm in 1922. In 1936, this location became Boys Town, an incorporated village. In 1938, the movie *Boys Town* starring Spencer Tracy and Mickey Rooney was a big hit and increased support for the orphanage. Fr. Flanagan passed away in 1948, but Boys Town continued to serve youth from across the United States.

In 1972, a small weekly newspaper in Omaha (*Omaha Sun*) reported on Boys Town's immense wealth (about \$200 million in the bank in 1971) and poor care of youths. The newspaper won a Pulitzer Prize in 1973 for its investigative journalism. In response, Boys Town suspended fundraising, changed directors, and hired two successive groups of experts to change the care of youths on campus.

### **The Teaching-Family Model and Boys Town**

The two efforts to change youth care at Boys Town failed, and at the end of 1974, Fr. Robert Hupp, the new director, had a critically important decision to make. After consulting with national experts in the field, such as Bob Wahler from the University of Tennessee and Jim Whitaker from the University of Washington, Fr. Hupp chose the route of the "radical innovation" to revolutionize care at Boys Town (Hupp & Limprecht, 1992). To do so, he contacted Montrose Wolf, Lonnie Phillips, and Dean Fixsen at KU and asked them to consider replicating the TFM at Boys Town. Initial discussions centered on the need for large-scale change, how ready Boys Town leadership was to support the change process, and how ready the TFM experts were to make the changes in youth care and throughout the organization. Initial discussions led to subsequent meetings with Fr. Hupp and a key member of the Board of Directors, coupled with spending time in the cottages and schools with staff and youths. As the TFM experts discussed the possibilities, their colleagues Jerry Miller, Ed Budelman, and Lloyd Ohlin, who were in the midst of deinstitutionalizing the delinquency system in Massachusetts (Miller, 1991) and evaluating the outcomes (Ohlin et al., 1975), warned of the dangers of organizational change and the risks to the reputation of the TFM in what likely would be a lost cause.

The TFM experts were familiar with large institutions and how intractable they seem to be, resisting change of any consequence (Reppucci & Saunders, 1974). However, they had a roadmap for how to create a high-quality intervention, systems to implement and monitor the changes, and an organizational leader in Fr. Hupp who would champion the change. What if implementation of the TFM could successfully occur in a large institution? Would the new standard become just as intractable and sustain humane and effective care for decades to come? Would the TFM work just as well in a campus setting as in a community setting? With these thoughts in mind, the TFM experts accepted positions at

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Boys Town. Mont Wolf agreed to be a consultant while retaining his position at KU. Lonnie Phillips became the director of youth care in May 1975 and was joined by Dean Fixsen (from KU), Karen Blase, Dennis Maloney (from the prototype Teaching-Family site in Western North Carolina), and Richard Baron (from a Teaching-Family replication in an institution in Salina, KS). Dan and Pam Daly joined this group in September 1975 as Pam completed her post-doctoral fellowship at Achievement Place and Dan completed his service as an Army psychologist.

The TFM experts did heed the advice from their colleagues in Massachusetts and, at Boys Town, called the Teaching-Family Model the Family Home Program and changed Teaching-Parents to Family Teachers to provide a bit of protection for the Teaching-Family Model in case the change efforts failed. For this paper, we use the Teaching-Family Model and Teaching-Parents to describe the changes at Boys Town.

### **Purposeful Organizational Change**

In 1975, Boys Town employed 998 people in all its operations. Boys Town was an incorporated town on 1600 acres (2.5 square miles) with its own post office, horse farm, agricultural farm, visitors center/museum, law enforcement, dental, maintenance department, schools, churches, training center, and choir in addition to its youth care facilities and related fundraising, financial management, and administrative staff. Organizational change was a challenge.

Weick and others (Morgan, 1997; Morgan & Ramirez, 1983; Weick, 1987, 1995; Weick et al., 1999; Zahra & George, 2002) have written extensively on organizational functioning and organizational development. Weick and colleagues describe the need to have a high-level standard for performance that detects and corrects errors, the basis for learning in an organization. As an organization develops, the goal is to reduce unwanted, potentially harmful errors and establish support for high-fidelity performance as part of organizational routines. Kotter (1996) summarized “what works” for purposeful organizational change and pointed to the measures required for the processes of change to occur and (finally) produce intended outcomes. He encouraged change agents to 1) establish a sense of urgency, 2) form a powerful guiding coalition, 3) create a vision, 4) communicate that vision, 5) empower others to act on the vision, and 6) plan for and create short-term wins.

Nord and Tucker (1987) distinguish between routine and radical innovations. Routine innovations are similar to what an organization has done before. Radical innovations are quite different and require significant change and disruption of the status quo. They noted that radical innovations require more changes in fundamental systems, new types of knowledge, and new types of specialists, which lead to

more uncertainty, less agreement, and greater involvement of top management. The more radical the innovation, the more learning and unlearning that must take place. Nord and Tucker (1987, p. 24) concluded, "Few organizations can perform radical innovation without, in essence, forming a new organization." Support for radical innovation requires the creation of a new unit "in which new personnel are recruited, and which has its own source of resources and enough time to work through the implementation stage."

Of course, none of this information was available in 1975. To initiate change, Boys Town quickly remodeled four cottages (in the first six months) to establish the first four Teaching-Family homes on campus in 1975. One Teaching-Parent couple who had already met Certification (fidelity) standards was

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recruited from an existing Teaching-Family Site. The other three Teaching-Parent couples were recruited, hired, trained, and coached at Boys Town. Once established, they were the "high-level standard" used to develop professional and administrative supports for those four homes and for the ones to follow. To manage change processes to reach that standard, a late afternoon meeting was held each day in the director's office to review what had been accomplished so far, decide on the priorities for the next day, and to quickly resolve any issues within the group or between the group and others in the organization. In retrospect, Kotter's six conditions for leading change were satisfied. In addition to initiating and managing change, there were still 500 youths in residence, and the "old Boys Town" was managed while the "new Boys Town" was being created. In the first year, the old was large and the new was small. By the fourth year, the old was nearly gone and the new was nearly complete. To manage these bifurcated responsibilities, one director managed the growing number of staff and youths in the new Teaching-Family parts, and another director managed the dwindling number of staff and youths in the old parts. As the new ways of work began creating irritants for administration, a third person was responsible for helping existing administrative units change to fit the new ways of work (e.g., human resources, financial accounting, staff training and staff evaluation, program evaluation).

For three years, the afternoon meeting of 4-8 people occurred every day to keep all parties on the same page and focused on the tasks at hand. Then frequency decreased until it was once a week by year five. In retrospect, these can be recognized as plan-do-study-act cycles (PDSAC) commonly described in improvement science (De Feo & Barnard, 2005; Deming, 1986; Nielsen, 2005; Shewhart, 1939). PDSAC is useful for guiding incremental improvements when there is a lot at stake, circumstances are complex, and unanticipated problems are sure to be uncovered as a process unfolds (Nielsen, 2000; Rubin, 1994). The daily meetings seem essential to PDSAC in this context because, as Stermann (2006, p. 509) cautioned, "we must be able to cycle around the loops faster than changes in the real world render existing knowledge obsolete."

As the cottages were renovated and staffed, the number of Teaching-Family homes on the Boys Town campus grew from the first four in 1975 to all 41 in 1979. As the number of Teaching-Family homes grew, they were organized into "Communities" with 12, 13, and 16 eight-youth homes in each Community. Each Community had a director, an assistant director, and an administrative assistant. The Community director and staff ensured that each Teaching-Parent couple received all the support

needed to learn and grow professionally and meet Certification standards. They also ensured that each Teaching-Family home received necessary support from finance, maintenance, etc.

The Teaching-Family site replication at Boys Town was instructive. It was a large and complex residential campus, not community-based group homes like those the TFM experts had developed previously. As researchers and program developers, the Teaching-Family experts who moved to Boys Town began collecting data and creating accounts of the organization change processes. As recounted by Fixsen and Blase (2018, p. 197), the changes were extensive:

Change at Boys Town required remodeling 41 dormitory-style cottages to become family homes; eliminating cafeterias, dental offices, furniture making facilities, and so on, in favor of eating at home and going into the community for typical services; and changing the staffing from shift staff to teaching-parents. By 1979, every aspect of Boys Town's operations had changed. The five TFM experts who moved to Boys Town did not know how to change an institution, but they

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did know how to develop and operate a TFM home. The basis for change was the TFM (Fixsen et al., 1978). Teaching-Parents needed individual transportation, so each home had a van. Teaching-Parents needed to shop in town, so each couple had a checking account. Teaching-Parents needed access to maintenance, so staffing was changed to do many repairs. (Teaching-Parents also needed privacy which required maintenance personnel to negotiate appointments and ring doorbells for entry). Teaching-Parent recruitment and hiring required ads that would attract couples to apply and interviews that evaluated skills and ability to accept and act on feedback, so the human resources department revamped the process. Youths needed a good education to address and compensate for learning deficits, so the instruction and behavior programs were changed in the schools on campus (Black et al., 1982). Each of these decisions were contested (sometimes with lawsuits) by affected staff and related professional associations. Without the TFM as the standard, and without the ardent support of Fr. Hupp, the TFM experts might have lost these arguments. In addition to the administrative changes, Teaching-Parent selection, training, coaching, and certification (fidelity) assessments, and organization administrative supports and data systems were in place by 1979 and part of the daily routines in the organization.

The last significant change of major impact was to include girls on campus so that girls who led troubled lives could benefit from the excellent care offered by Boys Town. By then, there were several Teaching-Family homes for girls and some co-ed homes administered by other Teaching-Family Sites. And the major changes in Boys Town were in place and beginning to operate effectively and efficiently. Thus, there was confidence that homes for girls on campus would not present major problems. Fr. Hupp and the Board agreed, and the first girls moved into an all-girls Teaching-Family home at Boys Town in 1979.

### **Purposeful Sustainability**

From the beginning, the TFM experts who moved to Boys Town had the end in mind – all 41 cottages and support for excellence built into the organization. During the early stages of change, newly

selected practitioners and staff are attempting to use newly learned skills (e.g., the innovation) in the context of an organization that is just learning how to change to accommodate and support the new ways of work (Fixsen et al., 2005). This is a fragile stage. The status quo is powerful and resilient and readily bounces back from efforts to change it (Jalava, 2006; Oser, 2000; Zimmerman et al., 1998; Zucker, 1987). The TFM experts initially conducted staff selection interviews, provided staff training workshops, conducted weekly coaching visits, carried out fidelity assessments for each Teaching-Parent couple, intervened to ensure required administrative supports, and so on. Doing things for the first time (and the second and third times) were opportunities to teach others how to do it. Staff who were interested were interviewed and selected to be the “understudy” and learned how to do selection, training, coaching, and fidelity assessments. After 1979, the TFM experts only needed to do “spot checks” to assure continued fidelity, since “home grown” staff could now provide the support systems.

### **Teaching-Family Model Fidelity Assessment**

The goal of sustainability is to sustain high-level services and good outcomes. For the TFM, fidelity assessments ensured high-level services. The first attempt to replicate the Teaching-Family group home failed in 1971 (Fixsen & Blase, 2018). That led to the development of the Teaching-Parent Certification (i.e., fidelity) assessment (Braukmann et al., 1975; Phillips et al., 1974), an indicator of the

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extent to which the TFM “was there” in each attempted replication. The TFM experts used Teaching-Parent Certification (fidelity) assessments from the beginning. They remodeled the cottages into group homes and selected, trained, and coached Teaching-Parents to provide expert treatment for troubled youths. At Boys Town, assessments of Teaching-Parents occurred at 3 months, 6 months, and 12 months after they completed the training workshop and annually thereafter.

As noted elsewhere (Fixsen & Blase, 2018, p. 196), “We were familiar with large institutions and how intractable they seem to be, resisting change of any consequence (Reppucci & Saunders, 1974). Could the implementation of the TFM occur across a large institution? The first question was would the new standard become just as intractable and sustain humane and effective care for decades to come? As it turns out, the hypothesis about the intractability of institutions was correct: Boys Town continues as a certified Teaching-Family site decades after the institutional change process was complete.”

### **Elements for Sustainability**

Job One for any program is to improve the lives of the youth it serves. At Boys Town, the implementation of the Model elements, i.e., teaching social skills, building healthy relationships, supporting religion and spirituality, creating a positive family environment, and self-determination, aims to promote safety, permanency, well-being, and reduce recidivism (Father Flanagan’s Boys Home, 2021). Systematic research over the years has demonstrated the efficacy of the TFM at Boys Town. One large quasi-experimental follow-up study occurred from 1980-1989. It compared admitted youth to a group of youth qualified for admission but who did not attend Boys Town. Oswald et al. (1992) reported lower rates of delinquency during care versus comparison youth. Thompson, Smith, et al. (1996) also found greater high school graduation rates for the Boys Town treatment group. The same study debunked frequent criticisms about residential care, showing less social isolation and more positive attitudes about family and friends post-discharge (Friman et al., 1996). Larzelere et al. (2004) found that youth

significantly improved during care on the myriad behavior problems at entry and approached age level norms on such behaviors post-care. Lee et al. (2010) found that progress during care was strongly related to positive outcomes after discharge. Another study that contacted former youth in their thirties documented long-term benefits such as less intimate partner violence (Huefner et al. 2004). In 2015, the Boys Town Campus-based adaptation of the TFM, known as the Boys Town Family Home Program (BTFHP), received designation as “Promising” on the Crime Solutions evidencebased clearinghouse of the National Institute of Justice (Crime Solutions Clearinghouse, 2015). The research evidence demonstrated that the model succeeded at Job One - Quality of Care.

Evidence that the model produced positive results does not entirely answer why the TFM has been the engine driving program quality for 50 years. TFM experts determined the resources that were essential for the organizational change at Boys Town included the technology of the TFM (i.e., administration, training, consultation, and evaluation systems), consumer orientation, feedback, and teaching skills (Baron et al., 1979; Wolf et al., 1995). Five factors that contributed to the sustainability of the model included 1) using data effectively, 2) culture of success, 3) model expertise, 4) quality standards, and 5) research focus. We will now provide examples for each of these five factors.

### ***Using Data Effectively***

The fact that the model improved the lives of youth is the most important reason for its longevity, and the effective use of data is the most salient reason for the longevity of quality care. From inception,

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TFM experts employed data to define and refine the model. Needing to demonstrate quick success in program implementation, model experts expanded the systematic evaluation tools used in Kansas and North Carolina. They modified the Major and Certification Evaluations, which occurred at 6 and 12 months after pre-service training, into a shortened version known as the “minor evaluation”. Trained evaluators visited the homes every 3 months for the “minor evaluation”. During the visits, evaluators observed and rated youth's social skills and the adults’ skills at implementing the TFM. Evaluators also conducted interviews with each youth to assess their perceptions of Boys Town and the adults with whom they lived. Annual Reports (Evans et al., 1976) summarized the data to inform senior leaders and the Board on the progress of the TFM installation, and Annual Reports were also used for staff and program development.

One example of data use involved a competing model used in the late 1970s. Due to staff and alumni resistance to any changes in the Boys Town system, the Executive Director thought Boys Town should simultaneously develop an Adlerian model alongside the TFM. It was a program based on Adlerian counseling principles and more like prior practice at Boys Town. The TFM focused on teaching appropriate alternative behavior, while the Adlerian approach focused on counseling. Sixteen of the homes used Adlerian instead of TFM. Evaluators compared TFM and Adlerian homes directly on minor evaluation performance as well as school data, runaways, and more. The results were dramatic. Boys in the TFM homes attended school and classes more regularly. They ran away less. They were more satisfied with Boys Town and the adults with whom they lived. The TFM homes were cleaner. And over

time, as TFM homes got better trained, the boys did better (Fixsen et al, 1976). Boys Town abandoned the Adlerian model and converted all 41 homes to the TFM.

Prior to Boys Town, the TFM only used the Major and Certification in-home observations and consumer data. As the program developed, youth behavior and progress data were included in the certification process and became referred to as “multi-method evaluation” (P. Daly et al., 1982). The collection of data on youth incidents, school performance, and progress in treatment plans was also tied into the day-to-day operations of the homes and used to improve youth behavior and treatment. Today, these data are available online and used routinely by Boys Town staff at all levels. Boys Town also tied Major and Certification evaluations to Teaching-Parents pay raises. These changes made good performance on these assessments more meaningful and increased the benefit to youth. A similar certification process was developed for the Consultants, who were the direct supervisor/mentor for Teaching-Parents.

### ***Culture of Success***

The success of the model in a campus environment required that all staff in all departments fulfill their role in supporting the primary change agents who were the adults closest to the youth (FFBH, 2024c). Referred to as the “Triadic Model,” the Teaching-Parents were the primary change agents, and the Consultants were responsible for providing the support, supervision, and ongoing training so the Teaching-Parents could help the youths in their home (FFBH, 2024). Making the Teaching-Parents the primary change agents was consistent with recommendations from *The Other 23 Hours* by Trieschman et al. (1969) that highlighted the importance of using the residential milieu as a teaching tool where “what goes on daily between children and adults is seen as an opportunity for therapeutic education and re-education of the child” (p. 3).

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From its beginning in 1967, a theme throughout the TFM was accountability. Teaching-Parents lived in the homes and were accountable for assuring the progress of each youth. Teaching-Parents could not pass on the responsibility of the youth to another shift of workers, a therapist, or a teacher. It was up to the Teaching-Parents to collaborate with parents, teachers, or therapists to ensure positive outcomes. And parents and teachers knew who to call with any questions or concerns – the Teaching-Parents. In the context of this accountability, the youths and Teaching-Parents developed trusting relationships. Who cares for the youths? The Teaching-Parents. For whom are the Teaching-Parents working? The youths. Thus, Teaching-Parents were accountable for the youths’ treatment, and the administration directed training, consultation, evaluation, and other resources to support the Teaching-Parents.

Self-government was another system of the TFM that created accountability for staff and promoted self-determination in youth by empowering youth to have a voice, ownership, peer accountability, and involvement in the homes’ day-to-day operations (Wolf et al., 1995). The manualized self-government process enhanced what Fr. Flanagan originally instituted when he started Boys Town to be a community where youth could learn how to be good citizens and solve problems together (Hupp & Limprecht, 1992; Lynch & Hyland, 2016). Components of self-government include,

i.e., 1) family meetings, 2) manager systems, and 3) citizenship that teach youth good decision-making, responsibility, leadership, and consideration of others (FFBH, 2021). The self-government system gave youth input in the governing of the homes and Boys Town community, and taught the limits to youth authority due to matters that concerned safety, health, and education (FFBH, 2021). The selfgovernment system also provided youth opportunities for practicing citizenship skills, proactive monitoring, and accountability needed for safe family-homes and a vibrant community.

To support the Triadic-Model and self-government, it was vital to create an environment where people wanted feedback and liked accountability. Wolf et al. (1995) termed the creation of a culture that valued feedback as “turning lead into gold.” Defining positive, supportive, and instructive relationships between staff and youth helped youth get better. One rubric validated by practice at Boys Town was that adults should have at least four positive social skills teaching interactions for each negative interaction with youths. Staff used point cards with the youth to track the progress youth were making on their social skills, the ratio of positive to negative teaching interactions, and the associated positive and negative consequences. Supervisors reviewed point cards to assess the social skills teaching and ratios and provided coaching to staff on any necessary adjustments. A study by Gross et al (2015) reviewed adult/youth positive to negative interactions and found the ratio to actually be 9:1. This emphasis enhanced what Wolf et al. (1995) referred to as the “reinforcement value of staff” that helped youths learned the necessary skills they needed to be successful.

The point cards and motivation system in the TFM were used as tools to support “mutually reinforcing relationships” (Wolf et al., 1995) and therapeutic alliance, defined as goals, bonds, and tasks (see Bordin, 1979; Folmo et al., 2020; Stubbe, 2018) between youths and staff. For instance, the point cards were used to monitor the progress youths were making on the *tasks* (i.e., individualized skills) needed to achieve their *goals*, and then youths were gradually faded from the point card as skills were established (Wolf et al., 1995). Additionally, point cards can be used to measure the *bond* (i.e., mutually reinforcing relationship) between staff and youth based on rates of individualized teaching, positive reinforcement, and encouragement from staff (see Duppong Hurley et al., 2015; Gross et al.,

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2015). A concern of point and level systems is that they can be manipulative and coercive and used by staff to control and punish youths (Lieberman et al., 2019), especially when point and level systems are poorly designed or implemented incorrectly (Peterson & Huefner, 2023). Therefore, point card data (e.g., positive to negative ratios, individualized skills teaching) were reviewed routinely by consultants to evaluate the mutually reinforcing relationship between staff and youth and to ensure treatment was safe, humane, individualized, and effective.

Boys Town leaders attempted to employ the same high positive-to-negative ratio in adult-toadult interaction as well. New staff learned how to pleasantly give and accept feedback and even to ask for feedback in preservice training. This section of training set the stage for how to thrive and help others thrive in a highly supportive environment with a lot of feedback. This also resulted in a culture that celebrated Teaching-Parent Certifications and recognition of Consultants for their coaching that helped their Teaching-Parents get certified. People who worked at Boys Town saw successes all around

them and valued the feedback; and this culture that valued feedback and the effective use of data was a major element in that success.

Initially, evaluators assessed the support provided by the Consultants to the Teaching-Parents through the Consultant Certification; later, evaluators extended this to a Campus-Wide Consumer Evaluation to positively influence the entire campus culture. All Teaching-Parents rated the support services provided by human resources, finance, maintenance, etc. In turn, those areas rated the Youth Care Department and one another. The goal was to create a culture where all staff recognized that their role was to help the Family Homes succeed and that all staff participated in the design and organizational change. Because senior leadership mandated its use and importance, the Campus Wide Consumer created a culture that supported Teaching-Parents – the adults who were closest to the children.

Another factor promoting a culture of success at Boys Town was national influence and expansion. National influence came as Boys Town helped other non-Boys Town programs install the TFM in their programs. Boys Town developed the National Resource and Training Center (NRTC) to replicate the model across the country in non-Boys Town-owned and operated programs. Boys Town also began to develop and operate Sites around the country, beginning with a five-home campus in Tallahassee, Florida, in 1982. Developing others' programs and expanding its own had wonderful benefits - first, more children received better care, and second, it strengthened the culture of Boys Town. National outreach exposed the organization to new challenges in funding, compliance, and the nuances of culture and ethnicity in different states and regions.

Wolf et al. (1995) stated that replication is the true test of successful program specification and development. Boys Town leaders learned that overcoming obstacles to successful replication also strengthened, emboldened, and kept vital the organizational culture. Not only did these efforts spawn creativity and the rewards of seeing positive impact on children's and families' lives, but they also created career opportunities for staff around the country - all contributing to a winning culture and model longevity.

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### **Model Expertise**

Fifty years of experience and program development and expansion at Boys Town and replication attempts by TFM Sites validated that model expertise is a major factor contributing to successful replication and high program fidelity. As Boys Town spread the good news and results of the model, it needed leaders who had the expertise to manage the new programs. In the process of successfully installing the TFM at Boys Town, the TFM experts developed a new generation of leaders and new systems to promote model expertise. The four model systems that function together to promote model fidelity —training, consultation, evaluation, and administration - require specific knowledge and skills for leadership success. Initially, new leaders attended the pre-service trainings in Lawrence, Kansas, to learn to train Teaching-Parents. Model experts developed the Consultation and Evaluation Workshops and mentored new leaders in the application of these skills. Also, to further embed widespread

knowledge of the TFM, KU and BT collaborated on a professional master's degree in human development. The curriculum focused on behavior analysis theory and practice, a thorough review of the initial research and development of the TFM, TFM practice itself, that culminated in a master's thesis applying this knowledge. Not only did this deepen the knowledge base, but it also credentialed masters-level practitioners for leadership and allowed BT to meet licensing requirements.

Experience with the TFM as a Teaching-Parent, an Assistant, a trainer, evaluator, or consultant became a prerequisite for anyone seeking leadership positions on the Boys Town Home Campus, at a Site, or in leading a model adaptation. For instance, when adapting the TFM to a residential treatment center, Boys Town selected one of its most experienced residential directors to work with the Psychiatrist, Medical Director. Today, the Boys Town Residential Treatment Center is successful in dealing with seriously aggressive preadolescents and adolescents with mental health disorders (Huefner et al., 2021) while reducing psychotropic medication needs of children without increases in problem behavior, seclusion, or restraints (Huefner et al., 2014).

### **Quality Standards**

As the model spread nationally, concerns developed that the TFM might drift in its implementation due to the vagaries of leadership change or regional or state regulations. Leaders from TFM Sites such as Kansas, North Carolina, New Jersey, Nevada, Texas, and Boys Town met in 1977 to form the Teaching-Family Association (TFA; 2024). They formed a national quality and branding system for TFM sites. Modeled after the fidelity systems involved in certifying Teaching-Parents, TFA leaders developed a Site Certification process that required annual data submission and tri-annual site consumer evaluation and visitation by a TFA certification team (D. Daly & Thompson, 2023). These national quality control systems would prove essential in protecting both the Teaching-Family and Boys Town brands moving forward.

Boys Town underwent massive leadership changes in the mid-1980s. Five of the seven original TFM experts were no longer in place. Such change often promotes intended or unintended changes in program direction. Fortunately, the TFM experts had done outstanding work, and the model remained strong in implementation and grew in influence as Boys Town's national impact grew. The program quality was high. Through training and supervision, TFM experts had developed dozens of new leaders imbued with thorough knowledge of the program and innovative ideas for model deployment and expansion. What became referred to as the "Boys Town Revolution" to create the organizational change needed was complete (Fixsen et al., 1977; Hupp & Limprecht, 1992).

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In 1985, Boys Town appointed a new Executive Director, Fr. Val Peter. His goal —impossible to achieve but inspirational to attempt - was to "change the way America cares for its troubled children." Since considerable national expansion and program development had been occurring at or through Boys Town in the early 1980s, the new Executive Director had capable staff and great tools to help achieve his goals. This Executive Director did not need a new model for a program, but he determined rebranding was necessary for national expansion. The rebranding of the TFM was important for the Board of Directors, whose fiduciary responsibility was to Boys Town. Thus, the TFM campus-based

adaptation became known as the Boys Town Family Home Program (BTFHP; see Thompson & Daly, 2015). This rebranding was instrumental to the longevity of the TFM at Boys Town.

Maintaining the close relationship with TFA was important through the leadership changes. Maintaining its status as a certified TFA Site allowed Boys Town to be both a recipient and a contributor to the collective wisdom of the organization. Leadership from TFA Sites came to Boys Town for certification visits and data reviews at least every third year, and candidly offered their observations and shared their expertise. Getting insights from leaders of programs running compatible systems was more than helpful – their feedback was foundational as to why the BTFHP/TFM remained a leader in quality care. While the strong data use at Boys Town exceeded the capabilities of smaller TFA Certified Sites, all Boys Town systems complied with TFA National Standards. Since that time, the BTFHP/TFM were used interchangeably in national and international practice and research circles (D. Daly & Thompson, 2023). Ongoing development and dissemination of evaluation standards on best practices for quality residential programs occurred beyond TFM programs as well (see Boel-Studt et al., 2019; D. Daly et al., 2018; Huefner, 2018).

As multi-site and multi-department management grew, more complex and new data systems had to evolve. For data to be useful, data communication had to become simpler and incorporate more support service information, such as human resources, finance, compliance, and fundraising. One such example was an application of the Balanced Scorecard (FFBH, 2024b) used to measure vital Site by Site and Department goal setting and goal attainment. The balanced scorecard contained not only youth and program data for residential programs and data for any of the family-based adaptations at a Site, but also key support service data. For example, metrics included number of youth and families served, duration and outcomes of services, staff certification and turnover rates, and financial data.

All senior managers at each Site and Departmental Vice Presidents at the Home Campus received this report monthly. Senior Site Leaders and Vice Presidents met every three months on a video conference to praise progress, raise areas of concern, and establish goals for the next quarter. The Balanced Scorecard simplified communication between all stakeholders. While only quarterly, the meetings clarified strategy and progress on implementation for all senior managers. It was reminiscent of the initial daily meetings TFM experts held in 1975.

Data use evolved and expanded to meet changes in program focus or direction. For instance, when national growth was the focus, research staff developed the Daily Incident Report (DIR), a reliable tracking report on over 100 behavioral incidents (FFBH, 2007; Handwerk et al., 2006; Larzelere, 1996), to provide program leaders with daily snapshots of activity at geographically distant Sites. Monthly Site visits by implementation experts from the Home Campus, phone calls, and Certification evaluations were necessary but insufficient tools to faithfully develop Site programs and maintain the

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safety of children and staff. The DIR gave senior leaders vital information on the progress of new leaders and programs, as well as the behaviors of youths in the homes. Program leaders and consultants still use the DIR to customize services and supports that staff and youths at all Sites need. The continuous feedback that the different routine data systems provided on program operations,

implementation, service delivery, behavioral incidents, youth and family assessments, and outcomes continued to be the lifeblood for continuous quality improvement and assurance.

### **Research Focus**

In 2006, the next Executive Director, Fr. Steven Boes, arrived with a focus on serving more youth and families by growing a continuum of services at Boys Town and at other TFA Sites. He also wanted to expand Boys Town's influence via research. National policy shifts and skepticism about residential care, prioritization of prevention services, and demands for evidence-based interventions highly influenced his direction. This direction furthered the growth of efforts Boys Town and TFA Sites had already begun, with new adaptations based on evaluation and research on family and schoolbased services.

Over the years, research has verified the effectiveness of Boys Town programs, but researchers needed external funding to conduct the large experimental studies (e.g., randomized controlled trials) required by evidence-based clearinghouses. To acquire this funding, Dr. Ron Thompson and the National Research Institute at Boys Town, and Dr. Michael Epstein from the University of Nebraska at Lincoln, Special Education and Communication Disorders, created a research-practice partnership called the Institute for Child and Family Studies in 2005 (Thompson et al., 2017). The role of the Institute was to conduct experimental research on operating programs in collaboration with academic institutions. The Institute formed a National Scientific Advisory Panel to guide research design, to assist in university partnerships, and to recommend funding agencies. After establishing the research-practice partnerships in 2005, Boys Town and its colleagues produced 70% of the nearly 600 peer-reviewed publications to date (FFBH, 2024a). Additionally, the research-practice partnerships with universities created a process for conducting independent evaluations that were necessary to establish the research required by the evidence-based clearinghouses. Next, we summarize some of the research and evidence-based statuses for the array of Boys Town services with ties to the TFM.

**Residential.** As mentioned earlier, the Crime Solutions Clearinghouse (2015) has designated the BTFHP as having "Promising" research evidence. Research conducted on the BTFHP reported success on youths' outcomes during care (Lee & Thompson, 2008) and after care (Larzelere et al., 2004; Ringle et al., 2012). Contrary to criticisms of residential programs, the BTFHP showed greater positive peer influence between youths, instead of negative peer contagion, during care (Huefner & Ringle, 2012; Huefner, Smith et al., 2018); and longer length of stays were related to greater life satisfaction, educational achievement, and employment success post-care (Huefner et al., 2004; Ringle et al., 2010). Researchers also reported that youth who were in the BTFHP for more than six months showed better educational, employment, and criminality outcomes that were associated with a societal benefit amounting to a 361% return on investment (Huefner, Ringle et al., 2018). Researchers also evaluated program effectiveness (Tyler, Patwardhan et al., 2019) and social skills teaching by Family-Teachers (Tyler et al., 2021; 2022) according to principles of trauma-informed care (United States Department of Health and Human Services, 2014). To increase resilience, youth in the program helped researchers

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develop a culturally informed screener to promote healthy activities related to resilience to help new youth coming into the BTFHP (Tyler et al., 2024).

Using research to evaluate the effectiveness of program components has been integral for innovating new services for other settings and populations. Over the years, research staff worked directly with program leaders to adapt known components of the TFM and BTFHP into services for evidence-based family, school, and aftercare services. The investment in research on family, school, and aftercare services benefited ongoing enhancements in the BTFHP as well.

**Family Services.** In 1992 an abbreviated “teaching interaction” (Phillips, et al., 1968) was incorporated into Boys Town’s parent training program, called Common Sense Parenting® (CSP; Burke et al., 2015), which is rated “Supported by Research Evidence” on the CEBC (2022), and “Promising” on the Prevention Services Clearinghouse (PSC, 2023). Boys Town In-Home Family Services® (IHFS) combines CSP with safety assessments, family resources, and supports to provide a family-centered service to prevent children from needing out-of-home placement (FFBH, 2022). The CEBC (2024b) has rated IHFS as “Promising”.

**School-Based Services.** To provide support to students, Boys Town leaders brought in WellManaged Schools® (WMS; Hensley et al., 2011) to provide universal supports in the BTFHP school settings in 1982. At that time, WMS was a classroom and school discipline curriculum based on the principles and operations of the TFM (Black et al. 1982). Boys Town quickly added incident tracking and model fidelity systems to enhance effectiveness and replicate it in community schools. University researchers recently completed a randomized controlled trial on WMS, and results are currently under review. One of the newest Boys Town programs, *Lift* with Boys Town School Support Program®, was developed to help students, parents, and teachers by linking school (e.g., WMS) and family-based services (e.g., CSP, IHFS) in multitiered systems of supports (see Ringle et al., 2025). University researchers are currently conducting a quasi-experimental study of this program.

**Aftercare Services.** Another strategy for Boys Town was to improve long-term outcomes of residential programs through aftercare. To do so, researchers at the University of Nebraska at Lincoln and Boys Town developed an aftercare program called On the Way Home® (OTWH; see Trout et al., 2013; 2020) to prevent youth discharged from residential programs from returning to out-of-home placement. The CEBC (2023) rated OTWH as “Supported by Research Evidence”, and the PSC (2022) rated OTWH “Promising”. To further extend research in aftercare, Boys Town’s Successful Futures® program staff are collaborating with researchers to assess the needs of youth who are transitioning into adulthood after high school graduation and evaluating their long-term outcomes (Day et al., 2025).

Since the adoption of the TFM model in 1975, Boys Town has directly served more than 500,000 youth and families with residential, family, school-based, and aftercare services. Due to the growth in community-based services, Boys Town now serves 95% of youths and families in their own homes and schools. By adopting the TFM, and later adapting it to different settings and populations, Boys Town services use the same theoretical model. Consistent with System of Care principles (see Stroul et al., 2010), Boys Town has been able to build a coordinated network of effective services with an emphasis on partnering with children and families so they can function better at home, in school, and in the community. Creating a continuum of services has improved continuity for children and

families because they receive similar core components (with fidelity) and language from Boys Town practitioners across the different settings and levels of care (see Huefner et al., 2010). The development of the continuum of family-based and aftercare services resulted in better support of families in all Boys Town systems, and improved family engagement in the BTFHP through greater collaboration, empowerment, and embracing the diversity of families as a strength (see FFBH, 2021).

Today, research remains embedded throughout Boys Town to support the programs. This includes data collection and analysis to monitor implementation, fidelity, risk, and protective factors (Duppong Hurley et al., 2025), social skills teaching (Tyler, Day et al., 2025), and outcomes to ensure others replicating Boys Town's evidence-based programs are achieving the expected results. For example, researchers are working with program staff to continue to refine implementation and outcome tracking systems for services within (see Duppong Hurley et al., 2025) and outside of Boys Town (Oats & Tyler, 2020; 2024). With the advent of new computer software, interactive data visualization dashboards are now available to monitor programs in real-time. Today, staff and supervisors can evaluate their own performance, along with youth and family outcomes, which improves training, supervision, and staff development. Additionally, using this data helps to evaluate core program components that inform program effectiveness and efficiencies, improve quality, and adapt programs, while maintaining fidelity (Fixsen et al., 2025), to address cultural differences (see Blasé et al., 2013).

### **Considerations for Ongoing Sustainability & Future Directions**

No one can know the future, but the lessons of the past 50 years prompted us to make recommendations for ongoing sustainability. First, Boys Town should maintain its implementation of evidence-based programs, such as the TFM/BTFHP, and only deviate when data suggest that new interventions become necessary, or new evidence-based programs emerge that are more effective and efficient. Second, data systems should support evaluation of program implementations and outcomes for continuous quality improvement at all levels of the organization. Third, continue "turning lead into gold" through positive feedback and caring relationships that are crucial for healthy and vibrant environments for children and families. There is no substitute for placing the satisfaction and happiness of clients and staff at the center of any intervention. Fourth, technology will be necessary for making interventions more efficient and attractive, but the previous suggestions would be important to keep in mind when adopting new innovations. Fifth, continue to generate new knowledge via research to improve current practices of the TFM/BTFHP so it can be more effective and efficient, while creating new innovations that help children and families. For new innovations, lessons learned from the adoption of the TFM at Boy Town provide a blueprint to institute programs with fidelity through manualized training, supervision, evaluation, and administrative systems. In this paper, we described how Boys Town is currently engaged in the first three recommendations and will now close with future directions in technology and research.

To further innovation of assessment and treatment, Boys Town started conducting neurobehavioral research using functional magnetic resonance imaging (fMRI) in 2012, and later magnetoencephalography (MEG). This technology has provided new insights into brain function on topics such as anxiety, depression, child maltreatment and trauma, substance use, aggression, conduct

problems, and substance use. For instance, researchers are learning how the type of adolescent substance use (e.g., alcohol, cannabis) impacts systems of the brain involved in learning, motivation,

emotional, and behavioral regulation differently (Aloi et al., 2021; R. Blair, Bashford et al., 2019; R. Blair, Bajaj et al., 2021). With regards to trauma, researchers are learning about differential brain responses based on the type of maltreatment a child experiences (see K. Blair, et al., 2019; K. Blair, et al., 2022) and changes in brain function after receiving services in the BTFHP (see K. Blair et al., 2025). The behavioral principles that are the foundation of the TFM have provided a useful crosswalk for understanding behavior and neural functions, so they are applicable to practice (see Tyler et al., 2018). Understanding the relationship between the child's behavior and neurocognitive function will help inform individualized treatment for youth.

As society moves further into the information age, researchers are working to support youth and families in the digital world. The relationships between social media use and mental health disorders in children and youth are becoming clearer (see Tyler et al., 2024). Emerging technologies such as artificial intelligence (AI) could further increase risks or improve protective factors. Indeed, AI will be able to produce information more quickly and work unlimited hours compared to humans, but AI will need training and will not be able to form authentic relationships or navigate human contexts (Toscano, 2018). Here, we draw a comparison to lessons learned from the TFM about artificial systems like token economies (Lieberman et al., 2019; Peterson & Huefner). For example, motivation systems, like token economies, must occur within "mutually reinforcing relationships" so they promote individualized skill development, and do not become coercive or manipulative (Peterson & Huefner, 2023; Wolf et al., 1995). Similarly, adults could use AI tools to help youth learn skills and increase protective factors, but these AI tools should be built and trained for use within mutually reinforcing human relationships. In this role, AI could be a helpful support for the adults closest to the children, rather than becoming coercive or manipulative.

Regardless of what technologies emerge, including youth, families, and staff in determining the application of new innovations will be key. In 2019, Boys Town renamed its Youth Care Research Department to the Child and Family Translational Research Center to emphasize principles of translational research (see Hamilton, 2015) and participatory action research (see Institute of Development Studies, 2024). The new Center applies a *practice to research and back to practice* framework that focuses on research activities of ongoing data support, experimentation, evaluation, and dissemination, defined with the acronym *DO BETTER* (Tyler et al., 2021). This framework aligned with Fr. Flanagan's views on research when he said, "I like to think of Boys Town as an experimental station in youth work – a starting point from which we adults may gain a better and finer knowledge of the programs of youth and the treatment of unusual cases which may arise" (Flanagan, 1939). Fr. Flanagan included the boys of Boys Town in the process of helping him identify solutions to the problems they were facing at the time. In the 1970s, the TFM experts created procedure manuals for Teaching-Parents by collaborating with Teaching-Parents to identify and define their best practices. Going forward, researchers should continue to partner with youth, families, and staff from the beginning, and make sure they have access to research results right away, so everyone can identify and apply solutions to address societal problems together.

## Conclusion

This manuscript reviewed the last 50 years of the TFM at Boys Town to identify keys to organizational change and sustainability. Essential resources included the TFM core systems (administration, training, consultation, and evaluation), consumer orientation, feedback, and teaching

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skills that established and maintained fidelity of effective programs. Prioritizing quality outcomes and standards, creating a culture of success, effective use of data systems, model expertise, and research focus were factors related to longevity. The structures and processes identified in this article allowed the model and organization to evolve and sustain. The adoption of the TFM at Boys Town resulted in implementing core systems and a feedback culture, which supported those closest to the children and a self-governing community providing continuity and quality care for 50 years. The enduring benefits achieved by combining the passion and love instilled by founder Fr. Edward Flanagan, with the science of the TFM is a good reminder that progress requires the courage of the heart and the knowledge of the mind.

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## **Sustaining Fidelity for 50 Years: Boys Town and the Teaching-Family Model**

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### **Abstract**

The use of evidence-based programs to improve the quality of residenal care is not common, and, to the extent they are used, there is litle evidence that those programs are used with fidelity. Fidelity is defined as the extent to which the essenal components of an innovaon are used in pracce. Fidelity was used as the standard to assess progress of organizaon change and quality of youth services as the Teaching-Family Model was established at Father Flanagan’s Boys’ Home, Boys Town, Nebraska. The organizaon change process was iniated in 1975, fundamental changes were completed in 1979, and the new organizaon funcons, roles, and structures were fully in place in 1984. The sustainability of change is assessed aer 50 years. The Implementaon Quoent was used to track the progress of organizaon change from 1975 to 1984 and sustainability in 2025. Data from hundreds of TeachingFamily Model fidelity assessments (collected as part of the Teaching-Parent Cerficaon process) documented the improvements in quality of care within years and across years from 1979-1984 and again in 2022-2024.

The data from Boys Town provide evidence that quality care can be established and sustained for dependent youths who are involuntarily placed in residential care organizations.

**Keywords:** Fidelity, Sustainability, Organization Change, Teaching-Family, Boys Town

**Practice implications:**

- Residential youth care organizations can be changed, changes can be sustained, and change can be assessed using fidelity and staff longevity as metrics.
- High fidelity use of an evidence-based program can be developed on purpose in a residential care agency.
- High fidelity use of an evidence-based program can be sustained for 50 years in a residential care agency.

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## **Sustaining Fidelity for 50 Years: Boys Town and the Teaching-Family Model**

### **Introduction**

Residential care agencies have been encouraged to use “what works” to improve the quality of care (James, 2011; U.S. Public Health Service, 2000). A review by James (2017) noted some progress and an “openness toward evidence-based practice” while “findings related to fidelity painted a far less encouraging picture. Findings suggested that efforts to implement evidence-based treatments may be haphazard with little attention paid to sustained training and other factors necessary to ensure the integrity of the treatment, and limited understanding of what may be required to successfully implement an evidence-based intervention” (p. 8). Thus, fidelity is a key indicator of the use of an evidence-based program in residential care.

Fidelity is defined as the extent to which the essential components of an innovation are used in practice. An innovation is defined by its essential components, and the presence and strength of the essential components are directly linked to outcomes (Fixsen, 2025). Assessing fidelity is important for any innovation (Dobson & Cook, 1980; Fixsen et al., 2024), and especially important for intervention-based innovations in residential care settings where treatment and care involve frequent interactions between staff and dependent children, youth, or adults. The nature of those interactions define the quality of care as well as the use of any evidence-based programs.

Fidelity has been a concern from the earliest days of the evidence-based movement (Braukmann et al., 1975; Gilbert, 1978; Hall & Loucks, 1977). Reminders regarding the importance of fidelity assessments continued as the field evolved (Bond et al., 2000; Bruns et al., 2001; McHugo et al., 1999; Schoenwald et al., 2000; Teague et al., 1998). Reviews of outcome studies across a wide range of human services have been reported by Moncher and Prinz (1991), Gresham et al. (1993), Dane and Schneider (1998), and Durlak and DuPre (2008). Overall, these reviews of over 1,200 outcome studies report that fewer than 20% of the studies included a measure of the independent variable (fidelity: is “it” there), and only a fraction of those used the measure of the independent variable in analyses of the

outcome data (does “it” matter). Consequently, there is much to be learned about the essential components of interventions and how to assess those components in practice.

Although a paucity of evidence regarding fidelity has been generated from evidence-based programs in residential care (James, 2017), the accumulating knowledge base applies to the use of evidence-based programs in residential care settings. Currently, fidelity is deemed to be an essential aspect of program research and development. “Without fidelity measures, treatment becomes a mysterious black box: We do not know precisely what the intervention is, how to implement it, and what quality of it has been delivered. The black-box approach represents pre-scientific clinical care” (Bond & Drake, 2020, p. 881).

Fidelity is a key metric for organization change and development. “Fidelity benchmarks set the minimum acceptable standard, and exceptions are managed so that performance is sustained within an acceptable range so that predicted outcomes can be achieved more consistently. Meeting benchmarks for fidelity establishes a new normal distribution of competencies and outcomes” (Fixsen et al., 2024, p. 4). An et al. (2020) recommend establishing pre-set benchmarks that must be met for fidelity.

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Assessing fidelity and using 80% as a benchmark for fidelity helps to assure the intervention “is there” as organizations change so that they can use innovations as intended to better support improved outcomes. Fidelity was central to the organization change process initiated in 1975 at Father Flanagan’s Boys’ Home, Boys Town, Nebraska. As described in a companion paper in this special issue (Tyler et al., 2025), the organization change process began with the goal of implementing the Teaching-Family Model in the 41 cottages on the Boys Town campus.

The Teaching-Family Model is an early example of an evidence-based program. It began in 1967 in a group home in Lawrence, Kansas. Family-style care and treatment was provided by TeachingParents, a married couple who lived in the home with their own children as well as the referred youths.

