

## TFCO Journal Article Summaries

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### 2015

Martin Bergström & Lotta Højman (2015): Is multidimensional treatment foster care (MTFC) more effective than treatment as usual in a three-year follow-up? Results from MTFC in a Swedish setting, *European Journal of Social Work*, DOI: 10.1080/13691457.2015.1030361

This study examines three-year post-baseline outcomes for a randomized controlled trial of Swedish antisocial youths who received either multidimensional treatment foster care (MTFC) or treatment as usual (TAU). Several studies in our literature review indicated that MTFC intervention is preferred to the alternative (TAU) in the USA during follow-up. Two studies (one conducted in the UK and one in Sweden) have shown indications of a washout effect between the intervention alternatives during follow-up. However, this study showed few but positive significant outcomes at follow-up for the MTFC programme in comparison to TAU. Juveniles who participated in MTFC spent fewer days in locked settings and had committed fewer violent crimes, according to the social case records. Two key features of the MTFC programme certainly merit use in general social service—namely, reducing exposure to deviant peers and increasing school participation. <http://dx.doi.org/10.1080/13691457.2015.1030361>

### 2014

Poulton R, Van Ryzin MJ, Harold GT, Chamberlain P, Fowler D, Cannon M, Arseneault L, Leve LD, Effects of Multidimensional Treatment Foster Care on Psychotic Symptoms in Girls, *Journal of the American Academy of Child & Adolescent Psychiatry* (2014), doi: 10.1016/j.jaac.2014.08.014.

Objective: Neurodevelopmental theories of psychosis highlight the potential benefits of early intervention, prevention, and/or preemption. How early intervention should take place has not been established, nor whether interventions based on social learning principles can have preemptive effects. The objective was to test whether a comprehensive psychosocial intervention can significantly alter psychotic symptom trajectories during adolescence—a period of heightened risk for a wide range of psychopathology.

Method: This study was a randomized controlled trial (RCT) of Multidimensional Treatment Foster Care (MTFC) for delinquent adolescent girls. Assessment of psychotic symptoms took place at baseline and then 6, 12, 18, and 24 months post-baseline using a standardized self-report instrument (Brief Symptom Inventory). A second source of information about psychotic symptoms was obtained at baseline or 12 months, and again at 24 months using a structured diagnostic interview (the Diagnostic Interview Schedule for Children [DISC]).

Results: Significant benefits for MTFC over treatment as usual for psychosis symptoms were observed over a 24-month period. Findings were replicated across both measures. Effects were independent of substance use and initial symptom severity and persisted beyond the initial intervention period.

Conclusion: Ameliorating nonclinical psychotic symptoms trajectories beginning in mid-adolescence via a multifaceted psychosocial intervention is possible. Developmental research on nonclinical psychotic symptoms and their prognostic value should be complemented by more psychosocial intervention research aimed at modifying these symptom trajectories early in their natural history. Clinical trial registration information—Juvenile Justice Girls Randomized Control Trial: Young Adult Follow-up; <http://clinicaltrials.gov; NCT01341626>. *J. Am. Acad. Child Adolesc. Psychiatry*, 2014;53(12):1279–1287.

**Key words:** psychotic symptoms, RCT, MTFC, juvenile justice, girls

### 2013

Brandon C. Welsh; Mark W. Lipsey; Frederick P. Rivara; J. David Hawkins; Steve Aos; Meghan E. Peel; David Petechuk. *Bulletin 6: Changing Lives: Prevention and Intervention to Reduce Serious Offending*

(Study Group on the Transitions Between Juvenile Delinquency and Adult Crime), 2013, <https://www.ncjrs.gov/pdffiles1/nij/243993.pdf>