The research and development of the Teaching-Family Model have been described and summarized (Blase et al., 1984; Fixsen & Blase, 2018; Phillips, 1968; Phillips et al., 1971, 1974; Wolf et al., 1995). It was cited as a “model program” by the American Psychological Association in its initial review of “evidence-based programs” (Roberts & Hinton-Nelson, 1996), as one of three evidence-based residential programs in the Surgeon General’s report (U.S. Department of Health and Human Services, 1999), and as perhaps the best developed and researched residential treatment model (James, 2011) among those reviewed by the California Evidence-Based Clearinghouse for Child Welfare. Subsequent meta-analyses have found the Teaching-Family Model to be one of three residential programs that produce positive and cost-beneficial outcomes (Lipsey & Wilson, 1998; Washington State Institute for Public Policy, 2016).

Father Flanagan’s Boys’ Home was founded in 1917 in a home in downtown Omaha, Nebraska. By 1975, Boys Town was an incorporated village on 1600 acres (2.5 square miles) with its own post office, horse farm, agricultural farm, visitors center/museum, law enforcement, dental, maintenance department, schools, churches, training center, and choir in addition to its youth care facilities and related fund raising, financial management, and administrative staff. In 1975, Boys Town was a large institution that

employed 998 people in all its operations. About 500 youths lived in 41 dormitory-style cottages staffed by three shifts of childcare workers. Education was provided in an elementary and high school on campus. The youths were referred from child welfare and juvenile court systems in multiple states. Typical youths were 14-15 years old, about 2/3 were Caucasian, and length of stay was about 20 months (Thompson et al., 1996).

In 1971, an article in an Omaha newspaper reported the accumulated wealth and poor care of boys at Boys Town. The article won a Pulitzer Prize for investigative journalism. In response, Boys Town suspended fundraising, changed directors, and hired two successive groups of experts to change the care of youths on campus. The two efforts to change youth care at Boys Town failed. At the end of 1974, Fr. Robert Hupp, the new director, invited the developers of the Teaching-Family Model to make the necessary changes to improve the quality of care at Boys Town. The Teaching-Family developers were familiar with large institutions and how intractable they seem to be, resisting change of any consequence (Reppucci & Saunders, 1974). But what if implementation of the Teaching-Family Model could occur successfully in a large institution? Would the new standard become just as intractable and sustain humane and effective care for decades to come? Would the Teaching-Family Model work just as well in a campus setting as in a community setting? With these thoughts in mind, five Teaching-Family Model experts accepted positions at Boys Town.

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Fidelity was central to the organization change process initiated in 1975. In the change process, fidelity of the use of the Teaching-Family Model was the “high-level standard” used to inform and assess changes as they were made. Weick and others (Morgan, 1997; Morgan & Ramirez, 1983; Weick, 1987, 1995; Weick et al., 1999; Zahra & George, 2002) have written extensively on organization functioning and organization development. Weick and colleagues describe the need to have a high-level standard for performance, a standard that can be used to detect errors, then correct errors so that the standard can be met. The standard serves as the basis for learning in an organization. As an organization develops, the goal is to reduce unwanted and potentially harmful error and establish support for high-fidelity performance as part of organization routines. For the Teaching-Family Model, the metric for the high-level standard is the fidelity assessment, called Teaching-Parent Certification.

The purpose of this paper is to describe the fidelity data collected during the organization change efforts at Boys Town and during ensuing years when these outcomes were sustained. One overarching hypothesis is that institutional change can be accomplished, and changes can be evaluated with ongoing fidelity assessments. A second overarching hypothesis is that organizational change can be sustained as long as fidelity assessments are conducted. The Teaching-Family fidelity assessment and results are presented in Study 1. In Study 1, it is hypothesized that fidelity can assess changes in treatment for resident youths and can be sustained over time. In Study 2, it is hypothesized that fidelity assessment can provide a metric to assess organization change and sustainability of change over time.

## **Study 1**

During the program development phase for the Teaching-Family Model, the Teaching-Parent Certification (fidelity) assessment was established as a measure of the quality of youth care. After 3 years of

intensive research to develop treatment methods, the first attempt to replicate (repeat, duplicate, reproduce) the Teaching-Family group home program failed in 1971 (Fixsen & Blase, 2018). At that time, the Board of Directors of the new group home called the Teaching-Family developers to a meeting and terminated the relationship based on complaints from teachers, parents, and neighbors. The failure led to a re-examination of the treatment program. Prior to the failure, repeated analyses of videotaped interactions in the prototype group home (Achievement Place) and the replication group home revealed an essential function in the prototype program that had not been identified previously. The essential function was named the *teaching interaction*, a set of skills for teaching a wide variety of appropriate alternative behaviors. The Teaching-Parents at Achievement Place were teaching the youths appropriate behavior so skillfully that it had been overlooked until the contrasting experience was observed in the replication group home. Another previously unrecognized component was relationship development. Again, so skillfully done it was not “seen” until its absence was noted in the replication home. The Teaching-Parents at Achievement Place used high rates of descriptive praise, statements of care and concern, and advocacy for youths in a natural way that fit into the flow of interactions in daily life. These new treatment components were added to the definition of the Teaching-Family Model.

Retrospectively, it was concluded that the developers failed to prepare the Teaching-Parents so they could use the evidence-based program as intended. In response to the failure, the developers discarded the previous academic methods for preparing Teaching-Parents and established new training and coaching processes to develop a broader set of defined competencies for Teaching-Parent couples who had been carefully selected for their roles as practitioners (Blase et al., 1984; Blase et al., 1974;

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Braukmann et al., 1975; Braukmann et al., 1984). As the essential components and related practitioner skill sets became clear, a fidelity assessment was developed and put into use (Braukmann et al., 1975; Phillips et al., 1974).

By the end of 1975, the developers had attempted to replicate the Teaching-Family Model in 64 group homes, learning new lessons along the way (Fixsen & Blase, 1993; Fixsen et al., 2001/2007). During the eight years from 1967 to 1975, the essential components of the Teaching-Family Model treatment program and implementation processes had been established, revised, refined, and evaluated. Fixsen et al. (2019; Chapter 4) provide a detailed review of the usability testing that led to the development of the essential components of the Teaching-Family Model and the implementation processes to replicate the residential (group home) treatment program for adjudicated youths.

By 1975, the goals of the Teaching-Family program were to provide treatment that was humane, effective, individualized, satisfactory to consumers, cost-efficient, and replicable. The identification and operationalization of the essential components to accomplish these goals were established from its inception in 1967 through 64 attempted replications by 1975. The essential components of treatment are relationship development, teaching appropriate alternative behavior, movement systems, self-determination, and counseling. Clinical judgment is also an essential component with a focus on morals (right, wrong), ethics (good, bad), and judgment (good sense) as Teaching-Family practitioners use the treatment components in their interactions with others.

The fidelity assessment relates directly to the essential components of the Teaching-Family treatment program. The fidelity assessment also relates to the goals of the Teaching-Family program, to provide treatment that is:

*Humane:* The youths, along with their parents and teachers, are in frequent contact with the Teaching-Parents and the youths and have firsthand knowledge of how the Teaching-Parents interact with the youths. Any strengths, perceptions of mistreatment, or concerns can be reported during the interviews and surveys that are a part of each fidelity assessment (at least annually).

*Effective:* The youths, along with their parents and teachers, are in frequent contact with the Teaching-Parents and the youths and have firsthand knowledge of how the youths are progressing at home, at school, and in the community. In addition to the Consumer survey, the two fidelity assessors have ample opportunity during the 2 to 3-hour in-home visit to observe and rate the quality and appropriateness of the Teaching-Parents' use of the essential components of the Teaching-Family treatment program to support behavior change.

*Individualized:* Throughout the 2 to 3 hour in-home visit, the two assessors observe and rate the appropriateness of the Teaching-Parents' interactions with each youth. This is also rated as part of the record review of individual youth files.

*Satisfactory to consumers:* The youths and their parents, teachers, and referral agents are asked directly, "How satisfied are you that...?"

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The goals of being cost-efficient and replicable are not part of the fidelity assessment because they are not within the purview of individual Teaching-Parents. Independent analyses have established cost efficiency (Washington State Institute for Public Policy, 2024; Weinrot et al., 1982) and ability to replicate the Teaching-Family Model (Fixsen & Blase, 2018; Fixsen et al., 2001/2007; Tyler et al., 2025).

The experience with the attempted replications from 1971-1975 led to the development of the Teaching-Parent Certification (i.e., fidelity) assessment (Braukmann et al., 1975; Phillips et al., 1974), an indicator of the extent to which the Teaching-Family Model was being used as intended in each attempted replication. The complexity of the essential components of the Teaching-Family Model requires direct observation to detect their use, absence, or misuse, and to assess the nuances related to judgment (e.g., when and with whom to use/not use skills, missed opportunities to use skills). It is not enough to change youth behavior in the group home. In the Consumer evaluation portion of a fidelity assessment, asking others to rate the Teaching-Parents provides an indication of the impact on (generalization of) youth behavior at home, at school, and in the community.

From the beginning, it was clear that the fidelity assessment was an *observation* of the Teaching-Parents (were the Teaching-Parents using the Teaching-Family Model as intended?) and an *evaluation* of the Teaching-Family Site staff (were the Teaching-Family Site staff effective in teaching and coaching the Teaching-Parents to use the Teaching-Family Model as intended?). Figure 1 shows the

results of a fidelity assessment in 1971 at Achievement Place, the prototype Teaching-Family group home.

By 1975, the Teaching-Family Model was well defined, and the fidelity assessment was well established. The criterion for Teaching-Parent Certification was set at 6 on the 7-point scale. Staff selection, training, and coaching, and organization administrative supports and leadership were effective and centered on supporting Teaching-Parents so they could meet Certification criteria routinely (Blase et al., 1984; Blase et al., 1975; Braukmann et al., 1975; Braukmann et al., 1984).

## Methods

The Teaching-Parent Certification (fidelity) assessment was used from the beginning at Boys Town as the dormitory-style cottages were physically remodeled into homes and were staffed by Teaching-Parents who were selected, trained, and coached to provide expert treatment for troubled youths. The Teaching-Parents lived in the home along with any children of their own and up to eight youths in care. At Boys Town, Teaching-Parents were assessed 6 months and 12 months after completing the training workshop and annually thereafter. Fidelity assessments were conducted by Teaching-Family experts who were leading the change processes at Boys Town.

At Boys Town, the Board and Parents groups noted in Figure 1 were not included since they were not closely/locally involved in the day-to-day activities of the youths. The Court and Social Service groups (i.e., referral agents and case managers with regular contact with the youths) were combined into one Consumer group consisting of those who referred youths and oversaw their cases. The groups remained the same for the Youth (i.e., the youths who lived in the home with the Teaching-Parents) and Schools (i.e., the teachers of the youths in a home and the principal of the school). The Professional Evaluation was conducted in the same manner with direct observation during a 2-hour (or

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more) visit by two trained assessors who continually interacted with youths and Teaching-Parents during their visit. Interrater reliability was calculated, and agreement was recorded if the scores did not differ by more than one (e.g., a score of 4 and a score of 5 = agreement). The agreement was 100% on all fidelity assessments.

The fidelity assessment items ask, "How satisfied are you that...?" For the youths, parents, teachers, and others in the Consumer groups, "satisfaction" is an undefined term. It is up to each individual to decide whether he or she is satisfied or not according to his or her own feelings. If one person is dissatisfied, then that rating and his or her comments are taken seriously, no matter how others might judge the reasoning.

For fidelity assessors, "satisfaction" is defined, and observations are calibrated during the development of assessors and checked again by calculating interobserver agreement between the two assessors who conduct an in-home visit (Fixsen et al., 2019). During the development of assessors and periodically thereafter, the accuracy and quality of the comments accompanying a satisfaction rating are also the subject of discussion and agreement. The comments made by assessors are used to inform the

Teaching-Family praconer and coach so that excellent use of the essenal components is reinforced with examples, and areas for improvement are noted with raonales.

As more dormitory cotages were renovated and converted to Teaching-Family homes, more evaluators were needed to maintain adherence to the fidelity assessment schedule for each TeachingParent couple. The five Teaching-Family experts who moved to Boys Town began teaching other staff how to conduct the Professional Evaluaon observaons and youth interviews, how to conduct the consumer surveys, how to conduct pre-assessment informaon meengs with Teaching-Parents and coaches, and how to prepare the post-assessment summaries and conduct the meengs with the Teaching-Parents, their coach, and their supervisor. Selecon, training, coaching, and assessment of the Professional Evaluators (i.e., fidelity assessors) were rounized to accommodate the growing volume of assessments and turnover among assessors (Daly et al., 1982; Davis et al., 1978). One of the original five Teaching-Family experts connued to be a co-assessor from me to me to ensure assessor observaons and comments connued to adhere to protocols.

## Results

From 1975 to 1979, the number of Teaching-Family homes on campus increased from 4 to 41 as shi staff cotages were closed, physically renovated, and established as Teaching-Family homes by 1979. Thus, in Figure 2, the fidelity data for the enre organizaon begin in 1979 (Year 4.0 in Figure 2) and represent all fidelity assessments for all Teaching-Parents in all 41 homes. Figure 2 shows the results of 491 fidelity assessments conducted from 1979 through mid-1984, a period of 5.5 years. The data are summarized from the decision support data system established at Boys Town, where fidelity, outcome, and process data were rounely collected, reported, and used for decision making (Fixsen et al., 1982; Fixsen & Phillips, 1985).

Fidelity scores ranged from 1 to 7 for each component. In Figure 2, the average for each component (consumer evaluaon, school evaluaon, youth evaluaon, professional evaluaon) was averaged into a total score for each fidelity assessment conducted during that me period. The five

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bars within each 6-month period (Year 4.0, Year 4.5...Year 9.0) show the fidelity scores for TeachingParent couples at each me period who were employed for 0-6 months, 7-12 months, 13-24 months, 25-36 months, and 37 or more months. In Yrs. 4.0-6.5, there were 41 Teaching-Family homes. This expanded to 49 Teaching-Family homes in Yrs. 7.0-9.0 when a new Community of eight homes was established on campus.

With longevity, turnover, and expansion, the number of Teaching-Parent couples represented in each bar in Figure 2 changed at each me period. Data for 152 different Teaching-Parent couples are represented during the 5.5 years in Figure 2.

The data in Figure 2 show that within each me period fidelity scores improved for TeachingParents as they received connued coaching and gained experse. Teaching-Parents in the 13-24 months, 25-36 months, and 37 or more months groups consistently had higher fidelity scores than

Teaching-Parents in the 0-6 months and 7-12 months employment groups. This is evidence that newly hired Teaching-Parents were given the technical, personal, and administrative support they needed to quickly learn to use the Teaching-Family Model with fidelity and good outcomes. The differences were more pronounced in the early years, as shown in Figure 2.

Over the years, the scores for the Teaching-Parents in the 0-6 months and 7-12 months groups (i.e., those most recently employed) improved from low fidelity scores in Years 4.0-6.5 to scores above 5 in Years 8.0-9.0. The changes are likely related to implementation climate and culture (Glisson et al., 2012; Glisson et al., 2008; Weick, 1987; Williams et al., 2019). Glisson (2007, p. 739) defines the terms as:

“[C]ulture captures the way things are done in an organization, and climate captures the way people perceive their work environment. That distinction suggests that culture is a property of the organization and climate is a property of the individual. We define culture as the norms, expectations, and way things are done in the organization.... Organizational climate is created when individuals in a work unit, team, or organization share the same perceptions of how their work environment affects them as individuals.”

Following Glisson’s logic, changes in fidelity scores *within* years can be related to organization climate and a work environment where everyone participates in the process of competency development and improvement. That is, all Teaching-Parents were selected, trained, coached, and assessed in the same way and likely “share the same perceptions of how their work environment affects them as individuals.” These processes were repeated for each new group. The improvements in scores for the 0-6 and 7-12 groups *across* years can be related to organization culture where the “norms, expectations, and way things are done in the organization” are changed to support the new ways of work. By Year 9, the “new ways of work” had become “*the* ways of work” – this is how we do things here – transmitted in multiple ways to the next Teaching-Parents, the next administrator, or the next executive director.

### **Sustaining impact**

The Teaching-Family Model fidelity assessment has been used at Boys Town continuously from 1975 to present. To provide a comparison with the data in Figure 2, fidelity data were summarized for

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Family-Teacher Certification evaluations conducted from 2022-2024 (Family-Teacher is the name used for Teaching-Parents at Boys Town).

The Family-Teacher fidelity instrument for in-home observations has remained essentially the same over the years. It includes observations of Teaching Components (e.g., teaches correct skills, teaches to individual target skills); Relationship Building and Engagement (e.g., quality components, encouragement, and praise); Empowerment and Self-Determination (e.g., problem-solving, family meeting); and Program Implementation (e.g., youth skills, personalized and well-maintained home). By 1995, the rating scale changed from a 1-7 scale to a 1-5 scale, with 4 established as the criterion required for certification. As shown in Figure 3, the pattern of scores remains the same, with newly employed Family-Teachers (0-6 months, called the Major group in Figure 3) falling short of the

Cerficaon Criterion (4.0) and subsequent groups of Family-Teachers scoring progressively higher. The data are from 137 fidelity assessments conducted for all Family-Teachers who staffed 49 Boys Town Family Homes during the three years (2022-2024) shown in Figure 3.

The same Consumer groups (e.g., school personnel, referral agents) were used for the FamilyTeacher cerficaon process over the years. Enhancements were made by adding new concepts to some of the consumer surveys. For example, the Family Survey was expanded to include family involvement, respectfulness, safety, listening, and schedule. The Youth Survey was also changed to focus more specifically on the essenal elements of the Model, such as Family-Style, Relaonship, Teaching Skills, Family Meengs, as well as adding Safety, Family Treatment, and Faith/Religion.

Figure 4 presents the specific criterion for each Consumer Survey completed for three years of Family-Teacher Cerficaons from 2022-2024. Results show that scores were above the 4.0 criterion for all groups.

## Study 2

Organizaon change is challenging with many issues to cope with each day and many legimate and compeng agendas to sasfy simultaneously. Organizaon change takes me, usually several years, and the benefits of change likely will not appear unl some crical mass is reached (Strain, 2018, p. 111). It is important to “keep your eye on the prize” and track progress from the beginning. For the Teaching-Family Model (or any evidence-based program), the “prize” is Teaching-Parents (direct youth care praconers) using the evidence-based program as intended, that is, with high fidelity, so that intended outcomes can be realized. The change processes used at Boys Town are documented in the arcle by Tyler et al. (2025) in this special issue.

The Implementaon Quoent measure was developed to provide an organizaon level assessment of fidelity that takes competency development and turnover into consideraon (Fixsen et al., 2019, p. 104ff). The Implementaon Quoent is a constant reminder of “where we have been and where we want to go” when engaged in organizaon change.

## Methods

The Implementaon Quoent is based on the extent to which praconer skill development has been supported and is being used with fidelity in an enre organizaon. The implementaon drivers for

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competency development for direct youth care praconers are selecon, training, coaching, and fidelity assessment (Fixsen et al., 2009; Fixsen et al., 2005). In 1975, the implementaon drivers were known as Teaching-Family Site services (Blase et al., 1975; Braukmann et al., 1975; Phillips et al., 1974).

In the calculaon of an Implementaon Quoent, the focus is on the praconer *positions* and the current occupant of each posion. Determining the praconer posions requires a statement at the beginning of the process about the intenons of an organizaon regarding the use of an innovaon. At Boys Town in 1975, 41 dormitory-style cotages were being managed by the organizaon. The goal was to have

all 41 cottages with staff established as Teaching-Family homes staffed by Teaching-Parents (direct youth care practitioners) using the Teaching-Family Model. Some positions may be unoccupied due to turnover, but they still count in the calculation of an Implementation Quotient.

To calculate the Implementation Quotient at Boys Town, a score was assigned to the practitioners (direct care staff) in each cottage (multiple staff were scored as one group, not individually) or home (Teaching-Parents) on June 30 and on December 31 each year. Scores were assigned by the first author of this paper, who was the lead evaluator and employed at Boys Town at the time. The lead evaluator and evaluation team annually collected and frequently summarized and reported a range of data to inform decision making by the directors and staff of Boys Town (Collins et al., 1976; Evans et al., 1976; Fixsen et al., 1982; Phillips et al., 1978). Information regarding selection, training, coaching, and fidelity assessment of staff in each staff-cottage or Teaching-Family home was recorded in the decision support data system. The criterion for “met fidelity” was an average score of 6 on the 7-point Teaching-Parent fidelity assessment scale (see Study 1). The information for scoring was readily available in the records and required no judgment to use the information for scoring the Implementation Quotient.

The scoring rubric for the Implementation Quotient is the following: a score of 0 = Practitioner position vacant, 1 = Practitioner hired, untrained (selection), 2 = Practitioner completed initial training (training), 3 = Practitioner trained and receives weekly coaching (coaching), 4 = Practitioner met fidelity criteria this month (fidelity), 5 = Practitioner met fidelity 10 of past 12 months (fidelity). The scores for all 41 practitioner positions were added to produce the Practitioner Sum. The Practitioner Sum was divided by 41 (the Allocated Position N determined at the beginning of the change process). The resulting ratio (SUM/N) is the Implementation Quotient for the Organization.

## Results

Figure 5 shows Implementation Quotient scores calculated every 6 months for ten years to track the organization change progress at Boys Town. During the 10 years shown in Figure 5, 41 staff groups (one staff group for each cottage) and 221 Teaching-Parent couples staffed the 41 cottages/homes at Boys Town. The data in Figure 5 begin on December 31, 1975, just after the Teaching-Family Model began in four homes on the Boys Town campus. As shown in Figure 5, the Implementation Quotient improved from an organization-wide average of about 1.0 (practitioner in position, untrained) to a score of over 4.5 (practitioner met fidelity criteria: as of this month) after about eight years. Scores above 4.5 were sustained for 18 months at the end of the ten-year data collection period. After four years (Block 8 in Figure 5), 50% or more of the Teaching-Parents were Certified (scores of 4 or 5). That is, four years after the change processes were initiated, 22 or more of

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the 41 homes at Boys Town were staffed by Teaching-Parents who had met the Certification criteria one or more times.

As evident in the scoring rubric, there are two major factors that move the Implementation Quotient scores: practitioner length of stay (turnover) and the ability of organization staff to develop skilled practitioners who can meet fidelity standards. Turnover results in lower Implementation Quotient scores

when Certified Teaching-Parents (who have reached a score of 4 or 5 on the 5-point scale) leave and are replaced by newly hired Teaching-Parents (who score 1 or 2 on the 5-point scale). For example, if all 41 Teaching-Parents reached a score of 5 (met fidelity 10 of past 12 months) in one time period, then they all left and were replaced by 41 Teaching-Parents who reached a score of 3 (completed training and received coaching) in the next time period, the Implementation Quotient score would decline from 5.0 to 3.0. This unlikely scenario never happened, but Teaching-Parents did come and go, and turnover did affect the Implementation Quotient scores. The ability of organization staff to develop skilled practitioners results in higher Implementation Quotient scores when untrained staff (who score 1 on the 5-point scale) are replaced with recently trained, coached, and assessed Teaching-Parents (who score 2 to 4 on the 5-point scale). As stated by James (2017, p. 8), "Findings suggested that efforts to implement evidence-based treatments may be haphazard with little attention paid to sustained training and other factors necessary to ensure the integrity of the treatment, and limited understanding of what may be required to successfully implement an evidence-based intervention." Without the ability to develop the competencies of evidence-based program practitioners, residential care agencies will be unable to achieve scores of 4 or 5 on the Implementation Quotient. Being able to quickly develop new Certified Teaching-Parents and retaining Certified Teaching-Parents (see Study 1) contributed to the steady increases in Implementation Quotient scores after 1979.

A dilemma faced in any organization change or scaling effort occurs when the best candidates for expansion of training, coaching, fidelity assessment, and management are the practitioners who have met fidelity criteria. During the initial phase of organization change at Boys Town, several newly Certified Teaching-Parents were encouraged to apply for training, coaching, and manager roles so that those support services could be expanded to keep up with the increasing number of Teaching-Family homes on campus. While this self-induced turnover resulted in lower Implementation Quotient scores, the turnover in Teaching-Parent positions also provided more opportunities for the ex-Teaching-Parents to learn how to be competent trainers, coaches, fidelity assessors, administrators, and so on for their newly employed replacements.

### **Sustaining impact**

Sustainability was the goal of organization change at Boys Town, and the Implementation Quotient was the measure of the adequacy of change and the sustainability of outcomes for Teaching-Parents and youths. Sustaining the Teaching-Family Model is defined as maintaining over time the fidelity of the use of the evidence-based program. As noted in the introduction, a) an innovation (the Teaching-Family Model) is defined by its essential components, b) fidelity is an assessment of the extent to which the essential components of an innovation are used in practice, and c) the presence and strength of the essential components are directly linked to outcomes. Thus, fidelity scores provide a proximal measure of eventual outcomes for youths (Bedlington et al., 1979; Bedlington et al., 1988; Washington State Institute for Public Policy, 2002). In this logic, to sustain Teaching-Parent fidelity is to

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sustain youth outcomes. The Implementation Quotient includes reaching and maintaining fidelity as definitions for scores of 4 and 5.

To assess sustainability, the Implementation Quotient was calculated (by co-author PMT) for existing staff in January 2025 ( $N = 49$ ) using the information available in Boys Town personnel records.

At Boys Town, Teaching-Parents are now known as Family-Teachers, and Teaching-Family homes are known as Boys Town Family Homes. As shown in Table 1, in January 2025, the Implementation Quotient was 4.61, and 86% of the Family-Teachers were certified. The Implementation Quotient of 4.61 is similar to 1984 (Blocks 19-20 in Figure 1).

## Discussion

As noted by Fixsen and Blase (2018, p. 196), “We were familiar with large institutions and how intractable they seem to be, resisting change of any consequence (Reppucci & Saunders, 1974). But what if we could change a large institution? Would the new standard become just as intractable and sustain humane and effective care for decades to come?” As it turns out, the hypothesis about the intractability of institutions was supported. As a large institution and an incorporated village, Boys Town continues as a certified Teaching-Family Site decades after the institutional change process was complete. And high-fidelity performance still is the standard against which organization routines are judged.

With respect to delivering high-quality services to youth, the Implementation Quotient remained high 40 years after the last data points shown in Figure 5. The Implementation Quotient score was above 4.5 on the 5-point scale in 1984 and was still at that level in 2025. Similarly, the selection, training, coaching, and administrative support for the rapid development and retention of Teaching-Parents who provided high fidelity Teaching-Family Model treatment was established in the early years (Figure 2) and sustained through the ensuing decades (Figure 3). Thus, establishing high fidelity performance took about 4 years, and embedding the myriad organization supports for Teaching-Parents engaging in high fidelity performance took about 4 more years.

Sustaining high fidelity use of the Teaching-Family Model is the result of sustaining the organization capacity to select, train, coach, and administratively support generations of Teaching-Parents. A similar result was found in the 10-year assessment of the use of the Parent Management Training, Oregon Model (PMT-O) in Norway (Forgatch & DeGarmo, 2011; Ogden et al., 2012; Ogden et al., 2005; Tommerraas & Ogden, 2016). Selection, training, coaching, and administrative supports were established and sustained, and, consequently, high fidelity performance and child and family outcomes were established and sustained.

Fidelity is essential when using any program (evidence-based or otherwise) in practice with the intention of benefiting recipients. Is “it” there? If “it” is there, then an evaluator can ask: Does “it” matter? If it does matter, can we do “it” here with fidelity and good outcomes? Fidelity is the goal and the test of practice and organization change, and the measure of sustainability.

## Quality of Care

In the 1950s and 1960s, documentation of widespread abuse and neglect in organizations intended to care for children (minors) and adults dependent on the care of others (Goffman, 1961; Wooden, 1976) led to the deinstitutionalization movement. In response, programs were developed to provide an alternative to institutional care (Fairweather, 1969; Stein & Test, 1978). The Teaching-Family Model was one of those (Phillips, 1968; Phillips et al., 1971). In the first grant application, Wolf (1968) stated the purpose was to develop a treatment program that was humane, effective, individualized, satisfactory to consumers, cost-efficient, and replicable. Humane is first on that list, and satisfaction of consumers (e.g., youth, parents, teachers, referral agents, funders, community partners) is more important than cost efficiency. These goals remain the goals of the Teaching-Family Model and any individual or organization using the Model.

Aspirational goals are not meaningful unless there are ways to achieve them, not just for a while but from now on. Aspirational goals cannot be achieved in a day, so measures need to be in place to mark progress toward those goals. From the beginning, the Teaching-Family Model developers were keenly aware that care was being provided to dependent youths who were involuntarily placed in a relatively private residential setting. Thus, the Teaching-Family Model needed to include methods to ensure humane, effective, and individualized care. The relationship development, teaching interaction, movement systems, self-determination systems, counseling approaches, and daily living routines were designed to be gentle and effective while teaching the youths to express and advocate for their own interests. The frequent coaching support and regular fidelity assessments were designed to ensure the quality of care provided by Teaching-Parents who had been selected and trained for that role. With fidelity as an indicator of humane, effective, and individualized care, the Implementation Quotient provides a meaningful measure of progress toward attainment of the aspirational goals.

The data presented in this article provide evidence that high-quality treatment and care can be established and sustained in a youth care organization. The Teaching-Family Model is an evidence-based program with good outcomes. The beneficial outcomes are realized when high-quality treatment (the Teaching-Family Model) is used with fidelity. With the link between fidelity and outcomes, fidelity today is a predictor of outcomes in the future. Fidelity assessments can be built into organization functions, along with bookkeeping and building maintenance, as something that is necessary to operate an effective youth care program.

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Table 1. Implementaon Quotent for Boys Town, January 2025

Scoring Rubric	N	Score
0 = Praconer posion vacant	2	0
1 = Praconer hired, untrained	0	0
2 = Praconer completed inial training	0	0
3 = Praconer trained + receives weekly coaching	4	12
4 = Praconer met fidelity criteria this month	1	4
5 = Praconer met fidelity 10 of past 12 months	42	210
SUM the scores for all praconer posions		226
The Allocated Posion N	49	
The Implementaon Quotent (SUM/N)		4.61

### List of Figures

Figure 1. Teaching-Parent Cerficaon evaluaon to assess fidelity of the use of the TeachingFamily Model.

Figure 2. Teaching-Parent fidelity scores for the years 1979-1984 (Year 4 through Year 9). Used with permission, Fixsen and Phillips (1985).

Figure 3. Averages for all Family-Teacher (Teaching-Parent) fidelity scores for the years 2022-2024. Major = fewer than 12 months employment, 1 Year = at least one year employment, 2 Year = at least two years employment, 3 Year = at least three years employment, 4 Year = at least four years employment. Used with permission, Tyler et al. (2025).

Figure 4. Consumer scores for all Family-Teacher Cerficaon (fidelity) assessments for the years 2022-2024.

Figure 5. The Implementaon Quotent for 10 years for 41 homes at Boys Town, calculated every 6 months from December 31, 1975, through June 30, 1984. Fixsen et al. (2019, p. 105), used with permission.

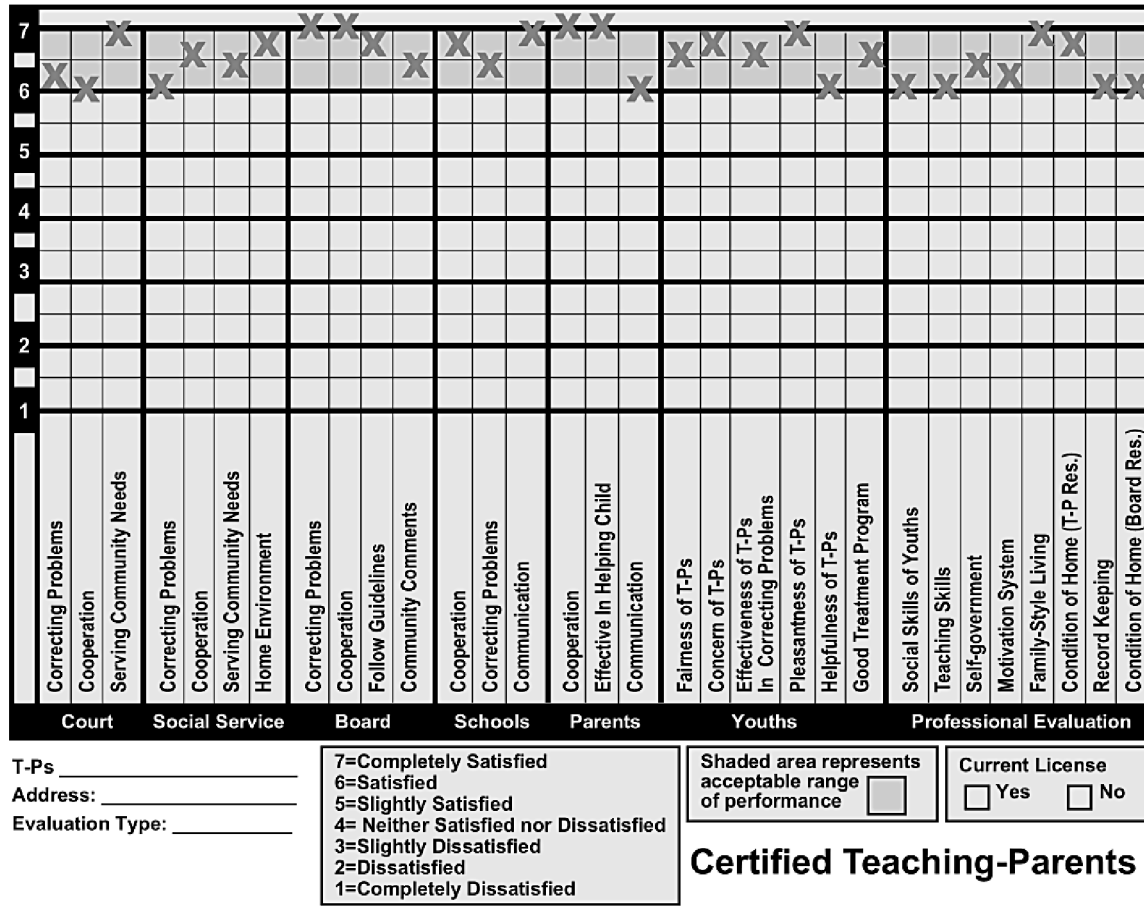


Figure 1. Teaching-Parent Cerficaon evaluaon to assess fidelity of the use of the Teaching-Family Model.

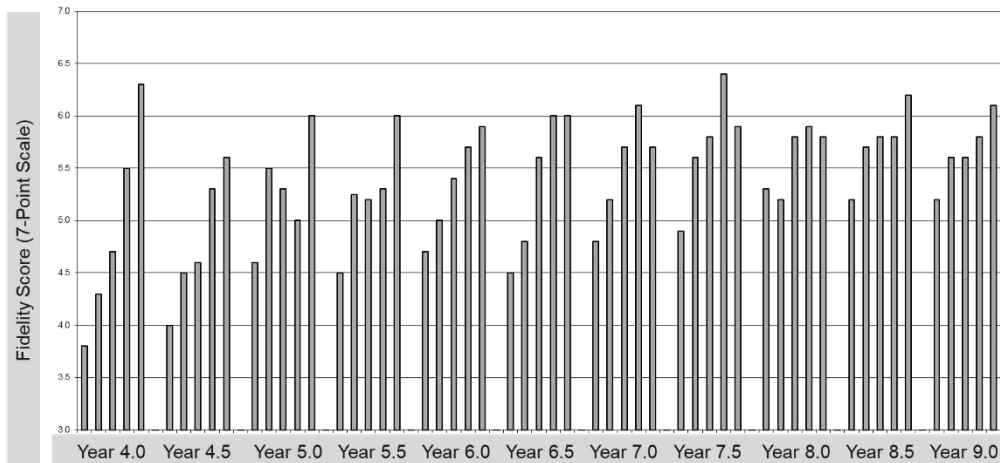


Figure 2.

Teaching-Parent fidelity scores for the years 1979-1984 (Year 4 through Year 9). Used with permission, Fixsen and Phillips (1985).

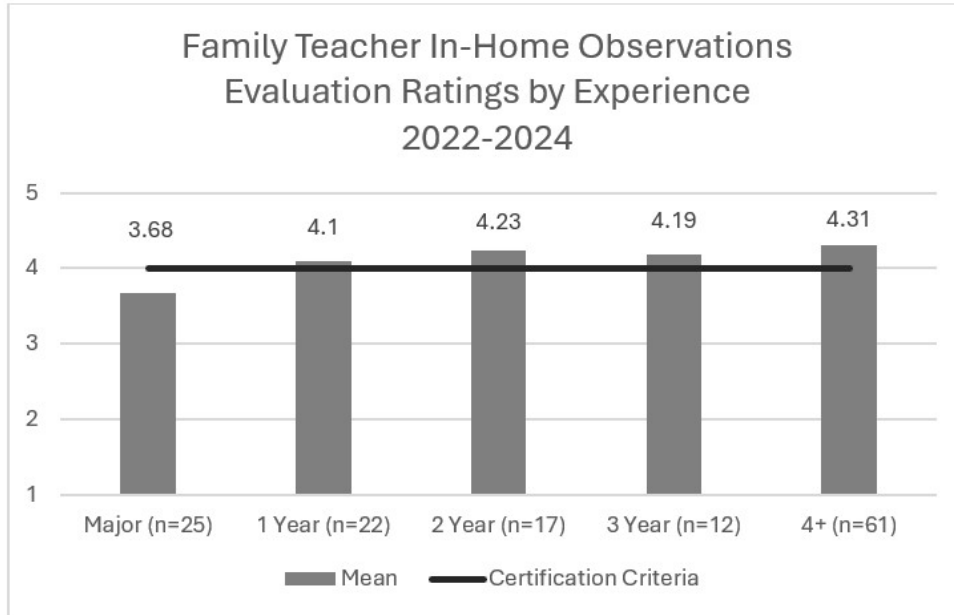


Figure 3.

Averages for all Family-Teacher (Teaching-Parent) fidelity scores for the years 2022-2024. Major = fewer than 12 months employment, 1 Year = at least one year employment, 2 Year = at least two years employment, 3 Year = at least three years employment, 4 Year = at least four years employment. Used with permission, Tyler et al. (2025).

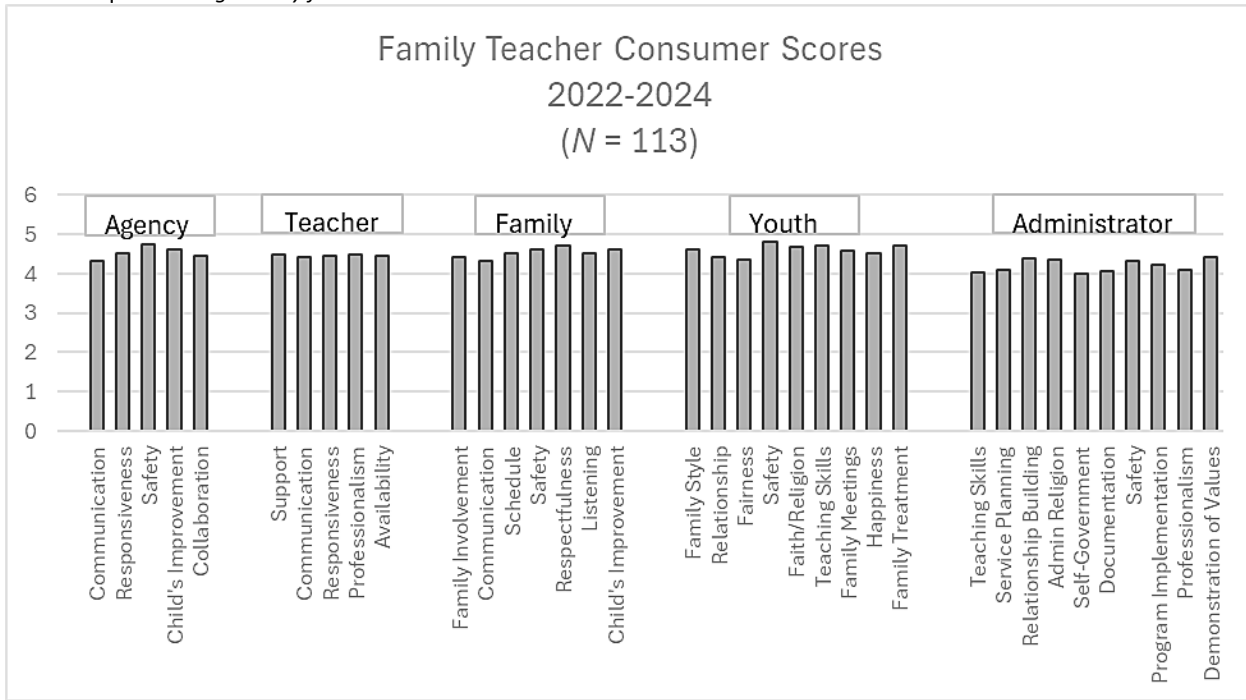


Figure 4. Consumer scores for all Family-Teacher Cerficao (fidelity) assessments for the years 2022-2024.

### Implementation Progress (N=41 Positions)

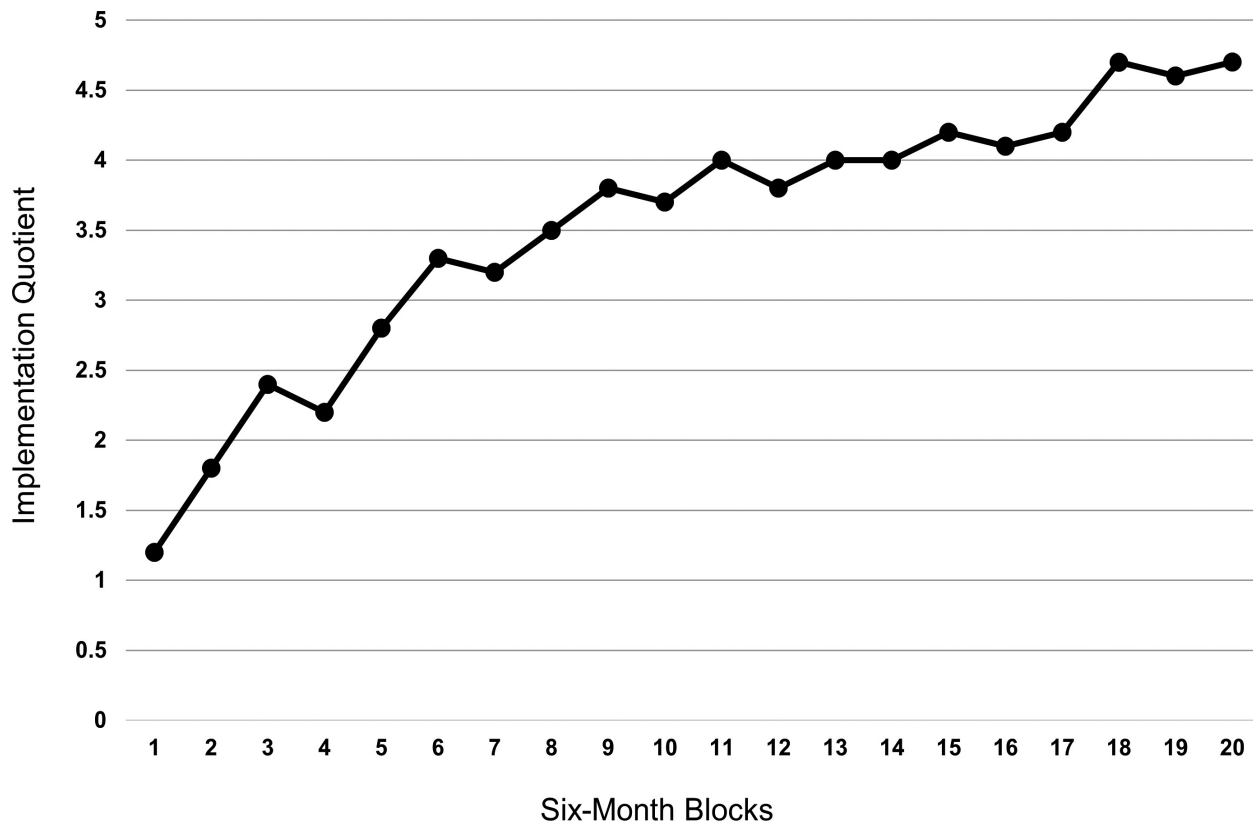


Figure 5.

The Implementaon Quent for 10 years for 41 homes at Boys Town, calculated every 6 months from December 31, 1975, through June 30, 1984. Fixsen et al. (2019, p. 105), used with permission.

## **Evaluating Youth Needs and Response to Services in a Residential Program Based on Neighborhood Factors**

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### **Abstract**

Communities have different neighborhood factors, such as economic, educational, and healthcare resources, that can influence child development. This study evaluated the relationship between neighborhood factors and the clinical needs and treatment response of youth in a residential program. The Child Opportunity Index was used to gain a better understanding of the relationship between neighborhood factors and youth presenting problems, behavioral incidents, changes in total difficulties from intake to discharge, residential placement safety and stability, and discharge placement. The sample included 1773 youth from 34 states in the U.S. who resided in the Boys Town Family Home Program from 2013 - 2023. Including neighborhood factors in the clinical assessment provided new insights into youth treatment needs and response to services. Youth who came from neighborhoods with better community resources had more severe clinical needs, with mixed internalizing and externalizing problems, while a greater proportion of youth from communities with poorer quality of

resources presented with truancy and legal problems. Youth from different communities with varying neighborhood resources made progress in the program, but youth from neighborhoods with better resources made greater gains because they started with more significant clinical needs. Limitations and recommendations for further research are also discussed.