Abstract: Five conclusions are drawn about the literature reviewed. First, there is a paucity of high-quality evaluations of programs that have measured the impact on offending in early adulthood. Second, there are some promising signs that early prevention programs can produce lasting effects on offending. Third, there are some promising signs that family-based interventions for adjudicated delinquents that operate outside the juvenile justice system can reduce offending in early adulthood. Fourth, evidence on intervention modalities used with both juvenile and adult offenders indicates their effects are substantially similar. Fifth, there are a number of evidence-based programs for juvenile and young adult offenders that can produce monetary benefits that exceed costs. The focus of the literature review is on the highest quality research studies, i.e., randomized experiments and non-randomized quasi-experiments that establish equivalence between groups. Also included are the most rigorous research reviews, i.e., systematic and meta-analytic reviews. Inclusion of evaluation studies was restricted to those with a sample size of no less than 50 individuals and an outcome measure of criminal offending. Three other criteria were used in the selection of studies. First, the programs implemented during the later juvenile years (ages 15-17) measured their impact on offending in early adulthood (ages 18-29). Second, the programs implemented in early adulthood measured their impact on offending up to age 29. Third, the programs implemented in early childhood measured the impact on offending in early adulthood. Following program summaries, a separate section of the bulletin considers the benefits and costs of selected evidence-based programs. 1 table and approximately 100 references.

Rhoades, K. A., Leve, L., Harold, G. T., Kim, H., Chamberlain, P. (Proof) Drug Use Trajectories After a Randomized Controlled Trial of MTFC: Associations With Partner Drug Use Journal of Research on Adolescence, 1-15.

An increasing number of children are placed in foster care (i.e., a kin or nonkin family home other than the biological parent) due to experiences of physical, sexual, emotional, or psychological abuse, and/or neglect. Children in foster care are at increased risk for a host of negative outcomes encompassing emotional, behavioral, neurobiological, and social realms. Methods: Areas of risk and vulnerability among foster children are described, including emotional and behavioral deficits, impaired neurobiological development, and social relationship deficits. Evidence suggesting the significance of family placement changes and prenatal exposure to substances as contributing mechanisms is presented. Based on a systematic search of the PsycINFO database (to March 2012), eight efficacious evidencebased interventions for foster families are summarized. Findings: Although the development of evidencebased interventions that improve outcomes for foster children has lagged behind the delivery of interventions in other service sectors (e.g., mental health and educational sectors), several interventions across childhood and adolescence offer promise. Service system constraints offer both challenges and opportunities for more routine implementation of evidence-based interventions. Conclusions: Given the increased likelihood of poor outcomes for foster children, increased efforts to understand the pathways to vulnerability and to implement interventions shown to be effective in remediating risks and improving outcomes for this population are indicated. Evaluation of efficacious interventions in countries outside of the United States is also needed.

Rhoades, K. A., Chamberlain, P., Roberts, R., Leve, L. MTFC for High-Risk Adolescent Girls: A Comparison of Outcomes in England and the United States Journal of Child & Adolescent Substance Abuse, 22:435-449, 2013. ISSN: 1067-828X print/1547-0652 online DOI: 10.1080/1067828X.2013.788887.

The current study examined 12-month outcomes for girls enrolled in an implementation trial of Multidimensional Treatment Foster Care (MTFC) in England. In addition to examining changes from pretreatment to post treatment, we also compared results for girls enrolled in the England implementation trial to girls enrolled in a randomized controlled trial (RCT) of MTFC in the United States. The England MTFC sample included 58 girls in foster care between the ages of 12 and 16 years. The U.S. MTFC intervention sample included 81 girls between the ages of 13 and 17 years who were referred to out-of-home care due to chronic delinquency. Results indicated improvement in

offending, violent behavior, risky sexual behavior, self-harm, and school activities for girls enrolled in the England implementation trial. The effect sizes of these results were similar to those obtained in the U.S. RCT, with the exception of substance use, which showed significant decreases for girls enrolled in the U.S. RCT but not for girls enrolled in the England implementation trial. These results, in combination with other cross-cultural findings, support the notion that MTFC might be relevant across U.S. and European cultures.

Harold, G., Kerr, D., Van Ryzin, M., DeGarmo, D., Rhodes, K., Leve, L. Depressive Symptom Trajectories Among Girls in the Juvenile Justice System: 24-month Outcomes of an RCT of Multidimensional Treatment Foster Care. *Prevention Science*, Published online February 17, 2013

Youth depression is a significant and growing international public health problem. Youth who engage in high levels of delinquency are at particularly high risk for developing problems with depression. The present study examined the impact of a behavioral intervention designed to reduce delinquency (Multidimensional Treatment Foster Care; MTFC) compared to a group care intervention (GC; i.e., services as usual) on trajectories of depressive symptoms among adolescent girls in the juvenile justice system. MTFC has documented effects on preventing girls' recidivism, but its effects on preventing the normative rise in girls' depressive symptoms across adolescence have not been examined. This indicated prevention sample included 166 girls (13–17 years at T1) who had at least one criminal referral in the past 12 months and who were mandated to out-of-home care; girls were randomized to MTFC or GC. Intent-to-treat analyses examined the main effects of MTFC on depression symptoms and clinical cutoffs, and whether benefits were greatest for girls most at risk. Depressive symptom trajectories were specified in hierarchical linear growth models over a 2 year period using five waves of data at 6 month intervals. Depression clinical cut-off scores were specified as nonlinear probability growth models. Results showed significantly greater rates of deceleration for girls in MTFC versus GC for depressive symptoms and for clinical cut-off scores. The MTFC intervention also showed greater benefits for girls with higher levels of initial depressive symptoms. Possible mechanisms of effect are discussed, given MTFC's effectiveness on targeted and non-targeted outcomes.

## **2011**

Henggeler, S., Schoenwald, S. Evidence-Based Interventions for juvenile Offenders and Juvenile Justice Policies that Support Them. *Social Policy Report*, volume 25, number 1, 2011

In a context where more than 1,000,000 American adolescents are processed by juvenile courts annually and approximately 160,000 are sent to residential placements, this paper examines "what works" and "what doesn't work" in reducing the criminal behavior of juvenile offenders and presents examples of government initiatives that have successfully promoted the adoption, implementation, and sustainability of evidence-based interventions for juvenile offenders. In general, the vast majority of current juvenile justice services has little empirical support or exacerbates antisocial behavior. These include processing by the juvenile justice system (e.g., probation), juvenile transfer laws, surveillance, shock incarceration, and residential placements (e.g., boot camps, group homes, incarceration). On the other hand, several effective treatment programs have been validated in rigorous research. Effective programs address key risk factors (e.g., improving family functioning, decreasing association with deviant peers), are rehabilitative in nature, use behavioral interventions within the youth's natural environment, are well specified, and include intensive support for intervention fidelity. Although only 5% of eligible high-risk offenders are treated with an evidence-based intervention annually, inroads to the larger scale use of evidence-based treatments have been made in recent years through federal (e.g., Office of Juvenile Justice and Delinquency Prevention, Substance Abuse and Mental Health Services Administration) and state (e.g., Washington, Ohio, Connecticut, Florida) policy initiatives. Based on our experience transporting an evidence-based treatment within the context of these initiatives, recommendations are made to facilitate stakeholder efforts to improve the quality and effectiveness of rehabilitative services available to juvenile offenders.

## 2010

Westermark, P. K., Hansson, K., Olsson, M. Multidimensional treatment foster care (MTFC): results from an independent replication. *Journal of Family Therapy* (2010) 1-23, doi: 10.1111/j.1467-6427.2010.00515.x

This study examines 24-months post-baseline outcomes for thirty-five Swedish antisocial youths who received either treatment in multidimensional treatment foster care (MTFC) or treatment as usual (TAU). MTFC is a community-based treatment programme that has been successful in treating chronic juvenile offenders in the USA. This study is the first randomized control study outside the USA. The youth treated in the MTFC programme consistently showed some statistically significant positive treatment effects compared to the youth exposed to TAU. The results suggest that MTFC might be an effective method in treating youth with severe behaviour problems in a Swedish context. The authors conclude that the programme ought to be of great interest for Swedish social services as an alternative to traditional care.