**Keywords:** residential programs, neighborhood factors, Child Opportunity Index, Teaching-Family Model, Boys Town Family Home Program

**Practical Implications:**

Presenting problems differed for youth based on neighborhood factors.

Including neighborhood factors in the clinical assessment of youth could improve individualization of treatment services for youth in residential programs.

Training residential and aftercare staff on how to use the Child Opportunity Index could improve aftercare support and resources for youth and families.

### **Evaluating Youth Needs and Response to Services in a Residential Program Based on Neighborhood Factors**

In the early 1970s, developers of the Teaching-Family Model recognized that adolescents who required residential services faced a variety of problems in their families, schools, and communities that required “extended supportive environments” (Wolf et al., 1995, p 23). Today, quality residential programs provide individualized services (Huefner, 2018) to address the wide range of academic, behavioral, and physical health needs of these youth (Farmer et al., 2016; Lambert et al., 2016; Trout et al., 2008). Many youth in residential programs have encountered adverse childhood experiences and family stressors (Briggs et al., 2012; Gordon et al., 2023; Pane et al., 2015; Tyler et al., 2019), with varied response to treatment based on exposure to these adversities (Brack et al., 2012; Briggs et al., 2012; Tampke et al., 2024; Tyler et al., 2019). They also come from different communities with varying neighborhood resources that can serve as risks or protective factors. Understanding how neighborhood factors, such as economic, educational, and healthcare resources, are related to the needs and treatment response of at-risk youth could improve the quality of residential services.

Neighborhoods can influence child development with lasting impacts on academic achievement, socioemotional competence, and mental health (Bronfenbrenner & Morris, 2006). For example, living in disadvantaged neighborhoods that include poverty, residential instability, or lack of educational resources is related to more adverse developmental outcomes for youth (Leventhal & Brooks-Gunn, 2000; Minh et al., 2017); while access to green space and neighborhood safety can serve as protective factors for healthy development and well-being (Leventhal & Brooks-Gunn, 2000; Chrisan et al., 2015). Though the effects of neighborhood context on youth adjustment are more commonly understood (Leventhal & Brooks-Gunn, 2000; Minh et al., 2017), there is little research on how neighborhood factors are related to youth treatment needs and response to residential services.

In the United States, the Child Opportunity Index (COI; see Noelke et al., 2024) provides a metric of educational, health, environmental, social, and economic resources available to children in their neighborhoods, according to census tracts of where a youth's residential address is located. The COI was developed by Diversity Data Kids.org in 2014 to measure neighborhood resources and conditions that matter for children's healthy development to improve child well-being and increase racial and ethnic equity in opportunities for children (Noelke et al., 2024). The COI has been recommended for the study of health and safety indicators to better inform how populations are affected at the community level (Slopen et al., 2023). For example, to improve health care, the COI has been used to increase health literacy education for families in lower COIs who were using emergency room visits for their children's illnesses that were treatable by routine primary care visits. This improved health literacy in turn reduced healthcare costs (Kaiser et al., 2022; Ramgopal et al., 2022). Further, the COI has been used to identify the need for more educators in lower COI neighborhoods that lacked education centers (Reilly et al., 2020), thereby increasing the number of education centers to improve youth development (Iruka et al., 2024). The COI has also been used to train professionals on how to identify the need for resources for lower-income families (Iruka et al., 2024; AEI-Brookings Working Group on Childhood in the United States, 2022). For example, it has been used to provide increased access to housing vouchers that assisted families with moving to more opportune neighborhoods (Qin et al., 2022; Supporting Neighborhood Opportunity in Massachusetts (SNO Mass) Program, 2021). Social service organizations have also used the COI to assess the impact of prevention services, after-school

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programs, youth justice programs, community centers, and short-term/emergency placement centers (Gleason et al., 2020). Despite these emergent applications of the COI, there is still little research on how the COI has been used to assess the needs of youth in residential programs.

Conducting research on neighborhood factors could improve the quality of trauma-informed residential services by providing a better understanding of the individual educational, social, health, and economic needs of youth. Thus, the purpose of this study was to better understand how the variety of the problems youth presented with were associated with their natural environments based on neighborhood factors. The study took place in the Boys Town Family Home Program (FHP) that was adapted from the Teaching-Family Model (TFM; Thompson & Daly, 2015; Wolf et al., 1995). Past research has shown that 75% of youth who departed this Boys Town FHP returned to their family or independent living (Trout et al., 2010). Though data were not available to verify if youth returned to the same community, the high reunification rates suggest a high percentage of youth return to their communities of origin or similar. For this study, we sought to examine the utility of using the COI as a tool to assess youth needs and response to services based on the communities they lived in prior to placement and determine if it could be useful in informing aftercare needs in their post-discharge community.

Five research questions were addressed: 1) Do youth and family presenting problems differ by COI? 2) Does the frequency of significant behavioral incidents, over twelve months in placement, differ for youth based on COI? 3) Do changes in total difficulties, conduct problems, and emotional distress from intake to discharge differ between COI groups? 4) Do safety, permanency, and well-being while in the program differ for youth based on COI? 5) Does discharge placement differ for youth based on COI? We

hypothesized that youth from neighborhoods with better resources and opportunities would have better overall functioning and placement outcomes. The results of the study have implications for improving the individualization of services for youth in residential group care programs, and considerations for aftercare support.

## Method

### Participants

The sample for this study included youth ( $N = 1773$ ) who resided in the FHP in Boys Town, Nebraska, from 2013-2023. The mean age was 15.6 years old ( $SD = 1.54$ ), 64.1% were boys, 48.2% were Caucasian, 24.9% were African American, 12.7% were Latino, 10.2% were Two or More races, 2.9% were American Indian, 1.1% were Asian, and <1% were Pacific Islander/Hawaiian. Youth represented 34 states and the District of Columbia, and 68% of the sample were from the state of Nebraska, where the residential program was located. Almost half of the sample (49%) were on probation with the juvenile courts from multiple states, less than 4% were state wards, and the remaining youth were privately placed by a parent or legal guardian. The mean length of stay in the residential program was 422.02 days ( $SD = 302.44$ ;  $Mdn = 359$  days). The study used archival data from the agency's administrative records for secondary analysis and was deemed exempt from IRB review by the Institutional Review Board of Boys Town National Research Hospital (IRB protocol # 20-17-X).

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The FHP (Father Flanagan's Boys' Home [FFBH], 2021) is a large evidence-based residential program (Crime Solutions, 2020) consisting of 49 family-style group homes in the Village of Boys Town. The core components of the FHP include creating a positive family environment, teaching social skills, building healthy relationships, self-determination, and supporting religion and spirituality (FFBH, 2021). The FHP is implemented by professionally trained direct care staff called Family-Teachers who reside with the youth in family-style homes. Some of the trauma-informed care components (see United States Department of Health and Human Services, 2014) of the FHP include identification and understanding the types and effects of trauma (e.g., abuse, neglect), providing a calm and nurturing environment that ensures youth are physically and emotionally safe, and teaching social skills to increase protective factors and resilience (FFBH, 2021).

All of the family-style homes for this study were located in the Village of Boys Town. The Village of Boys Town, Nebraska, was established by Fr. Edward J. Flanagan over a hundred years ago for children of all races and religions so that they could live, attend school, and learn how to become good citizens in a safe community (Hupp, 1992; Lynch & Hyland, 2016). The Village of Boys Town is an incorporated community with its own schools, fire department, police department, post office, etc. In 2011 and 2012, Boys Town was named one of *The 100 Best Communities for Young People* by America's Promise Alliance. The *100 Best Communities* honors communities that help young people achieve their potential, which includes earning a high school diploma, securing a good job, and playing an active, productive role in America's economic vitality. Communities were assessed on key characteristics that are

important for healthy child development and resilience, such as prioritizing and supporting vulnerable youth, youth leadership, safe places, caring adults, physical health, effective education, and helping others (America's Promise Alliance, 2009). The Village of Boys Town is rated in the very high category based on the COI, that indicates that youth who reside in this community are afforded the neighborhood resources (e.g., education, healthcare, social and economic resources) necessary for healthy child development.

## Measures

### ***Child Opportunity Index (COI; Noelke et al., 2024).***

The COI 3.0 includes 44 indicators across three domains: Education (e.g., high school graduation rate; teacher experience), Health and Environment (e.g., access to healthy food; access to green space), and Social and Economic (e.g., employment rate; economic resources). These indicators measure the level of opportunities or resources available to youth in the neighborhood in which they live and can also be thought of as a measure of neighborhood quality.

These domains are aggregated to calculate the National Child Opportunity Score. The scores are then ranked on a percentile scale from one to 100, with one being the lowest and 100 being the highest score in the distribution. These scores are then divided equally into five opportunity levels based on their position within the distribution (i.e., very low = 1 - 20, low = 21 - 40, moderate = 41 - 60, high = 61 - 80, and very high = 81 - 100). Although these ranges look at multiple domains of a neighborhood, from an educational perspective, a "very high" neighborhood would be expected to have high graduation rates, a "moderate" neighborhood would be at similar graduation rates to the national

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average, and a "very low" neighborhood may have lower opportunity rates or no nearby opportunities for education.

Census tracts are redefined every year and updated within the COI. Youth's home address before entering the FHP was geocoded (i.e., transforming their addresses to Federal Information Processing Series (FIPS) codes at the census tract level), and the subsequent census tract-level FIPS was then used to augment the current sample with tract-level COI 3.0 data.

### ***Strengths and Difficulties Questionnaire (SDQ; Goodman 1997, 1999)***

The SDQ is a 25-item behavioral screening measure for children ages 2–17. It consists of four problem subscales (Emotional Symptoms, Conduct Problems, Inattention-Hyperactivity, Peer Problems) as well as a Total Difficulties scale. It also contains one prosocial scale. It has been found to be a reliable and valid screening instrument for children (Kersten et al., 2015). The Total Difficulties (20 items,  $\alpha = .85$ ), Conduct Problems (5 items,  $\alpha = .78$ ), and Emotional Problems (5 items,  $\alpha = .74$ ) scales were used for this study. The SDQ was completed by a parent/guardian at intake into the program and by a FamilyTeacher at the youth's discharge from the program.

### ***Youth and Family Presenting Problems***

Information collected from youth and families during the intake process into the FHP was used by admission coordinators to complete a yes/no checklist of 51 youth presenting problems, and 30 family problems to inform service planning. Examples of youth presenting problems included poor anger control, school behavior problems, and drug/alcohol use. Family problems included family financial problems, unemployment, and illegal activity in the neighborhood.

### ***Adverse Childhood Experiences (ACEs)***

Exposures to adverse childhood experiences were derived from the *Youth and Family Presenting Problems* and adapted from the Adverse Childhood Experiences study (ACEs; Finkelhor et al., 1998). Indicators included three abusive items (emotional, physical, and sexual), one global type of neglect, and six types of exposure to household dysfunction: domestic violence, household substance use, household mental health issues, parent relationship problems, criminal household member, and abandonment. As part of the overall Boys Town admission process, admission staff conduct structured interviews with youth and parents/guardians and review prior case records on youth and family history to determine whether youth had been exposed to these ten adverse events (0 = no, 1 = yes). A total child adversity score was then calculated at intake from the summation of the endorsements.

### ***Brief Trauma Symptom Scale for Youth (BTSSY; Tyler et al., 2019)***

The BTSSY is a six-item screener of trauma symptoms (e.g., intrusive thoughts, physiological reactions) which was adapted from the Primary Care–Post-Traumatic Stress Disorder Screen (PC-PTSD; Prins et al., 2003) for use with children and adolescents. It is a youth self-report in which they respond to trauma-related statements on a 3-point Likert-type scale ranging from 0 (not true) to 2 (certainly true). A total symptoms score is then calculated as a sum of the six symptom scores. The BTSSY has been shown to have acceptable reliability and validity for screening for PTSD to determine the need for additional assessment (Tyler et al., 2019). The internal consistency of BTSSY for the sample of this study was  $\alpha = .91$ . Youth completed the BTSSY during their first week of orientation into the program.

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### ***Daily Incident Report***

Daily observations of significant youth behavioral incidents were reported by staff using the Daily Incident Report (DIR; Handwerk et al., 2006). Prior research found the DIR to be a reliable and valid instrument (Friman, 2000; Larzelere, 1996). All DIR data were stored and retrieved from the agency's electronic youth record-based system. For this study, six categories were used: the aggressive incident scale (e.g., property damage, physically assaultive behavior toward youth); suicide ideation incident; self-harm behavior incident; safety incidents (e.g., CPS contacts, stakeholder initiated abuse reports); permanency related incidents (e.g., short-term intervention and assessment, psychiatric hospital); and well-being incidents (e.g., dental/medical visits, no school suspensions or expulsions). The Daily Incident Report was completed by staff at each occurrence of a significant incident.

**Departure Restrictiveness of Living Scale (ROLES; Hawkins et al., 1992)**

The ROLES is a 25-item scale (1 = Jail to 25 = Independent Living by self) that indicates the restrictiveness of a youth's current living environment. Upon leaving the program, staff complete the ROLES on the environment in which the youth is returning to. By way of comparison, the FHP has a ROLES score of 12. To simplify analysis, the ROLES was categorized into three broad categories: 1 = Secure Detention Facility, 2 = Treatment, and 3 = Homelike Environment/Independent Living. The departure roles were completed by a program supervisor at the time of the youth's departure.

**Data Analyses**

The following statistical tests were used to answer the research questions: Descriptive statistics were provided for the sample: Pearson Chi-Square Tests were used to compare COI groups by the proportion of presenting problems (research question one); safety, permanency, and well-being during placement (research question four); and discharge placements (research question five). Pearson Correlation Coefficients were used to calculate the relationships between intake assessments and COI scores; paired t-tests were used to calculate changes from intake to discharge in total difficulties within COI groups; a 2x5 repeated measures analysis of covariance (ANCOVA) was used to compare the changes from intake to discharge in total difficulties, emotional distress, and conduct problems between the COI groups while controlling for age, sex, race, and length of stay (research question three); Hierarchical Linear Modeling (HLM) was conducted to compare the COI groups based on the frequency of daily incident report (DIR; i.e., aggression, suicide ideation, and self-harm) over 12 months (research question two) using HLM 6 (Raudenbush et al., 2004). HLM is useful for longitudinal data as it allows for estimation of behavior during the first 30 days in the program (i.e., the intercept) and over time (i.e., the slope). Further, HLM also allows for random effects to be estimated for incomplete data, as individual growth curves can be extrapolated from their existing data points (Silverstein & Long, 1998), allowing us to utilize data from all our youth in the dataset. In other words, youth did not have to be in the program a full 12 months to be included in the analysis. Unstandardized betas (*b*) are reported for the HLM. When a youth had more than one placement during the time period, only the first placement was used to avoid duplication in the sample. There were no missing data for the independent and dependent variables or covariates. Significance tests for multiple comparisons were adjusted to  $p = .005$  using Bonferroni correction ( $p = .5/10$ ). All data, except for DIR data, were analyzed using SPSS (Version 29 for Windows).

**Results Descriptive Information**

Youth total difficulties using the caregiver report of the SDQ showed the sample was in the clinical range ( $M = 18.13$ ,  $SD = 7.28$ ), the child adversity range based on the ACES was  $M = 3.22$  ( $SD = 2.31$ ), and trauma symptoms on the BTSSY were  $M = 2.80$  ( $SD = 2.9$ ). The mean COI for the sample was in the moderate range ( $M = 42.89$ ,  $SD = 28.06$ , range 1-100, skew = .200, kurtosis = -1.12). Group distributions based on COI were very low = 28.4%, low = 20.3%, moderate = 22.1%, high = 16.2%, and very high = 13.0%. The proportion of white youth differed between the COI groups,  $\chi^2(4, 1773) = 257.76$ ,  $p < .001$ , with a higher proportion of white youth in the moderate (62.1%), high (65.3%), and very high (70.0%) groups, and a lower proportion of white youth in the very low (21.2%) and low (43.2%) COI groups.

At intake, Pearson correlations showed COI scores were negatively correlated with age ( $r = -.06, p = .010$ ), being male ( $r = -.07, p = .003$ ), and childhood adversity ( $r = -.07, p = .003$ ); and positively correlated with being white ( $r = .38, p < .001$ ), total difficulties ( $r = .26, p < .001$ ), and trauma symptoms ( $r = .10, p < .001$ ).

### **Youth and Family Presenting Problems**

Comparisons based on COI levels showed several patterns of relationships with youth and family presenting problems (research question one). There was a higher proportion of youth in lower COIs on probation  $\chi^2(4, 1773) = 91.12, p < .001$ , compared to the moderate, high, or very high COI groups. Lower COI groups had higher proportions of truancy compared to high and very high COI groups,  $\chi^2(4, 1773) = 27.75, p < .001$ . The very low COI group had a higher proportion of prior gang involvement  $\chi^2(4, 1773) = 81.87, p < .001$ , and history of possession of a weapon  $\chi^2(4, 1773) = 16.80, p < .001$ , compared to the very high COI group. Higher proportions of youth from moderate, high, and very high COI groups had a history of depression  $\chi^2(4, 1773) = 33.18, p < .001$ , hyperactivity  $\chi^2(4, 1773) = 24.26, p < .001$ , suicidal threats  $\chi^2(4, 1773) = 104.34, p < .001$ , self-injurious behavior  $\chi^2(4, 1773) = 60.24, p < .001$ , and behavior that was out of parental control  $\chi^2(4, 1773) = 75.13, p < .001$ . For physically assaultive behavior, a significantly higher proportion of youth in the very low COI group (39.9%) had assaultive behavior toward peers compared to youth in the very high COI group (27.1%),  $\chi^2(4, 1773) = 12.10, p < .001$ ; while higher proportions of youth in the moderate, high, and very high COI groups (23.3%, 21.5%, 25.8%, respectively) had physically assaultive behavior towards adults compared to the very low COI group (13.0%),  $\chi^2(4, 1773) = 21.76, p < .001$ . COI group comparisons of youth and family presenting problems are reported in Table 1.

In terms of reported family problems, a higher proportion of youth from lower—compared to higher—COI communities came from environments with parents who had criminal involvement (e.g., jail, incarceration) (very low = 36.9%, low = 39.2%, high = 26.8%, very high = 19.3%),  $\chi^2(4, 1773) = 33.72, p < .001$ ; and the COI group with the highest proportion of illegal activity in the neighborhood was the very low group (25.2%),  $\chi^2(4, 1773) = 162.99, p < .001$ . A higher proportion of youth in the very high group had significantly lower family adversity than youth in the very low, low, and moderate groups, including lower levels of financial problems (9.1%),  $\chi^2(4, 1773) = 46.99, p < .001$ , divorce (46.2%),  $\chi^2(4, 1773) = 25.11, p < .001$ , and unemployment (6.2%),  $\chi^2(4, 1773) = 26.66, p < .001$ . There was a significant difference in the proportion of families with substance abuse in the very low COI group

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(51.5%) compared to the very high COI group (40.5%),  $\chi^2(4, 1773) = 14.25, p < .001$ . Group comparisons are reported in Table 1.

### **Behavioral Incidents During the Program**

Significant behavioral incidents (i.e., aggression, suicide ideation, self-harm) that youth exhibited while in the program were compared according to COI groups (research question two). Monthly rates of behavior were computed for up to the youth's first 12 months in the FHP and served as a "level 1" grouping. The COI grouping variable, as well as other youth-level demographic (i.e., age at admission, length of stay in days, male, and being white), were entered into the models as "level 2" variables. For all analyses, the moderate COI group was assigned as the reference group. Finally, it should be noted

that suicide ideation and incidents of self-harm were zero-inflated (i.e., most youth had no incidents during any given month). As such, these variables were Winsorized to the 99th percentile. Winsorizing is a method of dealing with outliers by making all extreme scores equal (e.g., values in the 99th percentile; Lusk et al., 2011).

### **Aggression**

Aggressive incidents during care were lower for youth in the very high COI ( $b = -.30, p = .011$ ) compared to moderate COI group in the first 30 days. In addition, aggression during the first 30 days was lower for older age ( $b = -.28, p < .001$ ) and white youth ( $b = -.16, p = .013$ ), while higher for males ( $b = .22, p = .001$ ). Examining aggressive behaviors over the first 12 months in care revealed no significant differences. Aggressive incidents for youth in all five COI groups decreased at a similar rate.

### **Suicide Ideation**

Suicide ideation incidents were lower for the very low COI group ( $b = -.35, p = .018$ ) compared to moderate COI group during the first 30 days in care. Frequency of incidents was lower for older admission age ( $b = -.22, p < .001$ ) and for males ( $b = .55, p < .001$ ), while higher for white youth ( $b = .45, p < .001$ ). Frequency of suicide ideation incidents decreased significantly over time for the very low ( $b = -.06, p = .019$ ) and very high ( $b = -.07, p = .002$ ) groups compared to the moderate COI group (See Figure 1).

### **Self-Harm**

Self-harm incidents during care were lower for the very low ( $b = -1.05, p < .001$ ) and low ( $b = .64, p < .001$ ) COI groups compared to moderate. Frequency of incidents were lower for older age ( $b = .21, p < .001$ ) and for males ( $b = -.61, p < .001$ ), while higher for white youth ( $b = .54, p < .001$ ). Frequency of incidents decreased significantly over time for the very high ( $b = -.09, p = .001$ ) compared to moderate COI group (See Figure 2).

### **Changes in Emotional and Behavioral Problems from Intake to Discharge**

Changes from intake to discharge in total difficulties, conduct problems, and emotional distress were compared for all five COI groups (research question three). Significant decreases in total difficulties were found in all five COI groups with small to moderate effect sizes (See Table 2). A 2 x 5 repeated measures ANCOVA was conducted to compare the changes in SDQ scores from intake to discharge between the five COI groups (1 = very low, 2 = low, 3 = high, 4 = very high, 5 = moderate), while controlling for age, sex (1 = female, 2 = male), race (0 = nonwhite, 1 = white), and length of stay. Between-subjects effects were statistically significant for age (higher for younger age;  $F = 160.37, p <$

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$.001$ ), sex (higher for female;  $F = 8.06, p = .005$ ), race (higher for white;  $F = 72.90, p < .001$ ), length of stay (higher for longer length of stay;  $F = 68.26, p < .001$ ), and COI groups ( $F = 11.97, p < .001, \eta^2 = .03$ ). Within-subjects interactions were significant for time by COI group ( $F = 2.60, p = .035, \eta^2 = .01$ ), after controlling for age, sex, race, and length of stay. After correcting for multiple comparisons, follow-up tests showed the total difficulties ranges for youth in the very high COI group were significantly higher ( $t = -4.34, p < .001, d = -0.37$ ) at intake ( $M = 20.31, SD = 6.82$ ) compared to the low group ( $M = 17.66, SD =$

7.48), but not at discharge ( $t = -.815, p = .416, d = -0.07; M = 14.08, SD = 8.41; M = 13.52, SD = 7.91$ , respectively; see Figure 3).

### **Conduct Problems**

For conduct problems, there were significant between-subjects effects for age (higher for younger age;  $F = 146.65, p < .001$ ), length of stay (higher for longer length of stay;  $F = 97.42, p < .001$ ), and COI groups ( $F = 4.62, p = .001$ ). There were significant within-subjects interactions for me by sex with greater decreases for female ( $F = 15.88, p < .001$ ), me by race with greater decreases for white ( $F = 24.16, p < .001$ ), me by length of stay with greater decreases for longer length of stay ( $F = 87.81, p < .001$ ), and COI group, ( $F = 5.58, p < .001, \eta^2 = .01$ ). Follow-up tests showed that compared to the very low COI group, all other COI groups had significantly higher conduct ratings at intake ( $p < .001$ ), but they were not significantly different at discharge ( $p > .05$ ).

### **Emotional Distress**

For emotional distress, the between-subjects comparisons were significant for sex (higher for female;  $F = 138.41, p < .001$ ), race (higher for white;  $F = 59.13, p < .001$ ), length of stay (higher for longer length of stay;  $F = 10.38, p < .001$ ), age (higher for younger age;  $F = 18.31, p < .001$ ), and COI groups ( $F = 4.23, p = .002$ ). There were significant interactions for me by sex with greater decreases for females ( $F = 5.6, p = .018$ ), me by race with greater decreases for white ( $F = 4.18, p = .042$ ), and me by length of stay with greater decreases for longer length of stay ( $F = 32.57, p < .001$ ), but there was not a significant within-subjects interaction for COI group by me ( $F = 1.28, p = .275$ ).

### **Safety, Permanency, and Well-being During the Program**

Safety, permanency, and well-being rates during placement were compared for youth based on the five COI groups (research question four). Safety (range = 87% - 90%),  $\chi^2(4, 1773) = 3.077, p = .545$ , and well-being (e.g., school stability; range = 99% - 100%),  $\chi^2(4, 1773) = 2.519, p = .641$ , did not differ based on COI groups. Permanency was significantly different,  $\chi^2(4, 1773) = 14.27, p = .006$ , with higher rates for the very low COI group (93.7%) compared to the very high group (85.7%).

### **Discharge Placement**

Youth discharge placements that included home, treatment, and lock-up were compared based on the COI (research question five). Comparisons of home and treatment placement did not differ based on COI groups (range = 79.1% - 85.8%), but a significantly lower ( $p < .05$ ) proportion of youth went to a secured detention facility from the very high COI group (1.4%) compared to other groups (range = 8.8% - 12.1%;  $\chi^2(8, 1773) = 25.63, p = .001$ ).

## **Discussion**

The results of the study provided new insights about the needs and response to services of youth based on the neighborhoods they lived in prior to out-of-home placement in the residential

program in the Village of Boys Town. The study sought to understand how COIs were related to youth and family presenting problems, behavioral incidents, and key outcomes during care (i.e., safety, permanency, well-being), changes in total difficulties, conduct problems, and emotional distress from intake to discharge, and discharge placement. These findings have implications for improving the quality of residential services and care.

The results revealed differences in youth presenting problems based on COI groups (research question one). In the general population, children from low socioeconomic status (SES) are more likely to meet criteria for mental disorders (Peverill et al., 2021). All the youth in the residential program met criteria for emotional and behavioral disorders, but we hypothesized that higher COI would be associated with higher levels of functioning. However, in our study, youth from higher COIs had greater clinical severity in internalizing and neurodevelopmental disorders. For instance, a higher proportion of youth from the moderate and higher COI groups presented with depression, suicidality, self-harm, and hyperactivity. Youth from the very high COI group also had lower rates of parental divorce and financial problems in the family. This suggests that, though youth from the very high COI group had better access to family and neighborhood resources, their clinical needs were more severe and required residential placement.

In contrast, a higher proportion of youth from lower COIs presented with academic and legal problems such as truancy, gang involvement, and prior possession of a weapon. These groupings of factors for the low COI groups converge with research showing the association between youth psychopathology and lack of educational attainment (Peverill et al., 2021). Conversely, school involvement is a protective factor against delinquency (Shader, 2003; Wasserman et al., 2003) and an important treatment objective for youth in residential programs. Youth from lower COI also faced challenges, such as parents who were involved in the courts and harmful neighborhood factors. These were less common for youth in higher COIs.

It was notable that there was a difference in assaultive behaviors between higher COIs and the very low COI group. Assaultive behavior towards adults was found in higher COI groups, while assaultive behavior toward peers was in the very low COI group. This finding warrants further inquiry to explore the relationship between function and type (e.g., reactive, proactive) of aggressive behaviors (see McClain et al., 2022; Sukhodolsky et al., 2016) and neighborhood factors. For example, treatment strategies would be different for youth who engaged in assaultive behaviors toward adults due to defiance of parents or poor emotional regulation, versus youth who were involved in fights with peers due to gang affiliation or bullying. Contrasting the differences of youth clinical needs based on COI demonstrated the benefit of considering neighborhood factors when developing individualized service plans for youth in residential programs.

The examination of frequency of youth behavioral incidents in the program showed differences based on the COI groups (research question two). In the first 30 days of the program, when compared to youth in the moderate COI group, youth from the very high COI group had fewer aggressive

incidents; youth from the very low COI groups had fewer suicidal incidents; and the very low and low COI groups had fewer self-harm incidents. Over 12 months, youth decreased in frequency in aggressive incidents at similar rates regardless of COI. Suicidal ideation decreased at a greater rate for youth in the very low and very high COI groups compared to the moderate group. Self-harm decreased at a greater rate for the very high group compared to the moderate group.

The findings of the relationships between behavioral incidents and COI extended prior research that has revealed differences in trends in significant behaviors based on youth characteristics. In a prior study, both boys and girls showed decreases in these behaviors, but girls had more frequent suicidal ideation incidents overall (Handwerk et al., 2013; Tyler et al., 2019; 2022). Another study found Black youth exhibited more aggressive behaviors in the first 30 days but had fewer incidents over 12 months. This finding highlighted the need for proactive strategies to improve support for Black youth during their transition in the first weeks of the program (Tampke et al., 2023). Similarly, youth in the moderate and very high COI groups had higher frequency of suicide ideation and self-harm in the first 30 days but showed decreases over 12 months. Including the assessment of neighborhood factors into treatment planning could therefore inform the need for proactive approaches to help youth who may require additional monitoring for suicide ideation and self-harm early on in their stay. Anticipating behavioral trends such as these and responding early could prevent potential placement disruptions.

Results showed caregiver ratings of youth total difficulties, emotional distress, and conduct problems tended to be lower for the lower COI groups, and higher for the higher COI groups (research question three). The pattern of change was mostly similar for all groups, with a few exceptions. For total difficulties, the significant interaction showed that the very high COI group was significantly higher than the low COI group at intake, but not at discharge; demonstrating the very high COI group started higher and made a greater decrease in total difficulties. Again, the results showed, contrary to our hypothesis, youth from higher COIs had greater clinical severity with both internalizing and externalizing symptoms. The same patterns of group differences were evident for emotional distress, with higher ratings of emotional distress with higher COIs, but the lack of interaction showed youth across all five COI groups showed similar decreases. For conduct problems, the moderate, high, and very high groups were significantly higher than the low and very low groups at intake but not significantly different at discharge. This pattern again demonstrated that youth from higher COI groups had higher ratings of conduct problems, had more room to improve, and discharged to less restrictive settings similar to youth from lower COIs. Overall, the reductions in emotional and behavioral problems converged with prior studies (Tampke et al., 2023; Tyler et al., 2021, 2022) and research conducted in other residential programs (Hodgdon et al., 2013).

It was notable, regarding conduct problems, that prior research showed Black youth had significantly lower conduct scores based on caregiver ratings at intake, resulting in less opportunity for improvement in conduct scores; thus, greater decreases were observed for non-Black youth (Tampke et al., 2024). It is unclear if the lower ratings at intake were based on differences in how caregivers reported the behavioral concerns of the youth. Further inquiry is needed to determine if parents in lower COIs are rating behaviors differently due to tolerances for what is considered problematic; or inconsistent reporting by families is due to a lack of trust initially in the program (McKinney et al., 2009). Exploring

ways to improve rapport, comfort, and involvement during the intake process for marginalized youth and families is recommended to ensure the accuracy of clinical assessment.

Safety, permanency, and well-being during placement were also examined according to COI groups (research question four). Safety and well-being (e.g., school stability) did not differ during placement. The high rate of school stability is an important finding given the higher rates of truancy found in the lower COI groups prior to intake. As residents of the Village of Boys Town, which has a very high COI, youth were able to attend safe schools with experienced teachers, who encouraged school involvement and extracurricular activities. As mentioned earlier, school involvement is a protective factor against delinquency (Shader, 2003; Wasserman et al., 2003). When youth spend more time involved in prosocial activities at school, they have less time to be involved in unsupervised activities that can lead to delinquent activities.

Permanency (e.g., placement stability) was also significantly higher for youth in the very low compared to the very high COI groups. The difference in permanency could be due to youth in the very high COI group having the highest frequency of incidents of suicide ideation and self-destructive behaviors that required further safety assessment in a more restrictive level of care (e.g., hospitalization, Intervention & Assessment). The temporary change of setting from the FHP, however, did not appear to impact the final discharge placement from the FHP. Indeed, the results showed that the departure to another treatment program or home was not significantly different among COI groups (research question five). Placement to a secured detention facility was also significantly lower for the very high COI group. This could indicate that youth from higher COIs had less legal involvement, or their families had more financial resources to help them comply with legal requirements compared to youth in lower COIs. For example, inability to pay restitution is a common reason for youth detainment (Taylor et al., 2020). Overall, the outcomes related to safety, permanency, well-being, and discharge placement were similar for youth across all five COIs.

### **Limitations**

Though the results from this study are promising, there are several limitations that could be addressed in future research. First, the FHP consists of family-style group homes located on a campus within an incorporated village in the Midwest United States. The results may not generalize to residential programs in other community settings, levels of care, treatment models, or regional locations. Future research could examine if the needs and treatment response of youth based on COI are similar in other residential programs. The study also did not include the specific domains of the COI or measures of model implementation, fidelity, and program components. Additional research is also needed to understand the relationship between core components of the residential program and the specific neighborhood factors of the community the program is located in.

### **Implications for Practice and Future Research**

The results of the study indicated that the COI was a helpful tool that added to the clinical conceptualization and understanding of youth needs. The COI could also be used to more clearly

understand what community factors promote resilience, so they can be better replicated within the residential program and broader community. For example, youth in the FHP were involved in the development of a culturally informed screener to promote healthy activities related to youth resilience (Tyler et al., 2024). Merging the interests that youth have in specific activities that promote resilience (e.g., involvement in extracurricular activities, community events) with an understanding of their

neighborhood factors (e.g., educational opportunities) could improve the planning needed to establish the community-based linkages for youth in residential programs.

Future research could also include evaluation of self-government systems that provide opportunities for youth self-determination and involvement in the homes' operations and the community. In the FHP, components of self-government include family meetings and citizenship that teach youth good decision-making, leadership, and responsibility (FFBH, 2021). An international study of other communities like Boys Town, in Spain and Colombia, found self-government was the most important program element for empowering youth voice based on the views of boys and girls from the three countries (Tyler et al., 2024). Identifying the relationships between core components (e.g., self-government) of evidence-based practices and outcomes (e.g., youth resilience) has been suggested to adapt these components to different settings so they are acceptable to diverse communities and don't compromise fidelity (Blase et al., 2013). Therefore, further evaluation of how self-government systems in residential programs are related to resilience could inform efforts to improve support for youth in their communities of origin.

The use of the COI also provided new insights important for aftercare planning for youth in residential programs. As stated earlier, the residential program for this study is in a community with a very high COI, and many of these youth will most likely reunify with their family or move to independent living in communities with lower COIs. Therefore, knowing the COI of the community they return to could be used to inform the aftercare support that youth and families need after they depart the residential program. For example, the COI could be a useful tool for aftercare programs such as On the Way Home<sup>®</sup> (Trout et al., 2020) that provides support for youth who depart and return home prior to high school graduation, and the Successful Futures<sup>®</sup> program (Day et al., 2025) that supports young adults who have graduated high school and are transitioning into adulthood. Currently, aftercare staff rely on directories, word of mouth, or on the knowledge that youth and families have about the resources that are available in their neighborhoods. The metrics and maps of the COI (Diversity Data Kids.org, 2025) provides aftercare workers with a tool to help youth and families locate educational, healthcare, and economic resources in neighboring communities that could be more supportive than what they have in their immediate community. Similar to other studies (Iruka et al., 2024; AEI Brookings Working Group on Childhood in the United States, 2022), aftercare staff could teach youth and parents how to use the COI to find better educational, healthcare, and economic supports. For example, youth and families could learn how to use the COI to find schools with more teacher experience or healthcare resources in surrounding communities that they may not have known about.

In conclusion, the TFM was developed to provide humane and effective care for youth from diverse backgrounds with a variety of needs (Wolf et al., 1995). Youth in our study came from

neighborhoods across the United States with a wide range of community resources. Youth from higher COIs were more likely to have mixed clinical presentations of internalizing and externalizing problems, suicidality, and self-harming behaviors, while youth from lower COIs were facing more significant educational, legal, and environmental challenges. Youth from all five COI groups showed decreases in emotional and behavioral problems as well as behavioral incidents. However, youth from higher COI groups started with more room for improvement and did so over the course of their first 12 months in care. The safety and well-being of youth did not differ based on COI during care, but there was a difference in placement stability, with youth from higher COIs more likely to require temporary

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placements to assess their suicidality and self-harming behaviors. Of note, youth from lower COI groups had higher rates of truancy prior to placement, but excellent school and placement stability while in the program. This study extended the literature by examining youth needs and response to services based on neighborhood factors. Including neighborhood factors in the assessment of youth, upon entry into residential programs, provides new insights that can help improve the humaneness, individualization, and effectiveness of residential services for youth and families.

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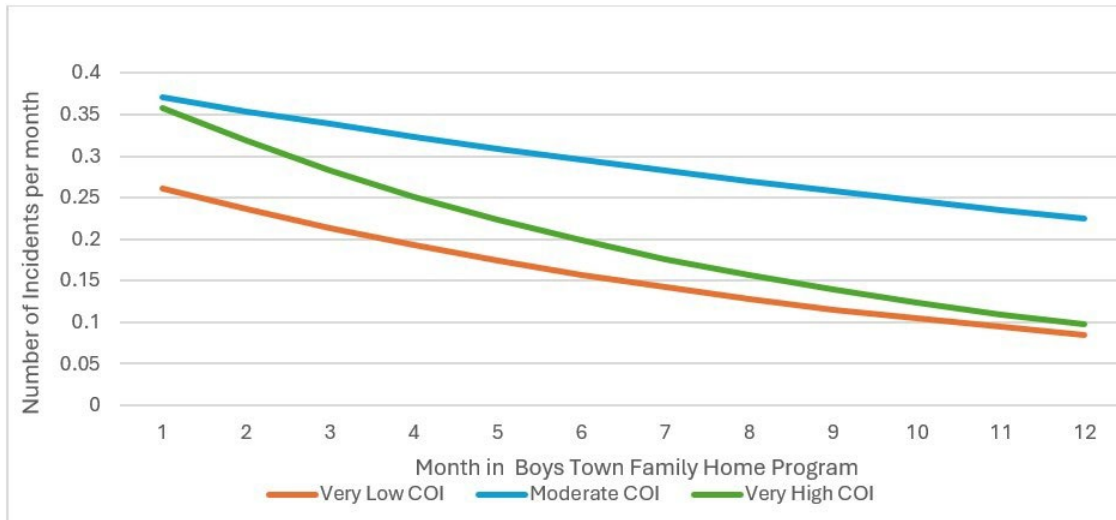
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**Figure 1**

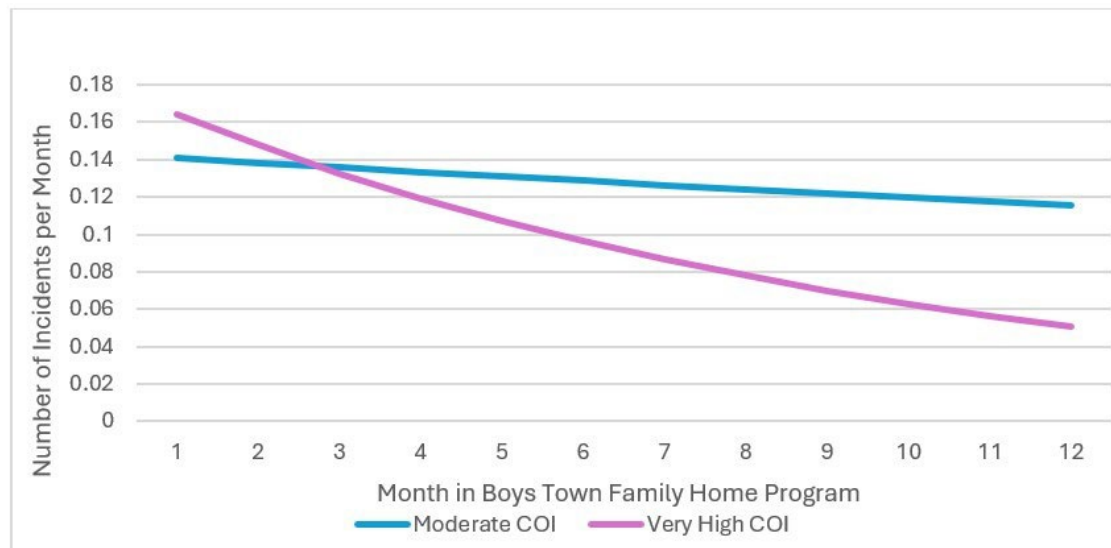
*Suicide Ideations by Very Low, Moderate, and Very High COI for White Females of Average Age at Admission Over First 12 Months in the Boys Town Family Home Program*



Note. All incidents Winsorized to the 99<sup>th</sup> percentile.

**Figure 2**

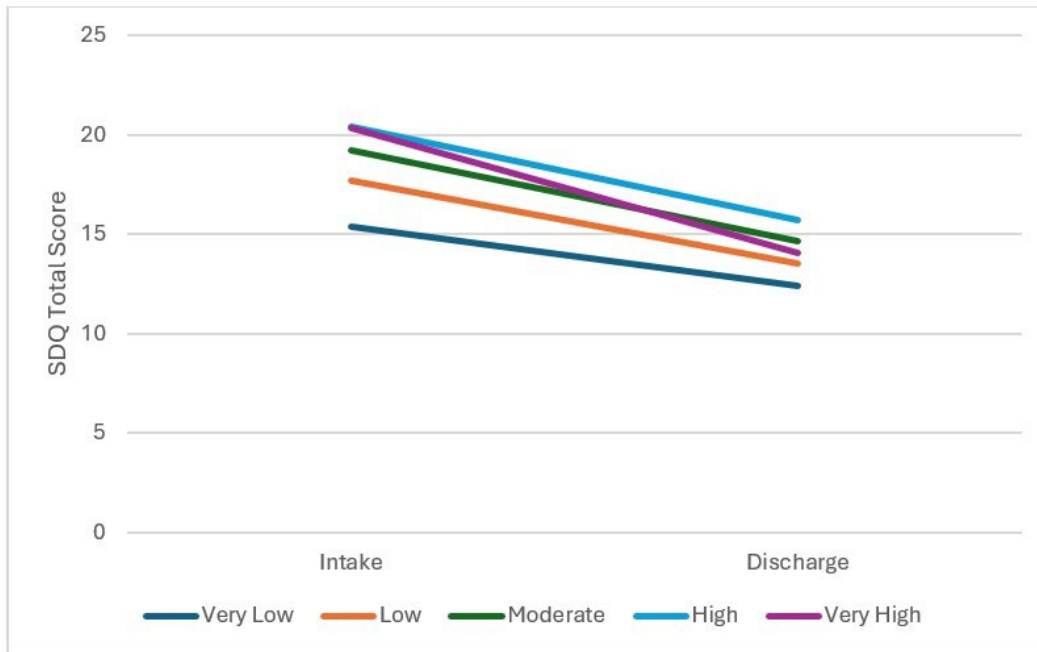
*Self-Harm Incidents by Moderate, and Very High COI Over First 12 Months for White Females of Average Age at Admission Over First 12 Months in the Boys Town Family Home Program*



Note. All incidents Winsorized to the 99<sup>th</sup> percentile.

**Figure 3**

*SDQ from Intake to Discharge by COI*



**Table 1***Percent of Youth and Family Presenting Problems by COI Group*

	Very Low (1-20)  (N = 504)	Low (21-40)  (N = 360)	Moderate (41-60)  (N = 392)	High (61-80)  (N = 287)	Very High (81-100)  (N = 230)
<b>Youth Problems</b>					
Depression	35.7 <sub>a</sub>	39.6 <sub>a,b</sub>	51.6 <sub>c</sub>	46.5 <sub>b,c</sub>	52.4 <sub>c</sub>
Hyperactivity	30.5 <sub>a</sub>	31.8 <sub>a,b</sub>	39.4 <sub>a,b,c</sub>	41.3 <sub>b,c</sub>	45.9 <sub>c</sub>
Out of Parental Control	68.5 <sub>a</sub>	79.4 <sub>b</sub>	84.5 <sub>b,c</sub>	88.9 <sub>c</sub>	90.0 <sub>c</sub>
Physically Assault (Adult)	13.0 <sub>a</sub>	19.5 <sub>a,b</sub>	22.3 <sub>b</sub>	21.5 <sub>b</sub>	25.8 <sub>b</sub>
Physically Assault (Peer)	39.9 <sub>a</sub>	33.4 <sub>a,b</sub>	35.5 <sub>a,b</sub>	34.0 <sub>a,b</sub>	27.1 <sub>b</sub>
Suicide Threats	14.4 <sub>a</sub>	21.7 <sub>a,b</sub>	40.4 <sub>c</sub>	30.9 <sub>b,c</sub>	41.5 <sub>c</sub>
Self-injurious acts	18.4 <sub>a</sub>	22.8 <sub>a</sub>	36.8 <sub>b</sub>	34.4 <sub>b</sub>	38.9 <sub>b</sub>
Possession of Weapon	16.0 <sub>a</sub>	10.9 <sub>a,b</sub>	12.4 <sub>a,b</sub>	10.1 <sub>a,b</sub>	6.1 <sub>b</sub>
Truancy	65.1 <sub>a</sub>	62.4 <sub>a</sub>	57.5 <sub>a,b</sub>	51.4 <sub>b</sub>	48.0 <sub>b</sub>
Gang Involvement	17.2 <sub>a</sub>	7.2 <sub>b</sub>	4.7 <sub>b</sub>	5.2 <sub>b</sub>	0.4 <sub>c</sub>
Drug/Alcohol Use	71.5 <sub>a</sub>	64.3 <sub>a,b</sub>	68.9 <sub>a</sub>	55.6 <sub>b</sub>	56.3 <sub>b</sub>
On Probation	57.9 <sub>a</sub>	59.1 <sub>a</sub>	48.2 <sub>b</sub>	39.9 <sub>b</sub>	24.0 <sub>c</sub>
<b>Family Problems</b>					
Family Substance Abuse	51.5 <sub>a</sub>	50.3 <sub>a,b</sub>	53.4 <sub>a</sub>	48.0 <sub>a,b</sub>	40.5 <sub>b</sub>
Parental Divorce	60.8 <sub>a</sub>	61.9 <sub>a</sub>	60.5 <sub>a</sub>	53.5 <sub>a</sub>	46.2 <sub>b</sub>
Court Involved Parent	36.9 <sub>a</sub>	39.2 <sub>a</sub>	29.1 <sub>a,b</sub>	26.8 <sub>b</sub>	19.3 <sub>b</sub>
Unemployed Parent	15.4 <sub>a</sub>	18.9 <sub>a</sub>	13.3 <sub>a</sub>	11.1 <sub>a,b</sub>	6.2 <sub>b</sub>
Family Financial Problems	31.7 <sub>a</sub>	28.3 <sub>a</sub>	23.3 <sub>a</sub>	23.2 <sub>a</sub>	9.1 <sub>b</sub>
Illegal Neighborhood Activity	25.2 <sub>a</sub>	7.5 <sub>b</sub>	5.3 <sub>b,c</sub>	3.8 <sub>b,c</sub>	1.2 <sub>c</sub>

*Note.* Row percentages with different subscripts differ at  $p < .05$ . All pairwise comparisons were adjusted using a Bonferroni correction.