Fisher, P., Tininenko, J., Bruce, J., Pears, K. (In Press). Sleep Disruption in Young Foster Children. *Child Psychiatry and Human Development*.

In the current study, sleep actigraphy and parent-report measures were used to investigate differences in sleeping behavior among four groups of 3- to 7-year-olds (N = 79): children in regular foster care (n = 15); children receiving a therapeutic intervention in foster care (n = 17); low income community children (n = 18); and upper middle income community children (n = 29). The children in therapeutic foster care exhibited longer sleep latency and increased variability of sleep duration than the upper middle income community children. In addition, there was indication of a treatment effect: the therapeutic foster care children slept longer than the regular foster care and low income community children and had earlier bedtimes, fell asleep earlier, and spent more time in bed than the regular foster care children. The results are discussed in terms of the effectiveness of early intervention for enhancing sleep in foster children.

## 2009

Leve, L., Fisher, P., Chamberlain, P. Multidimensional Treatment Foster Care as a Preventive Intervention to Promote Resiliency Among Youth in the Child Welfare System. *Journal of Personality* 77:6, December 2009

Demographic trends indicate that a growing segment of families is exposed to adversity such as poverty, drug use problems, caregiver transitions, and domestic violence. Although these risk processes and the accompanying poor outcomes for children have been well studied, little is known about why some children develop resilience in the face of such adversity, particularly when it is severe enough to invoke child welfare involvement. This paper describes a program of research involving families in the child welfare system. Using a resiliency framework, evidence from 4 randomized clinical trials that included components of the Multidimensional Treatment Foster Care program is presented. Future directions and next steps are proposed.

Fisher, P., Chamberlain, P., Leve, L. Improving the lives of foster children through evidenced-based interventions. *Vulnerable Children and Youth Studies*, Vol. 4, No. 2, June 2009, 122–127

In the United States and England, the use of evidence-based interventions for children in foster care has the potential to decrease the widespread disparities in health and mental health outcomes, improve placement stability and increase the likelihood of children achieving permanency. Nevertheless, there have been few discussions about the systematic implementation of evidence-based practice to address different levels of need and risk in foster care. In this paper, we provide a framework for determining the types of programs needed for children with varied needs along a continuum that includes four categories of options: (1) screen and identify those who are functioning adequately in foster care versus those in need of supplemental services; (2) provide 'enhanced foster care' with additional resources for families and children; (3) implement interventions that target specific problems such as disruptive behavior or school functioning; and (4) implement intensive therapeutic foster-care programming. Examples of interventions in each category are provided, and implications for policy and practice are discussed.

Kerr, D., Leve, L. D., Chamberlain, P. (2009) Pregnancy rates among Juvenile Justice Girls in two randomized controlled trials of MTFC. *Journal of Consulting and Clinical Psychology*, 2009, Vol. 77. No. 3, 588-593.

Preventing adolescent pregnancy is a national research priority that has had limited success. In the present study, the authors examined whether Multidimensional Treatment Foster Care (MTFC) relative to intervention services as usual (group care [GC]) decreased pregnancy rates among juvenile justice girls mandated to out-of-home care. Girls (13–17 years of age) with histories of criminal referrals (Mdn = 10) were randomly assigned to MTFC (n = 81) or GC (n = 85) as part of 2 randomized controlled trials. Pregnancy histories were assessed from baseline through 24 months. Fewer post baseline pregnancies were reported for MTFC girls (26.9%) than for GC girls (46.9%)—an effect that remained significant after controlling for baseline criminal referrals, pregnancy history, and sexual activity. MTFC has previously been shown to decrease arrest and lock-up rates. The present findings support the long-term preventive effects of MTFC on adolescent girls' pregnancy rates. Findings are consistent with the notion that programs that target delinquency by impacting general risk behavior pathways and contexts may more successfully prevent teen pregnancy than those that directly target sexual behaviors.