**Table 2***SDQ Intake and Discharge Means by COI Group*

COI Group (N)	Intake (SD)	Discharge (SD)	Diff	T-test*	Cohen's <i>d</i> <sup>a</sup>
<b>Very Low (504)</b>	15.35(6.98)	12.41(7.09)	2.94	8.03	0.36
<b>Low (359)</b>	17.66 (7.48)	13.52 (7.91)	4.14	8.74	0.46
<b>Moderate (391)</b>	19.20 (6.95)	14.66 (7.93)	4.54	9.76	0.49
<b>High (288)</b>	20.39 (6.68)	15.71 (8.24)	4.68	8.83	0.52
<b>Very High (231)</b>	20.31 (6.82)	14.08 (8.41)	6.23	9.55	0.63

<sup>a</sup>*As opposed to a statistical significance test*

*(e.g., p-value), an effect size is an indicator of a*

*"practical or clinical significance" of a change. Generally speaking, .2 = "Small", .5 = "Medium",*

*"Large".*

*.8=*

*\*All Comparisons represent a significant change from intake to discharge ( $p < .01$ ).*

## Threat Sensitivity of Adolescents with Abuse Histories: The Impact of Residential Care

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### Abstract

Childhood abuse is associated with neuro-developmental disruption, including heightened threat sensitivity. It is often assumed that this disruption is semi-permanent and resistant to change. Here we examine whether the exaggerated threat response seen in adolescents who have experienced past abuse was modified after a 7 month stay in a trauma-informed residential program. The sample included thirty-six adolescents who were placed into residential care and had either prior exposure to high levels of abuse ( $n=36$ ) or lower levels of abuse ( $n=25$ ). Groups (aged 12.7-18.9 years, 57 male) were matched on age, sex, IQ, and prescribed medications and were scanned twice (shortly after intake and after 7 months) on a looming threat task. Results indicated (i) trauma-informed residential care was associated with significant decline in depression, anxiety, aggression and callous-unemotional trait symptoms irrespective of severity of prior abuse exposure; (ii) Participants who had been subjected to high levels of abuse showed heightened neural responsiveness to threats in both the posterior cingulate cortex/precuneus and the amygdala/hippocampus at intake that reduced after 7 months; (iii) Both groups showed declines in responsiveness within the rostromedial frontal cortex and the lingual gyrus and fusiform cortex after 7 months treatment. These data demonstrate that intervention can ameliorate heightened neural threat responsiveness and symptom severity in adolescents who have been exposed to high levels of abuse.

**Keywords:** Childhood Abuse; Threat Responsiveness; Amelioration; Looming Threat; Adolescents; fMRI

#### Practical Implications:

- These findings highlight the potential for trauma-informed residential care to significantly reduce both symptom severity and heightened neural threat responsiveness in adolescents with a history of abuse. This indicates that the neurodevelopmental impact of trauma is not fixed and can possibly be modified.
- Our results reinforce the need for continued investment in trauma-informed programs, which can promote long-term emotional and neurological resilience in affected youth.

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### Threat Sensitivity of Adolescents with Abuse Histories: The Impact of Residential Care

Abuse can occur as physical, sexual, or emotional molestation or physical or emotional neglect. Exposure to abuse in childhood is a potent risk factor for psychopathology that accounts for a substantial

proportion of mental disorders for survivors (Kessler et al., 2005, 2010). U.S. population-based studies estimate that up to 1 in 4 children will experience physical, sexual, or emotional abuse or exposure to some other form of violence within the family by the time they reach adulthood (Finkelhor et al., 2014, 2015). Exposure to abuse is associated with elevated risk for psychopathology, particularly Major Depressive Disorder (MDD), anxiety disorders, Attention Deficit Hyperactivity Disorder (ADHD), and Post Traumatic Stress Disorder (PTSD) (Busso et al., 2017; Cicche & Toth, 2005, 2015; Kessler et al., 2005, 2010; Schaefer et al., 2018) as well as low academic achievement (De Bellis et al., 2013), poor socioeconomic outcomes in adulthood (Jaffee et al., 2018) and aggression (1). There is a growing literature on the adverse neuro-developmental impact of early life stressors (ELS) (McCrorry et al., 2017; McLaughlin, DeCross, et al., 2019; McLaughlin & Lambert, 2017). However, there are very little data on the extent to which these forms of atypical neurocognitive function are developmentally plastic/can be ameliorated via intervention.

Approximately 3.2 million children/adolescents in the U.S. receive prevention & post-response services for abuse annually, with prevention services aimed at improving parenting competencies for families at risk through education and support, and post-response services provided following an investigation to address child safety based on an assessment of family needs and strengths (U.S. Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau, 2019). There is evidence of at least partial efficacy for some of these prevention and post-response services, though this is not seen universally (Vankineni, 2019). There are indications that intervention may reduce symptom severity (especially for PTSD) of internalizing and externalizing conditions (Cisler et al., 2016; Kirsch et al., 2018; Shapiro, 2014; ValienteGómez et al., 2017; Yasinski et al., 2016; Zepeda Méndez et al., 2018). However, it should be noted that a meta-analytic review indicated that exposure to childhood abuse was associated with a *lack* of response or remission during treatment for depression (Nanni et al., 2012) - though other data indicate relatively equivalent treatment responses for psychiatric conditions, irrespective of prior abuse exposure (Tyler et al., 2019).

Abuse has been associated with a number of maladaptive neuro-cognitive consequences. These include increased threat sensitivity (McCrorry et al., 2017; Pine et al., 2005; Pollak, 2005; Pollak & Sinha, 2002; Toth & Cicche, 2011), compromised emotional regulation (VanTieghem & Tottenham, 2018), reduced reward responsiveness (Birn et al., 2017; Gerin et al., 2017; Harms et al., 2018), and disrupted executive functioning (K. S. Blair et al., 2019; Sheridan et al., 2017). Moreover, different forms of abuse may have differential impacts on neuro-development (McLaughlin & Sheridan, 2016; Sheridan et al., 2017). In particular, physical and sexual abuse may be more associated with increased threat responsiveness, while neglect may be more associated with disrupted reinforcement-based decisionmaking (K. S. Blair et al., 2019, 2022; McLaughlin & Sheridan, 2016; Sheridan & McLaughlin, 2014).

Critically, there is relatively little work that has determined the extent to which these forms of atypical neuro-cognitive functioning are neurodevelopmentally plastic/can be ameliorated by intervention. One longitudinal study reported that a group of adolescents exposed to abuse showed

increased differential recruitment within retrosplenial cortex for autobiographical recall of positive vs. negative material, relative to a non-exposed comparison group, two years after the initial assessment (Puetz et al., 2023). However, it should be noted that the groups did not differ in differential recruitment for positive vs. negative material within retrosplenial cortex at *initial assessment*, making interpretation of these findings complicated. The goal of the current study was to begin to clarify this situation.

The current study uses the Looming task (Coker-Appiah et al., 2013) to examine the extent to which atypical threat processing in adolescents exposed to abuse is neuro-developmentally plastic/can be ameliorated by intervention. The Looming task is a paradigm designed to examine threat processing in adolescent participants (K. S. Blair et al., 2020; White et al., 2018). This task examines responsiveness to stimuli that either loom (a very basic threat cue; (Blanchard et al., 1977)) or recede. The stimuli are either threatening or neutral and can be either human faces or animal images. Previous work with this and comparable threat tasks has revealed that adolescents who had been previously subjected to abuse, relative to comparison adolescents, show increased neural responses to threatening looming stimuli in regions implicated in aspects of emotional responding, including the rostral and superior frontal gyrus, the amygdala, and posterior cingulate gyrus (PCC) (K. S. Blair et al., 2020; Tottenham & Sheridan, 2010). However, there are currently no data on the extent to which this atypically increased responsiveness is developmentally plastic/can be reduced via intervention.

The current study examined neural threat responsiveness over a 7-month period in participants who had experienced high levels of abuse and participants who had experienced lower levels of abuse. During this 7-month period, participants were residents within a trauma-informed residential program (Father Flanagan's Boys Home [FFBH], 2015). Adolescents were referred to this residential program for a variety of emotional and behavioral problems by child welfare, juvenile justice agencies, or parents. The program implements a modified version (R. Thompson & Daly, 2015) of the evidence-based Teaching-Family Model (Phillips et al., 1974; Wolf et al., 1995) in family-style group homes. Professionally trained direct care staff ("Family-Teachers"), reside with the youth in the homes and provide instruction on prosocial skills, relationship building, self-government, problem-solving, and social development. Trauma-informed components of the model include staff training to identify and understand the types and effects of trauma, and the importance of providing a calm and nurturing environment that ensures youth are physically and emotionally safe. Strategies include teaching and reinforcing skills for youth and their families with praise and encouragement that promote self-advocacy, empowerment, conflict resolution, healthy decision-making, coping, and stress management skills and emotional regulation (FFBH, 2015). The program has shown efficacy in prior work (Farmer et al., 2017; R. W. Thompson et al., 1996; Tyler et al., 2019, 2021). Researchers have evaluated program effectiveness (Tyler et al., 2019), and social skills teaching by Family-Teachers (Tyler et al., 2021; 2022) according to principles of trauma-informed care (United States Department of Health and Human Services, 2014)

The two groups of adolescents in residential care were scanned using fMRI on the Looming task twice: First, soon after arrival in residential care (Time 1) and then approximately 7 months later (Time 2). Depression, anxiety, aggression, and callous-unemotional trait symptom levels were also assessed at these times (in different sessions) and involved assessments of aggression-related symptoms, depression, and anxiety. Previous work has shown that prior exposure to abuse is associated with

increased risk for the emergence of these symptoms (Busso et al., 2017; Cicche & Toth, 2005, 2015; Dackis et al., 2015; Kessler et al., 2005, 2010; Ran et al., 2023; Schaefer et al., 2018). Given previous data on the efficacy of the residential program (Farmer et al., 2017; R. W. Thompson et al., 1996; Tyler et al., 2019, 2021), we considered that 7 months of residential care would be associated with reductions in aggression, depression, and anxiety. The 7-month timeframe was selected to reflect a meaningful midpoint in treatment while accommodating the variability in length of stay across participants. The average length of stay in our program is approximately 11–12 months, but discharge decisions can be highly individualized.

Given findings with respect to treatment response in patients with PTSD (Cisler et al., 2016), we predicted that atypical threat responsiveness in the adolescents previously exposed to abuse would be reduced following treatment, perhaps particularly within regions including the rostromedial frontal (rmPFC), PCC, and the amygdala (K. S. Blair et al., 2020; Tottenham & Sheridan, 2010). Contrasting responsiveness within regions showing changes in neural responsiveness over time in the adolescents in residential care with responsiveness within these regions to the stimuli of the typical developing participants would give an indication of the extent of “normalization” of Blood-oxygenation-level-dependent (BOLD) response over the 7-month period. The BOLD response indicates blood flow changes in specific brain areas and is thought to index neural activity (Hillman, 2014). Finally, we predicted that the extent to which atypical threat responsiveness was reduced would be associated with level of symptom improvement, particularly anxiety symptom level given the strong association of anxiety and increased threat responding (Abend et al., 2022; Alexandra Kredlow et al., 2022).

## Materials and Methods

### Participants

Male and female participants in residential care were recruited shortly after their arrival at the facility. Youth were referred to the program for significant emotional and/or behavioral problems. The exclusion criteria for participants in the study included pervasive developmental disorder, Tourette’s syndrome, lifetime history of psychosis, neurological disorder, head trauma, non-psychiatric medical illnesses requiring medications that may have psychotropic effects (e.g., beta-blockers, steroids), and IQ < 75.

Sixty-one adolescents participated in this study: (i) 36 adolescents entering residential care exposed to high levels of past abuse [note that nine of these participants were also involved in an earlier study documenting increased threat responsiveness on the Looming task in individuals exposed to high levels of sexual abuse (4)]; (ii) 25 adolescents entering residential care exposed to lower levels of past abuse. The adolescents exposed to high levels of abuse ( $N = 36$ ) had a mean age of 15.83 years ( $SD = 1.52$ ) and mean IQ of 99.25 ( $SD = 13.55$ ), with 58.33% male, while the group exposed to lower levels of abuse ( $N = 25$ ) had a mean age of 16.36 years ( $SD = 1.27$ ), mean IQ of 103.60 ( $SD = 15.19$ ), and 76.00% male. The two groups were matched on age, sex, IQ, prescribed medications, pubertal status, and clinical diagnoses (except generalized anxiety disorder (GAD) and PTSD; see Tables 1 & 2). The

adolescents exposed to high levels of past abuse also reported significantly greater depression (MFQ scores) than those exposed to lower levels of abuse (Table 1). Psychiatric diagnoses were provided via psychiatric interviews by licensed psychiatrists with the participant and a parent/legal guardian following standard clinical practice.

Institutional Review Board at Boys Town National Research Hospital approval was acquired before data collection began. Informed consent was obtained from a parent/legal guardian, and informed assent was obtained from the youth. In all cases, youth had the right to decline participation at any time before or during the study. It was made clear to all participants and their parents that their decision with respect to participation had no influence on their clinical care.

### Measures:

**History of abuse:** This was assessed using the Childhood Trauma Questionnaire (CTQ), a 25-item self-report measure, completed by the participant, that indexes childhood abuse. Abuse is indexed via 15 items, organized around three forms of abuse (sexual abuse, emotional abuse, and physical abuse). Neglect is indexed via 10 items organized around two forms of neglect (physical neglect and emotional neglect). For each item, adolescents respond on a five-point Likert scale, ranging from 1 (never true), 2 (rarely true), 3 (sometimes true), 4 (often true), and 5 (very often true). The CTQ has excellent psychometric properties, including internal consistency, test-retest reliability, and convergent and discriminant validity with interviews and clinician reports of abuse (Bernstein et al., 1997). Exposure to high levels of past abuse was defined as scoring above validated thresholds on either the EA, SA, or PA subscales of the Child Trauma Questionnaire [CTQ], ( $EA \geq 10$  or  $SA \geq 8$  or  $PA \geq 8$ ; 5, 6). Exposure to lower levels of abuse was defined as being below validated thresholds on the EA, SA, and PA subscales of the CTQ (i.e.,  $EA < 10$  and  $SA < 8$  and  $PA < 8$ ).

**Symptom severity:** Callous-Unemotional traits were assessed via the *Inventory of Callous-Unemotional Traits* (ICU; Frick, 2004), a 24-item self-report questionnaire with excellent psychometric properties, including internal consistency ( $\alpha = .77$ ) and test-retest reliability (51). Aggression severity was assessed via the *Reactive-Proactive Questionnaire* (RPQ; 52), a 23-item self-report questionnaire that is a validated measure of both proactive and reactive aggression in youth (53). Depression severity was assessed via the *Mood and Feelings Questionnaire* (MFQ) (54), a 33-item self-report questionnaire that is a reliable measure of depression in youth (55). Anxiety severity was assessed via the *Screen for Child Anxiety Related Emotional Disorder* (SCARED, child version, 56). Prior work has indicated that the SCARED has excellent internal consistency and test-retest reliabilities (57, 58).

### Looming Threat functional MRI (fMRI) Task

We used a looming task (*adapted from Coker-Appiah et al., 2013*) previously used by this lab with adolescent participants (K. S. Blair et al., 2020; White et al., 2018). Participants are presented with images that appear to loom toward or recede away from them. For fuller details of this task, see Supplemental Material and Supplemental Figure 1.

## **fMRI parameters**

The fMRI parameters followed our previous work with this task (K. S. Blair et al., 2020). Details are provided in the Supplemental Material.

## **fMRI Analysis: Data Preprocessing and Individual Level Analysis**

Data Preprocessing and Individual Level Analysis followed our previous work with this task (K. S. Blair et al., 2020). Details are provided in the Supplemental Material.

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## **Stascal Analyses**

### ***Movement data***

Volumes were censored if there was >0.5 mm motion across adjacent volumes. No participant in the final sample for the current study had >5% censored volumes. There were no significant group differences in terms of censored volumes ( $F < 1$ ; ns), average motion per volume ( $F < 1$ ; ns), or maximum displacement during scanning ( $F = 1.73$ ;  $p = 0.195$ ). In short, group differences in BOLD response are unlikely to relate to artifacts related to group differences in movement (Friston et al., 1996)

### ***Symptom change data***

Four 2 (Group: High abuse vs. Low abuse) x 2 (Phase: Pre-treatment [Time 1] vs. 7 months treatment [Time 2]) ANOVAs were conducted on the ICU, RPQ, MFQ, and SCARED scores, respectively.

### ***Behavioral data***

Two 2 (Group: High abuse vs. Low abuse) by 2 (Phase: Pre-treatment [Time 1] vs. 7 months treatment [Time 2]) by 2 (Direction: Loom vs. Recede) by 2 (Type: Human vs. Animal) by 2 (Emotion: Threat vs. Neutral) ANOVAs were conducted on the accuracy and reaction time (RT) data, respectively.

### ***BOLD response data***

*Our main analysis* involved a whole brain analysis contrasting the BOLD responses of adolescents exposed to significant abuse relative to adolescents not exposed to significant abuse pretreatment and following 7 months of residential care. A 2 (Group: High abuse vs. Low abuse) by 2 (Phase: Pre-treatment [Time 1] vs. 7 months treatment [Time 2]) by 2 (Direction: Loom vs. Recede) by 2 (Type: Human vs. Animal) by 2 (Emotion: Threat vs. Neutral) ANOVA was conducted on the whole brain BOLD response data. To facilitate future meta-analytic work, effect sizes (partial eta squared [ $\eta^2_{pp^2}$ ]) are reported in Table 3. Correction for multiple comparisons was performed using a spatial clustering operation in AFNI's 3dClustSim, utilizing the autocorrelation function (-acf) with 10,000 Monte Carlo simulations for the whole-brain analysis. Spatial autocorrelation was estimated from residuals from the individual-level GLMs. The initial threshold was set at  $p = .001$ . This process yielded an extent threshold of  $k = 18$  voxels for the whole brain (multiple comparison corrected  $p < 0.05$ ). Follow-up testing was conducted within the Stascal Package for the Social Sciences (SPSS) version 22.0.0.2 (IBM Corp., 2017). Note that this follow-up testing is purposed solely to allow interpretation of the multiple comparison corrected analysis described above – additional multiple comparison analyses are not conducted for these interpretation analyses.

*Follow-up analysis:* To determine the extent to which changes in activity over the treatment process reflected “normalization” of function, activity within functional region of interest (ROIs) of regions showing Group-by-Phase-by-Emotion [Task Condition] interactions or Phase-by-[Task Condition] interactions was contrasted between the two groups of participants in residential care at Time 1 and Time 2. In addition, data from these two groups were contrasted with data from the TD participants at Time 1 and Time 2.

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*Association between Time 1->Time 2 BOLD response changes and symptom level changes:* Correlation analyses were conducted to examine the association between BOLD response changes and symptom level changes from Time 1 to Time 2.

*Supplemental analyses:* The interactions of primary focus were those identifying regions showing Group-by-Phase-by-Emotion or Group-by-Phase-by-Direction interactions (i.e., reflecting particularly reduced threat processing [as indexed by threatening image or Looming image content] in adolescents exposed to high levels of abuse as a function of intervention). In cases where the groups significantly differ in presence of a particular condition (e.g., PTSD for which abuse is an important precursor; (McLaughlin, Alvarez, et al., 2019)) follow-up analyses of these interactions were conducted within SPSS following the exclusion of participants with the relevant diagnosis. Follow-up sensitivity analyses were not conducted for variables which the groups were matched on.

## Results

### Clinical (symptom change) data

Table 3 reports symptom data by group and phase. As can be seen, for all four symptom sets assessed (CU traits, aggression, depression, and anxiety), there were significant main effects of phase, i.e., declines in severity as a function of phase (Time 2 [7 months treatment] < Time 1 [shortly after intake]). There was also a main effect for Group for CU traits; the adolescents exposed to high levels of abuse showed significantly greater CU traits relative to those exposed to lower levels of abuse. None of the analyses revealed significant Group-by-Phase interactions (see Table 3).

### Behavioral data

Accuracy and RT data were analyzed using two separate repeated measures ANOVA. Results are reported in Supplemental Materials.

### Main analysis

The analysis of the BOLD response data revealed regions showing significant Group-by-Phase-by-Emotion interactions as well as regions showing both Phase-by-Emotion and Phase-by-Direction interactions (see Table 4). No other interactions with Phase survived corrections for multiple comparisons.

### **Group-by-Phase-by-Emotion Interactions**

Regions showing significant Group-by-Phase-by-Emotion interaction were the PCC/precuneus and the amygdala/hippocampus. Within both regions, there was a significantly greater reduction in BOLD responses to *negative* stimuli from Time 1 (shortly after intake) to Time 2 (7 months treatment), compared to *neutral* stimuli in the adolescents who had experienced significant abuse, relative to those not exposed to significant abuse ( $F[1, 59] = 16.59$  &  $19.57$ ,  $p < 0.001$ ,  $\eta^2_{pp} = 0.22$  &  $0.25$  for PCC/precuneus and the amygdala/hippocampus, respectively); see Figure 1.

### **Phase-by-Emotion Interactions**

There was a significant Phase-by-Emotion interaction in the rmPFC. Within this region, there was a significantly greater reduction in BOLD responses to *threatening* stimuli from Time 1 to Time 2, compared to neutral stimuli ( $F(1, 59) = 21.05$ ,  $p < 0.001$ ,  $\eta^2_{pp} = 0.26$ ); see Figure 2.

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### **Phase-by-Direction Interactions**

Regions showing significant Phase-by-Direction interaction were the lingual and fusiform gyri. Within both regions, there was a significantly greater reduction in BOLD responses to *looming* stimuli from Time 1 to Time 2, compared to receding stimuli ( $F(1, 59) = 15.71$  &  $22.80$ ,  $p < 0.001$ ,  $\eta^2_{pp} = 0.21$  &  $0.28$  for lingual gyrus and fusiform gyrus, respectively); see Figure 2.

## **Examining the extent to which brain level changes represent “normalization” of function**

### **Regions showing Group-by-Phase-by-Emotion interactions**

Both PCC/precuneus and the amygdala/hippocampus showed significant *Group-by-Phase-by-Emotion interactions*. Examining responsiveness within these regions at Time 1 revealed that adolescents exposed to significant abuse showed significantly atypical responses within both regions to Emotion information relative to TD participants ( $F[1,67]=6.82$  &  $5.44$ ,  $p = 0.011$  &  $0.023$ ,  $\eta^2_{pp} = 0.09$  &  $0.075$  for PCC/precuneus and amygdala/hippocampus, respectively). Notably, the adolescents exposed to low abuse showed no differences in responsiveness within these regions to Emotion information relative to TD participants ( $F[1, 56]=0.819$  &  $0.848$ ,  $p=0.369$  &  $0.361$ ,  $\eta^2_{pp} = 0.014$  &  $0.015$  for PCC/precuneus and amygdala/hippocampus, respectively). It should be noted, though, that the atypical function within these regions had not “normalized” by Time 2 in the adolescents exposed to significant abuse. Group-by-Emotion interactions (adolescents exposed to significant abuse vs. TD adolescents) remained significant at Time 2 ( $F[1,67]=7.58$  &  $4.958$ ,  $p=0.008$  &  $0.029$ ,  $\eta^2_{pp} = 0.102$  &  $0.069$ ).

### **Regions showing Phase-by-Emotion or Phase-by-Direction interactions**

Both adolescents exposed to significant abuse and those exposed to low levels of abuse showed changes in responsiveness to threat stimuli and Looming stimuli from Time 1 to Time 2 within the rmPFC (Threat: Phase-by-Emotion interactions), lingual gyrus, and fusiform gyrus (Looming: Phase-by-Direction interactions). At T1, the responsiveness within both the rmPFC and fusiform gyrus was significantly atypical relative to TD adolescents for threat and looming information, respectively ( $F[1, 92]=4.82$  &  $5.765$ ,  $p=0.031$  &  $0.018$ ,  $\eta^2_{pp} = 0.050$  &  $0.059$ ). This had “normalized” by Time 2 ( $F[1, 92]=1.020$  &  $1.358$ ,

$p=0.333$  &  $0.247$ ,  $\eta\eta_{pp}^2 = 0.010$  &  $0.015$ ). Responsiveness within the lingual gyrus was not atypical relative to TD adolescents at either Time 1 or Time 2 ( $F[1, 92]= 1.02$  to  $3.2$ ,  $p = 0.077$  to  $0.482$ ,  $\eta\eta_{pp}^2 = 0.005$  to  $0.034$ ).

### **Associations of brain function changes to symptom level changes**

No significant associations were found between Time 1 to Time 2 brain function and symptom level changes (for full details, see Supplemental Material).

### **Supplemental analyses:**

Supplemental analyses in SPSS revealed that the Group-by-Phase-by-Emotion interactions within the PCC/precuneus and the amygdala/hippocampus remained significant following the exclusion of cases with PTSD, GAD, and following the addition of an exposure to neglect covariate (for full details, see Supplemental Material).

## **Discussion**

In this study, we investigated the extent to which 7 months of residential care was associated with a reduction in atypical threat responding in adolescents who had experienced significant abuse. There were four main findings: First, participants in trauma-informed residential care showed significant reductions across several categories of symptoms decline. This symptom decline was not moderated by whether participants had suffered significant abuse exposure. Second, participants who had been subjected to significant abuse showed heightened neural responsiveness to threats in both PCC/precuneus and the amygdala/hippocampus that selectively reduced over the 7 months. Third, both groups of participants showed declines in responsiveness within the rmPFC to threat relative to neutral images, and lingual gyrus and fusiform gyrus to looming relative to receding stimuli over the 7 months. Fourth, brain level changes occurring over the 7-month period were not associated with level of symptom change during this time.

*Symptom change during intervention:* Considerable data point towards the efficacy of psychosocial interventions for reducing symptom severity of internalizing and externalizing conditions, including PTSD (Cisler et al., 2016; Kirsch et al., 2018; Shapiro, 2014; Valiente-Gómez et al., 2017; Yasinski et al., 2016; Zepeda Méndez et al., 2018). However, there have been some indications that interventions have reduced efficacy for those previously exposed to high levels of abuse (Nanni et al., 2012; Vankineni, 2019), although this is not universally reported. For example, Tyler and colleagues reported relatively equivalent treatment responses for psychiatric conditions, irrespective of prior abuse exposure, for an independent population who experienced the same trauma-informed residential care model as the current participants (Tyler et al., 2019). Our results are in line with those of Tyler and colleagues; symptom level showed significant reduction as a function of residential care but the level of this symptom reduction was independent of level of prior abuse exposure (though in the absence of comparison groups involving participants subject to high and lower levels of abuse not receiving this

intervention, it can only be speculated that these results relate to residential care rather than, for example, maturational processes).

*Brain function change during intervention as a function of Group:* Two regions showed significant Group-by-Phase-by-Emotion interactions - PCC/precuneus and the amygdala/hippocampus. Both are implicated in emotional responding (AbuHasan et al., 2025; Rolls, 2019; Zhu et al., 2019). Within these regions, there was a significantly greater reduction in responsiveness to threat relative to neutral stimuli in the adolescents with high prior abuse exposure relative to the adolescents with low prior abuse exposure over the 7-month period. These regions have been frequently shown to be atypically responsive to threat in previous studies investigating adolescents and adults with prior exposure to abuse (e.g., K. S. Blair et al., 2020; Jenness et al., 2021; van Rooij et al., 2020). Indeed, an earlier study with the Looming task involving adolescents who were sexual abuse survivors showed atypically increased responsiveness within PCC /precuneus and rmPFC (K. S. Blair et al., 2020). Notably, activity within these two regions was only atypically increased in the adolescents with high prior abuse exposure (not those with lower abuse exposure) relative to typically developing comparison adolescents. This further supports the suggestion that the atypical function at Time 1 seen in the current study within these two regions reflected an impact of prior abuse that was ameliorated over the 7-month period. However, it should be noted that activity within these two regions did not “normalize” relative to the typically developing comparison adolescents; indeed, it appeared that the

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participants exposed to significant abuse were showing significantly reduced responses to threat following intervention. While this may be a statistical artifact, it may also indicate some of the long-term difficulties of recovering from abuse (Gardner et al., 2019; Norman et al., 2012), perhaps the development of an avoidant response to threat (Pine et al., 2005).

Within three regions, there was a general reduction in response to threat cues, whether these represented threatening vs. neutral content (rmPFC) or looming vs. receding images (lingual gyrus and fusiform gyrus). These regions have all been implicated in affect-based self-referent processing and the maintenance of the emotional response (rostromedial frontal cortex (De Pisapia et al., 2019; Waugh et al., 2010, 2014)) or the representation of (emotional) visual stimuli (lingual gyrus and fusiform cortex; (Meaux et al., 2019)). All of these regions show atypically increased responding in patients with anxiety disorders/MDD (Alexandra Kredlow et al., 2022; Waugh et al., 2012). It should be noted, however, that BOLD responses within one of these regions to the threat information was not significantly atypical in the adolescents who had experienced prior abuse relative to the TD group (lingual gyrus). As such, it is probably worth being cautious in considering this finding. However, for the other two regions, rmPFC (Threat) and fusiform gyrus (Looming), BOLD responses were significantly atypically increased relative to those shown by the TD adolescent sample at Time 1 but had “normalized” over the 7-month period. As noted, rmPFC has been implicated in affect-based self-referent processing and the maintenance of the emotional response (De Pisapia et al., 2019; Waugh et al., 2010, 2014) and may exacerbate emotional conditions by maintaining rumination on aversive emotional content (K. S. Blair et al., 2020). Fusiform gyrus has long been implicated in processing social stimuli (e.g. (Kanwisher & Yovel, 2006)) including threatening social stimuli.

Notably, the three regions that showed a reduction in response to threat cues over the 7 month period (rmPFC, lingual gyrus, and fusiform gyrus) are all regions that have been identified as atypical responding in parent populations on this task (K. S. Blair et al., 2020; R. J. Blair et al., 2021; White et al., 2018). They are all regions implicated in responding to threats on this or related tasks (Alexandra Kredlow et al., 2022; Kunitatsu et al., 2020). This suggests that a significant number of the participants at Time 1 showed atypical responding within systems responding to threat, irrespective of level of prior exposure to abuse. This would be consistent with suggestions that these regions are implicated in the pathology of particularly anxiety disorders (Alexandra Kredlow et al., 2022; Kunitatsu et al., 2020) and may perhaps be particularly exacerbated in individuals with these disorders who have been exposed to high levels of abuse (Callaghan et al., 2014; Sheridan & McLaughlin, 2014).

*Limitations and caveats:* A significant limitation of the current study, and against predictions, was that reductions in threat responsiveness, as indicated by BOLD response, were not associated with level of symptom reduction. This might reflect that atypical activity within these regions to threat does not manifest in this specific symptomatology or that the corresponding symptom level changes take longer to manifest than the brain-level changes. Future work will be necessary, with larger samples and increased power, to explore this further. In addition, it should be noted that there is a lack of information regarding the timing of abuse experiences for each participant. Although the Childhood Trauma Questionnaire (CTQ) provides valuable data on the severity and type of maltreatment, it does not capture when in the developmental trajectory the abuse occurred. This limits our ability to examine how recency of trauma may influence individual differences in neurodevelopmental outcomes or treatment response. Additionally, we cannot determine whether observed changes in

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neurodevelopment and clinical symptoms are the result of active treatment effects—such as trauma-informed care and specific intervention components—or more passive effects related to environmental stability and the absence of ongoing abuse. Future research will examine specific treatment interventions, such as skills teaching in problem-solving (Tyler et al., 2021), relationship-building (Tyler et al., 2022) impact neurodevelopmental changes. Despite these limitations, the present findings offer promising support for residential care, especially in light of recent critiques of such settings (United States Senate, 2024).

Five caveats should be considered with respect to the current study. First, we cannot be certain whether the changes in threat responsiveness reflect spontaneous developmental amelioration or the impact of intervention (and, if they did reflect the intervention, which components of the intervention). Indeed, residential care non-specifically allows me away from the maltreating environment, and this likely confers benefit. Notably, comparison populations of adolescents exposed to high and lower levels of abuse not receiving intervention were not investigated nor did we have sufficient participant numbers to attempt to disentangle which specific features of the program might be particularly associated with amelioration of threat responsiveness (Tyler et al., 2021). Importantly, though, the current data do indicate that atypical threat responsiveness is not “fixed” but at least partially neurodevelopmentally plastic. Second, although the two groups of adolescents receiving residential care were relatively well

matched for psychopathology, there were significant group differences in incidence of PTSD and level of CU symptoms. It could be argued that the regions showing Group-by-Phase-by-Emoon interactions reflect treatment impacts on the pathophysiology of PTSD rather than treatment impacts on the pathophysiology associated with abuse. Of course, since abuse is a very significant risk factor for the development of PTSD (McLaughlin, Alvarez, et al., 2019), it may be impossible to disentangle these two possibilities. However, it should be noted that re-analyses of the BOLD responses for the regions showing the Group-by-Phase-by-Emoon interactions, following the exclusion of the participants with PTSD, did not remove the significance of these interactions (see Supplemental Material). Third, the two groups of adolescents receiving residential care not only differed in prior exposure to abuse but also neglect. While exposure to abuse, rather than neglect, has been particularly associated with increased threat responsiveness (K. S. Blair et al., 2019, 2022; McLaughlin & Sheridan, 2016; Sheridan & McLaughlin, 2014), the current study was not designed to distinguish beneficial effects with respect to impact of prior abuse relative to prior neglect. Fourth, while the study's sample size is slightly greater than previous longitudinal work investigating this issue (Puetz et al., 2023), it is not large. This likely contributes to the failure to observe associations between neural and symptom change indices. As such, the study should be considered preliminary. Finally, a difficulty with longitudinal results like the current ones is that they might represent regression towards the mean. It is important to note, though, that a regression towards the mean explanation would also expect findings related to *reduced* threat responsiveness at Time 1 that increased over the treatment period. This was not observed.

**Conclusion:** In conclusion, the current study indicated that over a 7-month period in trauma-informed residential care; (i) adolescents exposed to high relative to low levels of abuse showed comparable amelioration of symptoms; and (ii) adolescents exposed to high levels of abuse showed additional amelioration of atypical brain responses to threat in addition to those shown by adolescents exposed to lower levels of abuse. These data indicate that at least some forms of atypical neurocognitive function associated with abuse are developmentally plastic (Puetz et al., 2023).

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However, brain level changes over the 7-month period were not associated with level of symptom change over this time. This may reflect either that the atypical brain responses seen here were unrelated to the forms of symptom examined or that the corresponding symptom level changes take longer to manifest than the brain-level changes.

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Table 1: Participant characteristics.

	High abuse (N=36)		Lower abuse (N=25)		F(1, 60)	p=
	Mean	SD	Mean	SD		
<b>IQ</b>	99.25	13.55	103.60	15.19	1.02	0.31
<b>Age</b>	15.83	1.52	16.36	1.27	2.04	0.16
<b>HI</b>	78472.22	62380.11	90208.33	63581.18	2.44	0.10
<b>PDS Score</b>	3.05	1.07	3.47	0.55	1.64	0.55
<b>Pubertal status</b>	8.39	2.96	9.12	1.94	0.60	0.37
<b>ICU</b>	26.97	8.14	23.21	6.95	3.45	0.07
<b>RPQ</b>	12.72	9.34	9.16	6.85	2.55	0.12
<b>MFQ</b>	21.30	16.05	8.80	7.65	12.90	<0.001
<b>SCARED</b>	24.45	18.25	15.96	13.47	3.76	0.058

<b>EA</b>	12.56	4.49	6.76	2.17	35.68	<0.001
	Range: 5 to 21		Range: 5 to 13			
<b>PA</b>	9.44	3.40	5.48	0.96	32.03	<0.001
	Range: 5 to 19		Range: 5 to 9			
<b>SA</b>	8.33	5.71	5.00	0.00	8.48	=0.005
	Range: 5 to 25		Range: 5 to 5			
<b>EN</b>	12.50	3.97	6.92	1.96	42.03	<0.001
	Range: 5 to 22		Range: 5 to 11			
<b>PN</b>	8.78	3.92	5.40	0.82	17.92	<0.001
	Range: 5 to 21		Range: 5 to 7			
<b>CTQ</b>	51.61	13.65	29.56	2.65	63.32	<0.001
	Range: 34 to 88		Range: 25 to 33			

**Key to Table 1:** IQ = Intelligence Quotient; HI = Household income; PDS = Pubertal Developmental Scale; ICU = Inventory of Callous Unemotional traits; RPQ = Reactive Proactive Aggression Questionnaire; MFQ = Mood and Feelings Questionnaire; SCARED = **Screen for Child Anxiety Related Emotional Disorder**; EA = Emotional Abuse; PA = Physical abuse; SA = Sexual abuse; EN = Emotional Neglect; PN = Physical neglect; CTQ = Childhood Trauma Questionnaire total score.

Table 2: Diagnoses and medication use

	High abuse (N=36)		Lower abuse (N=25)		$\chi^2$ (df=2)	p=
	N	%age	N	%age		
<b>Male</b>	21	58.33	19	76.00	3.70	0.16
					$\chi^2$ (df=1)	p=
<b>CD</b>	22	61.11	15	60.00	0.01	0.93
<b>ADHD</b>	24	66.67	18	72.00	0.20	0.66
<b>MDD</b>	8	22.22	3	12.00	1.04	0.31
<b>GAD</b>	20	55.56	6	24.00	6.01	0.01

<b>PTSD</b>	9	25.00	0	0.00	7.33	0.01
<b>Anpsyhoc</b>	1	2.78	3	12.00	2.04	0.15
<b>SSRI</b>	5	13.89	7	28.00	1.86	0.17
<b>Smulant</b>	4	11.11	5	20.00	0.93	0.34

**Key to Table 2:** CD = Conduct Disorder; ADHD = Attention Deficit Hyperactivity Disorder; MDD = Major Depressive Disorder; GAD = Generalized Anxiety Disorder; PTSD=Post Traumatic Stress Disorder; SSRI = Selective Serotonin Reuptake Inhibitor (N of participants prescribed medications of this class); sd = standard deviation; N = Number. Note: (i) chi-square tests were conducted to examine differences between the two groups of participants engaged in intervention; and (ii) Psychiatric diagnoses were provided via psychiatric interviews by licensed psychiatrists with the participant and a parent/legal guardian following standard clinical practice.

Table 3: Symptom change and statistical results as a function of Group and treatment Phase.

		Time 1		Time 2		Group	Phase	Group x Phase	
		Mean	s.e.	Mean	s.e.				
<b>ICU</b>	<b>High Ab</b>	28.21	1.43	25.39	1.79	$F(1, 48)=$	8.40	11.38	0.16
	<b>Low Ab</b>	22.09	1.61	18.50	2.02	$p=$	0.01	0.00	0.69
<b>RPQ</b>	<b>High Ab</b>	13.08	1.69	11.00	1.66	$F(1, 44)=$	3.13	7.49	0.33
	<b>Low Ab</b>	8.59	1.76	7.23	1.74	$p=$	0.08	0.01	0.57
<b>MFQ</b>	<b>High Ab</b>	19.07	2.75	13.19	2.54	$F(1, 47)=$	3.77	5.24	1.11
	<b>Low Ab</b>	10.36	3.05	8.18	2.81	$p=$	0.06	0.03	0.30
<b>SCARED</b>	<b>High Ab</b>	22.83	3.36	14.08	2.55	$F(1, 44)=$	1.64	18.02	1.47
	<b>Low Ab</b>	15.77	3.51	10.91	2.66	$p=$	0.21	<0.001	0.23

**Key to Table 3:** ICI = Inventory of Callous-Unemotional traits; RPQ: Reactive Proactive Questionnaire; MFQ: Mood and Feelings Questionnaire; SCARED = Screen for Child Anxiety Related Emotional Disorders; High Ab: Group exposed to high levels of abuse; Low Ab = Group exposed to low levels of abuse; s.e. = standard error.

Table 4. Significant areas of activation from the 2 (Group: High abuse vs. Low abuse) by 2 (Phase: Pretreatment vs. 7 months treatment) by 2 (Direction: Loom vs. Recede) by 2 (Type: Human vs. Animal) by 2 (Emotion: Threat vs. Neutral) ANOVA. Activations are from whole brain analyses significant at  $p < 0.001$ , corrected for multiple comparisons, significant at  $p < 0.05$ .

REGION	BA	Voxels	X	Y	Z	F-value	$\eta^2_{pp}$
<b>Group-by-Phase-by-Emotion</b>							
R PCC/ precuneus	23/29	46	2	-60	19	16.59	0.22
R amygdala/ hippocampal gyrus	--	19	28	-14	-25	19.57	0.25
<b>Phase-by-Emotion</b>							
L rmPFC	9	20	-8	49	18	21.05	0.26
<b>Phase-by-Direction</b>							
R Lingual gyrus	38	18	8	-77	6	15.71	0.21
R Fusiform gyrus	20	19	31	-62	-8	22.80	0.28

### Figure Legends

Figure 1. Interactions of Group-by-Phase-by-Emotion. BOLD responses within (a) right PCC/ precuneus (2, -60, 19); (b) right amygdala/ hippocampal gyrus (28, -14, -25). Error bars indicate standard errors of parameter estimates.

Figure 2. Interactions of Phase-by-Emotion in the rmPFC (a) (-8, 49, 18). Interactions of Phase-by-Direction in (b) right fusiform gyrus (31, -62, 8); and (c) right lingual gyrus (8, -77, 6). Error bars indicate standard errors of parameter estimates.