Fisher, P., Hyoun, K., Pears, K. (2009) Effects of Multidimensional Treatment Foster Care for Preschoolers (MTFC-P) on reducing permanent placement failures among children with placement instability. 0190-7409/ – see front matter. Published by Elsevier Ltd. doi:10.1016/j.chilyouth.2008.10.012

The aims of the present study were to examine the effects of a therapeutic intervention for foster preschoolers with histories of placement instability on permanency outcomes and to determine whether the intervention's effectiveness on these outcomes varied based on prior maltreatment experiences. Permanency outcomes for 52 children who had experienced 4 or more placements prior to study entry (n=29 intervention condition; n=23 regular foster care condition) were examined through 24 months post-study entry. The results indicated no group differences in permanency attempt rates but more than double the rate of successful permanency attempts for the intervention condition. The findings indicated that systematic interventions have the potential to impact permanency outcomes among children with prior instability.

## 2008

Westermarck, P., Hannsson, K., Vinnerljung, B. (2008) Does MTFC reduce placement breakdown in foster care? *International Journal of Child & Family Welfare*, 2008/4, page 155-171.

This study describes and compares placement breakdown rates between three samples of antisocial youth in a child welfare system: a Swedish and a US MTFC program (Multidimensional Treatment Foster Care), and a Swedish national cohort study focusing on adolescent breakdown in traditional out-of-home care. The Swedish national cohort study had more than a three-fold increase in risk of breakdowns compared to the Swedish MTFC program. Although not all the differences were statistically significant, the trend in the material was clear. Regardless of type of care, gender, and time of breakdown, MTFC youths in Sweden with their combination of high internalizing and externalizing symptoms showed lower breakdown rates compared to the other two studies. The author concludes that multi-contextual treatment programs such as MTFC help youths complete their treatment better than traditional out-of-home care.

Ryan, J. P., et al., Juvenile delinquency in child welfare: Investigating group home effects. *Children and Youth Services Review* (2008), doi: 10.1016/j.chilyouth.2008.02.004

Group homes fall into the broad category of residential care, a category that also includes half-way homes, campus-based homes, emergency shelters, self-contained settings, and staff secured setting. In general, residential care services represent an option of last resort. In the current study we use administrative records from a large urban county and propensity score matching to investigate the relationship between group home placements in child welfare and the risk of delinquency (n=8226). The results indicate that the relative risk of delinquency is approximately two and one half times greater for

adolescents with at least one group home placement as compared with youth in foster care settings. This finding raises serious questions about the use of group homes for victims of physical abuse and neglect.

(NOT POSTED ON WEBSITE)

Chamberlain, P., Brown, C. H., Saldana, L., Reid, J., Wang, W., Marsenich, L., Sosna, T., Padgett, C., & Bouwman, G. (2008). Engaging and recruiting counties in an experiment on implementing evidencebased practice in California. *Administration and Policy in Mental Health and Mental Health Research*, 35(4), 250-260.

In this article, the initial phase of a randomized trial that tests two methods of implementing Multidimensional Treatment Foster Care (an evidence-based intervention that crosses child public service systems) in 40 non-early adopting California counties is described. Results are presented that support the feasibility of using a randomized designed to rigorously test contrasting implementation models and engaging system leaders to participate in the trial.

Chamberlain, P., Price, J., Leve, L. D., Laurent, H., Landsverk, J. A., & Reid, J. B. (2008). Prevention of behavior problems for children in foster care: Outcomes and mediation effects. *Prevention Science*, 9, 17-27.

The effectiveness of a universal intervention, KEEP, based on MTFC (but less intensive) was tested in a universal randomized trial with 700 foster and kinship parents in the San Diego County CWS. The goal of the intervention was to reduce child problem behaviors through strengthening parents' skills. Child behavior problems were reduced significantly more in the intervention condition than the control condition, and specific parenting practices were found to mediate these reductions, especially for highrisk children in foster families reporting more than six behavior problems per day at baseline.