### Figure 1

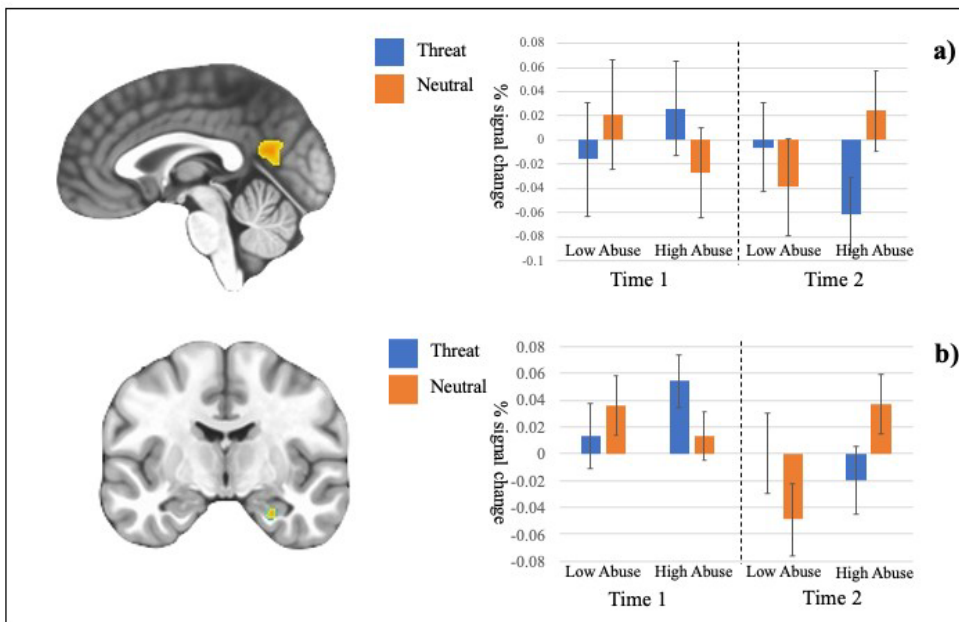
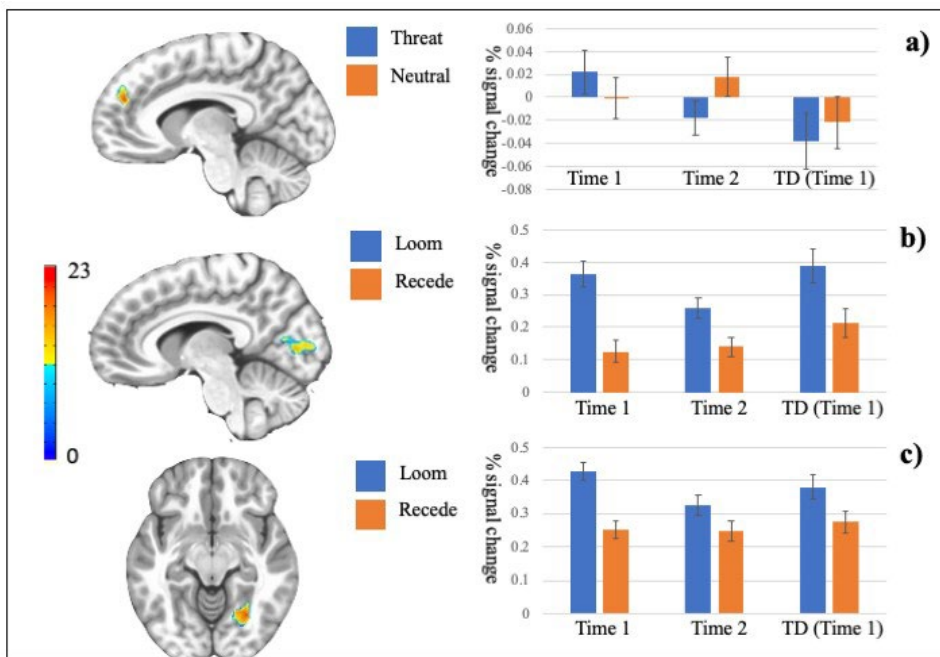


Figure 2



## Description of the School Support Program: A Multi-Tiered School-Based Parent Engagement Approach to Improve Student Support

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### Abstract

The School Support Program is a mul-ered school behavioral intervenon that incorporates components of the Teaching-Family Model to decrease negave behaviors while increasing posive ones in the school seng. This program ulizes trained staff called School Support Specialists who work with teachers and administraon to idenfy and refer students in need. Specialists are also trained to work with students, staff, and families to refer students and their families to programs within a larger array of services if addional family-based support is needed. Over the 2022-23 and 2023-24 school years, services were

delivered to more than 12,500 unique students at over 100 elementary, middle, and high schools in the United States. This equated to approximately 22,000 hours directly serving students and approximately 2,700 parent contact hours. In aggregate, served students received approximately 1.76 hours of direct service. Further, approximately three percent of families of students served by the program received additional Boys Town services. Ranges of school climate were also associated with sasfacon with their Specialist. Data from a small pilot study indicated that improved atendance and grades were posively related to services received. Limitaons and future research are discussed.

**Keywords:** Li With Boys Town School Support Specialist Program, Mul-Tiered Systems of Support, Teaching-Family Model, School Support, School Climate

**Implicaons:**

- School Support Program served over 12,500 unique students in over 100 schools, equang to 1.76 hrs./student.
- School Support Specialists engaged in over 2700 parent contact hours, bridging the widening home/school communicaon gap.
- Data from a small pilot study indicated that improved atendance and grades were posively related to services received.
- School Support Program is unique due to its larger connected service array. Approximately three percent of families received additional services.
- A strong commitment to fidelity is recommended to ensure quality implementaon of the School Support Program moving forward.

**Descripon of the School Support Program:  
A Mul-Tiered School-Based Parent Engagement Approach to Improve Student Support**

Youth in residenal programs have significant emoonal and behavioral challenges that negavely impact their academic success (Rimehaug et al., 2018). These youth oenmes make significant academic and behavior improvement in school during (Thompson et al., 1996) and aer residenal placement (Trout et al., 2013; 2020). Many of the behavioral (e.g., teaching social skills) and relaonship strategies (e.g., praise) implemented in residenal programs using the Teaching-Family Model (TFM; see Wolf et al., 1995) help students in school sengs as well (Mason et al., 2024; Oliver et al., 2019; Scudder et al., 2025). In the last few years, there has been a significant increase in student classroom behavior issues (U.S. Department of Educaon [DOE], 2021) and student mental health struggles across the United States (Racine et al, 2021). Applying effecve components from evidencebased residenal programs can help address these increases in emoonal and behavioral problems in schools. This arcle will describe the Li with Boys Town School Support Program that was adapted from the Boys Town Family Home Program (see Father Flanagan’s Boys’ Home, 2022) to provide school and family-based support to students.

Mul-Tiered Systems of Support (MTSS) have been recommended by the U.S. Department of

Educaon (2021) to prevent student behavior issues and provide intensive support when needed (IMTSS Research Network, 2024; Sanago-Rosario et al., 2023). Further, research has found that increasing the connuity of support that children and families receive can improve their overall wellbeing at home, in school, and in the community (Stroul, 2010). Thus, the School Support Program was designed to fit within a mul-ered system of school and family-based supports to address the needs of at-risk students.

### **Adaptaon of the Teaching-Family Model to School Sengs**

Adapng core components from the same model to other intervenons can aid with consistency and achieve posive outcomes across different sengs (Blasé et al., 2013). This approach has been shown to be reliable and effecve in all levels of care (Huefner et al., 2010; Ringle et al., 2012). Boys Town has a long history of implemenng components of the TFM in school-based sengs (Black et al., 1982; Furst and Thompson, 1998) and manualized this into a universal classroom management curriculum known as Well-Managed Schools (WMS; Connolly et al., 1995; Hensley, et al., 2016) To this end, the School Support Program was built from core components of the Well-Managed Schools classroom management curriculum (i.e., social skills teaching, relaonship building, praise; see Hensley, et al., 2016) and the Boys Town Family Home Program (Thompson & Daly, 2015) to include elements of the TFM (i.e., skills teaching, reinforcing relaonships, training, consultaon, evaluaon, administrave data support; see Wolf et al., 1995).

### **Growth of the School Support Specialist Program**

When the School Support Program was developed during the 2019-20 school year, it was a small pilot program at one Boys Town site, serving 501 students in four schools. As the Covid-19 pandemic took hold, the number of students served reduced to 293 in ten schools at three sites during the 2020-21 school year and 2,749 students in 39 schools at three sites during the 2021-22 school year. As students began to return to school in person during the end of the 2021-22 school year, the rapid increase in the number of students served clearly reflected the need for increased school support.

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Indeed, chronic absenteeism was on the rise (U.S. Department of Educaon, 2022) while academics were suffering (Irwin et al., 2023; U.S. Department of Educaon, 2023). However, it wasn't only students who needed more support. During this me, relaons between the home and school were at an all-me low while teacher dissasfacon was at an all-me high (Carrión-Marnez et al., 2021; McCarthy et al., 2022). In fact, the number of teachers quing rose significantly between the years of January 2020 and July 2022 (Schmit & deCourcy, 2022), leaving 44% of public schools starnng the 2022-2023 school year with one or more vacant teaching posions (U.S. Department of Educaon, 2023).

All these issues le schools, teachers, and parents wondering how to reverse these negave trends in a post-pandemic educaonal environment. Given its unique treatment combinaon of student, parent, and teacher supports, the School Support Program addressed these needs through trained staff called School Support Specialists who work with teachers and administraon to idenfny and refer students in need. As a result, the School Support Program experienced exponenal growth during the 2022-23 school year, promptng us to explore and describe the program's key elements. This paper provides the theory of change and logic model, core components, staff qualificaons, training, and supervision of the School Support Program. It will also provide informaon related to the implementaon monitoring and

preliminary outcomes of the program. Three research questions will be addressed: 1) How much money is spent by School Support Specialists providing the program components, and what is the program dosage per served student? 2) How is teacher satisfaction with their School Support Specialist related to their views on school climate? 3) What are the preliminary outcomes of the School Support Program on unexcused absences, GPA, and school climate?

### **School Support Program (SSP) Theory of Change and Logic Model**

The School Support Program was designed to improve student and school safety, student and parent engagement, and student, parent, and teacher satisfaction. The School Support Program utilizes core components of the TFM (Wolf et al., 1995), such as social skills teaching based on Social Learning Theory (Bandura, 1977) and principles of operant learning (Skinner, 1953). The SSP incorporates positive reinforcement to improve a student's social awareness and self-management, while reducing problem behaviors. The targeted outcomes of the School Support Program are to provide student support to prevent disruptive behavior (e.g., defiance, non-compliance), truancy and attendance problems, and increase social skills, time in class, on-task behavior, and parent engagement.

The key activities of the School Support Program include one-on-one skills teaching in the classroom, social skills teaching during office referrals, facilitating social skills groups (3-6 students), conducting observations, and classroom mini lessons (universal 20-30-minute skills teaching sessions). Skills taught are adapted from the Well-Managed Schools social skills teaching manual (Hensley et al., 2016; Tierney & Green, 2022), which breaks down each social skill into a series of smaller steps. Examples of skills taught include, but are not limited to, getting the teacher's attention, following instructions, and staying on task. The most intensive intervention usually occurs after an office referral, in which a student is removed from the classroom due to disruptive behavior. When students receive an office referral, they may be referred to a School Support Specialist who will work with the student to de-escalate the situation and teach appropriate replacement skills to address the problematic behavior. This might involve teaching a "quick engagement strategy" to calm down and address student misbehavior. The Specialist also notifies the family about the intervention, provides suggestions on how

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to support the student, and offers additional assistance to families, as appropriate, referring them to resources in the community or within the array of Boys Town services. Parental contact is aimed at increasing parent engagement and connecting the student and family to resources when needed. Finally, the School Support Program fits within the school culture and provides support to teachers and administrators to cultivate a positive school climate.

The School Support Program was designed to be implemented either in conjunction with, or independent of, Well-Managed Schools. However, rather than the classroom being the unit of change, it is the individual student and the program follows a multi-tiered system of support (MTSS) framework that includes both school-based and family-based services. This framework can be thought of as a pyramid and is generally broken into three tiers (e.g., universal, group-based, and individualized intervention) of service (Goodman-Scott et al., 2019; Center on PBIS, 2022).

## **School Support Specialists**

The School Support Program is implemented by School Support Specialists (“Specialists”) who are bachelor’s level Boys Town staff who are trained in the Boys Town model and embedded within the school. Specialists work with teachers and administrators to identify and refer students in need of assistance. They are not certified mental health professionals. Instead, they work exclusively with students on teaching social skills and work to replace negative or maladaptive behaviors with more appropriate ones. School Support Specialists can also refer students and families to family-based services when additional supports (e.g., community-based services, formalized parenting classes) outside of the school are needed.

## **School Support Specialist Training/Consultation**

All School Support Specialists undergo a two-week preservice training. During the first week, they learn general principles of behavior, the mechanisms of behavior change, and how these are incorporated into the Boys Town Model of Care. The second week of preservice is dedicated to applying the core components of the School Support Program and learning the specified duties, roles, and expectations of the position. After preservice, Specialists shadow more experienced Specialists for two weeks before transitioning to their own school. After established in their assigned school, Specialists meet with their supervisors for a minimum of one hour per week during their first year. This time is spent discussing their job performance, specific student cases, and any challenges that they are encountering with service delivery. In addition, their supervisor will observe them at least twice a month in the school setting. After their first year, the frequency of supervision and observations is adjusted based on each individual Specialist’s needs and competency. Finally, supervisors observe Specialists in the classroom to assess their fidelity in implementing the model.

## **Supervisors**

School Support Program Supervisors were once School Support Specialists prior to becoming Supervisors. To maintain program integrity, Supervisors are required to undergo a yearly certification process in which they are rated by an evaluation team, their immediate director, as well as the School Support Specialists that they supervise.

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## **Materials and Methods**

### **Population Served**

The School Support Program was implemented in over 100 schools across seven sites in the United States during the 2022-23 and 2023-24 school years. More than 12,500 students received preventive and/or intensive services. Services were implemented at all three levels of education: elementary (39%), middle (32%), and high school (29%). It should be noted that one site was considerably larger than the others and accounted for 82% of all services. The study was approved by the Boys Town National Research Hospital Institutional Review Board (number: 24-02-x).

## **Program Implementaon Monitoring**

School Support Specialists collect and enter informaon regarding every interaon with a student into a HIPAA compliant database. Data included the content, me, and type of interaon (e.g., one-on-ones, classroom mini lessons, social skills groups). Supervisors and administrave personnel reviewed these data in addion to student progress, tailoring the intervenon and acvies as needed.

## **Data Collecon**

During the fall and spring of the 2022-23 and 2023-24 school years, teachers and support staff were given the opportunity to anonymously complete surveys regarding their school’s climate. In the spring, teachers were also asked to anonymously rate the performance of their Specialist. Finally, one site in this study reported grades and attendance data, which allowed us to conduct a pilot study and evaluate student outcomes.

## **Measures**

### ***PBIS Climate Survey: School Personnel (La Salle, 2017)***

School teachers and other school personnel completed a 29-item school climate survey. This survey measures how teachers and staff perceive their school and contains six subscales: staff connectedness (6 items; e.g., “I get along well with other staff members at my school”), structure for learning (6 items; e.g., “All students are treated fairly by the adults at my school”), school safety (4 items; e.g., “I have been concerned about my physical safety at school”), physical environment (4 items; e.g., “My school building is well maintained”), peer/adult relaonships (6 items; e.g., “Students at my school would help another student who was being bullied”), and parental involvement (3 items; e.g., “Parents at this school frequently atend school acvies”). Respondents rate each item on a 4-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree) with higher scores indicang beter school climate. One item is reverse-coded (Item 14: “I have been concerned about my physical safety at school”), and the survey takes approximately 15 - 20 minutes to complete. The total scale (i.e., mean of all 29 items) has excellent overall internal consistency ( $\alpha = .94$ ), with subscale reliability ranging from quesonable (School Safety,  $\alpha = .66$ ) to excellent (peer and adult relaons,  $\alpha = .93$ ; La Salle, 2017).

For this study, the climate survey was collected from 921 school staff in the fall of 2022 and connued to be collected in the fall and spring of each school year. Across schools, parent involvement and peer/adult relaons were consistently the two lowest domains. Table 1 displays all the means, standard deviaons, and Cronbach’s alphas for the fall 2022 data collecon.

### ***School Support Specialist Satisfaction Survey***

Sasfacon with the School Support Specialist was measured via a 10-item sasfacon survey that was developed specifically for this project and administered during the spring of the 2022-23 and 2023-24 school years. Teachers indicated their level of sasfacon with the specialist on a variety of acvies ranging from helping with social and emoonal development (e.g., “help students improve their social and emoonal skills”), to providing universal prevenve services (e.g., “conduct mini lessons with the students in the classroom”), to working with parents (e.g., “get the parents of your students engaged in

the school”). Respondents rate each item on a 5-point Likert scale (1 = Poor to 5 = Excellent). No items were reverse-coded, and it took less than 5 minutes to complete. Overall, teachers rated their satisfaction with their specialist as *Very Good*. Table 2 displays the item-level and total means and standard deviations, as well as the total Cronbach alpha for the spring 2023 data collection.

### Data Analysis

All data were analyzed using IBM SPSS Statistics (Version 29). For research question 1, descriptive statistics were provided for the sample. Next, for research question 2, Pearson Correlation Coefficients were used to calculate the relationships between school climate subscales/total mean score and the Specialist Satisfaction Survey total mean score. Finally, for research question 3, paired t-tests were used to calculate differences in end of year unexcused absences between service groups (i.e., Tier 1 Universal, Tier 2 Preventive, Tier 3 Intensive), for differences in GPA between the 2022-23 fall and spring trimesters; Analysis of Variance (ANOVA) were performed to investigate GPA differences among service groups between the 2022-23 fall and spring trimesters. To investigate changes in school climate, paired t-tests were conducted to investigate changes in teacher-reported climate between the spring 2022 and spring 2023 trimesters. Finally, paired t-tests were used to calculate spring 2023 to spring 2024 differences in unexcused absences between service groups; Pearson Chi-Square Tests were used to investigate differences in proportions of whose GPA “met standards” during the spring 2023 to spring 2024 trimesters.

## Results

### Time Allocation of Services

Overall, Specialists provided over 27,000 hours of service during the 2022-23 and 2023-24 school years. Approximately 22,000 of these hours were spent directly serving approximately 12,500 unique students and around 2,700 hours in contact with the parents of almost 8,000 students. Figure 1 displays the School Support Specialist’s time allocation.

In terms of program dosage, approximately 8,500 (68%) students received one-on-ones, averaging 1.5 hours per student. Office referral skills teaching was provided to 4,800 (38%) students, averaging about 1 hour per student. Social skills groups were administered to around 4,300 (34%) students. On average, students participated in 4 social skills groups, each lasting 30 minutes (i.e., 2 hours per student). Finally, there were over 3,500 instances of classroom mini lessons. These mini lessons had an average attendance of 28 students and were on average 25 minutes in length. Clearly, students received a variety of services based on their individual needs. In aggregate, the average student received approximately 1.76 hours ( $SD=3.7$  hrs.,  $Mdn = 1$  hr.) of direct service. In terms of distribution, 25% received 20 minutes or less, 50% received 1 hour or less, and 75% received 2.7 hours

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or fewer. For the students receiving the top 25% of direct service hours, the average amount of service received was 6.5 hours.

Finally, referrals to other family-based programs were discussed with approximately 10% of families, with 3.3% receiving such services. Of these, 2.2% received home-based services (i.e., In-Home

Family Services; see Duppong Hurley et al., 2020, Parra et al., 2016) and 1.1% utilized case management (i.e., Care Coordination Services; see Anderson et al., 2017).

### Teacher Satisfaction & School Climate

To gauge if there was a relationship between school climate and teacher satisfaction with the services of the School Support Specialist, we conducted Pearson's Product-Moment correlations between the overall mean satisfaction score on the School Support Specialist Satisfaction Survey and the six subscales and total climate score on the PBIS School Climate Survey. Results indicated significant positive correlations: staff connections ( $r = .32$ ), structure for learning ( $r = .37$ ), physical environment ( $r = .40$ ), school safety ( $r = .31$ ), student peer/adult relations ( $r = .38$ ), parent involvement ( $r = .35$ ), and overall school climate ( $r = .47$ ). These significant correlations suggest that when the teacher's satisfaction with the Specialist was higher, so was their rating of their school's climate.

### Student Outcomes

While most data reported thus far are implementation data, we did have the opportunity to conduct a pilot outcome study at one small site. At this site, student grades and attendance were collected for three trimesters (fall, winter, and spring) during the 2022 – 2023 school year. These 1<sup>st</sup> through 8<sup>th</sup> graders fell into three distinct service groups: Tier 1 Universal (e.g., classroom mini lessons;  $N = 210$ ), Tier 2 Preventive (e.g., social skills groups, "light touch" parent contacts and one-on-ones;  $N = 163$ ), and Tier 3 Intensive (e.g., office referrals, more involved parent contacts and one-on-ones;  $N = 34$ ). Further, we obtained follow-up data from this site for the 2023-2024 school year, one year after initial implementation.

### Unexcused Absences (22-23 SY)

Overall, Tier 3 Intensive students had the highest rate of unexcused absences across the school year ( $M = 7.4$  days,  $SD = 6.04$  days) compared to Tier 2 Preventive ( $M = 5.0$  days,  $SD = 7.0$  days) and Tier 1 Universal ( $M = 5.3$  days,  $SD = 6.8$  days) students. Comparing the Tier 3 Intensive group to the other two combined groups, it was revealed that this group had borderline significantly higher unexcused absences during the fall trimester ( $M = 2.12$ ,  $SD = 2.01$  vs.  $M = 1.29$ ,  $SD = 2.35$ );  $t(405) = 1.96$ ,  $p = .05$ . The Cohen's  $d$  effect size for this comparison was  $d = 0.35$ . Based on Cohen's (1988) recommendations for interpreting effect sizes (0.2=small, 0.5=moderate, and 0.8=large), the magnitude of this comparison was small. However, for the spring trimester, the Tier 3 Intensive group was indistinguishable from the other two groups ( $M = 2.44$ ,  $SD = 2.68$  vs.  $M = 2.06$ ,  $SD = 2.87$ );  $t(405) = 0.73$ ,  $p = .47$ ,  $d = .13$ .

### Grade Point Average (GPA; 22-23 SY)

Standards-based grading was used at this site. Marks were translated to a 4-point GPA scale (1 = 'Needs Improvement', 2 = 'Approaching Standards', 3 = 'Meeting Standards', 4 = 'Exceeding Standards'). Overall, GPA increased significantly from the fall ( $M = 2.47$ ,  $SD = 0.27$ ) to spring trimesters ( $M = 2.77$ ,  $SD = 0.32$ ) for all groups  $t(406) = -20.45$ ,  $p > .001$ ,  $d = 1.01$ . Further analysis revealed that those in the Tier

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3 Intensive group had significantly lower gains than their peers in the other two-tier groups,  $F(2, 404) = 3.46$ ,  $p = .032$ .

**School Climate (22-23 SY)**

Teachers and staff completed the PBIS School Climate Survey in May 2022, October 2022, March 2023, and May 2023. At each mepoint, all teachers and staff signed an informed consent indicang that they were nofied of and understood their rights as study parcipants. For the purposes of this analysis, we matched teachers who completed a survey both in May 2022 and May 2023 (i.e., spring 2022 and spring 2023). This allowed us to compare school climate prior to implementaon with school climate rangs aer a full implementaon year. Matched teacher rangs indicated a significant increase in student peer and adult relaons from spring 2022 ( $M = 2.72$ ,  $SD = 0.59$ ) to spring 2023 ( $M = 2.91$ ,  $SD = 0.62$ );  $t(28) = -2.56$ ,  $p = .016$ ,  $d = 0.47$ . Parent involvement indicated a trend towards significance ( $M = 2.39$ ,  $SD = 0.68$  vs  $M = 2.62$ ,  $SD = 0.63$ );  $t(28) = -1.86$ ,  $p = .074$ ,  $d = 0.34$ . The other four areas of school climate were not significantly different from the prior year. These findings should be interpreted with cauon, given the small number of matched pairs ( $N = 29$ ) and the fact that some variance may be due to teachers having different students during the different school years.

**Follow-Up Data****Unexcused Absences (23-24 SY)**

Using matched student data from those who were in the study for both years, analysis showed no significant differences between the service groups in unexcused absences.

**GPA (23-24 SY)**

When considering those who “met standards” (i.e., a GPA of 3 or greater), a McNemar’s test of paired proporons revealed a significantly higher proporon of students at the end of the 2023-24 school year met standards compared to their previous performance in the 2022-23 school year,  $\chi^2(1, N=360) = 45.60$ ,  $p = .000$ ,  $\phi = .36$ . In terms of change within service groups, the Tier 1 Universal and Tier 2 Prevenve services groups saw a significant increase in the proporon of students meeng standards,  $\chi^2(1, N=136) = 9.52$ ,  $p < .001$ ,  $\phi = .27$  and  $\chi^2(1, N=159) = 24.40$ ,  $p < .001$ ,  $\phi = .39$ , respecvely. Further, students in the Tier 3 Intensive service group made gains that were trending towards significance,  $\chi^2(1, N=65) = 12.11$ ,  $p = .057$ ,  $\phi = .43$  (17% vs 29%). Although not stascally significant, those in the Tier 3 Intensive group realized the largest magnitude of change ( $\phi = .43$ ). This finding can be interpreted as a clinically meaningful change, but the sample size may be too small ( $N=65$ ) to detect a stascal difference (Ferr, 2025). Table 3 displays the crosstab tables of those meeng standards in each service group.

**School Climate (23-24 SY)**

Aer compleon of the inial pilot study, schools connued to collect anonymous PBIS school climate data from staff. As scores could not be paired, stascal tests of change were not performed. However, the same general patern emerged with Peer and Adult Relaons and Parent Involvement climate scores being rated the lowest (2.85 and 2.48, respecvely).

**Discussion**

This paper describes the development of a school-based program that was adapted from core components of an evidence-based residential program. The innovative School Support Program emerged out of a request from school administrators in community schools and grew rapidly as it addressed the emotional and behavioral problems of students that increased after the COVID-19 pandemic. The theory of change and logic model were described, along with core program components. Administrative data were examined to describe the roles and responsibilities of the School Support Specialist (e.g., service allocation, direct service hours), the relationship between teacher satisfaction of the Specialist and school climate, and a pilot study of the relationship between the School Support Program, student outcomes, and school climate.

Time allocation data were used to describe the roles and responsibilities of the School Support Specialist to answer the first research question. Specialists served over 12,500 students at over 100 schools across all three levels of education (elementary, middle, and high), with an average of 1.76 hours dedicated to individualized teaching per student served by the program. Results of time allocation showed that over half of the Specialist's time was spent conducting one-on-ones and teaching social skills. One-fifth of their time was providing teacher and administrative support by working with students who received office referrals. One-tenth of their time involved communicating with parents, sometimes connecting them to family-based services.

For research question two, we examined teacher satisfaction and school climate. Overall, teachers were satisfied with the job that their respective Specialist was doing (average of 3.8 out of 5). Further, data indicated a positive relationship between program satisfaction and school climate, suggesting that when the teacher's satisfaction with the Specialist was higher, so was their rating of their school's climate.

To answer research question three, data from a small pilot study revealed positive relationships between student program participation and improved attendance and grades. This finding has been further extended with a preliminary result from a large quasi-experimental study suggesting students who were served by the School Support Program had fewer absences than a matched control group (Guo et al. 2025). Results are representative of existing literature indicating that school intervention programs based on Social Learning Theory are an effective vehicle for positive change (Murano et al., 2020). Specifically, key components of the TFM that were included in the School Support Program (e.g., teaching social skills, relationship building) were effective and appropriate for the school setting. For example, during the 2022-23 school year, our pilot study revealed a strong positive relationship between the Tier 3 Intensive students and unexcused absences. After starting the school year with considerably more unexcused absences than the other two groups, they were indistinguishable from their peers by the end of the year. Further, data indicate that these students engaged in twice as many one-on-one interactions per student as their counterparts ( $M = 10$  vs  $M = 5$ ), supporting prior research indicating that one-on-ones are effective at increasing school attendance (Flannery et al., 2024).

Post-implementation data from the 2023-24 school year suggested that ongoing involvement in the program was effective in maintaining improvements, particularly among the highest-risk students. Indeed, grades were found to have increased school-wide, and the number of students 'Meeng

Standards' increased significantly, with higher proportional increases among served students. In terms of absences, analysis indicated no overall significant differences between the 2022-23 and 2023-24 school years, as well as no significant differences between service groups. This combination of findings suggests that at-risk served students were not falling further behind and starting to catch up with their peers. This is indicative of research connecting increased social skills to better academic outcomes (Durlak et al., 2011; Sharma et al., 2016).

While there are many mul-ered school intervenons being implemented in schools across the United States and elsewhere, the School Support Program addresses some of the gaps. First, a vital component of the program is increasing parental involvement, targeng parent/school relaons, which were the lowest school climate domains rated by teachers (2.4 out of 5). The focus of the School Support Program is to improve collaboraon between the school and parents to get all the adults on the same page to support the student. This focus was reflected through increased parental involvement on the climate survey aer a year of implementaon, providing addional support for research qesion three. Evidence suggests that, as parental involvement increases, so do academic outcomes (Jeynes, 2012, 2024). This is especially relevant for parents of at-risk students, as they tend to have lower school involvement than their non-at-risk counterparts (Lambert et al., 2022).

Next, the School Support Specialist is a trained specialist in social skills teaching who can support the teacher and administrators. Oenmes, the teacher is tasked with addressing the social and behavioral needs of students, which can detract from teaching academics and may add to their stress (McGoey et al., 2022; Pendharker, 2023). Moreover, the Specialist works as a partner with school personnel to achieve the common goal of helping students achieve their full potenal. This is evidenced by the high levels of teacher sasfacon with their Specialist.

Finally, the School Support Program is part of the larger Boys Town array of services, all of which share core elements of the TFM. As a Specialist becomes more familiar with a student, it may become apparent that the family could benefit from family-based services. Indeed, just over three percent of families of students served received addional Boys Town family-based services. When services are provided to students and their families at the appropriate me, they are more likely to produce beter outcomes and are more cost-effecve (Southam-Gerow et al., 2024; Thompson et al., 2024). Further, by referring to programs under the same array of services, students and their families are exposed to the same overarching philosophy, program language, and expectaons that improve connuity (Ringle et al., 2015). Providing school- and family-based supports for students around a common theorecal approach and behavioral language is the innovave emphasis of the School Support Program.

### **Limitaons**

Although preliminary data are promising, there are limitaons that must be addressed. First and foremost, most data are administrave. A quasi-experimental or randomized control trial study is needed to help determine if the benefits of the program compared to "business as usual". Relatedly, program dosage informaon revealed large amounts of variaon, ranging from less than 20 minutes to over 6 hours. Future research will need to invesgate if there is an opmal amount of direct service needed to achieve posive program outcomes. Next, data were not available to evaluate if the

improvements made in social skills are related to the School Support Program. To address this limitation, recent work has been done to develop the Boys Town Social Skills Assessment for Schools

(BTSSA-S; Tyler, Day, et al., 2025), which measures a student's proficiency in engaging in basic social skills. Such skills are vital to school success and are the cornerstone of the School Support Program. Consistent assessment of student needs will aid in earlier identification and increase the benefits of the School Support Program.

Finally, evaluation data pertaining to the School Support Specialists' level of adherence to the model were not included in this analysis. Although Specialists were trained, evaluation tools that monitor fidelity and supervision structures were still in the process of development when the study data were collected. Thus, the School Support Specialist Satisfaction Survey data were used for evaluating model implementation. It is well known that for evidence-based school interventions to sustain high levels of effectiveness, implementation must be measured and delivered with high levels of integrity (McGoey et al., 2022). Unless there are formal processes put in place to monitor implementation and hold consultants to a standard of excellence, programs are prone to drift and risk losing their effectiveness and sustainability over time (Moir, 2018; Zbukvic et al., 2024). The School Support Program has now implemented a process to formally monitor and track program implementation for both supervisors and specialists. This monitoring process aligns with the notion of consistent implementation measurement (Fixen et al., 2024, 2025) and is similar to the established processes for other TFM and Boys Town programs (Daly & Thompson, 2023; Tyler, Daly, et al., 2025).

## Conclusions

The School Support Program was developed to improve support for students, parents, and teachers during a critical time of need. This program was developed in partnership with schools across the United States in response to requests from school administrators. As a result of careful development, this manualized program has established training, consultation, and service delivery methods. In addition, implementation tracking systems are now in place to monitor and evaluate implementation and outcomes, all of which are core elements of the TFM. The development, implementation, and positive outcomes of the School Support Program demonstrate how core elements of evidence-based models (i.e., TFM; Boys Town Family Home Program) can be adapted and implemented into school-based settings. This project demonstrates that the School Support Program aligns with the key hallmarks of the TFM programs (i.e., humane, effective, individualized, satisfactory to consumers, cost-efficient, and replicable; Wolf, 1995). This process can serve as a roadmap for other agencies seeking to extend their service array to community-based services based on the core components of their residential program.

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**Table 1**

*Means, Standard Deviation, and Cronbach’s Alpha for the PBIS Climate Survey – Fall 2022*

<b>Climate Domain</b>	<b>Mean</b>	<b>SD</b>	<b>α</b>
Staff Connections	3.44	.51	.87

Physical Environment	3.34	.57	.89
Structure for Learning	3.29	.65	.75
School Safety	3.18	.59	.81
Peer/Adult Relations	2.78	.63	.91
Parent Involvement	2.34	.79	.89
Total Climate	3.12	.46	.94

Note. N=859-921. Items rated on a 4-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree).  $\alpha$  = Cronbach's Alpha for internal consistency;  $\geq 0.7$  = acceptable,  $> 0.8$  = good,  $\geq 0.7$  = excellent.

**Table 2**

*Item Means, Standard Deviations, and Total Cronbach Alpha for the School Support Specialist Satisfaction Survey – Spring 2023*

<b>Item</b>	<b>Mean</b>	<b>SD</b>	<b><math>\alpha</math></b>
Help students improve their social and emotional skills?	3.94	1.14	
Conduct mini lessons with the students in the classroom?	3.57	1.39	
Conduct social skills groups?	3.90	1.21	
Conduct 1-on-1 skills teaching?	4.02	1.20	
Conduct classroom observations of students?	3.72	1.32	
Assist with office referrals?	3.89	1.28	
Assist your students' families with community resources/supports?	4.05	1.15	
Get the parents of your students engaged in the school?	3.60	1.37	
Partner with you to help students?	3.92	1.29	
Help create a positive and supportive climate in your school?	4.06	1.19	
<b>Total Satisfaction</b>	<b>3.91</b>	<b>1.16</b>	<b>.87</b>

Note. N=409-629. Items rated on a 5-point Likert scale (1 = Poor to 5 = Excellent).  $\alpha$  = Cronbach's Alpha for internal consistency;  $\geq 0.7$  = acceptable,  $> 0.8$  = good,  $\geq 0.7$  = excellent.

**Table 3.***Students 'Meeting Standards' at End of School Year by Service Group.*

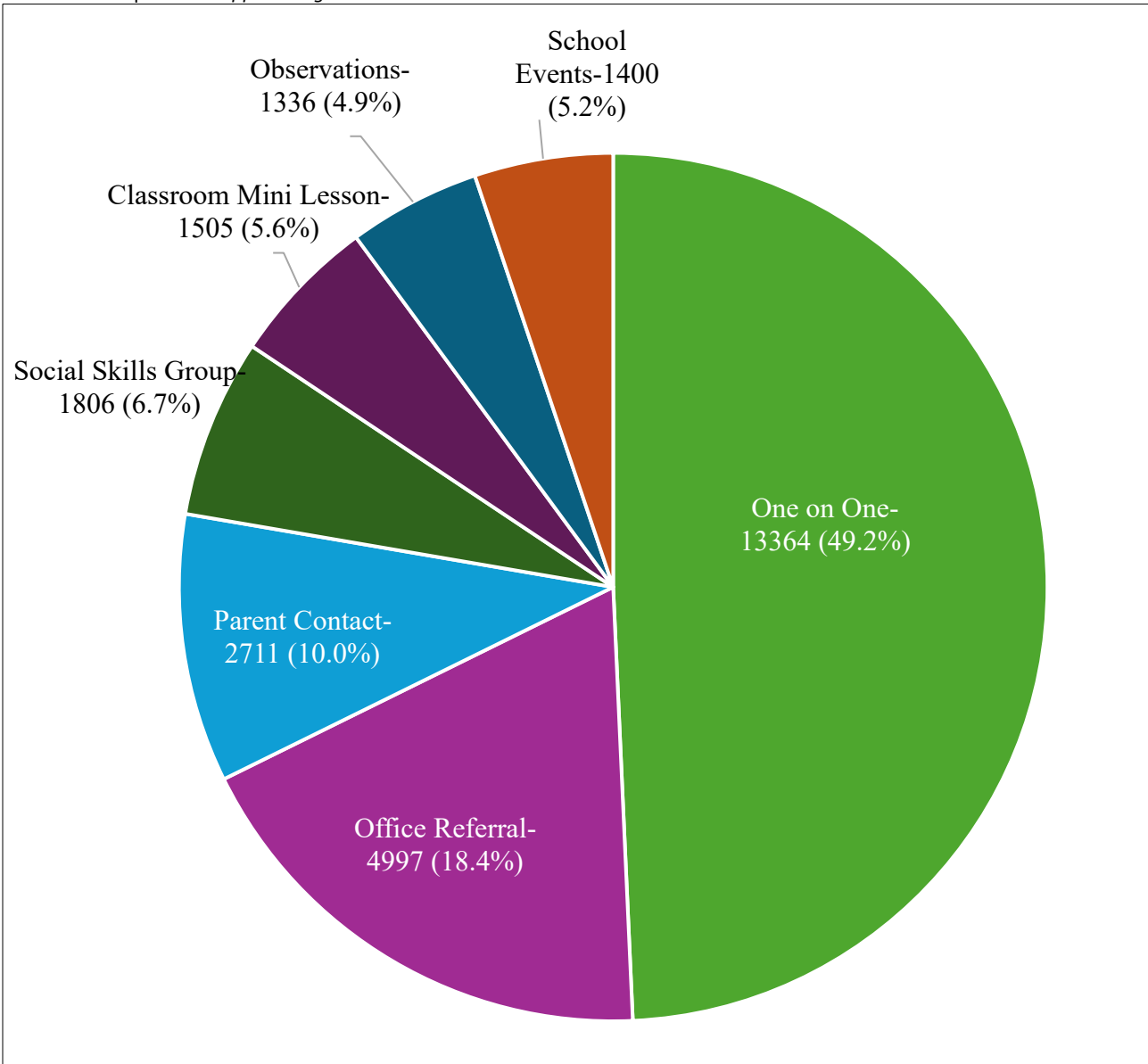
<b>Group</b>	<b><i>N</i></b>	<b>Spring 23 <i>N</i> (%)</b>	<b>Spring 24 <i>N</i> (%)</b>	<b><math>\chi^2</math></b>	<b><math>\phi</math></b>	<b><i>p</i></b>
Tier 1 Universal	136	34 (25%)	61 (45%)	9.5	.27	<.001
Tier 2 Preventive	159	43 (27%)	82 (52%)	24.4	.39	<.001
Tier 3 Intensive	65	11 (17%)	19 (29%)	12.1	.43	.057
<b>Overall</b>	<b>360</b>	<b>88 (24%)</b>	<b>162 (45%)</b>	<b>45.6</b>	<b>.36</b>	<b>&lt;.001</b>

Note. McNemar's test was performed to account for repeated measures. As opposed to a statistical significance test (e.g., p-value), phi ( $\phi$ ) is an indicator of effect size, or the magnitude, of change: <.2 = "Weak", .2-.6 = "Moderate", >.6 = "Strong".

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**Figure 1**

*School Support Program: Activity, Hours, and Percentage (%) of Specialist Time Engaged in Program Components by School Support Specialist.*



## **Replicating the Teaching-Family Model: In-Home Family Services Across Different Types of Service Sengs**

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### **Abstract**

The study examines the replicaon of the In-Home Teaching-Family Model (TFM) across different service sengs, including child welfare, juvenile jusce, diversion, and other prevenon programs. Using administrave data (i.e., fidelity, service delivery, and family outcomes) for Boys Town In-Home Family Services (BT-IHFS) from 2021 to 2023, results indicate consistent implementaon across service sengs, with minor adaptaons in dosage for juvenile jusce cases. Significant improvements from intake to case closure were observed in family funconing and parenng skills across all contracts, with large effect sizes

in several domains. When comparing family outcomes at case closure using an analysis of covariance approach, families in 'other prevention programs' reported higher family-functioning outcomes compared to the three other contract types. The study highlights the ability to implement BTIHFS in diverse contexts and obtain consistent positive outcomes for families, emphasizing the importance of routine data collection for continuous improvement. Limitations include missing data and challenges in measuring parenting across different child age groups. Overall, the research provides strong evidence for the In-Home TFM's adaptability and effectiveness, offering valuable insights for policymakers, practitioners, and researchers working to support families from child welfare, juvenile justice, diversion, and prevention program settings.

**Keywords:** Teaching-Family Model, Family Services, Parenting, Family Functioning, Child Welfare, Juvenile Justice

### Implications

- Originally developed for a group care residential population, the Teaching-Family Model has been successfully adapted for family-based In-Home Services.
- Boys Town In-Home Family Services can be effectively implemented across various service settings, with minimal adaptations to dosage.
- Boys Town In-Home Family Services promotes significant positive changes in families, including improvements in family functioning and parenting skills, regardless of service setting.
- The TFM provides broad applicability and the potential for widespread use of a single model across a variety of service settings.

## **Replicating the Teaching-Family Model: In-Home Family Services Across Different Types of Service Settings**

In-home family support is an essential intervention provided to families of children who come to the attention of child welfare authorities. Its aim is to prevent abuse and neglect and to keep children in their home (Pecora et al., 1992). One in-home intervention developed for families of children involved in the child welfare system is the In-Home Teaching-Family Model (TFM; Fixsen & Blasé, 2019; Thompson & Daly, 2015). Based on a modification of the original residential TFM (Phillips et al., 1971; Wolf et al., 1976), the In-Home TFM serves families of youth from birth to 18, involved in the child welfare system. Using a skills-based intervention to assist families struggling with issues surrounding family functioning, parenting, and connecting to local resources, its main objective is to prevent child neglect and abuse so families remain together. Over the past 40 years, In-Home TFM has been implemented by a variety of TFM-certified agencies (Fixsen & Blasé, 2019). Two leaders of In-Home TFM child welfare implementation and research are the Boys Town In-Home Family Services (BTIHFS) model (Duppont Hurley et al., 2012; Ingram et al., 2015; Parra et al., 2016) and the Families First in-home model from Utah's Youth Village (West et al., 2021).

Like the residential version of TFM, the In-Home TFM intervention incorporates key TFM components, including client-centered services, quality assurance, consultation model, fidelity evaluation system, and adherence to high ethical standards to ensure humane treatment of families. It focuses on

families as the primary change agent via a reliance on feedback systems, and teaching skills to youth and families (Father Flanagan’s Boys Home, 2021; Wolf et al., 1995). As described throughout the TFM literature, all TFM programs feature detailed staff training and certification; individualized services focused on teaching; providing services to the primary change agent—the family; strengths-based progress monitoring of families to help make data-informed decisions; and routine model fidelity assessments (Fixsen & Blasé, 2019; Fixsen et al., 2025). Whereas residential TFM uses Teaching Parents (staff who live with and work directly with youth), the In-Home TFM incorporates Family Consultants (staff who serve families in their homes). Family Consultants assist family members to identify and build on existing strengths to address the individualized needs of the family. To this end, Family Consultants help build relationships with families, promote self-determination, increase family resources and support, and teach skills focused on family functioning and parenting (Father Flanagan’s Boys Home, 2022; Tyler et al., 2025). Although the core intervention is the TFM, many structural components of In-Home TFM are similar to the Homebuilders model (Kinney et al., 1977), including small caseloads, brief but high-intensity in-home services, and 24/7 Family Consultant availability.

While the original focus of these in-home interventions was families involved in child welfare, the In-Home TFM programs began to explore the efficacy of the approach for families with different issues, such as emotional and behavioral needs (Duppong Hurley et al., 2020; Lewis, 2004; Patwardhan & Duppong Hurley, 2024) or involvement in the juvenile justice system (Hess et al., 2012; Tanana & Kuo, 2020). This expansion of the In-Home TFM is aligned with the larger TFM framework, with a system based on continuous data collection, refinement, and testing that can support extensions of the original model (e.g., Fixsen & Blasé, 2019; Pinkelman & Horner, 2019). While these experimental studies of In-Home TFM demonstrated that this approach could be used successfully with a variety of different family issues, they did not explore whether the implementation and routine outcomes for families differed or remained consistent among different service settings (e.g., child welfare and juvenile justice). In other words, while it is essential to have independently conducted, stand-alone experimental studies with unique measures of implementation and family outcomes, it is also helpful

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to examine routine, agency-collected implementation and family outcomes that are collected in a similar manner across different service delivery replications. Having implementation and family outcomes that are consistently collected across different populations will assist in understanding service setting differences and similarities for families, allowing for group-level comparisons. Indeed, a study of In-Home TFM delivered by a single agency across a variety of populations while using consistent implementation and family outcomes is needed to fill this gap in the field. Results hold the potential to inform the field on the ability of the In-Home TFM to be replicated across child welfare, juvenile justice, and prevention service settings.

## **Research Objectives**

We wanted to compare the efficacy of a single agency’s In-Home TFM program across different service settings using routine agency-level implementation systems and family outcome data. To this end, BT-IHFS currently supports families involved with child welfare, juvenile justice, diversion (services to divert or prevent youth involvement in the juvenile justice system), and other prevention services (e.g., school-referred) at several sites across the United States. Regardless of service setting, the BT-IHFS program is consistent in that it is trained and supervised using the same program manual for all in-home programs

(Father Flanagan's Boys Home, 2022). With this in mind, we will first examine if implementation of the model can be replicated across service settings by comparing average Family Consultant fidelity certification scores as well as the dose of services for families across different service settings. Next, we will investigate if significant family-level gains in family functioning and parenting were obtained at completion of services across all types of service settings. Finally, we will examine if post-test scores on family functioning and parenting skills are similar across family service settings.

## Method

For this study, we examined data routinely entered by BT-IHFS service providers into a HIPAA-compliant database. Data includes family characteristics, family outcomes, details about services provided, and service setting information. The study was approved by the Boys Town National Research Hospital Review Board IRB protocol 24-33-X. Secondary study data includes information from families that started BT-IHFS on or after January 1, 2021, and completed services by December 31, 2023. To ensure that all families had at least minimal engagement in BT-IHFS, each had to receive at least 8 hours of services, resulting in a sample of 2,108 families.

The research team met with BT-IHFS directors from each of the 10 sites across the United States to determine the types of families served by their respective BT-IHFS program. Four main types of service settings were identified: Child Welfare, Juvenile Justice, Diversion, and Other Prevention. Families served by *child welfare* had been identified with a possible risk of child neglect or abuse. As such, the parents were receiving BT-IHFS to help them work on family functioning and parenting skills, as well as accessing community resources. *Juvenile justice* families had a young person involved with the juvenile criminal justice system. Often, family participation in the BT-IHFS program was a part of the sentencing of the adolescent. Families involved in *diversion* services were preventative in nature. The goal is to divert youth from future juvenile justice involvement. Some diversion youth may have had an encounter with the legal system, and services were referred to pre-arrest. However, others did not have criminal justice involvement; as such, their services were more preventative in nature, but the funding source was still juvenile justice-related. The last service setting was *other prevention*. Other

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prevention settings typically were those funded by community agencies, such as school-based prevention programs.