Magellan Health Services Children's Services Task Force Paper. (2008). *Perspectives on Residential and Community-Based Treatment for Youth and Families*.

This paper concludes that while residential treatment remains an important component of a system of care, for most youth, community-based interventions represent a more appropriate and less costly alternative to residential placement.

Price, J. M., Chamberlain, P., Landsverk, J., Reid, J., Leve, L., & Laurent, H. (2008). Effects of a foster parent training intervention on placement changes of children in foster care. *Child Maltreatment*, 13, 64-75.

The aims of this investigation were to examine the impact of a foster parent training and support intervention (KEEP) on placement changes and to determine whether the intervention mitigates placement disruption risks associated with children's placement histories. The sample included 700 families with children between ages 5 and 12 years, from a variety of ethnic backgrounds.

Fisher, P. A., & Stoolmiller, M. (2008). Intervention effects on foster parent stress: Associations with child cortisol levels. *Development and Psychopathology*, 20, 1003-1021.

Foster children exhibit high rates of atypical neuroendocrine functioning compared to children in the general population. In particular, alterations in the daytime diurnal activity of the hypothalamic-pituitary-adrenal (HPA) axis have been observed in foster children, often characterized by blunted salivary cortisol levels (i.e., low morning levels that remain low throughout the day). There is emerging evidence that therapeutic interventions for foster children can affect this pattern of HPA axis activity, but the specific intervention components responsible for change have not been fully explicated. Within a randomized trial to evaluate a therapeutic intervention for foster preschoolers (n = 57 intervention condition; n = 60 comparison condition; n = 60 community comparison condition), the present study examined whether diurnal cortisol activity was associated with caregiver self-reported stress in response to child problem behavior. Results showed immediate reductions in caregiver stress that were sustained through 12 months post-baseline in the intervention condition. In contrast, caregivers in the regular foster care condition showed higher rates of stress across time and increased stress sensitivity to child problem behaviors. In addition, among caregivers in regular foster care, higher self-reported stress was associated

with lower morning cortisol levels and more blunted diurnal cortisol activity. These results provide evidence that interventions can simultaneously impact caregiver stress and buffer children from the negative impacts of caregiver stress on HPA axis regulation.

## 2007

Christeson, W., Kass, D., Wiley M. (2007). Getting Juvenile Justice Right in New York: Proven Interventions Will Cut Crime and Save Money. Fight Crime: Invest in Kids, New York  
Nothing will make juvenile crime totally disappear. But research from Missouri, Ohio and elsewhere shows that, if fully implemented, the reforms New York State is beginning to put in place can eliminate 4 out of 10 or more of the repeat crimes now committed by juvenile delinquents.

Chamberlain, P., Leve, L. D., & DeGarmo, D.S. (2007). Multidimensional Treatment Foster Care for girls in the juvenile justice system: 2-year follow-up of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 75 (1), 187-193.

This study is a 2-year follow-up of girls with serious and chronic delinquency who were enrolled in a randomized clinical trial conducted from 1997 to 2002 comparing multidimensional treatment foster care (MTFC) and group care (N = 81). Girls were referred by juvenile court judges and had an average of over 11 criminal referrals when they entered the study. A latent variable analysis of covariance model controlling for initial status demonstrated maintenance of effects for MTFC in preventing delinquency at the 2-year assessment, as measured by days in locked settings, number of criminal referrals, and self-reported delinquency. A latent variable growth model focusing on variance in individual trajectories across the course of the study also demonstrated the efficacy of MTFC. Older girls exhibited less delinquency over time relative to younger girls in both conditions. Implications for gender-sensitive programming for youths referred from juvenile justice are discussed.