## Measures

### **Program Implementation**

*Family Consultants certification.* Staff certification scores included all Family Consultant certification model fidelity scores during the study period (January 1, 2021- December 31, 2023). Each Family Consultant was observed by two trained BT-IHFS model experts and who independently rated them from 1 (implementation is absent and/or incorrect) to 5 (implementation is natural, consistent, and spontaneous) on a series of model fidelity items. Each item corresponded to one of four subscales, including teaching skills, family relationship building and engagement, safety, or assessment and exploration. A rating of 4 or above indicated that the Family Consultant met the criteria for certification for that specific skill. The ratings of the two observers were averaged for each item and then averaged for each subscale. Then the four subscales were averaged together to create a total certification score. It is

important to understand that some Family Consultants work with families from a variety of different service settings, while other Family Consultants only serve families from a single service setting. Given this variance in service delivery, we included a Family Consultant as serving families in a specific service setting if at least 55% of their families at that point in time were from that type of service population.

**Service delivery.** The BT-IHFS intervention is designed to provide family services for approximately 3 to 5 months. We examined dosage by looking at the average length of services in months from when the family was enrolled to when the family completed services. We also looked at the total hours of direct care service, average length of sessions, and frequency of sessions providing core model components (e.g., teaching families skills, helping them to connect to resources) as recorded by Family Consultants. The calculation of service hours and average sessions does not include activities when Family Consultants are not actively engaged with the family, such as driving them to the family's home, paperwork completed, supervision of visitations, or driving families to appointments.

### **Family Functioning Outcomes**

**Family Functioning.** Family functioning was examined using the Strengths and Stressors (SS; Berry, 2003). This assessment contains 35 items, comprising six domains: child well-being (7 items,  $\alpha = .78$ ), environment (9 items,  $\alpha = .83$ ), family interactions (4 items,  $\alpha = .69$ ), family safety (5 items,  $\alpha = .73$ ), parental capabilities (6 items,  $\alpha = .72$ ), and social supports (4 items,  $\alpha = .71$ ). Each item is rated on a 6-point Likert-type rating scale ranging from -3 (*serious stressor*) to 2 (*clear strength*), except for *family safety* which is scored from -3 (*serious stressor*) to 0 (*adequate*). For all six domains, scores with a negative value indicate a family stressor, whereas positive scores indicate a family strength. For all domains, higher scores indicate better family functioning. The SS has been found to be sensitive to changes made by families over the course of treatment and has been shown to be valid and reliable (Berry, 2003).

The SS was completed by Family Consultants using parent input at intake and case closure. For those situations in which a family did not have a completed SS at either intake or case closure, the nearest completed SS within 30 days of the assigned timeframe was used. Even with this modification, there was missing data. Across families, 7% of SS were missing at intake (range: 5% for other

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prevention to 12% for juvenile justice). At case closure, 18% were missing for families (range: 8% for diversion to 25% for juvenile justice).

**Parenting Outcomes.** Positive parenting was examined using the Parenting Children and Adolescents (PARCA) scale, a modified version of the Parenting Young Children (PARYC; McEachern et al., 2012). The PARCA is a 19-item assessment designed to address positive parenting behaviors on a 7-point Likert-type rating scale ranging from 1 (*not at all*) to 7 (*most of the time*) across three domains. It has been found to have a good reliability: supporting good behaviors ( $\alpha = .78$ ), setting limits ( $\alpha = .78$ ), proactive parenting ( $\alpha = .78$ ), and total score ( $\alpha = .95$ ; Ringle et al., 2019). For this study, the total score was used as an indicator of positive parenting ( $\alpha = .91$ ).

The PARCA was reported by the same parent at intake and case closure. If PARCAs were reported by multiple guardians at a single time point, then those scores were averaged. Across families, missing data was 8% at intake (range: 6% for other prevention to 10% for juvenile justice). At case closure, missing data was 22% for families (range: 19% for other prevention to 27% for juvenile justice).

**Covariates.** Covariates included youth's age, caregiver's race (White/Other racial and ethnic groups), family poverty status based on the 2017 Department of Health and Human Services guidelines (yes/no), single parent household (yes/no), and program completion (yes/no).

## **Analysis**

All data were analyzed using IBM SPSS Statistics (Version 29), using pair-wise exclusion of the missing data.

## **Implementation Outcomes**

**Family Consultants certification scores.** Over the three years, 11 out of 84 Family Consultants who completed the staff certification process served families equally across multiple service settings and were not assigned to a single service setting. In other words, these Family Consultants did not meet the threshold of serving at least 55% of their families in one particular service setting and, therefore, were not included in these certification analyses. Only 1 Family Consultant with certification data could be identified as serving primarily diversion cases; given these low staffing rates, diversion certification rates were not included in these analyses. The number of Family Consultants included in the analysis was 72. One-way ANOVA was conducted to examine whether the differences across the three remaining service settings were significant.

**Service delivery.** Service length (months), service hours received (hours), number of sessions (sessions), and session duration (hours/minutes) were obtained from an administrative database for each service setting. Further, one-way ANOVA was conducted to examine if the differences across the families by type of setting were significant. We expected to see similarities across families, except for those involved with juvenile justice, where we expected more intensive services since Family Consultants were explicitly serving both the juvenile justice-involved youth and their families. Conversely, the other settings are more singularly focused on serving the family unit as a whole.

In terms of clinically meaningful change, effect sizes from the one-way ANOVAs were measured with Eta squared for continuous outcomes and *Cramer's V* for categorical outcomes (Fritz et al., 2012). Eta squared measures the proportion of variance explained by the model/variable, and ranges from 0 to 1. The values closer to 1 indicate a higher proportion of variance that can be explained by the model (e.g., .01 = small, .06 = medium, .14 = large). *Cramer's V* is a measure of strength of association

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between two nominal variables, and ranges from 0 to 1, with values closer to 1 indicating a stronger association (e.g., .06 = small, .17 = medium, .29 = large).

## **Pre-post gains in family outcomes by service setting**

Pre-post gains in family outcomes were analyzed with paired samples t-tests. A paired t-test is used to determine whether the mean change between matched pre- and post-assessments is significantly different from zero. Independent analyses were conducted with the seven outcomes (e.g., six SS domains and one total PARCA score) by service setting. Because our analyses included multiple tests with the same samples, we used Bonferroni Correction for multiple tests, applying a conservative alpha at the level of .007 (.05/7). Effect sizes from pairwise t-test comparisons were measured with Cohen's *d* (Fritz et al., 2012). Cohen's *d* is measured as a standardized mean difference between two groups. The closer the

values are to one (or negative one), the more clinically meaningful the change (e.g., .02 = small, .50 = medium, .80 = large).

### **Family outcome scores at case closure by service setting**

To analyze the mean differences in the seven primary study outcomes between the four service settings at case closure, a one-way analysis of covariance (ANCOVA) was conducted. The ANCOVA was used because we were interested in whether there were between-setting differences at case closure after adjusting for relevant variables (e.g., intake scores on outcome measures, family demographics). Seven independent models were conducted (i.e., one for each outcome). In each model, the effect of the service setting on the outcome at the case closure was analyzed after controlling for the intake score and a set of covariates (e.g., youth age, caregiver race, family poverty status, single household, and program completion). Post-hoc comparisons were analyzed using a Bonferroni Correction. Because our analyses used seven tests with the same sample, a conservative alpha at the level of .007 (.05/7) was applied throughout the analyses. The effect sizes from ANCOVA analyses were reported with the Eta squared (e.g., .01 = small, .06 = medium, .14 = large). **Results**

### **Descriptive Statistics Results**

*Youth's age.* There was a significant difference in the average youth age for families among different service settings ( $F(3) = 256, p < .001, \eta^2 = .27$ ). The oldest adolescents were in juvenile justice service settings ( $M = 14.2$  years,  $SD = 2.8$ ), followed by diversion ( $M = 12.1$  years,  $SD = 3.4$ ), other prevention programs ( $M = 10.3$  years,  $SD = 3.8$ ), and child welfare ( $M = 8.1$  years,  $SD = 4.5$ ). These differences were expected, as the nature of juvenile justice and diversion service settings is to focus on older youth.

*Caregiver's race.* Caregiver's race was recoded as either "white" or "any other racial and ethnic group" when race information was available. The number of families coded as "other racial and ethnic group" for other prevention services was 78%, followed by child welfare services (63%), diversion services (53%), and juvenile justice services (46%). There was a significant difference in the proportion of families coded as "other racial and ethnic groups" among the four service settings ( $F(3) = 129, p < .001, V = .27$ ). It should be noted that race and ethnicity data were not consistently reported across settings, with missing data as follows, other prevention services (21%), juvenile justice (14%), child welfare (7%), and diversion (4%).

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*Poverty status.* Families below the federal poverty line across the service settings were child welfare (57%), other prevention services (46%), juvenile justice (45%), and diversion (38%). Child welfare families were the most likely to experience poverty, while diversion cases were least likely ( $\chi^2 = 30.17, df = 3, p < .001, V = .13$ ). The amount of missing data was other prevention services (22%), juvenile justice (15%), child welfare (7%), and diversion (5%).

*Single Parent Families.* The number of single-parent families across the service settings were child welfare (67%), juvenile justice (52%), diversion (50%), and other prevention services (45%). Child welfare families were significantly more likely to be single-parent households ( $\chi^2 = 68.53, df = 3, p < .001, V = .18$ ). The amount of missing data was less than 1%.

**Program Completion.** The average program completion rate for families in other prevention services was 87%, child welfare (83%), diversion (82%), and juvenile justice (64%). Juvenile justice services were found to have a lower rate of program completion ( $\chi^2 = 110.85$ ,  $df = 3$ ,  $p < .001$ ,  $V = .23$ ) than the other service settings. This finding is likely due to the differences inherent in juvenile justice services, in which courts can quickly change placement decisions.

### **Implementation Outcomes**

**Family Consultants Certification Scores.** Over the three years of the study, the average overall Family Consultant certification scores were 3.91 for child welfare (24 people with 38 certification scores), 3.88 for other prevention (30 people and 43 certification scores), and 3.84 for juvenile justice (18 people with 38 certification scores). There was no significant difference between service setting and total certification score ( $F(2, 69) = .087$ ,  $p = .916$ ).

**Service Delivery.** When evaluating aspects of service delivery, there were a few consistent trends, as seen in Table 1. For most families, the service length was between 3 – 3.5 months. However, families in juvenile justice settings received services for an average of 4.3 months, which is statistically longer than the other settings (see Table 1). This finding is in line with the total service hours received, in which those in the juvenile justice settings received services statistically longer (7-10 hours) than those in other service settings. Additionally, we investigated the number of sessions that families had with Family Consultants. We found that juvenile justice families received significantly more sessions than other service settings. Given that the duration of services is longer, this finding was not surprising. When evaluating typical sessions, the duration of a typical session was found to be significantly shorter for juvenile justice than for other settings; however, the average difference was only 11 minutes, which might not be especially meaningful.

### **Pre-Post Gains in Family Outcomes by Service Setting**

**PARCA.** For positive parenting, paired t-tests found that the total PARCA scores for each service setting had a significant *intake to case closure* gains with large effect sizes ( $d$  range .79 to 1.1; see Table 2).

**Strengths and Stressors.** For strength and stressors domains, paired t-tests found that every SS domain had significant intake to case closure gains for the four service settings ( $p < .005$ , see Table 2). Gains in child well-being and family interaction domains were large ( $d > .80$ ) across all settings. Gains in environment, parental capabilities, and social support ranged from medium ( $d > .50$ ) to large ( $d > .80$ ). Gains for family safety were small ( $d > .20$ ), likely because family safety was already rated relatively high

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at intake for most families. These gains across family outcomes for all service settings suggest that the BT-IHFS program positively impacts a wide variety of families seeking support for a range of initial needs.

### **Family Outcome Scores at Case Closure by Service Setting**

After adjusting for intake scores and a set of demographic covariates, a series of one-way ANCOVAs found significant main effects at case closure by service setting for positive parenting and the SS domains of parental capabilities, family interactions, environment, child well-being, and social support (see Table 3). While the main effect for setting at case closure was significant, the effect size remained small ( $\eta^2$  ranging from .03 - .05). Despite the small overall effect size, we did examine posthoc tests of

adjusted scores for the significant main effects and found that families in the other prevention services tended to have higher scores at case closure than families in the other three services, especially those in juvenile justice or child welfare services (see Table 4). There were no significant main effects at case closure by service for SS family safety.

### Discussion

The residential TFM has been replicated for adolescents in out-of-home care across the United States and world (Fixsen & Blasé, 2019; Tyler et al., 2025). The TFM has also been extended into in-home services for families involved in the child welfare system. This extension of the model has resulted in improved family functioning and services to prevent escalation of problems that could require out-of-home placement (Duppont Hurley et al., 2012; Ingram et al., 2015; West et al., 2021). The In-Home TFM has also had studies with strong experimental designs that have demonstrated positive outcomes for different population groups, such as juvenile justice (Hess et al., 2012; Tanana & Kou, 2020) or youth with emotional and behavioral needs (Duppont Hurley et al., 2020; Patwardhan & Duppont Hurley, 2024). While independent research with strong causal designs is essential, given the different needs of families from varied service settings, it is also important to explore how well an in-home family services model can be implemented by a single agency. Furthermore, it is imperative to investigate if positive outcomes can be achieved across different service settings using agency-collected family data. This unique approach of comparing routine implementation and family outcomes should provide additional insight into the replicability of the BT-IHFS version of the In-Home TFM that could also be applied to other in-home family service interventions.

This study found support for similar service implementation for the BT-IHFS model across four different service settings: child welfare, juvenile justice, diversion, and other types of prevention services. We found that Family Consultants' overall model fidelity scores from the certification process were consistent across service settings. This is in line with expectations, as all BT-IHFS Family Consultants receive the same basic training and supervision supports, regardless of the types of families they serve (Father Flanagan's Boys Home, 2022). It also indicates that the BT-IHFS core components do not require changes or different versions of the model to be implemented with different population groups. This is important, as Family Consultants can be trained in one evidence-based intervention that can be implemented across different service settings. Regarding service dosage, we found that the juvenile justice settings tended to have longer duration of services, more service hours, more sessions with family members, and a slightly shorter duration of sessions. However, the range of dosage was within the BT-IHFS program requirements. These findings demonstrate that the BT-IHFS program allows for minor adaptations among its specific service delivery contexts but still requires that the core model be implemented. For example, the BT-IHFS model has as a core element to

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encourage parents to be the primary change agents with their children; however, Family Consultants will provide services to individual family members as needed (Father Flanagan's Boys Home, 2022). It is expected that BT-IHFS Family Consultants will often provide more frequent services to the youth involved in juvenile justice--and even diversion service settings--as they need more individual support to succeed than perhaps the younger children served by child welfare or less system-involved other prevention services. This slight shift of increased frequency of sessions with adolescents aligns with our finding of increases in service duration and average service hours for families with juvenile justice involvement. In

all, the review of the implementation information for BT-IHFS suggests that the program is staying within the model parameters (Fixsen et al., 2025, Father Flanagan's Boys Home, 2022), with slight adaptations in service delivery for families with older children involved in the juvenile justice system.

When looking at routinely reported agency-level family outcomes, we found that across all four service settings, families made significant improvements with large effect sizes in the total PARCA parenting scores as well as the SS domains of child and family well-being and family interaction. Further, similar gains with medium effect sizes were found for environment, parental capabilities, and social support. Only the SS domain of family safety had small effects, reflecting that family safety was already adequate for many families at intake, reducing the variance. These intake to case closure gains in parenting and family functioning support the argument that families experience positive change after completing In-Home TFM (Duppong Hurley et al., 2020; Hess et al., 2012; Tanana & Kou, 2020; West et al., 2021) regardless of the type of service setting. Aside from minor differences in dosage, this is encouraging in the light that families experience the same model regardless of the service setting and report substantial parenting and family functioning gains.

The analyses of covariance approach of outcome scores at case closure after accounting for intake scores found significant differences by service setting for all family outcomes aside from family safety, although the effect sizes for these main effects were small. Thus, while there were significant effects by service setting for case closure outcomes, the differences were negligible. However, as the main effects were significant, we conducted adjusted post-hoc analyses. We found that families in other prevention programs had higher family outcome scores at case closure than the other three service settings. This is consistent with research that finds that families with low parental difficulties or stress tend to report better family outcomes than families with high parental difficulties or stress (Folk et al., 2020; Ward & Lee, 2020). As families in our other prevention setting were coming largely from school and community referrals, these families were unlikely to be system-involved, compared to the juvenile justice or child welfare families. It is encouraging that we did not consistently find significant differences among the other service settings, with the exception that the juvenile justice settings had lower scores for some case closure outcomes. Again, this could be expected, as families of system-involved young people are likely under greater stress and experiencing more difficulties. For example, adolescents with increased emotional or behavioral problems, like those involved with the juvenile justice system, report increased parental stress and decreased parental relationship quality (e.g., Buist et al., 2017; Hillekens et al., 2020). It is important to note that there were no significant differences for the domain of family safety across the service settings. This indicates that, regardless of the service setting, families had similar family safety scores. Further, most effect sizes were small, suggesting that differences among service settings may not be of practical importance. In all, the findings of this study suggest that the TFM that was originally developed for residential care settings delivered to youth can be transferred to the In-Home TFM and is delivered to families, and that the In-Home TFM can be

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successfully replicated in regard to implementation and family outcomes across child welfare, juvenile justice, diversion, and other prevention services settings.

### **Limitations and Future Directions**

While this study did use Family Consultants and parent report, there were still limitations regarding missing data, especially the PARCA. As the PARCA is completed by parents, it is difficult to require service recipients to complete outcome data at the end of services. Despite reminders, some parents simply did not complete case closure data. We will continue to look for ways to improve data collection; however, it is likely to remain an ongoing issue for research in this field. One avenue that we have begun is to routinely ask Family Consultants to enter information on four key outcomes: (a) is the child(ren) safe, (b) attending school, (c) arrest-free, and (d) abuse-free. We are hopeful that having this information collected routinely can provide a helpful ongoing data stream with less missing data for future research studies.

Another limitation of the study is that the range of ages of the youth makes it difficult to select a parenting measure that works well across all developmental ranges. Parenting strategies change from when children are toddlers to adolescents, and the assessments need to reflect these developmental stages. While we believe the PARCA is useful as it relates directly to core BT-IHFS model, it may be less relevant to the parents of adolescents than those with younger children. This may account for lower scores corresponding to parents of youth with juvenile justice involvement. Parents may not be endorsing some parenting skills very highly, as they simply may not be as relevant to families with adolescents. Additional research is needed to explore whether families of adolescents have lower PARCA scores than those with young children.

To help sustain the high-quality implementation of the BT-IHFS, it is important to continue to increase efforts to collect real-time information on both implementation outcomes and family-level outcomes related to the model's core aspects of parenting and family functioning. We have been developing and testing the use of interactive implementation dashboards for supervisors and administrators to improve implementation outcomes across all service delivery settings. Future research will explore how access to these implementation dashboards can help supervisors and administrators monitor implementation of the model to ensure high-quality service delivery across service settings. We are also working with training external agencies to provide BT-IHFS and are using similar implementation and outcome systems to monitor and support fidelity across agencies. These efforts to collect routine, individual client-level implementation and outcome information provide important data streams that extend the findings from the causal studies of the In-Home TFM.

Family functioning outcomes for the In-Home TFM have demonstrated causal effects across a range of service settings, including the initial child welfare population (West et al., 2021) and with other populations involved with juvenile justice, diversion, and other prevention settings (Duppont Hurley et al., 2020; Hess et al., 2012; Tanana & Kou, 2020). Using agency data to examine both implementation and family-level outcomes is a promising approach to examine how an in-home program originally developed for families involved in the child welfare system can be used across diverse populations. This approach of monitoring the implementation and family-level outcomes of BT-IHFS is a hallmark of the TFM (Fixsen & Blasé, 2019; Fixsen et al., 2025; Tyler et al., 2025) and has contributed to the success of the TFM in being extended from residential services to in-home child welfare services, and subsequently to in-home juvenile justice and prevention applications.

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Table 1

*Means, Standard Deviations, and One-Way Analyses of Variance Results for Service Dosage*

(months)

Hours served	30.4	27.9	40.4	30.68	33.6	18.1	30.2	16.6	21.7***	0.03
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Measure	CW		JJ	DIV		OP		<i>F</i>	$\eta^2$	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Number of sessions	19.2	17.8	26.6	18.4	20.4	11.2	17.1	8.5	44.8***	0.06
Session duration	96.1	24.3	90.3	21.5	100.6	22.6	105.7	27.6	43.3***	0.06
Service length	<i>M</i>	<i>SD</i>	4.3	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	22.2***	0.03
	3.5	2.8		2.4	3.1	1.5	3.4	1.4		

*Note.* \*\*\* $p < .001$ ; CW – Child Welfare, JJ – Juvenile Justice, DIV- Diversion, OP – Other Prevention.

Table 2

*Paired Sample t-test Results for Positive Parenting and Strength and Stressors by Service Settings*

Strength and Stressor Domain	N	Missing (%)	Intake		Case Closure		t	p	d
			M	SD	M	SD			
			Child Welfare						
PARCA Total Score	472	24%	4.93	1.17	5.67	1.05	14.7	<.001	1.1
Child Well-Being	515	17%	-0.29	1.11	0.29	1.05	15.3	<.001	0.87
Environment	522	16%	0.23	1	0.55	0.97	9.7	<.001	0.76
Family Interactions	522	16%	0.2	1.19	0.64	1.12	10.7	<.001	0.94
Family Safety	510	17%	-0.36	0.57	-0.13	0.34	11.1	<.001	0.47
Parental Capabilities	522	16%	-0.02	0.97	0.49	0.98	14	<.001	0.83
Social Support	522	17%	0.45	1.04	0.7	1.03	6.6	<.001	0.87
Juvenile Justice									
PARCA Total Score	362	31%	4.93	0.97	5.4	0.9	8.8	<.001	1.01
Child Well-Being	354	-32%	-0.9	0.88	-0.42	1.05	8.5	<.001	1.04
Environment	354	32%	0.54	0.8	0.65	0.81	2.9	0.004	0.73
Family Interactions	354	32%	0.15	1	0.4	0.95	4.4	<.001	1.04
Family Safety	339	35%	-0.14	0.36	-0.08	0.28	4	<.001	0.29
Parental Capabilities	354	32%	0	0.86	0.34	0.84	7.6	<.001	0.84
Social Support	354	32%	0.66	0.85	0.81	0.83	3.1	0.002	0.86
Diversion									
PARCA Total Score	154	23%	4.55	0.92	5.55	0.77	15.7	<.001	0.79
Child Well-Being	174	13%	-1.01	0.81	-0.08	1	13.5	<.001	0.91
Environment	174	13%	0.64	0.88	0.92	0.83	6.4	<.001	0.57
Family Interactions	174	13%	0.02	1.16	0.68	0.92	9	<.001	0.97
Family Safety	171	15%	-0.15	0.3	-0.07	0.25	4.3	<.001	0.24
Parental Capabilities	174	13%	-0.04	0.88	0.59	0.77	11.1	<.001	0.75
Social Support	174	13%	0.8	0.92	1.15	0.77	6.8	<.001	0.68
Other Prevention									
PARCA Total Score	604	21%	4.64	1.04	5.72	0.88	28.4	<.001	0.93
Child Well-Being	597	22%	-0.8	0.81	0.33	0.93	31.3	<.001	0.89
Environment	598	22%	0.42	0.86	0.95	0.81	19.6	<.001	0.66
Family Interactions	598	22%	-0.01	1	0.86	0.9	23	<.001	0.92
Family Safety	594	22%	-0.07	0.21	-0.03	0.15	4.8	<.001	0.21

Parental Capabilities	598	22%	0.03	0.77	0.76	0.79	24.9	<.001	0.72
Social Support	598	22%	0.56	0.83	1.06	0.8	16	<.001	0.77

Table 3

*One-Way ANCOVA Results for PARCA and Strength and Stressors Domains at Case Closure*

	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2$
PARCA						
Intercept	250	1	250	432.95	<.001	0.26
Intake Score	324	1	324	561.15	<.001	0.31
Program Completion	37	1	37	63.87	<.001	0.05
Other Ethnicity	0	1	0	0.43	0.514	0.00
Youth Age	1	1	1	1.00	0.318	0.00
Poverty Status	3	1	3	5.01	0.025	0.00
Single Parent	1	1	1	1.56	0.212	0.00
Service Setting	22	3	7	12.66	<.001	0.03
Error	719	1247	1			
Child Well-being						
Intercept	3	1	3	4.90	0.027	0.00
Intake Score	412	1	412	665.68	<.001	0.34
Program Completion	134	1	134	216.56	<.001	0.14
Other Ethnicity	1	1	1	0.90	0.344	0.00
Youth Age	0	1	0	0.01	0.916	0.00
Poverty Status	0	1	0	0.60	0.437	0.00
Single Parent	2	1	2	2.71	0.100	0.00
Service Setting	45	3	15	24.29	<.001	0.05
Error	807	1304	1			
Environment						
Intercept	4	1	4	10.14	0.001	0.01
Intake Score	445	1	445	1181.50	<.001	0.47
Program Completion	23	1	23	59.81	<.001	0.04
Other Ethnicity	0	1	0	0.22	0.636	0.00
Youth Age	0	1	0	0.40	0.530	0.00
Poverty Status	1	1	1	1.50	0.221	0.00
Single Parent	1	1	1	3.55	<.001	0.00
Service Setting	25	3	8	22.50	<.001	0.05
Error	493	1309	0			

Family Interactions						
	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2$
Intercept	10	1	10	15.87	<.001	0.01
Intake Score	439	1	439	694.18	<.001	0.35
Program Completion	52	1	52	82.52	<.001	0.06
Other Ethnicity	1	1	1	2.02	0.156	0.00

Family Interactions (cont.)						
Youth Age	2	1	2	3.71	0.054	0.00
Poverty Status	1	1	1	1.03	0.311	0.00
Single Parent	0	1	0	0.47	0.493	0.00
Service Setting	42	3	14	22.26	<.001	0.05
Error	828	1309	1			

Parental Capabilities						
Intercept	4	1	4	8.76	0.003	0.01
Intake Score	372	1	372	834.04	<.001	0.39
Program Completion	57	1	57	127.22	<.001	0.09
Other Ethnicity	1	1	1	2.45	0.118	0.00
Youth Age	0	1	0	0.04	0.840	0.00
Poverty Status	2	1	2	3.98	0.046	0.00
Single Parent	2	1	2	3.78	0.052	0.00
Service Setting	22	3	7	16.66	<.001	0.04
Error	583	1309	0			

Social Support						
Intercept	8	1	8	16.42	<.001	0.01
Intake Score	362	1	362	753.77	<.001	0.37
Program Completion	26	1	26	55.00	<.001	0.04
Other Ethnicity	0	1	0	0.51	0.474	0.00
Youth Age	0	1	0	0.02	0.892	0.00
Poverty Status	1	1	1	1.10	0.294	0.00
Single Parent	1	1	1	1.22	0.270	0.00
Service Setting	26	3	9	18.10	<.001	0.04
Error	629	1309	0			

Family Safety						
Intercept	1	1	1	21.91	<.001	0.02

Intake Score	29	1	29	584.35	<.001	0.31
Program Completion	3	1	3	54.15	<.001	0.04
Other Ethnicity	0	1	0	0.12	0.734	0.00
Youth Age	0	1	0	0.00	0.992	0.00
Poverty Status	0	1	0	0.79	0.375	0.00
Single Parent	0	1	0	2.59	0.108	0.00
Service Setting	0	3	0	0.23	0.875	0.00
Error	65	1302	0			

Table 4

*One-Way ANCOVA Post-hoc Comparison Results for PARCA and Strength and Stressors Domains at Case Closure*

Comparison	Difference	p	SE	95% CI	
				LL	UL
PARCA					
JJ - CW	-0.154	0.170	0.07	-0.339	0.031
JJ - OP	-0.386	<b>&lt;.001</b>	0.068	-0.565	-0.207
JJ - DIV	-0.191	0.110	0.081	-0.406	0.023
CW - OP	-0.232	<b>&lt;.001</b>	0.055	-0.378	-0.087
CW - DIV	-0.037	1.000	0.078	-0.243	0.168
OP - DIV	0.195	0.059	0.075	-0.004	0.394
Child Well-Being					
JJ - CW	-0.247	<b>0.003</b>	0.071	-0.434	-0.060
JJ - OP	-0.550	<b>&lt;.001</b>	0.068	-0.73	-0.371
JJ - DIV	-0.296	<b>0.001</b>	0.079	-0.505	-0.086
CW - OP	-0.303	<b>&lt;.001</b>	0.056	-0.451	-0.156
CW - DIV	-0.049	1.000	0.077	-0.251	0.153
OP - DIV	0.255	<b>0.004</b>	0.074	0.058	0.451
Environment					
JJ - CW	-0.085	0.740	0.055	-0.23	0.060
JJ - OP	-0.369	<b>&lt;.001</b>	0.053	-0.509	-0.229
JJ - DIV	-0.131	0.211	0.062	-0.294	0.033
CW - OP	-0.284	<b>&lt;.001</b>	0.043	-0.398	-0.170
CW - DIV	-0.046	1.000	0.059	-0.202	0.111
OP - DIV	0.238	<b>&lt;.001</b>	0.058	0.085	0.392
Family Interaction					

JJ - CW	-0.084	1.000	0.071	-0.272	0.104
JJ - OP	-0.460	<b>&lt;.001</b>	0.069	-0.642	-0.279
JJ - DIV	-0.238	0.018	0.08	-0.45	-0.026
CW - OP	-0.376	<b>&lt;.001</b>	0.056	-0.524	-0.229
CW - DIV	-0.154	0.266	0.076	-0.356	0.048
OP - DIV	0.222	0.019	0.075	0.024	0.421

Comparison	Difference	p	SE	95% CI	
				LL	LL
Parental Capabilities					
JJ - CW	-0.100	0.569	0.06	-0.257	0.058
JJ - OP	-0.356	<b>&lt;.001</b>	0.058	-0.508	-0.204
JJ - DIV	-0.160	0.106	0.067	-0.338	0.018
CW - OP	-0.256	<b>&lt;.001</b>	0.047	-0.38	-0.132
CW - DIV	-0.060	1.000	0.064	-0.23	0.110
OP - DIV	0.196	0.012	0.063	0.029	0.363
Social Support					
JJ - CW	0.036	1.000	0.062	-0.128	0.20
JJ - OP	-0.293	<b>&lt;.001</b>	0.06	-0.451	-0.134
JJ - DIV	-0.178	0.066	0.07	-0.363	0.007
CW - OP	-0.329	<b>&lt;.001</b>	0.049	-0.458	-0.20
CW - DIV	-0.214	0.008	0.067	-0.391	-0.037
OP - DIV	0.115	0.485	0.066	-0.059	0.288

*Note.* CW – Child Welfare, JJ – Juvenile Jusce, DIV- Diversion, OP – Other Prevenon;  
**Bold p-values** indicate significant differences at the  $\alpha = .007$  level (aer Bonferroni adjustment).

## Impact of Implementing the Boys Town Family Home Model on Organizational Climate in an Australian Residential Program

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### Abstract

The ineffectiveness of an organization's current intervention is the most common reason for them to seek a new evidence-based program. This paper outlines and evaluates the adoption and implementation of the Boys Town Family Home Program (BT-FHP; USA) by the Dunlea Centre (DC) in Engadine, NSW, Australia. The primary focus of the evaluation examines the impact of implementing the BT-FHP on the organizational culture at DC. From 2015 until the end of 2024, youth at DC responded to an organizational climate questionnaire during the time spent in their residential house. During this 10-year period, 852 questionnaires were collected. The overall impact of the implementation of the BT-FHP had a significant impact on the organizational climate at DC, as evaluated by youth in the program. Pairwise comparisons for two climate measures across Implementation, Sustainment, and Accreditation periods were all significantly higher than the Baseline period. The implementation process used by DC was systematic, strongly supported by leadership, and sustained by continued training and assessment of model fidelity. The results supported the hypothesis that the new model would significantly increase youths' evaluation of the program's organizational climate.

**Keywords:** Program Change, Program Implementaon, Residental Care, Teaching-Family Model, Organizaonal Climate, Youth Perspecve, Milieu

**Implicaons:**

- Implementaon of the BT-FHP was successful, as evidenced by significant improvements in organizaonal climate and eventual cerficaon of the program by the Teaching-Family Associaon.
- Successful implementaon of an evidence-based milieu program can have a significant impact on organizaonal climate.
- Youth perspecve is an important source of informaon for assessing organizaonal climate in a residental care seng.

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### **Impact of Implemenng the Boys Town Family Home Model on Organizaonal Climate in an Australian Residental Program**

The most common reason for organizaons to seek a new evidence-based program is that their current intervenon is not as effecve as desired (36% of programs; James et al., 2017). A sound program model is the necessary foundaon for effecve residental care pracce, and without it, nothing else will likely mater (Horwitz et al., 2014; James, 2017). Milieu organizaonal change efforts, however, involve the largest scope, including training, ongoing support, coaching, and supervision (Lowenthal, 2020). The desire to employ a milieu program is also frequently identifed as a newprogram goal (Hodgdon et al., 2013). The implementaon of a milieu program impacts the organizaon as a whole and involves global organizaonal culture and climate change strategies (Aarons et al., 2023; Kor, 2025).

Organizaonal leadership plays a crical role in nurturing a culture that facilitates a change in programming (Aarons et al., 2023; Collins-Camargo et al., 2025; Park et al., 2025). A supportve organizaonal culture is a crical component of implemenng evidence-based programs (EBP) and improving effecveness (Edwards et al., 2023; Horwitz et al., 2014). EBPs are intended to use research evidence to ideny and provide the best possible care at the point of contact with the client (Dawes et al., 1999).

When adopng a new treatment model, service providers need to make certain that the model is a good fit for their contractual, local, and societal context (Lefevre et al., 2025). This is especially relevant in cases of implemenng an EBP internaonally. Development of a culture that supports implemenng milieu and evidence-based programs takes me and concerted effort across all organizaonal realms, including supervision, policies, procedures, and youth percepon of safety and inclusion (Aarons et al., 2023; Edwards et al., 2023; James et al., 2017). The organizaonal change strategy must be consistently applied to ensure all employees are committed to and focused on the use of the new program. If not implemented homogeneously across an organizaon, poor results can lead to the new program being seen as a failure when the problem was that it was not properly implemented (Dominick et al., 2014).

Not surprisingly, research findings suggest that a new evidence-based program will not work unless substantial attention is paid to sustained training and monitoring of fidelity (James et al., 2017). Horwitz et al. (2014) found that 94% of agencies had implemented a new program, but only 58% of system reforms were sustained. It is important to integrate the implementation processes into strategic planning with concrete and measurable goals and a system of accountability (Edwards et al., 2023).

Aarons et al. (2011) propose a four-phase model for program implementation and observe that many implementation efforts have failed to reach their full potential due to incomplete execution of the process. The four implementation phases are Exploration, Adoption/Preparation, Implementation, and Sustainment. Exploration involves an awareness of a need for change and the search for a workable solution to the issues. Recognizing the need for and a willingness to make a change is essential to this phase. Adoption/Preparation is selecting a program model that is congruent with the organization's core values, resolves problematic issues, and is directly supportive of meaningful practice needs. This phase requires allowing sufficient time to create an organizational culture that is

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open to adopting the new model. The role of leadership is essential in taking ownership of this process and promoting the change in program model. Implementation involves putting the new model into practice. This requires sufficient training in applying the model to daily service delivery and may involve adopting formalized policies supporting the new program model. Leadership involvement at all levels is needed to promote a positive implementation climate and readiness for implementation. Sustainment refers to factors supportive of the continued use of the new program model. Activities supportive of sustainment are focused supervision, continuous assessment, certification of model fidelity, and providing targeted retraining as needed. An important factor in the Sustainment phase is attaining a critical mass of program staff using the new program model which will create a durable new-model culture. Both culture (the normative beliefs and shared expectations of the organization) and organizational climate (shared perceptions of the psychological impact of the work environment on the provider) can impact the quality of service delivery and the adoption of EBPs (Aarons et al., 2023).

The Teaching-Family Model has evolved over 50 years (Fixsen & Blase, 2019) and has outstanding outcome evidence about the productivity and well-being of children and youth in residential care (Friman et al., 1996; Huefner et al., 2007; Kingsley et al., 2008; Thompson et al., 1996; Tyler et al., 2025). The Teaching-Family Model is a cognitive-behavioral intervention that is characterized by family-style living, integrated support systems, and clearly defined individualized goals (James, 2011). The Boys Town Family Home Program (BT-FHP) is an adaptation of the Teaching-Family Model. The BT-FHP is comprehensive in scope and designed to affect every aspect of practice within a residential care setting (James, 2017). The BT-FHP has been widely replicated, well researched in the literature, and identified as a promising best practice (California Evidence-Based Clearinghouse, 2015; CrimeSolutions, 2015; Fixsen et al., 2007; James, 2011).

The primary focus of the present study is to examine the impact of implementing the BT-FHP in a new setting. Specifically, will youth perceive an improvement in organizational climate after the implementation of the BT-FHP in a residential program in New South Wales, Australia?

## **Setting**

The Dunlea Centre (DC) in suburban Sydney, New South Wales, is a 5 day/4 night (Monday–Thursday) per week accredited residential school for both male and female children and youth. In 2024, 46 young people attended the school (33 males, 13 females) with ages at enrollment ranging from 13 to 17 (program takes youth between 12 and 18 years old). The center is a campus-based facility consisting of a modern school, extensive recreational facilities, and 4 residential houses (3 males and 1 female) with a capacity of 8 youth in each house. The expected period of attendance at DC is a minimum of 12 months. The aim is to either return youth to a mainstream school, college, or employment following completion of their time at DC.

Youth entering DC often have histories of school refusal, disengagement from school, family conflict, poor peer relations, and often have moved from one school to another due to behavioral issues. In 2024, the average number of prior schools for youth at DC was 2.7, with 46% having been at three prior schools (the range was 1 to 5). Seventy percent of the youth entering DC have also received a mental health diagnosis. For youth with a mental health diagnosis, the average number of diagnoses was 2.3 (the range was 1 to 5). The most common diagnoses were attention deficit/hyperactivity

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(90.6%), oppositional defiance (37.5%), anxiety (21.7%), and autism spectrum (21.7%). Additionally, drug and alcohol issues were identified as an issue in 26% of the youth.

## **Change in practice model**

Recognizing the need for change, selecting a suitable model, and implementing the BT-FHP occurred over a period of years. The process DC experienced in changing their practice model follows.

## **Exploration Phase**

Aaron et al.'s (2011) Exploration phase of implementation began at the DC in 2015. A Research Consultant collaborating with DC began a three-year effectiveness evaluation of the program. In doing this, he began the process of DC's leadership, thinking about the program's impact on target outcomes. This all reflected a growing sense of need for a program change at DC and the beginning of readiness for change. The perceived need and readiness for change are both important factors in the four-phase model of change (Aarons et al., 2011; Grol et al., 2007). At this point in time, the theoretical model underpinning the DC program was Don Bosco's preventive approach and Larry Brendtro's Circle of Courage program (Brendtro et al., 1991). In 2016, after attending a European Scientific Association on Residential & Family Care for Children and Adolescents (EuSARF) conference, the Research Consultant visited several residential programs in the United States, looking for a treatment model that he felt would work well at DC. The DC Research Consultant felt the BT-FHP was a good structural and ideological fit with DC. A good fit is an important element in the four-phase model for achieving

successful model change (Aarons et al., 2011). After visiting Boys Town (BT) in Omaha, he recommended the BT-FHP to DC's Executive Director.

### **Adoption/Preparation Phase**

A transition to the Adoption/Preparation phase (Aarons et al., 2011) occurred in early 2017. A review panel composed of childcare and program experts was hired to conduct a comprehensive evaluation of the DC. The review found that direct care staff lacked an understanding of how the current theoretical approach applied to day-to-day practice and outcomes. Early feedback from the review panel emphasized the need to adopt a model that would uniquely support DC's mission. In response to this, the DC Executive Director visited BT to see the BT-FHP in practice and, as a result, agreed that the BT-FHP would be a good program for DC. Aarons et al. (2011) emphasize the importance of leadership championing the need for and commitment to the program change. Plans and a training schedule for BT to train DC in the BT-FHP were formulated. The DC Executive Director and the DC Residential Manager again visited BT in 2018 to become more familiar with the BT-FHP. In return, a BT-FHP Model Consultant visited DC to better understand the circumstances at DC and refine the plans for training the BT-FHP. The BT Model Consultant also met with the DC Board Chair to include the DC Board in the process of transitioning the DC to the BT-FHP model. As a result, the DC leadership team and the Board expressed a strong commitment to the implementation of the BT-FHP. This degree of interorganizational partnership is important for increasing the perception that the new model could be implemented and successful in attaining organizational objectives (Aarons et al., 2011). Toward the end of the year, the BT Model Consultant spent a week immersing herself in DC operations and learning the specifics about the program operations.

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### **Implementation Phase**

The Implementation phase (Aarons et al., 2011) began just prior to 2019. The BT Model Consultant and a BT Training Specialist began training the BT-FHP model before the regular school year started at DC. The DC Day Manager, Educational Services Manager, and Family Services Manager all visited BT to gain a clear understanding of what the BT-FHP looks like in practice. Given the degree of mission, values, and roles fit (Aarons et al., 2011), the implementation process was relatively smooth and without any issues. This was the first year of integrating the BT-FHP model of care into DC's daily operations. In response to the formal review panel report, changes were also made to the DC's organizational structures and day-to-day educational and care practices (Humphreys et al., 2018).

Not surprisingly, the implementation of the BT-FHP was not without challenges (cf. Wolf et al., 1995). Staff seemed apprehensive heading into training. There was a divided response from DC staff on training days, with some staff engaged and attentive, while other staff were disengaged and dismissive. There was also some resistance from staff regarding new rules such as no technology in bedrooms, no use of fidget toys, no me-outs (chill-out room; me away from group to de-escalate), etc. Additionally, implementing the new model led to some DC staff turnover. One staff member resigned almost immediately after BT-FHP training at DC. Several other staff took significant time to get on board with the

BT-FHP model. Of these, some staff stayed for a few years before leaving DC, while others who conued at DC are now among the best at applying the BT-FHP. Finally, some staff isolated themselves from the rest of the program and conued to provide care using the old model during the first year of implementaon. In response to these challenges, the BT Model Consultant and DC Program Director focused on creang a culture supporve of the new model amongst staff at DC.

The BT Program Consultant and Training Specialist returned to DC in 2020 and conducted a “Train the Trainer” workshop with select DC staff to deepen model expere and enable internal preservice training in the BT-FHP model at DC, again emphasizing the value of the DC/BT partnership (Aarons et al., 2011). Shortly aer this, COVID-19 restricons closed DC from mid-March to late April. DC was able to reopen April 27, 2020, with all staff and students returning and significant focus on personal hygiene, social distancing, and increased cleaning across the site. From May through September, DC adjusted operaons as per the safety recommendaons of the New South Wales Health Department, developed a COVID-19 Response Plan, and worked at making the environment as normal as possible so youth and families could focus on their goals. Notwithstanding these challenges, DC was doing well at implemenng the BT-FHP model but was not yet accredited. Several DC youth workers became Behavioral Intervenonists and supported implementaon of the new model across all classrooms and teachers. A Youth and Family Program Manager posion at DC was created to oversee residenal and educaonal programs. Addionally, several program-related acvies that are part of the BT-FHP were also adopted at DC. For example, DC adopted semesterly recognition ceremonies (where families, carers, and community are invited to celebrate young people’s achievements), and residenal dinners (where families or carers invited to come in for dinner with their DC house). Finally, youth were involved more in the management of the program via student representave councils, school captain, house meengs, and treatment team review meengs, where youth parcipate in their goal seng.

### **Sustainment Phase**

In 2021, all staff and students were on site with the same COVID-19 regulaons as the end of 2020. This year, DC also made a concerted effort to sustain (Aarons et al., 2011) the BT-FHP through DC taking on responsibility for internal training and oversight of model fidelity. A Senior Behavioral Intervenonist was idenfied at DC to supervise and model proper implementaon of the BT Specialized Classroom Management model, providing consultaon and feedback to the teachers and school staff. Program staff worked with de-escalang behavioral problems within the classroom in place of me-out. DC’s leadership team engaged with the Teaching-Family Associaon (TFA) to begin the accreditaon process. DC started working with Berry St, a local sponsor site, to support the process of preparing for TFA accreditaon. Interorganizaonal supports are also helpful in supporng DC with their structure, role, and measurement quesons (Aarons et al., 2011). The second term ended June 25<sup>th</sup>, with Sydney entering lockdown. Online classes were held during the third term. A workbook was sent to students to complete throughout the week, and 2-3 Zoom meengs a day were held for students to atend with a teacher and behavioral intervenonist to access help with the schoolwork. Behavioral Intervenonists were allocated to call several students at their homes and encourage less screen me. Residenal youth

workers did a group Zoom in the afternoon with the young people in their house and provided social skills, independent living skill work, and made individual check-in calls with youth and their families. Clinicians also provided as-needed therapy via telehealth (either phone or Zoom calls). On October 18<sup>th</sup>, 2021, DC returned to face-to-face classes following the return to school plan for COVID-19 that was released by the New South Wales Government (mandatory mask wearing). Sustainment efforts were continued into 2022. To meet TFA accreditation requirements, a Training & Development role was created at DC, which was responsible for ongoing observation, evaluation, and fidelity of the BT-FHP. DC created internal fidelity and monitoring systems that were essential in sustaining the BT-FHP model moving forward (Aarons et al., 2011). The BT Training Specialist visited DC to support the preparation for TFA accreditation.

In 2023, DC trainers delivered pre-service BT-FHP training. DC took over the evaluation system fully with two qualified evaluators after receiving training from Berry St. These evaluators certified that practitioners were using the BT-FHP model with fidelity. As guardians of the model, they focus on sustainability and fidelity by practitioners and provide relational support with day-to-day challenges. They can also apply program knowledge to help other programs. All these program-related roles were vital in helping DC achieve staff critical mass using the model, which resulted in the BT-FHP becoming the dominant treatment norm (Aarons et al., 2011). During 2023, DC attained full TFA Accreditation. The lead TFA evaluator was impressed with the high level of implementation of the model at DC, noting that teachers were as good at the program as direct care staff. The lead evaluator also noted that DC was fully open to and committed to feedback from program experts. In 2024, three more TFA Model Evaluators were trained at DC (strengthening the focus on sustainability and fidelity by practitioners). The DC Youth and Family Program Manager was appointed as a board member at the TFA. The Training and Development team took the lead in facilitating Common Sense Parenting (a parent training program adjunct to the BT-FHP). Table 1 summarizes the key points for implementing the BT-FHP across the 10-year timeline.

## Method

### Procedure

From 2015 until the end of 2024, group home climate measures were given to youth in the DC during the time spent in their residential house. The questionnaire was distributed between the 8<sup>th</sup> and 10<sup>th</sup> weeks of each term (four terms in a year). Instructions on how to complete the questionnaire and its purpose were given to youth prior to each administration. The questionnaire was completed individually by each youth; however, youth were not required to complete the questionnaire if they did not wish to participate. The climate survey identified the home where the surveys were collected, but there was no information about who completed a given survey. Survey data were entered into an SPSS database on a password-protected workplace computer. Reports aggregated by residential house were sent to the

leadership team. Program consultants used home climate results in consultation with the residential youth workers to set goals for the term. During this 10-year period, 852 questionnaires were collected.

## Measures

Group Climate Instrument for Children (GCIC 8-15). The GCIC is a 14-item questionnaire, using a Likert-type scale, designed to measure children's perception of the quality of group climate in different kinds of youth-care settings (Strijbosch et al., 2014). The 14 items were selected from a pool of 54 items using confirmatory factor analysis. In the Strijbosch et al. (2014) paper, they split the 14-item scale into open- and closed-climate subscales, with Cronbach's alphas of .91 and .71, respectively. No overall alpha was reported for the 14-item scale.

In the present study, we only use the overall climate score, and not the subscales. The Cronbach's alpha for the overall scale was .88. Minor wording changes were made to the GCIC to better fit the terminology used in the DC. Specifically, the term "group workers" was changed to "staff" in 7 of the 14 items (e.g., "The group workers are honest" became "The staff are honest"). Additionally, "group" became "unit" in two items, and "children" became "kids" in one item. Two items with the biggest changes went from "When I complain about something, this is being taken seriously" to "When I complain about something, it is taken seriously" and "In this group, children trust each other" to "In this unit, we trust each other." When the Cronbach alphas were calculated for DC data, the open- and closed-climate scored .88 and .72, respectively, which are very close to the Strijbosch et al. (2014) results. In the current analyses, the negative items were reversed.

Living Unit Evaluation (LUE). The LUE is an internally developed measure asking youth to evaluate their living unit in five areas: 1) the help you get from group workers; 2) the things you learn in this group; 3) the atmosphere at the group; 4) honesty at the group; and 5) group rules. Each area was rated on a 10-point scale, where a 1 = very bad and a 10 = very good. The correlation between aggregate LUE with aggregate GCIC in this sample was .725 ( $n = 852$ ,  $p < .001$ ), and the Cronbach's alpha for the aggregate LUE scale was .87.

## Analysis

IBM SPSS Statistics (version 29) was used to analyze the data. The two fixed factors were Implementation Stage (Baseline, Implement, Sustain, and Accreditation) and House (A, B, C, and D). As the evaluations were collected by living unit (i.e., House) from 2015 to 2024, year was used as a

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covariate in the analyses to account for the repeated-measures aspect of the data. Roy's Largest Root was used to determine multivariate significance.

## Results

The multivariate results for the MANCOVA were significant for House ( $F(3, 835) = 24.45$ ,  $p < .001$ ,  $\eta^2 = .081$ ), Implementation Stage ( $F(3, 835) = 6.72$ ,  $p < .001$ ,  $\eta^2 = .032$ ), and the House by Implementation Stage interaction ( $F(9, 835) = 5.85$ ,  $p < .001$ ,  $\eta^2 = .059$ ).

The univariate results for GCIC are shown in Table 2. The pairwise comparisons for GCIC across implementation stages showed that the Implementation ( $MD = -.262, SE = .079, p > .05$ ), Sustainment ( $MD = -.443, SE = .147, p = .016$ ), and Accreditation ( $MD = -.594, SE = .196, p < .015$ ) stages were all significantly higher than the Baseline stage. Figure 1 shows this relationship in the change in GCIC from Baseline and over three implementation stages.

The univariate results for LUE are shown in Table 3. The pairwise comparisons for LUE across implementation stages showed that the Implementation ( $MD = -1.12, SE = .278, p < .001$ ), Sustainment ( $MD = -1.12, SE = .278, p < .001$ ), and Accreditation ( $MD = -1.12, SE = .278, p < .001$ ) stages were all significantly higher than the Baseline stage. Figure 2 shows this relationship in the change in LUE from Baseline and over three implementation stages.

## Discussion

This paper examined the impact of implementing the BT-FHP on the organizational climate at the DC in New South Wales, Australia. The youth in the DC program completed multiple administrations of two climate surveys over a 10-year period. The results showed that implementing an evidence-based practice milieu model (i.e., BT-FHP) significantly increased youths' evaluation of DC's organizational climate.

DC initiated their program change journey by employing external childcare and program experts to conduct a three-year effectiveness study and a separate comprehensive program evaluation. These efforts were motivated by the recognition at DC that their results needed to be improved. DC also sent their research consultant to an international residential-care conference in Europe and to the United States to visit several evidence-based residential programs. It was during the visit to BT in Omaha (Nebraska, USA) that the research consultant called the DC Executive Director and said, "You need to come here and see this." DC committed significant resources and effort to identify an appropriate evidence-based residential care model. DC's movement and process over this period closely parallels Aarons et al. (2011)'s Exploration stage of evidence-based implementation.

The decision to pursue the BT-FHP was supported by a strong commitment by organizational leadership. Early in this process, the DC Executive Director and Residential Manager visited BT to verify that the BT-FHP would be a good fit, especially in the context of intercultural transfer. Ultimately, DC leadership determined that the BT-FHP would be a good organizational fit at DC, and as a result, the BTFHP Model Consultant visited DC to work with DC leadership in refining implementation plans and a culture supportive of change. Without this strong leadership support, the ambitious plan to implement

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the BT-FHP would not have been likely to succeed. The work done during this period conforms to Aarons et al. (2011) Adoption/Preparation stage of evidence-based implementation.

All DC staff were involved with the formal implementation of the BT-FHP in a determined effort to make relevant organizational changes across roles, supervision, policies, and procedures. BT-FHP training

by the BT Model Consultant and Training Specialist began before the beginning of the DC school year. As a part of helping DC supervisors visualize what the training was designed to achieve, the DC Day Manager, Educational Services Manager, and Family Services Manager all visited the BT program. The goal of BT-FHP training is consistent application of the model across the milieu, which requires continued assessment and refresher training. The work done during initial BT-FHP training corresponds to Aarons et al. (2011)'s Implementation stage of evidence-based implementation.

Maintaining and excelling at using the new model is the next challenge after the Implementation stage. Sustaining learning, new skills, and practices requires more than just doing the program; it requires becoming the program (Galvin et al., 2022). This was accomplished at DC by two supervisors completing BT-FHP Train-the-Trainer program, which empowered DC to conduct its own preservice and in-service (refresher) training. DC staff were also designated and trained to monitor model fidelity across the organization. Additionally, strategic planning was used to define direction (BT-FHP implementation towards TFA Certification), reorganize and reallocate resources (organizational structure, define population served, update policies), and put systems in place for performance management. This final period corresponds to Aarons' et al. (2011) Sustainment stage of evidence-based implementation.

The DC received TFA accreditation as verification that the BT-FHP was fully implemented and operating at a high level within five years of implementation. This accreditation occurred despite the broad disruption to daily operations associated with COVID-19 during 2020-2021. TFA certification provided strong external verification that DC had excelled at implementing and sustaining the BT-FHP.

Additionally, we strongly support the value of using youth perceptions of program quality in evaluations of residential care programs. While there are aspects of residential care operations that youth do not directly experience (e.g., staff training), they are very sensitive to and keenly aware of changes to the quality in the environment around them. Additionally, youth are typically not bashful about telling staff what they do or do not like in the residential care they experience. Finally, it is important to account for youths' perceptions of care practices, culture, and conditions, because these explicitly shape their relationships and sense of being valued, respected, and cared for (McPherson et al., 2025).

### **Limitations**

While youth perception of organizational climate is very important, a comprehensive evaluation of the new model requires a broader set of measures. Future research needs to examine the impact of the BT-FHP on outcomes such as educational progress, emotional and behavioral symptom reduction, behavior incident reports, and meaningful treatment goals.

The generalizability of the results reported here might be questioned as the evaluation was limited to the impact of the BT-FHP on a single program. However, while the DC's implementation of

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the BT-FHP was remarkably successful, the Teaching-Family Model itself has been broadly adopted successfully by 36 programs in the United States and internationally (see <https://www.teachingfamily.org/>). The process of translating evidence-based practices to different

contexts and communities is often complex (Aarons et al., 2011). Verifying model fit, sustained leadership commitment, interorganizational collaboration, monitoring of model fidelity, and continued training all played key roles in the successful implementation of the BT-FHP at DC.

## Conclusion

The implementation process used by DC was systematic, strongly supported by leadership, and was sustained by continued training and model fidelity assessment, and these factors were associated with significant improvements in organizational culture as perceived by the youth in the DC program. In retrospect, it is hard to imagine that DC would have been as successful in their implementation of the BT-FHP without all the work that went into each of the implementation stages described above. We feel that Exploration, Adoption/Preparation, Implementation, and Sustainment phases all played critical roles in the ultimate success of an implementation of the BT-FHP to a new country and culture.

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Table 1  
 Summary of Aarons et al. (2011) Stages, Key Events, and Year

	Effectiveness evaluation begins	2015	Focus
Exploration	on program impact on outcomes		
	DC research consultant visits BT	2016	
	BT-FHP recommended to DC leadership Comprehensive evaluation of DC		
Adoption/Preparation	Director visits BT	2017	DC
	Planning and preparation for BT-FHP	2018	
	Visits between DC and BT BT-FHP training begins at DC	2019	
Implementation	Key DC staff visit BT to observe model		
	Train the trainer established at DC	2020	
	Program Manager role created Senior behavior analyst identified	2021	
Sustainment	DC joins Teaching-Family Association Training and development role created	2022	Ev
	evaluation and fidelity of BT-FHP focus		
	Certification of internal evaluators	2023	DC
	attains full TFA accreditation		
	Model evaluators established at DC	2024	
	BT-FHP parent training program added		

Figure 1

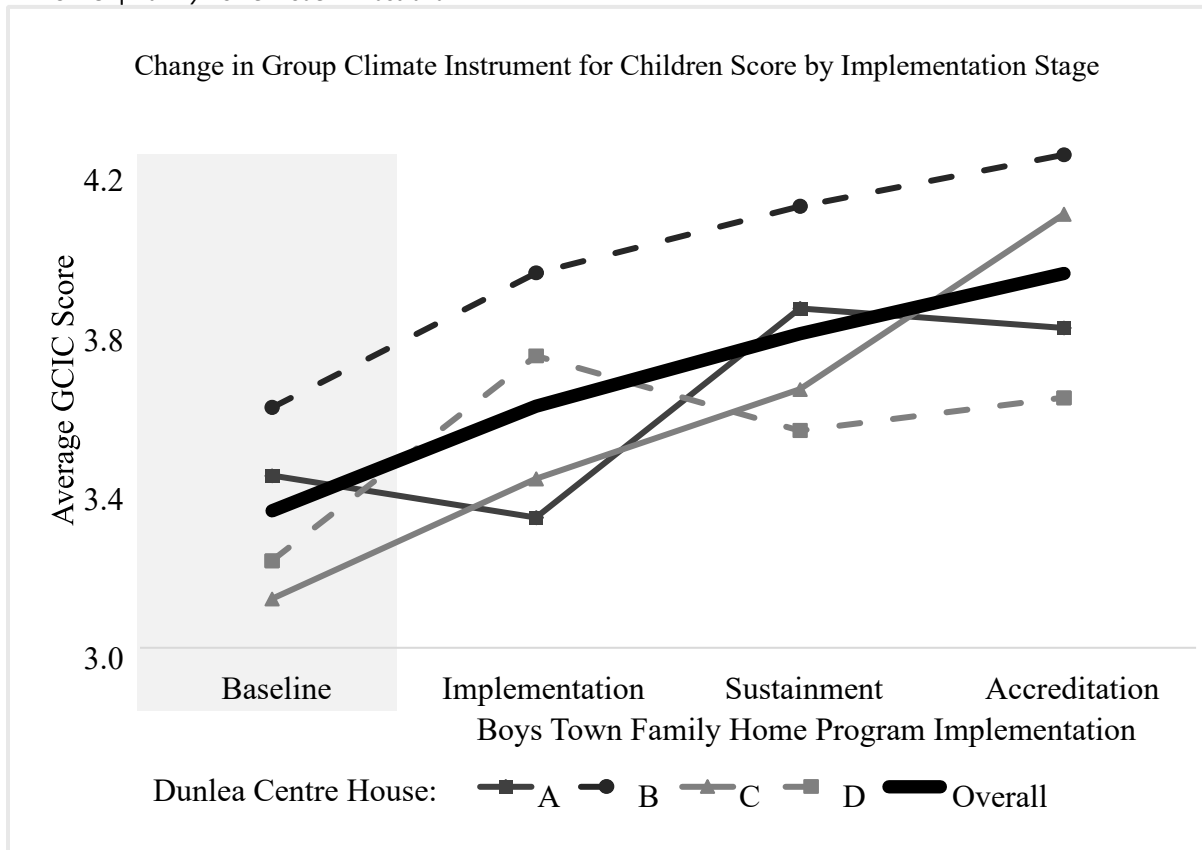


Table 2  
Group Climate Instrument for Children (GCIC) univariate effects for House, Implementation Stage, and the House by Implementation Stage interaction.

Source	F	df	Sig.	Paral η <sup>2</sup>
House	21.71	3/835	< .001	.072
Implementation Stage	3.19	3/835	.023	.011
House * Imp. Stage	4.17	9/835	< .001	.043

Figure 2

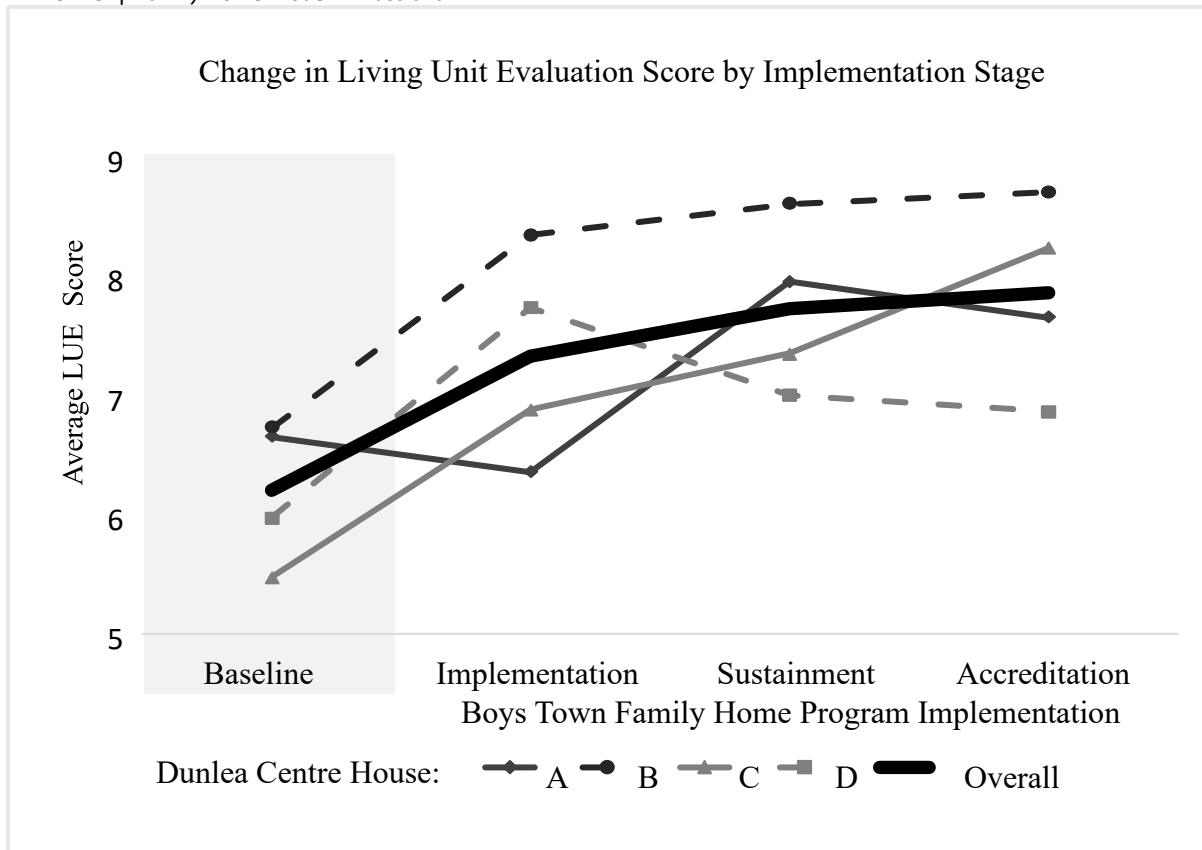


Table 3  
 Living Unit Evaluation (LUE) univariate effects for House, Implementation Stage, and the House by Implementation Stage interaction.

Source	F	df	Sig.	Paral $\eta^2$
House	19.66	3/835	< .001	.066
Implementation Stage	6.36	3/835	< .001	.022
House * Imp. Stage	5.60	9/835	< .001	.057

## **Developing a Boys Town Social Skills Assessment for Schools: Psychometric Properties and Pilot Testing**

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### **Abstract**

Social skills teaching is an effective intervention to support students with emotional and behavioral disorders. This paper describes the initial development and psychometric properties of the *Boys Town Social Skills Assessment for Schools* (BTSSA-S), a 15-item assessment intended to identify students' social skill strengths and needs. Fifteen educators at an educational center for a residential program for at-risk youth completed the instrument. A total of 150 students were rated at two points in time, approximately 30 days apart (129 students were matched). The BTSSA-S demonstrated good test-retest reliability (ICC

= .83) as well as adequate internal consistency ( $\alpha = .85$ ) for a mul-dimensional scale (3 factors: behavioral compliance, on-task, and sociability). Further, scale scores significantly correlated ( $r = .76$ ) with another social skills screener, indicang convergent validity. Finally, a ROC curve discriminated significantly between students with and without a disrupve school incident and was used to determine a preliminary cut-off score for idenfying those at risk for such incidents. Limitaons, implicaons, and future research are discussed.

**Keywords:** Social Skills Assessment, Boys Town Social Skills Assessment for Schools, BTSSA-S, WellManaged Schools, *Lift With Boys Town School Support Program*

**Implicaons:**

- The Boys Town Social Skills Assessment for Schools (BTSSA-S) was found to be a valid and reliable instrument for measuring social skills of students receiving educational services in Boys Town schools.
- Lower scores on the BTSSA-S classified students with disrupve school behaviors.
- The BTSSA-S can be used to idenfify students who could benefit from social skills teaching in schools.

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**Developing a Boys Town Social Skills Assessment for Schools:  
Psychometric Properes and Pilot Tesng**

Since adopng the Teaching-Family Model (TFM; Wolf et al., 1995) for its residenal program in 1975, Boys Town has expanded its reach by delivering 95% of its services to children and families in community-based sengs (see Tyler et al., 2025). As suggested by Blase et al. (2013), replicang the core components of evidence-based models, with fidelity, has allowed the model to be adapted to other sengs while maintaining effecvness. Social skills teaching is one of the core components of the TFM included in the school-based, family-based, residenal, and aercare programs in Boys Town’s Connuum of Care (Tyler et al., 2025). School administrators and praconers requested the development of a social skills assessment to help assess an emerging need for student social skills in schools following the COVID-19 pandemic. The assessment also needed to be able to inform adults of students’ social skills across the different sengs and services of the Connuum to improve connuity for students. This paper describes the inial development and pilot tesng of the instrument referred to as the Boys Town Social Skills Assessment for Schools (BTSSA-S).

Providing support and services based on core components (see Blase et al., 2013) and common language (e.g., terminology, definitions) of the TFM has been shown to be a reliable, consistent, and effecve means of care (Huefner et al., 2010; Ringle et al., 2012). For instance, the Well-Managed School Curriculum (WMS: Hensley et al., 2011) equips educators to teach social skills to students in the classroom. The *Lift with Boys Town School Support Program* provides one-to-one and group social skills teaching to students (see Ringle et al., 2025). The School Support Program also connects the students’ families to parent training (e.g., Common Sense Parenng; Burke & Herron, 1996) and family-based services (e.g., Boys Town In-Home Family Services; Duppong Hurley et al., 2020) that instruct parents on how to teach these same social skills to their children. As a result, students can receive social skills

teaching and reinforcement from multiple adults who are all using the same approach and terminology - teachers and school support specialists at school and caregivers at home.

Social skills teaching is a safe and effective technique adults can use to help students grow and develop. Social skills serve as protective factors against emotional and behavioral problems (Taylor et al., 2017) by improving social development and reducing competing problem behaviors (Cook et al., 2008; Sheridan et al., 1999). Social skills teaching is positively associated with student academic functioning and reductions in emotional distress and disruptive behaviors (Durlak et al., 2011; Elliot et al., 2001; Langland et al., 1998; Mahoney et al., 2018; Taylor et al., 2017). Early developers of the TFM recognized that teaching social skills helped students develop “mutually reinforcing relationships” with peers and parents. They also saw that the way that social skills (e.g., accepting criticism, greeting others) were taught could be manualized to include positive reinforcement and rationales; and this improved youth receptivity to learning the skills (Wolf et al., 1995, p. 21). Teaching social skills continued to be enhanced by breaking the skills down into steps to improve learning (Hensley et al., 2011; Tierney et al., 2016). For instance, teaching social skills has been shown to be more effective when implemented using the *SAFE* criteria, which includes being *sequenced, active, focused, and explicit* (see Durlak et al., 2011).

In addition to breaking skills down into steps, individualizing social skills teaching also improves social, emotional, and academic outcomes (Durlak et al., 2011), and valid and reliable social skills

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assessments can be used to identify the specific skills students need. Researchers have also reported good agreement between teachers' and parent ratings on social skills assessments (Mударра et al., 2022). Therefore, social skill assessments are useful tools to get teachers, parents, and practitioners on the same page to support each student's unique social skill needs at school and at home. When students are assessed, taught, and reinforced on the same targeted skills by different adults, students learn to generalize and sustain the use of these skills in different settings (Miller, 2006; Mударра et al., 2022).

The growing behavioral and social challenges of students resulting from the COVID-19 pandemic required immediate solutions (Racine et al., 2021; United States Department of Education, 2021). Our team conducted a national study with teachers from across the United States to determine what they found to be the most helpful strategies to address the increase in student behavioral, emotional, and academic needs since the pandemic; and social skills teaching and relationship building were two of the highest-rated strategies (Tyler, Duppong Hurley et al., 2025). Teachers and school administrators indicated an assessment that could provide earlier identification of students in need of social skills teaching and evaluate student progress would be a helpful tool. As mentioned, social skills teaching has been a core component of the TFM and Boys Town's service array for decades, yet an assessment of the specific social skills used by the services had never been developed. Although many brief options were available to evaluate a student's competency regarding social skills such as Devereux's DESSA-Mini (Naglieri et al., 2011), Social Emotional Assets and Resilience Scales (Nese et al., 2012), Behavioral and

Emotional Rang Scale (Epstein, 2000), and Social Skills Improvement System-Rang Scales (Gresham & Elliot, 2008); these instruments did not measure the specific, manualized, and defined social skills used in the Boys Town social skills curriculums. Thus, a social skills assessment was needed so teachers, parents, and practitioners could assess students using the same social skill labels and definitions for consistency and continuity. To address the emerging needs of students related to the pandemic, an assessment such as this would also provide for earlier identification of students in need of additional direct instruction on the social skills being taught within the classroom management curriculum, as well as additional school or family-based services that may be required.

Increases in behavioral and emotional needs of students following the COVID-19 pandemic prompted the need for a brief, valid, and reliable instrument to assess the social skills needs of students within schools using the WMS curriculum. The purpose of this project was to develop the BTSSA-S alongside school curriculum experts, school, and program staff, pilot the assessment in the school setting, and evaluate the psychometric properties. For the initial scale development and pilot testing, three primary research questions were addressed: 1) Does the BTSSA-S demonstrate convergent validity with another gold standard social skills assessment? 2) What are the internal consistency and underlying relationships among the items of the BTSSA-S and subscales? 3) What is the test-retest and interrater reliability of the assessment? Three secondary questions were addressed to explore: 4) group differences based on student characteristics such as sex, race, grade level, and special education status; 5) change in social skills over time; and 6) the accuracy of the BTSSA-S scale to classify school behavioral incidents and determine a cut-score for identifying students at-risk for disruptive behavior (e.g., office referrals)? A cut-score can help prioritize students who are at-risk for behavioral problems so they can receive social skills teaching sooner to prevent problems from occurring.

## Scale Development

The first step of scale development was to ensure face validity of the assessment. Face validity is the extent to which an assessment measures what it is intended to measure according to the subjective opinion of experts (Hassan, 2024). To establish face validity, we included program experts in social skills teaching from the Boys Town Well-Managed Schools and School Support Programs to consult on the design of the BTSSA-S. The social skills that were selected came from the *Well-Managed Schools* (Hensley et al., 2011) curriculum and the *Teaching Social Skills to Youth* (Tierney et al., 2016) manual, which are also used in other Boys Town family-based and residential services, such as Common Sense Parenting, Boys Town In-Home Family Services, the Boys Town Family Home Program, and Residential Treatment Center. Originally, twenty social skills were selected from the manuals and included instructions on how to teach the skills in a series of steps. For example, the skill steps for *following instructions* includes 1) Look at the person, 2) Say okay, 3) Do what you've been asked right away, 4) Check back (Hensley et al., 2011, p. 106; Tierney et al., 2016, p. 69).

Social skills were rated on a 3-point scale (0 = "needs improvement", 1 = "typical", 2 = "strength") based on a student's behavior over the past four weeks. During the scale development

phase, a “cannot rate” option was provided to determine the ability of teachers to be able to rate each skill based on classroom observations. As a result of the “cannot rate,” five social skills were deleted from the total scale because a high frequency of teachers indicated inadequate opportunities to observe the skills in the classroom. Four of these skills, i.e., disagreeing appropriately, making an apology, setting goals, and solving problems, were more likely to be addressed during one-on-one social skills teaching, social skills groups, or an office referral. As a result, these four skills were removed from the BTSSA-S scale and placed on a supplemental scale so they could be assessed when students presented with needs that required individualized intervention outside of the classroom. One item was completely deleted from the assessment due to a high percentage of cannot ratings.

### **Instructions & User Qualifications**

The final version of the BTSSA-S includes 15 defined social skills and takes approximately 5 minutes to complete for each student. The BTSSA-S includes the following instructions: *Read each social skill below and darken the circle underneath the rating that best describes how well the student showed the skill, in comparison to his/her peers (classmates), during the past 4 weeks.* Items are scored as follows: *needs improvement = 0, typical = 1, and strength = 2.* Each skill is defined with skill steps that are provided as part of the BTSSA-S for reference.

The BTSSA-S was designed to be used with K-12 students and administered by a teacher, behavioral interventionist, paraprofessional, or school support specialist who is familiar with a student’s social skills based on at least four weeks of direct observation. The assessment is used to identify social skill strengths in students as well as areas where students could benefit from social skills teaching. Higher scores on the BTSSA-S indicate stronger use of social skills by the student in comparison to their peers, and a total score can range from 0-30.

## **Method**

### **Measures**

#### ***Devereux Student Strengths Assessment-Mini (DESSA-Mini; Naglieri et al., 2011)***

To establish validity, the BTSSA-S was administered at the same time with the Devereux Student Strengths Assessment-Mini (DESSA-Mini; Naglieri et al., 2011) - an 8-item standardized, norm-referenced universal behavior screening instrument completed by teachers on students ages 5-14 years old (i.e., grades K – 8). It was developed from the larger 72-item Devereux Student Strengths Assessment (Nickerson & Fishman, 2009). Teachers rate how often they have seen certain behaviors in a student over the past 4 weeks (e.g., “During the past 4 weeks, how often did the child make a suggestion or request in a polite way?”) using a 5-point scale from “Never” to “Very Frequently.” The DESSA-Mini has been found to be a reliable and valid instrument for screening students for social skills and potential behavior problems (LeBuffe et al., 2018). The internal consistency of the DESSA-Mini with this sample was good ( $\alpha = .87$ ).

### **Behavioral incidents**

Daily observations of significant student behavioral incidents were reported by staff using the Daily Incident Report (DIR; Handwerk et al., 2006). Prior research has found the DIR to be a reliable and valid instrument (Friman, 2000; Larzelere, 1996). All DIR data were stored and retrieved from the agency's electronic administrative records. For this study, school behavioral incidents (i.e., noncompliance, office referrals) were included in the analysis.

### **Participants**

For pilot testing, educators completed the BTSSA-S on students attending the Boys Town Education Center (BTEC) in Boys Town, Nebraska, from March 2024 - May 2024. Thirteen teachers and two behavioral interventionists at BTEC volunteered to participate in the study. Participants received training and instructions on how to administer the BTSSA-S prior to data collection. These participants chose up to ten students to evaluate using the BTSSA-S and 8-item DESSA-Mini at two points in time, approximately 30 days apart. Participants were able to choose any student they had regular interactions with and were asked to assess the same student at time one and time two. If this was not possible, participants were asked to choose a new student to assess. Consent was obtained from participants, and they were compensated for their time completing the assessments. Participant demographics are found in Table 1. The study was approved by the Institutional Review Board of Boys Town National Research Hospital.

At time 1, a total of 129 students from grades 5-12 and ages ranging from 11.2 to 18.9 years ( $M = 16.3$ ) were assessed. At time 2 (30 days after time 1), a total of 127 students ranging from 11.3 to 19.0 years of age ( $M = 16.4$ ) were assessed. At each time point, 150 assessments were completed. Some students were rated by more than one teacher. A significantly larger proportion of students in this sample were in high school (79%;  $\chi^2 = 43.61, p < .001$ ). In this sample, 52.7% of students were receiving special education services based on a verified disability and an Individualized Education Program (IEP). Time 1 student demographics are found in Table 1.

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### **Analysis**

All data were analyzed using IBM SPSS Statistics (Version 29), except for Exploratory Factor Analysis, which was performed using MPlus software (Version 8.11). To address research question one, convergent validity was established using Pearson Product Moment Correlations. Research question two was addressed by examining internal consistency at times one and two via Cronbach alphas, with acceptable level established at  $\alpha = .70$ . Question two was further examined by determining the scale's factor structure through Principal Components and Exploratory Factor Analysis. Intraclass correlations were used to answer research question three. Sex, race, grade level, and special educational status differences, as well as change over time (research questions four and five), were examined by comparing assessment scores via independent t-tests, paired t-tests, and Analysis of Variance (ANOVA) to begin to explore group differences. Finally, the accuracy of the BTSSA-S to classify school behavioral incidents (research question six) was examined using Pearson Correlation and Receiver Operating Curve (ROC) analysis to determine a cutoff score, and logistic regression to determine the contribution of using that

cutoff score along with other factors (i.e., age, sex, race, grade, SPED) to predict the occurrence of a school behavioral incident.

## Results

### Validity

#### ***Convergent validity***

To establish validity, the BTSSA-S scale scores were compared to ratings on the DESSA-Mini. Both assessments were completed by participants at the same time. Pearson Correlations revealed there was a strong, significant relationship between the BTSSA-S total scale and DESSA-Mini at time one ( $r = .76, p < .001$ ) and at time two ( $r = .82, p < .001$ ), indicating convergent validity.

### Reliability & Factor Analysis

#### ***Internal Consistency***

Internal consistency for BTSSA-S 15-item scale was examined using Cronbach's alpha. The 15-item BTSSA-S showed good internal consistency at times one and two ( $\alpha = .85$  and  $\alpha = .87$ , respectively,  $N = 120$ ).

#### ***Principal Components Analysis***

Prior to conducting an Exploratory Factor Analysis, a Principal Components Analysis with a Varimax rotation was performed. Principal Components Analysis is a type of extraction that accounts for as much of the total variance in the observed variables as possible. Varimax rotation is a type of orthogonal rotation that produces factors that are uncorrelated and more easily interpreted. Initial eigenvalues indicated that a three-factor solution provided the best explanation for the BTSSA-S, distinguishing between skills such as "following instructions," "staying on task," and "getting others." The resulting three-factor solution accounted for 55.7% of the variance in the BTSSA-S, and three individual factors explained 20.01%, 19.01%, and 16.69 % of the variance, respectively.

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#### ***Exploratory Factor Analysis***

An Exploratory Factor Analysis was conducted using maximum likelihood as the estimator and Geomin as the rotation method. Exploratory Factor Analysis is a statistical method that identifies underlying relationships between a set of variables. This method is used to identify if items group together to form underlying common themes (known as latent constructs). Once identified, these underlying themes are often named to form "subscales." When determining if subscales are reasonable, it is important to see if the data "fit" the model. This is known as "model fit." Model fit is usually assessed using a number of statistically calculated indicators. The most used model fit statistics are the Chi-Square Goodness of Fit, the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Standardized Root Mean Square

Residual (SRMR). Models with a Chi-Square  $p$  value greater than .05, CFI and TLI values approximately .95 or greater, RMSEA values around .06 or less, and SRMR approximately .08 or less indicate good fit (Dunn et al., 1993; Hu & Bentler, 1999; Kelloway, 1998).

These data revealed three five-item factors: behavioral compliance, on-task, and sociability. This factor structure indicated good model fit,  $\chi^2(149) = 67.97, p > .05$ ; CFI = .97, TLI = .99; RMSEA = .03; SRMR = .05. Composite scores were created for each of the three factors, based on the means of the items which had their primary loadings on each factor: behavioral compliance (5 items,  $\alpha = .83$ ), ontask (5 items,  $\alpha = .75$ ), and sociability (5 items,  $\alpha = .74$ ). Table 2 displays the items for each subscale, along with the factor loadings and the factor Cronbach's alpha, mean, standard deviation, and range.

### **Test-retest & Interrater Reliability**

The intraclass correlation of .83 (95% CI = .75 - .89) indicated good test-retest reliability based on ratings of the BTSSA-S scale by the same teacher at me one and me two.

Interrater reliability was determined by examining the intraclass correlation of social skill ratings of two different teachers who completed the BTSSA-S on the same 19 students at me two, and was acceptable (.77, 95% CI = .40 - .91). It should be noted that the ratings were completed by teachers in different classrooms and subject areas.

### **Group Comparisons**

#### **Sex**

Group comparisons based on sex found no differences at me one,  $t(118) = .039, p = .484$ , between males ( $n = 68, M = 16.68, SD = 5.81$ ) and females ( $n = 52, M = 16.63, SD = 5.76$ ). Likewise, no differences were found at me two between males ( $n = 66, M = 17.39, SD = 5.77$ ) and females ( $n = 50, M = 17.84, SD = 5.94$ ).

#### **Race**

For race, there were no significant differences at me one ( $F = 2.08, p = .072$ ) or me two ( $F = .662, p = .653$ ) for students who were White, African American, Hispanic, or More than one race. The subgroups of American Indian and Asian students were too small to compare.

#### **Grade Level**

For grade level, high school students were rated higher on social skills ( $M = 16.87, SD = 5.50$ ) compared to middle school students ( $M = 15.88, SD = 6.71$ ), but the difference was not significantly different at me one ( $t = -.772, p = .442$ ) or me two (middle school  $M = 16.73, SD = 6.44$ ; high school  $M = 17.83, SD = 5.65; t = -.849, p = .397$ ).

### **Special Education Status**

Group comparisons based on special education status (i.e., general education versus special education students) showed general education students were rated significantly higher ( $M = 16.45$ ,  $SD = 5.77$ ) at me one compared to special education students ( $M = 15.48$ ,  $SD = 5.90$ ;  $t = 2.41$ ,  $p = .018$ ,  $d = 0.44$ ). General education students also had higher ratings at me two ( $M = 18.35$ ,  $SD = 5.50$ ) than special education students ( $M = 16.97$ ,  $SD = 6.05$ ;  $t = 1.27$ ,  $p = .207$ ,  $d = 0.24$ ). However, these differences were not statistically significant.

### **Change Over Time**

Evaluating BTSSA-S scale scores from me one to me two revealed there was a small, significant increase from me one ( $M = 16.45$ ,  $SD = 5.77$ ) to me two ( $M = 17.62$ ,  $SD = 5.79$ ) with a small effect size ( $d = -0.27$ ). There was also a significant increase in the sociability subscale, from me one ( $M = 6.10$ ,  $SD = 1.23$ ) to me two ( $M = 6.55$ ,  $SD = 2.23$ ),  $t(116) = -2.46$ ,  $p = .015$ ,  $d = -0.23$ , but not the on-task or behavioral compliance subscales.

### **Relationship Between Social Skills and School Behavior Incidents**

The relationship between social skills ratings on the BTSSA-S and behavioral incidents (e.g., school non-compliance, office referrals) was computed using incidents that occurred within 30 days of both assessments. There was a small, significant negative correlation ( $r = -.22$ ,  $p = .019$ ) between BTSSA-S ratings and school incidents at me one, and a medium significant negative correlation ( $r = .39$ ,  $p < .001$ ) at me two.

### **Receiver Operating Characteristic (ROC) curve**

The likelihood of a certain BTSSA-S score classifying a disruptive school behavioral incident was also examined. For this analysis, cut-scores of the BTSSA-S were created from the variables BTSSA-S12 (students with a score of 12 or less versus more than 12) and SchDis (School Disruptive Incident Group); students with a school incident within four weeks of me one or four weeks of me two. Table 3 displays the number of students in each group. Using the two groups (BTSSA-S12, SchDis), a receiver operator characteristic (ROC) curve (MedCalc Software Ltd, 2024; Murphy et al., 1987; Zweig & Campbell, 1993) was performed to help determine the accuracy of the BTSSA-S score classifying students with a school disruptive incident from those without. The Area Under the Curve (AUC) in the ROC greater than .50 means the instrument is better than chance at detecting the condition (HajianTilaki, 2013; Metz, 1978). Results indicated that a cut-score of 12 (out of a possible 30) was the classifier with an AUC of .689,  $p = .003$ , sensitivity (positive predictive value) = .67, specificity (negative predictive value) = .71. Sensitivity indicated how well the BTSSA-S score of 12 or below classified a student with a school disruptive incident; while specificity indicated how well a score above 12 classified a student who did not have a school disruptive incident. The overall accuracy was acceptable at 70%.

### **Predicting School Behavioral Incidents**

Finally, we tested factors related to school behavioral incidents. In the first step we included the factors of student age, sex (girl = 1, boy = 2), race (non-white = 0, white = 1), grade level (1 = middle, 2 =

high school), and special education (general ed = 1, special ed = 2) and any school behavioral incident (no = 0, yes = 1) as the criterion. The model was significant,  $\chi^2(5) = 17.61, p = .003$ , and accounted for 19% of the variance with middle school ( $b = 1.74, SE = .68, p = .011$ ) and special education status ( $b = 1.10, SE = .43, p = .009$ ) as significant predictors. A score of 12 or less was included in the second step and was significant ( $b = 1.51, SE = .51, p = .003$ ) and improved the model by accounting for an additional 9% of the variance ( $R^2 = .28$ ). A student with a score of 12 or less was 4 times more likely to have a disruptive school incident within a month of the assessment.

### **Feedback from Participants**

At the conclusion of the study, a brief survey was also used to obtain feedback from participants on the use of the BTSSA-S to provide insight into how the instrument could be further developed to be most useful. Educators reported that the BTSSA-S helped them better identify students who were struggling behaviorally and helped them determine what social skills could be beneficial. The BTSSA-S was also useful for lesson planning for social skills instruction and provided insight into student needs that were not as obvious from routine classroom observations. Educators suggested the BTSSA-S rating process could be further improved to track students' progress more incrementally. In some cases, students were making progress in their social skills but still received the same rating. It was suggested that it would be helpful to increase the options on the rating scale or be able to track how often students showed certain social skills to help measure their progress in smaller increments over time.

### **Discussion**

This study describes the initial phase of scale development of a social skills assessment for students in schools implementing the Boys Town social skills curriculum. The development of the BTSSA-S is an example of using a practice to research and back to practice approach (see Tyler et al., 2021). First, the idea for developing the assessment came from educators and program experts at the request of school personnel, who then participated in the development of the assessment. Next research activities were conducted to collect data and assess the psychometric properties of the BTSSAS. Finally, the results were shared with the developers and participants to get their feedback and ideas for further development. Initial psychometric testing of the BTSSA-S scale determined validity, reliability, factor structure, group differences, sensitivity to change, and ability to classify students at risk for behavioral incidents who were attending Boys Town's middle school and high school.

To establish face validity (see Hassan, 2024), content and program experts from the WellManaged Schools and School Support Programs participated in the development of the measure, and the social skill items were selected from an existing classroom management curriculum (Hensley et al., 2011). The BTSSA-S contains skills that helped youth develop mutually reinforcing relationships with peers and adults (Wolf et al., 1995). Students' social skills were rated based on the teachers' observations of students' social interactions with classmates, the teacher, and other adults in the classroom. The strong correlation between the BTSSA-S with the DESSA-Mini provided convergent validity for assessing social skills. The psychometric properties of the BTSSA-S scale, therefore,

demonstrated it is a valid assessment of social skills for middle and high school students who were receiving educational services while placed in the residential program.

Psychometric testing showed the reliability and internal consistency of the Total Scale of the BTSSA-S was good. Scores for the Total Scale ranged from 0 – 30 for the core 15 social skills. Exploratory Factor Analysis showed the BTSSA-S had three subscales with acceptable to good internal consistency. The *behavioral compliance* scale included five skills, such as following instructions and accepting a consequence; *on-task* skills included five skills, such as completing tasks and listening; and the *sociability* scale included five important relationship skills, such as having a conversation and working with others. These skills align closely with the *Collaborative for Academic, Social, and Emotional Learning (CASEL)* domains of Self-Management, Responsible Decision-Making, and Relationship Skills (CASEL, 2025). For example, the BTSSA-S skills of having a conversation and working with others are important for positive student interactions with peers and adults, and similar to the skills of communicating effectively and practicing teamwork found in the CASEL domain of Relationship Skills (CASEL, 2025). The subscales also aligned with the three primary domains of skills outlined in Jones & Bouffard (2012): emotional processes, cognitive regulation, and interpersonal skills, respectively. Teaching to these skill domains has been associated with short-term decreases in problematic behaviors (e.g., aggression) and long-term improvements in health and academic achievement (Jones & Bouffard, 2012).

For this study, we started to conduct an initial exploration of test-retest and interrater reliability, and whether the scale was sensitive to change over time. The test-retest reliability was good, and the interrater reliability was acceptable but was limited by the small sample size. The BTSSA-S also showed that it was sensitive to change, with significant gains assessed over 30 days with a small effect size. We were not expecting to see significant changes within 30 days, so further evaluation is needed to see if this finding replicates.

The preliminary findings of group comparisons showed there were no significant differences based on sex, race, and grade level. This finding is in line with the racial similarity of DESSA (LeBuffe et al., 2022), DESSA-Mini (LeBuffe et al., 2014), and DESSA-HSE scores (LeBuffe et al., 2022). Interestingly, a significant difference between male and female scores was found in the literature for the DESSA (LeBuffe et al., 2022), DESSA-Mini (Naglieri et al., 2022), DESSA-HSE testing (LeBuffe et al., 2022), and the SSIS Brief SEL scale (Anthony et al., 2020), but not in our study of the BTSSA-S. The difference between the studies could be attributed to the students being placed in the residential program and all of them receiving social skills teaching, but it warrants further inquiry. Configural measurement invariance also needs to be conducted in future research to assess potential differences based on cultural groups (Schmidt & Kuljanin, 2008). Though teacher ratings were higher for high school students than middle school students, they were not significantly different. Students who received special education services had significantly lower assessed social skills than general education students, similar to other research (Kavale & Forness, 1996; Kucukera & Tekinaraslana, 2015), but over gains were made, their scores were not significantly different at time two. These significant gains were also greater than expected and warrant further inquiry.

The accuracy of the BTSSA-S scale was acceptable at classifying students with school behavioral incidents (e.g., office referrals). Students with a total score of 12 or below out of 30 were 4 times more

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likely to have a significant behavioral incident within the 30-day timeframe. These early results suggest that universal use of the BTSSA-S could aid in earlier identification of students who could benefit from social skills teaching. For example, students with total scores that are 12 or below could receive teaching on the identified social skills to prevent later occurrence of problematic school behavior. The BTSSA-S can also be used to identify a group of skills based on the subscales or individual skills that could indicate a student's strengths or needs. Using the cut-score of the BTSSA-S can help identify students who could benefit from social skills teaching sooner, prevent behavior problems, and improve efficiency of staff and school resources by creating a system for prioritizing students for one-to-ones and social skills groups.

### **Limitations and Implications for Future Research and Practice**

The preliminary findings of this initial phase of development showed the psychometric properties of the BTSSA-S were promising. However, as indicated, the pilot data were based on assessments that were completed by classroom teachers and behavioral interventionists who were trained in the Boys Town Model, and conducted with students who were placed in the Boys Town Family Home Program and attending Boys Town schools. Therefore, further development and testing are necessary to confirm the psychometric properties and establish the external validity of the BTSSA-S beyond Boys Town schools. Ongoing research will be conducted to address the limitations.

First, research is needed to confirm the scale structure of the BTSSA-S in a non-overlapping sample using Confirmatory Factor Analysis (CFA) and measurement invariance (e.g., configural, metric, scalar) using multigroup CFA (see Milfont & Fisher, 2015). Second, the BTSSA-S should be tested with K–12 students in other schools—both those that implement the Boys Town curriculum and those that do not—to determine whether the assessed skills are generalizable beyond Boys Town services. Third, though gains were seen in 30 days and showed promise that the instrument was sensitive to change, the significant and small effect size needs to be evaluated further. Current research is underway to evaluate changes in BTSSA-S scores over an entire school year. For instance, the BTSSA-S was completed by teachers for all students after the first four weeks of the school year as a baseline assessment of social skills and then at the end of the school year to determine student progress on social skills over the course of the year. The results of this study are forthcoming. Additionally, future research will evaluate how gains in social skills are related to student attendance, academic achievement, and school behavior. Efforts are also underway to respond to participant suggestions to improve the way the BTSSA-S can be used to track students' incremental progress over time. Rather than changing the scale of the BTSSA-S, it was determined that participants were in need of a supplemental tool that could help them observe the frequency of student usage of the social skills (e.g., time on task) to assess smaller approximations of change that could be later used to inform the ratings on the BTSSA-S scale. Finally, though the BTSSA-S originated from the Boys Town social skills curriculum, further testing and development are needed to

evaluate the scale's properes and determine modifcaons needed for use with Boys Town services in other sengs (e.g., family-based, residenal).

In conclusion, the study provides an example of using a pracce to research and back to pracce approach with educators and praconers to improve services for children and families (see Tyler et al., 2021). Prior to this inial development of the BTSSA-S, an assessment for early idenficaon of Boys Town social skills teaching for students in schools did not exist, and procedures for doing so varied from

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school to school (Ringle et al., 2025). Preliminary evaluaon of the psychometric properes of the BTSSA-S found it to be a valid and reliable assessment of student social skills in Boys Town schools using the Boys Town social skills curriculum, which is a core component of the evidence-based TFM. Ongoing efforts by praconers, educators, and researchers are needed to further develop the BTSSA-S so it can be used to aid in the connuity and quality of support for more youth and families.

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**Table 1**

*Adult and Youth Demographics at Time 1*

<u>Educator (N = 15)</u>		<u>Youth (N = 129)</u>	
	Percent		Percent
Posion		Sex	
Teacher	87	Female	43
Other Staff	13	Male	57
Sex		Special Educaon	
Female	73	Yes	53
Male	20	No	47
Unknown	07	Race	
Years Experience		Black/African American	25
6-10 years	27	White	41
11-15 years	20	Hispanic/Lano	15

More than 15 years	53	Two or More	14
Degree		Other	5
Bachelor's	20	Grade Level	
Master's	73	Middle School	21
Other	7	High School	79
Race			
White	87		
Unknown	13		
Ethnicity			
Not Hispanic/Lanx	93		
Unknown	7		

**Table 2.**

*Factor Structure, Cronbach's Alpha, Mean, Standard Deviation, and Range of the BTSSA-S*

	Factor		
	Behavioral Compliance	On-task	Sociability
Accepting Criticism/Consequence	<b>0.89</b>		
Accepting No for an Answer	<b>0.86</b>		
Controlling Emotions	<b>0.75</b>		
Following Instructions	<b>0.61</b>	0.40	
Appropriate Voice Tone	<b>0.53</b>		0.37
Staying on Task		<b>0.81</b>	
Completing Tasks		<b>0.68</b>	
Asking Permission		<b>0.64</b>	
Getting the Teacher's Attention		<b>0.62</b>	0.32
Listening		<b>0.61</b>	
Greeting Others			<b>0.81</b>

Having a Conversation			<b>0.76</b>
Accepting Compliments			<b>0.63</b>
Working with Others			<b>0.62</b>
Asking for Help		0.43	<b>0.44</b>
<hr/>			
Cronbach's Alpha	0.83	0.75	0.74
M	1.04	1.08	1.22
SD	0.55	0.46	0.45
Range	0-2	0-2	0-2

Note. Bolded loadings indicate final factor for each item.

**Table 3**

*Number and Percentage of Students in Each Cutoff Group (N=129)*

Group	Yes		No		Missing	
	N	%	N	%	N	%
T1 BTSSA-S 12 or below (BTSSA-S12)	29	24	91	71	9	7
School Disruptive Incidents (SchDis)	49	38	77	60	3	2

Note. BTSSA-S, Boys Town Social Skills Assessment for Schools

## **International Collaboration to Explore Elements for an Effective Residential Childcare Workforce**

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### **Abstract**

Residential childcare workers provide critical support to vulnerable children around the world. Building and maintaining a qualified residential childcare workforce is challenged by myriad forces, the foremost of which is recruiting and retaining staff for valuable work often misaligned with available compensation; making individual qualifications at hiring, ongoing training, supervision, and data support systems to monitor performance critical for quality care. This study explored the similarities and differences among these essential elements of staffing across distinct programs: Youth Education Centers (YEC) in Poland, Ciudad Escuela Muchachos (CEMU) in Spain, and the Boys Town Family Home Program (BTFHP) in the

United States. Using an autoethnographic approach, the authors, who are a diverse team of practitioners and researchers, provide insights guided by personal experience about the programs as they compared and contrasted program training and evaluation manuals and materials, job descriptions, etc. The focal programs shared several similarities, most notably prioritizing children's dignity. However, notable differences also offer possible solutions for region-specific challenges in building and sustaining a qualified residential childcare workforce. Future implications for ongoing international collaboration to establish training standards are discussed.

**Keywords:** Residential Childcare Workers, Training, Supervision, Evaluation, International Collaboration

**Practical Implications:**

- The three programs had different qualification requirements, training, supervision, and evaluation approaches for residential childcare workers.
- YECs in Poland had the highest educational requirements, CEMU balanced formal education with training to ongoing staff needs, and BTFHP trained staff according to the evidence-based model, regardless of their prior formal education.
- Blending the approaches could help each program develop manualized systems so staff learn how to do the job consistently, and are prepared with the theoretical foundation from formal education and hands-on training to advance in their career.
- International collaboration is recommended to determine agreed-upon performance and outcome measures that could be used to support an effective residential childcare workforce.

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### **International Collaboration to Explore Elements for an Effective Residential Childcare Workforce**

The global prevalence of children in residential care worldwide in 2024 was 102 per 100,000 (UNICEF, 2024). These children and youth are often vulnerable due to complex trauma histories and a myriad of emotional and behavioral problems and needs (Bravo et al., 2023; Briggs et al., 2012; Opening Doors for Europe, 2016; Pane et al., 2015). Regardless of country or circumstance, they all deserve care "in the spirit of peace, dignity, tolerance, freedom, equality and solidarity" (United Nations Convention on the Rights of the Child [UNCRC], 1990, p.1). An effective residential childcare workforce is critical to ensuring these children mature into flourishing individuals and productive citizens of their respective communities. Unfortunately, many programs worldwide face high turnover of staff who are underpaid and receive insufficient training and development (James et al., 2022). Universally agreed-upon core standards could provide direction for the essential training, supervision, and evaluation needed for residential childcare workers to provide high-quality care and support for children in therapeutic residential settings worldwide.

Currently, there is considerable variability in the qualifications required, as well as in the training and support provided to residential childcare workers (James et al., 2022; Whitaker et al., 2023). Flexibility is necessary to meet the diverse needs of youth and the unique contexts in which programs

operate. However, we posit that core standards could be developed to improve preparation, support, and sustainability of a residential childcare workforce globally.

There are several factors that could impede agreement on what constitutes adequate preparation and support for residential childcare workers around the world (Whitaker et al., 2023). Countries have different political views of residential programs, rates of utilization, and regulations. Countries such as the U.S., Canada, Australia, and Ireland have the lowest rates of residential care utilization (James et al., 2022; UNICEF, 2024) and have wide variations in the educational requirements (Huefner, 2018). In the United States, some residential treatment facilities have even been referred to as “warehouses of neglect,” in part because staff are poorly trained and supervised (United States Senate, 2024). In Australia, past attempts have been made to eliminate residential programs (Ainsworth, 2017; Ainsworth & Hansen, 2005; Ainsworth & Holden, 2018). Conversely, countries such as Portugal, Argentina, Germany, Spain, and Israel have high utilization of residential programs and require direct care staff to have bachelor’s degrees in education, psychology, or social work (del Valle et al., 2012; James et al., 2022).

The model of care and treatment approaches used by residential programs vary. Some programs do not have any theoretical foundation (Whitaker et al., 2023), while others use evidence-based models like the Teaching-Family Model (TFM; see Wolf et al., 1995). The TFM prioritizes skills-based teaching approaches that are grounded in behavioral principles (see Teaching-Family Association [TFA], 2024; Daly & Thompson, 2023). In these programs, direct care staff are considered the “primary change agents” (Father Flanagan’s Boys Home [FFBH], 2021; Wolf et al., 1995) or the “main teachers” who provide therapeutic education to children in the residential milieu (Trieschman et al., 1969). In European countries like Germany and Spain, programs focus on social pedagogy and social education (James et al., 2022), and direct care staff are referred to as educators.

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Regulations for determining the training, supervision, and evaluation requirements for providing care to children in residential programs also differ by country. Many countries establish their regulations based on the United Nations Convention on the Rights of the Child (UNCRC, 1990) requiring facilities caring for children to conform to the standards established by *competent authorities* to determine the suitability of staff and competent supervision (UNCRC, Article 3.3, 1990). The UNCRC is the fundamental parameter for most countries, except the U.S., which is the only member of the United Nations that has not ratified the UNCRC (Harris, 2024). Instead, in the U.S., background checks are required for staff to work in residential childcare (United States Congress, 2018; United States Senate, 2024), but standards for youth rights and staffing requirements are determined by the state, independent accrediting organizations, or the agency providing the residential service (Huefner, 2018).

There is also considerable variability in the structural organization of residential childcare programs. Some residential programs are operated by private companies, and others are operated by public agencies or charitable organizations. Variation in structural organization often contributes to meaningful differences in administration and oversight, financial resources and priorities, and possible external accountability. Additionally, residential programs respond to youth with varying treatment needs,

ages, genders, and cultural backgrounds. The histories and cultural contexts of the organizations also shape the philosophies and theories on how the organization cares for children. With all these factors, it is easy to understand why it has been so difficult to establish international agreement on universal standards for the training and support of residential childcare workers.

### **Historical and Program Context and National Standards**

Therapeutic residential centers for youth vary significantly across countries and agencies, reflecting a need for diversity in the training and support needed for residential childcare workers. In addition to national and regional policies, regulations, and standards, residential childcare programs differ based on cultural context and organizational ethos that have influenced the philosophy and models of caring for children in residential programs. For instance, ethnic or religious heritage often inspires the founding of a residential program and provides insight into the mission and core principles of a program's "way of doing things," that subsequently influences the training and support of the residential childcare workers. Intangibles like these imbue a sense of calling that can positively contribute to job satisfaction and meaning in the lives of staff, and reduce turnover (Rowles et al., 2021). The following provides a brief historical context of examples from three separate residential programs in Poland, Spain, and the United States, as well as an overview of the national standards for residential care in these three countries.

## **Poland**

### ***Historical Context***

In 1911, a Polish pediatrician and teacher, Janusz Korczak, developed a model of education in a residential setting that empowered orphaned children and taught them the skills and values needed for independence (Bragiel, 2013). As a practitioner, Korczak had a thorough knowledge of the mental and social aspects of child development and taught tolerance, respect, and love for the child (Kmak, 2021). Korczak started the Republic for Children, which provided the children with opportunities for self-governance, including a court and parliament. During WWII, Korczak's orphanage was forced to move to a Jewish ghetto, and Korczak was later informed that he and his children would be taken to a Nazi

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concentration camp (Holocaust Encyclopedia, 2020). He was offered protection from Aryan sympathizers who were inspired by his work, but he refused to abandon the children in the orphanage. On August 5, 1942, Korczak boarded the train with the children to go to their deaths in the gas chambers of Nazi Germany (Holocaust Encyclopedia, 2020). The work of Janusz Korczak later inspired the idea for the UNCRC, which Poland proposed in 1978 and was adopted by the United Nations in 1989 (Bragiel, 2013; Humanium, n.d.; Kmak, 2021). Korczak's influence is evident in Youth Education Centers (YEC) in Poland that are centered around schools with a strong commitment to education.

### ***National Standards for Residential Care***

Poland's YECs work with children and adolescents characterized as "socially maladjusted," typically by providing specialized educational and therapeutic support. YECs are designed to eliminate the causes and manifestations of social maladjustment and prepare residents for life in compliance with

prevailing national social and legal norms. In Poland, efforts toward quality standards for residential childcare have undergone significant developments in recent years to create centers that prepare youth for independent, creative, and responsible lives in non-institutional environments (Konopczynski, 2016). Poland's standards for childcare were established by national legislation, with their implementation delegated to local commune authorities – the smallest units of local government responsible for managing public services like childcare – resulting in observable regional variation in quality and practice. The Polish government introduced non-mandatory childcare standards in September 2023 to smooth out regional variation and better align with international guidelines. Polish standards demonstrate the importance of suitability of staff, which is a requirement of the UNCRC (1990; Article 3.3). The 2023 standards provided a uniform framework for quality assurance encompassing five thematic areas: work with the child, children's safety, organization of work, staff development, safety and cooperation with parents, and monitoring and evaluation (Eurydice, 2024). Having qualified pedagogical staff is considered critical to providing quality services to children and adolescents in the Polish model (Granoet et al., 2014).

## Spain

### ***Historical Context***

Historically, in Spain, the Catholic Church managed residential childcare (Bravo & del Valle, 2009; del Valle et al., 2015). In 1956, a Catholic Priest named Fr. Jesus Silva Mendez ("Fr. Silva") reshaped the way residential programs cared for youth by starting the *Nation of Boys*, called *Benposta*. Fr. Silva was inspired by the work of Fr. Edward J. Flanagan, who began Boys Town in the United States in 1917. Like Fr. Flanagan's Boys Town, Fr. Silva envisioned cities where the children had the means and training necessary to "become the leaders of the earth" (Muñiz Sánchez, 2017). At that time, Spain was under dictatorship by Francisco Franco. Yet, Fr. Silva created democratic communities for youth, including a mobile city called Circo Los Muchachos (Circus of the Boys), which traveled the world. It was through the Puerta de Circo, on its way through León, Spain, where an architect named Alberto Muñiz Sánchez ("Tio Alberto") would become inspired by Fr. Silva's work.

Tio Alberto started Ciudad Escuela Muchachos (CEMU) on December 1, 1970, for children in Leganes, Spain, as a school of democracy and culture that would complement the family and child's education (Muñiz Sánchez, 2017). He conceived it as a civic experience for children of any social condition and personal and family situation. Thus, CEMU became a democratic community for children

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(Muñiz Sánchez, 2017) that preceded the transition away from large institutions and the arrival of democracy in Spain in 1978 (Bravo et al., 2023).

CEMU is a learning community in which children and youth grow under the care of professionals who have the assistance of the program components that include the Physical Environment (a town at a children's scale); the Psycho-Emotional Environment (a teaching methodology based on children being protagonists of their development, children participation; and democracy, as well as a loving and family atmosphere). CEMU offers children a multidimensional space for integral development in which they are

loved, learn social skills and democratic values through play, and have access to a wealth of symbolic and experiential learning opportunities. CEMU has a strong commitment to education and is centered around the school in a self-contained community (i.e., town) that incorporates the architecture in the town to inspire and educate youth. Youth are cared for by residential staff called educators and reside in artfully decorated, homelike settings where bedrooms face a central atrium. The community created at CEMU was developed with a unique concept of “Amoristad” (i.e., “lovingkindness”), synonymous with friendship and brotherly love, “that is a force that helps develop the basic principles of valuing life, compassion for the suffering of others, and empathy” (Muñoz Sánchez, 2017).

### ***National Standards for Residential Care***

The residential childcare system in Spain includes resources for children and adolescents (recursos residenciales para niños, niñas y adolescentes) and therapeutic residential centers (centros residenciales terapéuticos), serving children and adolescents who cannot remain with their families. Residential childcare is overseen by regional governments referred to as Comunidades Autónomas (Autonomous Communities); nevertheless, there have been considerable efforts towards deinstitutionalization with residential facilities by moving toward small homes with adequate care ratios to provide safe environments and individualized care (Poole Quitanna et al., 2025). To aid in this process, Quality Standards in Residential Care were developed by del Valle et al. (2012) that define requirements for resources, management, youth rights, safety, and participation. These standards highlight the importance of promoting dignity, self-reliance, and youth participation in the community (UNCRC, 2019, Article 23.1). Even though all of the autonomous communities in Spain have not adopted these Quality Standards (Cantos-Egea et al., 2024), there is agreement on the level of professionalism of residential childcare. Residential childcare workers are required to have a university degree when hired and receive specialized training (del Valle & Fuertes, 2000; del Valle et al., 2012; Medina, Children’s Platform, 2023). Focus has also been placed on improving the specificity of staff functions and professional competencies, including the need for “teaching staff” (those with ongoing daily interaction with children) to generate emotional bonds with the children to help balance the rights of both children/adolescents and professionals (Cantos-Egea et al., 2024; Larrañaga & Melgo, n.d.).

## **United States**

### ***Historical Context***

Boys Town was started in 1917 by an immigrant Irish Catholic Priest, Fr. Edward J. Flanagan, as a home and school for “wayward” boys of all races and religions in Omaha, Nebraska, United States (Lynch & Hyland, 2016). However, laws at that time in Omaha did not allow the boys of different races

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and religions to live together in the same home, so Fr. Flanagan started his own incorporated Village of Boys Town outside of the city of Omaha. He empowered the boys with quality education and self-government based on democratic principles. At that time, boys lived in dormitories to accommodate the number of boys, but Fr. Flanagan envisioned converting the dormitories into family-style homes. Unfortunately, he did not realize his vision; in 1948, he died in Germany after traveling to Korea, Japan,

and Austria after World War II, at the request of U.S. President Truman, to help these countries attend to the needs of children orphaned during the war (Lynch & Hyland, 2016). Fr. Flanagan's work continued after his death, however, and in 1975, the TFM, which provided residential care in family-style homes, was brought to Boys Town from the University of Kansas at the request of the second successor of Fr. Flanagan, Fr. Robert Hupp (see Tyler et al., 2025). Adopting the TFM later became referred to at Boys Town as the Boys Town Family Home Program (BTFHP; see Daly & Thompson, 2023) and is a certified program by the Teaching-Family Association (TFA, 2020). Youth at Boys Town are cared for in the family-style homes by teaching-parents called Family-Teachers who raise their own children along with the Boys Town youth in the FHP. Core elements of the model include teaching social skills and self-determination, building healthy relationships, supporting religion and spirituality, and creating a positive family environment (FFBH, 2021).

### ***National Standards for Residential Care***

Residential care facilities in the U.S. include group homes, residential treatment centers, qualified residential treatment programs, and psychiatric residential treatment facilities for youth with specific needs, such as behavioral or mental health issues. In the United States, individual states or local authorities determine standards for residential childcare. Agencies providing residential childcare are licensed by the states, and accreditation standards apply to various program settings, but they are not typically specified as residential childcare (Huefner, 2018). Attempts have been made to define a consistent set of Quality Residential Standards that were developed based on comparisons of standards from Scotland, Ireland, Queensland, and the United States (Huefner, 2018). Information from these countries was used to create a comprehensive set of standards in conjunction with practitioner views on best practices and implemented in some states, such as Florida (Buel-Studt et al., 2019). For example, these Quality Residential Standards include passing a criminal background check, in-service and ongoing training to provide quality services, establishing relationships with youth, and regular supervision to ensure compliance with training and program policies and procedures. The Teaching-Family Association (2020) also has quality standards that are used to certify residential programs that implement the TFM (Wolf et al., 1995).

### **Current Study**

At the heart of quality residential programs are childcare workers who need adequate training and support to ensure the safety and well-being of vulnerable youth. Establishing an essential set of universally agreed-upon core standards could be a crucial step toward enhancing national and international consistency and collaboration—both of which are vital to improving the quality of therapeutic residential care worldwide. The purpose of this study was to explore the systems used to train and support residential childcare workers in three model programs in Poland, Spain, and the United States. The programs were compared across five key areas: (1) the roles of residential childcare workers; (2) staff qualifications, education, and pre-service training; (3) ongoing training and supervision provided by the residential program; (4) staff evaluation; and (5) administrative data systems used to monitor child outcomes. By synthesizing both similarities and differences in these

areas, the study aims to contribute to international dialogue and collaboration on improving the training and support of residential childcare workers, potentially leading to the development of universal core standards in the key areas of training, supervision, and evaluation.

## Method

Because the purpose of this study was to provide a culturally centered characterization of the residential care provider qualifications, training, and evaluation requirements across three different contexts, the autoethnographic method was used. Autoethnography involves researchers reflecting on their own insider knowledge of cultural experiences to provide insights that other researchers may not be able to know; then integrating personal and research experience so that the results are accessible to a larger audience (Adams et al., 2017). Researchers in this study had prior experience working as practitioners in therapeutic residential care programs and were able to provide firsthand knowledge of the program and cultural contexts. The autoethnographic method involved 1) researchers sharing their own experiences working in residential care, 2) observing each other's experiences from the cultural context, 3) and then connecting the findings to more formal research (Adam et al., 2017).

The research team conducted moderated monthly meetings, each about 60 minutes, for approximately one year. Initial meetings involved researchers sharing information to effectively learn from each other so that these insights could be applied to the research process. Specifically, conversations covered a broad range of topics and procedures about the program structures and staffing, theoretical models, populations, youth rights, training, and other related considerations. The materials shared included program training manuals (see Muñiz Sánchez, 2017; FFBH, 2021; 2024), as well as web-based legislative and professional guidelines (see Eurydice, 2024) operated by different agencies in Poland, Spain, and the United States. All conversations and interviews were held in English and transcribed. Collected materials that were in Polish and Spanish were translated into English using free translation tools from the web.

The process led to focusing specifically on the training and support needs of the adults who spent most of the time with the youth in the residential programs – the residential childcare workers. Meetings became more frequent as this research project took shape and concentrated on building strategies to organize the information into similarities and differences of the three programs that could be generalized to the broader field. The four core systems of facilitative administration, training, consultation/supervision, and evaluation (Teaching-Family Association [TFA], 2020) from the TFM (see California Evidence-Based Clearinghouse, 2008; see Tyler et al., 2025) were chosen to compare the support residential childcare workers received in the three programs. The definition of the four core systems were based on the TFA *Standards of Service Section DD, Integrated Systems* that include facilitative administration (e.g., staff selection, hiring, data systems), training (e.g., in-service content, assessment of staff skill acquisition), consultation/supervision (e.g., consultation service delivery, treatment planning, staff observations), and evaluation (e.g., internal evaluation/certification, consumer evaluations, accreditation). Boys Town was the only program that implemented the TFM and was certified under the TFA Standards, but the team agreed to use the core systems as a framework for comparison because they could be applied to the other programs.

As a result, information obtained from the meetings and program materials from each country was organized based on staff roles and responsibilities; staff qualifications and pre-service training required of staff prior to working with youth; ongoing staff training and supervision of staff; staff performance evaluation; and administrative data support used for continuous quality improvement. The use of the autoethnographic method allowed for better understanding of the cultural contexts so that similarities and differences could be synthesized in a way that highlighted the priorities of the three programs to inform future development of universal core standards.

## Findings

### Staff Roles & Responsibilities

Staff roles and responsibilities of residential childcare workers for the three programs were examined. There was a notable similarity that all three programs had titles related to teacher/educator i.e., “pedagogues” in Poland’s YECs, “social educators” at CEMU in Spain, and “Family-Teachers”<sup>1</sup> at Boys Town in the United States. It should be noted, however, that the roles were distinctly different from classroom educators, focusing instead on teaching socialization and independent living skills to youth in their residences/homes. Staff provided for the day-to-day needs of youth by creating personalized plans to nurture children’s strengths, belonging, and self-determination; providing children with activities they could participate in during their free time; and helping youth learn life and academic skills.

The structure of the treatment teams differed, however. YEC pedagogues were part of a team made up of teachers, psychologists, social workers, and therapists. At CEMU in Spain, teams were comprised of 12 social educators per home (5 assistant educators, 7 social educators), a coordinator, and director. At Boys Town, Family-Teachers were married couples who lived with youth under the same roof in family-style homes; Family-Teachers had their own private living area and cared for their own biological children as well. Family-Teachers were supported by an Assistant Family-Teacher and Consultant.

<sup>1</sup> The title Family-Teachers, originally called Teaching-Parents or House Parents in the TFM, emphasizes being a caregiver who teaches youth skills for healthy family relationships.

### Staff Qualifications & Pre-Service Training

Staff qualifications and pre-service training were compared, and the similarities and differences are summarized in Table 1. Similarities showed that all three programs required staff to have practice-based training prior to working with youth. However, there were differences in the level of prior formal education required of childcare workers and the specificity of the on-the-job training they received. In Poland, the YEC implemented the most academically rigorous requirements, mandating that pedagogues possess second-cycle (master’s) degrees in “resocialization” or “sociotherapy”. The YEC system valued formal academic credentials as a prerequisite for working with vulnerable youth. The academic program is considered a “practical profile in student education” and is focused on developing practical skills and

social competencies that are useful in a future profession. This means more than half of the course credits are dedicated to activities such as workshops, laboratories, internships, or project work that build practical skills. In Spain, CEMU also required higher education qualifications, but balanced formal education with practical skills training in the program. Educational requirements in

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Spain were more general compared to Poland, with degree concentrations in related areas such as social work, education, or psychology for social educators; assistant educators were qualified based on completing a certification program prior to a college degree. Program knowledge was then gained through on-the-job learning experiences, shadowing, and coaching from more experienced social educators and coordinators. In the United States, Boys Town adopted a significantly different approach. Rather than formal educational credentials, the emphasis was on fidelity to implementing the evidence-based program grounded in the TFM and creating a family-like environment. This reflects the Boys Town philosophy that views modeling, relationship-building, and teaching skills as more fundamental than formal educational qualifications to ensure consistent implementation of the model across all of the programs.

Synthesizing the similarities and differences of the three programs highlighted the following priorities for preservice training: 1) formal training that was developed specifically for residential childcare workers was required before staff were allowed to work with youth; 2) on-the-job training built on formal training to link theory and practice, and 3) specific skills-based training that was manualized and/or from an evidence-based model was used to improve consistency and effectiveness among staff.

## **Ongoing Training & Staff Supervision**

### ***Ongoing Staff Training***

Similarities showed all three programs provided ongoing training to ensure staff complied with regulations and were able to provide for the safety and well-being of youth; however, each program had unique approaches for ongoing staff training. Poland's YEC emphasized ongoing professional development within a structured promotion system that relied heavily on the childcare workers' prior academic preparation, with pedagogues bringing substantial theoretical knowledge from their university education. Ongoing training was not a structured training program on a standardized model of care, but rather it was individualized and focused on addressing specific challenges within the YECs. CEMU provided a blend of orientation training and ongoing professional development. New social educators received basic training on the organization's educational and social goals, with emphasis on protective environments and quality treatment. Annual training was mandatory, but the content was determined with staff input on topics that balanced organizational priorities with youth needs. Boys Town featured the most intensive pre-service training program for Family-Teachers, with a competency-based approach that included behavioral rehearsals and skill acquisition assessments, regular feedback, and consultation on the evidence-based model and youth treatment needs. Ongoing training and continuous skill development were a continuation of pre-service training to maintain and improve fidelity to model implementation and treatment consistency.

Combining the similarities and differences provided examples of priorities for ongoing staff training, such as: 1) continuity of training by building ongoing training on the prior pre-service training and formal education; 2) determining training topics based on staff input to address emerging trends and youth needs; and 3) emphasizing program implementation in ongoing staff training for greater consistency among team members.

### **Staff Supervision**

Staff supervision and ongoing training systems were compared, and the similarities and differences are summarized in Table 2. Similarities in supervision revealed all three programs had clearly defined supervisors and requirements, regular meetings, and systems for effective communication and teamwork, with unique differences in focus and structure. The YEC supervision system operated primarily through instructional hierarchies that emphasized legal compliance with national regulations and professional standards. The center director oversaw pedagogues or educators' performance, ensuring compliance with regulations and professional standards, with additional oversight from a Pedagogical Council when necessary. CEMU employed an integrated supervision model. Home Coordinators provided directed supervision to the social educators, working collaboratively with the Technical Team of Coordination, Guidance, and Follow-Up (ETCOS) to oversee and guide educational interventions. This approach allowed for responsive supervision that adapted to emerging needs while maintaining program consistency. Boys Town implemented the most structured and intensive supervision system from consultants who provided support that was differentiated based on Family-Teacher experience. Referred to as the "Triadic Model," Consultants provided support to Family-Teachers with weekly consultation and monthly observations so Family-Teachers could best support the youth (FFBH, 2024).

Merging the similarities and differences highlighted the following priorities for supervision: 1) supervisors had knowledge of regulations and professional standards to ensure compliance; 2) integrated technical teams provided flexible support to staff to address emerging program and youth needs; and 3) intensive consultative coaching was provided to staff to develop proficiency and fidelity for consistent implementation of the program model and best practices.

### **Staff Evaluation**

Staff evaluation systems were compared, and the similarities and differences are summarized in Table 3. All three programs were similar in that they had formal evaluation of staff performance to ensure youth safety, well-being, and progress, but there were differences in the focus, frequency, and method of evaluation. The YEC focused its evaluation of pedagogues on legal compliance, ethical adherence, and maintaining professional standards. At CEMU, evaluation of social educators focused on self-perception tests, youth satisfaction, and team-based assessments and improvements. Boys Town used a multi-tiered evaluation system of Family-Teachers that included routine observations by the Consultant and formal evaluations by trained evaluators that focused on the implementation of the program model, outcomes, and youth and family satisfaction. Boys Town also required Family-Teachers and Assistants to be certified in their positions every year through formal evaluation.

Synthesizing the similarities and differences provided examples of evaluation systems that prioritized: 1) adherence to legal and professional standards for youth safety, well-being, and progress; 2) self and team-based assessments for input into staff and program improvements; and 3) routine and formal monitoring of youth and consumer satisfaction, youth and program outcomes, and program implementation.

### **Administrative Data Support**

Administrative data support systems that provided oversight of youth behaviors and outcomes for continuous quality improvement were compared, and the similarities and differences are

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summarized in Table 4. Similarities showed all three programs had data systems to monitor compliance, quality assurance, and youth safety, but with differences in how the data were used. The YEC system focused on risk management and adherence to established standards, documentation of "extraordinary incidents," compliance with safety regulations, and tracking child progress on Individual Educational and Therapeutic Plans. Youth data were stored in an online central system, which was accessible to the centers and the Ministry of Education. CEMU employed a comprehensive e-management platform that tracked social and educational interventions across multiple domains. This system, called *educacemu.es*, allowed for real-time documentation and generated reports accessible to leadership. Boys Town utilized advanced data systems and dashboards developed and refined over years that emphasized data-driven decision-making and model fidelity monitoring. This included reporting of significant behavioral incidents (i.e., Daily Incident Report, DIR), that provided a report of incidents for all youth that were reviewed by staff, consultants, administrators, and an internal audit department (i.e., Program Audit) daily.

Synthesizing the similarities and differences in how administrative data were being used provided examples of systems designed to: 1) monitor compliance and significant incidents that were reported to administrative and governing authorities; 2) intervention tracking to support consistent and holistic intervention; and 3) comprehensive performance management with data visualization dashboards that were used by staff and supervisors to monitor youth and program outcomes and program implementation for continuous quality improvement.

### **Discussion**

This study provided a cross-national comparison of approaches to residential childcare staffing across Poland (YEC), Spain (CEMU), and the United States (Boys Town). The comparisons of the three programs demonstrated fundamental agreements on the following: (1) staff were required to have practice-based training prior to working with youth; (2) staff were provided ongoing training to help them meet the evolving needs of youth; (3) supervision structures were in place to provide oversight, and regular meetings were held for effective communication and teamwork; (4) formal evaluations were conducted on staff performance to ensure the well-being, safety, and progress of youth; and (5) data systems were utilized to monitor compliance and youth safety. Despite serving similar populations of vulnerable youths and having similar roles and responsibilities, the programs had distinct approaches to staff training and support influenced by historical, theoretical, and regulatory contexts. Comparisons

revealed the YECs in Poland emphasized academic credentials and pedagogical expertise; CEMU in Spain balanced professional qualifications with organizational values and on-the-job training; and Boys Town in the United States prioritized teaching social and relationship-building skills supported by systems to train, supervise, and evaluate staff implementation of an evidence-based model.

A notable similarity of all three programs was the inspirational heritage of the programs that emphasized education, community, and empowering children with systems of self-government and youth voice. The three examples showed how residential programs were started in these countries to address the needs of vulnerable children during times of great uncertainty and strife. Many residential programs worldwide can point to similar historical or cultural legacies. Providing residential childcare workers with a connection to a meaningful history and mission, such as these, is crucial to maintaining an inspired workforce. For example, Rowles and colleagues (2021) indicated strong associations of

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“sense of calling” with improved job satisfaction and retention. Finding one’s calling in a meaningful career is much more motivating than working in a “warehouse of neglect” and certainly influences the quality of care one provides.

The differences across the three programs raise important questions about the optimal approach to creating an effective residential childcare workforce. The YEC model in Poland provides a robust academic foundation to promote academic and practical competencies and accountability for individual practitioners. CEMU’s team-based approach in Spain balances academic preparedness with flexibility and responsiveness to ongoing staff and youth needs. Boys Town uses a different staffing structure with married couples and trains and supports them with quality assurance systems established by the defined evidence-based model. As shown, all these approaches have strengths and weaknesses. For the first example, requiring staff to have advanced degrees ensures staff have a theoretical foundation with general competencies when they start. However, requiring advanced degrees may limit the candidate pool and may not be financially sustainable due to demands for compensation. In the second example, a flexible and responsive approach can improve teamwork and staff cohesion but may face challenges in standardizing a model of care that can sustain when there is turnover in staff. In the third example, training staff to implement evidence-based practices can facilitate change and positive outcomes in youth without requiring staff to have prior education. However, if training is applied too rigidly, it may impede staff from generalizing competencies needed to advance in the profession, especially those without prior education (Cook et al., 2017).

The examples of the three programs range from reliance on academic preparation of the individual (Poland) prior to being hired to intensive training and consultation of an evidence-based model after being hired (Boys Town), with CEMU taking a more flexible, needs-driven approach to requiring formal educational or a certificate prior and on-the-job training after. Examining this range of options opens alternatives for enhancing the residential childcare workforce. For instance, theoretical knowledge acquired during formal education provides learning related to the “why” that is broader in scope, versus on-the-job learning that provides training on the “how” based on practical demands of the job (Gessler, 2019). Some organizations may prefer program-based learning over school-based learning

because staff can transition more easily and their skills match better, but this can limit staff's learning potential (Gessler, 2019). To address this gap, internships and apprenticeships can link theory and practice by combining real-life experiences with pedagogical concepts to strengthen staff skills (Beauchamp & Thomas, 2009; Darling-Hammond, 2006). Though apprenticeships have traditionally been perceived in the United States as having to choose between a trade or college (Roden, 2022), there have been recent attempts to expand apprenticeship models in the caring professions to improve recruitment, training, and retention (U.S. Department of Labor, n.d.). Similarly, in other parts of the world, apprenticeships provide pathways to higher education and higher-paying careers (Roden, 2022). The apprentice approach is similar to the option available to residential childcare staff in Spain, who can obtain a certificate in high school to begin work as an assistant and work toward the social educator role after completing their college degree, with further advancement to a coordinator, etc. Future research could explore the idea of internships and apprenticeship-based models for developing a residential childcare workforce.

As the field of residential childcare continues to evolve globally, opportunities exist for cross-national learning and adaptation of staff preparedness and development. The emphasis on academic

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preparation in Poland's YECs, CEMU's blended academic and on-the-job training model, and Boys Town's skills-based training and consultation approach each offer valuable components that could inform a more comprehensive approach to training a residential childcare workforce. For example, staff in Poland and Spain already complete formal education at the university level that prepares workers with knowledge regarding professional ethics, social policy, child development, etc., but the academic program may lack education on how to implement evidence-based practices in specific settings. At Boys Town, staff are trained to implement an evidence-based program, but access to a candidate pool with prior academic preparation could improve staff readiness before being hired. Collaboration between residential programs and local colleges and universities on academic coursework that includes evidence-based practices could generate greater student interest in entry-level positions and equip them with practical knowledge sooner. Aligning university curricula with training, supervision, and evaluation manuals based on the job-related skills required by residential programs could also provide consistency, continuity, and repetition to improve staff competencies and performance.

Regarding the use of administrative data systems, all three programs had systems in place that ranged from compliance monitoring to comprehensive program and staff performance management for continuous quality improvement. Real-time reporting of program implementation and outcome data that is available to staff and administrators is important for staff development, program quality, and most importantly, youth and family success (Tyler et al., 2025). Integrated data systems could also improve alignment across regions, states, and countries. For instance, efforts are underway in Spain to improve consistency across Autonomous Communities by encouraging the transformation of continuous improvement systems that allow for real-time decision-making about the residential resources provided to children and families (Poole Quintana et al., 2025). International collaboration should continue to explore the development of agreed-upon performance and outcome measures that could be used to evaluate residential childcare workers consistently across programs and countries.

## Limitations and Future Directions

This study was meant to further the understanding of similarities and differences in training and development of residential childcare workers across three countries. Though the study provided new insights by synthesizing the examples from Poland, Spain, and the United States, it had several limitations that need to be addressed in future research. First, this study only included residential programs from one agency in each country. Second, the three programs in this study prioritized training residential childcare workers to teach socialization and independent living skills, and relationship building in their roles as caregivers. Therefore, the findings may not be representative of other residential programs in these countries and around the world that use different approaches. Next, this study did not include quantitative data needed to evaluate treatment approaches and implementation, staff training and youth outcomes, satisfaction, and related factors. As recommended by other researchers (see James et al., 2022), evaluating program outcomes based on staffing models is an important need for future research. Comparisons of different treatment approaches, types of staffing (e.g., shift staff, teaching-parent), and supervision systems could evaluate the immediate and long-term youth and family outcomes resulting from different models, as well as differences in youth and staff satisfaction, staff retention and burnout, and additional indicators of program success. Other important areas of research are how these different staffing models create community, empower youth self-determination, engage and involve families, and help youth transition into adulthood.

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## Summary and Implications

Future international conversations are encouraged to examine how elements from different training and supervision approaches might be integrated to create more effective hybrid models that could advance the support for a more effective international residential childcare workforce. Despite the differences observed across the three programs, the findings of the research conducted support an essential conclusion. Effective residential childcare workers need to create a safe, stable, competent, and secure interpersonal relationship with the young people they steward. Regardless of cultural context, this relational foundation emerges as a critical prerequisite for achieving meaningful outcomes. This was exemplified as “respect and love of the child” in the YEC, “Amoristad” in CEMU, and the core model element of “building healthy relationships” in the TFM used at Boys Town. Ongoing international collaboration with input from youth, families, administrators, and residential childcare workers is suggested to establish core standards that are essential for training and sustaining an effective residential childcare global workforce.

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**Table 1.**  
*Similarities and Differences in Staff Qualifications and Pre-Service Training*

	Poland (YEC)	Spain (CEMU)	United States (Boys Town)
<u>Similarities</u>			
<b>Residential Childcare Worker Title Emphasizes Teaching/Education</b>	YES (Pedagogues/Educators)	YES (Social Educators and Assistant Educators)	YES (Family-Teachers & Assistant FamilyTeachers)
<b>Training is Required Before Working with Youth</b>	YES	YES	YES

<u>Differences</u>			
<b>Minimum Educaon</b>			High School Diploma (some college preferred).
<b>Training Type</b>	Master’s Degree in sociotherapy or resocializaon.	Bachelor’s Degree in psychology, social work, or educaon, or vocaonal certificaon for assistant educators.	Competency-based, praccal.
<b>Preservice Training</b>	Academic, structured.	Organizaon, needsbased.	Two weeks of intensive preservice on evidencebased model with behavioral rehearsals.
<b>Focus</b>	270 hours didacc, 150 hours pracce/ internship.	Basic training on organizaons educaonal and social goals.	Teaching-Family Model, family-style teaching and behavioral skills.
	Sociotherapy & resocializaon, youth challenges.	Social inclusion and protecon.	

**Table 2.**  
*Similarities and Differences in Ongoing Training & Staff Supervision*

	Poland (YEC)	Spain (CEMU)	United States (Boys Town)
<u>Similarities</u>			
<b>Inservice Training Required</b>	YES	YES	YES
<b>Defined Supervisor Requirements</b>	YES	YES	YES
<b>Regular Supervision Meetings</b>	YES	YES	YES
<b>Team Approach</b>	YES	YES	YES

<u>Differences</u>			
<b>Structure of Ongoing Staff Training</b>	Promotion-based, structured professional advancement systems tailored to prior formal education.	Twenty hours of annual training in topics based on input from staff to address program and youth needs.	Weekly consultation and booster trainings monthly. In-service training on topics relevant for staff development and model implementation.
<b>Oversight Structure</b>	Dual (governing & supervisory) Center Director works with the Pedagogical Council.	Direct + integrated supervision model with support from the ETCOS.	“Triadic Model” – Consultants support FTs so FTs can support the Youth.
<b>Intensity and Focus of Supervision</b>	Biannual council meetings, focused continually on ensuring legal compliance and adherence to professional standards.	Ongoing focus on educational interventions adapted to emerging needs while maintaining program consistency with oversight from the ETCOS.	Weekly consultations and monthly observations, consistency is emphasized through consultation on model fidelity, 24/7 consultant availability.

Note. ETCOS, Technical Team; FT, Family-Teacher; AFT, Assistant Family-Teacher

**Table 3.**  
*Similarities and Differences in Staff Evaluation*

	Poland (YEC)	Spain (CEMU)	United States (Boys Town)
<u>Similarities</u>			
<b>Ensures Youth Safety, Well-Being, and Progress</b>	YES	YES	YES
<b>Tracks Staff Performance</b>	YES	YES	YES

<u>Differences</u>			
<b>Evaluation Focus</b>	Legal compliance and adherence to professional standards.	Multi-layered and reflective, objectives of the individual intervention plans. Includes self-perception tests and team discussions.	Model-driven, staff skills assessment and fidelity to the Model, as well as youth/family satisfaction and outcomes.
<b>Frequency and Intensity of Evaluation</b>	Ongoing based on legal and institutional cycles.	Permanent performance monitoring, annual program review, self-assessment every 3 years.	FT observations from Consultant and formal evaluations at 6 & 12 months, and then annually for recertification.
<b>Methods of Evaluation</b>	The Hierarchical Pedagogical Council focuses on educators' discipline and professional standards.	Technical team (ETCOS) annual reviews and staff self-assessments.	Uses in-home observations and reviews of clinical data, fidelity and compliance reviews, surveys, and annual certification based on formal evaluation criteria.

Note. ETCOS, Technical Team; FT, Family-Teacher

**Table 4.**  
*Similarities and Differences in Administrative Data Support*

	Poland (YEC)	Spain (CEMU)	United States (Boys Town)
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<u>Similarities</u>			
<b>Youth Incident Tracking Systems</b>	YES	YES	YES
<b>Uses Data to Monitor Children’s Progress</b>	YES	YES	YES
<b>Uses Data for Quality Improvement</b>	YES	YES	YES
<u>Differences</u>			
<b>Data Tools and Systems</b>	Manual documentation of "extraordinary incidents", Educational and Therapeutic Plans.	Educational, social, community, family, and residential domains are tracked in “educacemu.es”.	Daily Incident Reports (DIR), service plans, program performance metrics, and implementation.
<b>Reporting Frequency</b>	Incidents (daily), educaon plans (as needed).	Incidents (daily), education plans (quarterly).	Incidents (daily), service plans (monthly).
<b>Data Integration</b>	Online central system, which is accessible to the Centers and the Ministry of Educaon	Integrated emangement platform allows for report generation and online accessibility.	Real-time data systems include visualization dashboards used for implementation and outcome monitoring.
<b>Specific Purpose of Data Collection and Analysis</b>	Monitors situations that pose a threat to the safety of children, youth, and staff.	Monitors the intervention and improvement processes.	Focuses on monitoring key performance indicators to ensure program effectiveness, model fidelity, and quality improvement.



Child and Family Translational Research Center  
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