Fisher, P. A., Stoolmiller, M., Gunnar, M. R., Burraston, B. O. (2007) Effects of a therapeutic intervention for foster preschoolers on diurnal cortisol activity. *Psychoneuroendocrinology* (2007) 32, 892-905.  
Atypical diurnal patterns of hypothalamic-pituitary-adrenal (HPA) axis activity have been observed in samples of individuals following early life adversity. A characteristic pattern arising from disrupted caregiving is a low early-morning cortisol level that changes little from morning to evening. Less well understood is the plasticity of the HPA axis in response to subsequent supportive caregiving environments. Monthly early-morning and evening cortisol levels were assessed over 12 months in a sample of 3–6-year-old foster children enrolled in a randomized trial of a family-based therapeutic intervention (N = 117; intervention condition, n = 57; regular foster care condition, n = 60), and a community comparison group of same-aged, non-maltreated children from low-income families (n = 60). Latent growth analyses revealed stable and typical diurnal (morning-to-evening) cortisol activity among non-maltreated children. Foster children in the intervention condition exhibited cortisol activity that became comparable to the non-maltreated children over the course of the study. In contrast, children in regular foster care condition exhibited increasingly flattened morning-to-evening cortisol activity over the course of the study. In sum, improvements in caregiving following early adversity appear to have the potential to reverse or prevent disruptions in HPA axis functioning. © 2007 Elsevier Ltd. All rights reserved.

Fisher, P. A., & Kim, H. K. (2007). Intervention effects on foster preschoolers' attachment-related behaviors from a randomized trial. *Prevention Science*, 8, 161-170.

This study examined change in attachment related behaviors among foster preschoolers participating in a randomized trial of the Multidimensional Treatment Foster Care Program for Preschoolers (MTFC-P). Measures of secure, resistant, and avoidant behaviors were collected using a caregiver-report diary at 3-month intervals during the 12 months following a new foster placement. Children randomly assigned to the MTFC-P intervention condition (n = 57) showed significant increases in secure behavior and significant decreases in avoidant behavior relative to children assigned to a regular foster care condition (n = 60). Both groups showed significant decreases in resistant behavior over time. Analyses also

revealed a significant interaction between treatment condition and age at first foster placement on change in secure behavior. Results are discussed in terms of the importance of early intervention and prevention services for foster preschoolers.

Westermarck, P., K., Hansson, K., Vinnerljung, B. (2007 in press). Does Multidimensional Treatment Foster Care (MTFC) prevent breakdown in foster care?

With support from the literature this article sheds light on the strong links between frequent treatment breakdown and antisocial problems. The study describes and compares breakdown rates between three samples of antisocial youth in a child welfare system. The three samples examined were; the Swedish and the USA sample of the MTFC program (Multidimensional Treatment Foster Care) and a Swedish national cohort study focusing on adolescent breakdown in out-of-home care. The results showed that the Swedish national cohort study had about two to three times more breakdowns compared to MTFC in Sweden. Although not all the differences were statistically significant, the trend in the material was obvious. Regardless of type of care, gender, and time of breakdown, MTFC youths' in Sweden with their combination of high psychiatric and external symptoms showed a much lower breakdown rate, compared to the other two studies. The author concludes that multi-contextual treatment programs such as MTFC provide assurance that youths will complete their treatment better than traditional out-of-home care programs.

## 2006

Leve, L. D., & Chamberlain, P. (2006). A randomized evaluation of Multidimensional Treatment Foster Care: Effects on school attendance and homework completion in juvenile justice girls. *Research on Social Work Practice*, Vol. X No. X, July 2006 1-7.

In this study, the efficacy of MTFC on school attendance and homework completion was examined in juvenile justice girls who were referred for out-of-home care (N = 81). Results from this randomized intervention trial suggest that MTFC was more effective than group care in increasing girls' school attendance and homework completion while in treatment and at 12 months post-baseline. In addition, the previously reported effect of MTFC on reducing girls' days in locked settings was mediated by homework completion while girls were enrolled in the intervention setting. Implications for policy and practice are described.

Chamberlain, P., Leve, L. D., & Smith, D. K. (2006). Preventing behavior problems and health-risking behaviors in girls in foster care. *International Journal of Behavioral Consultation and Therapy*. 2(4), 518-530.

Transition into middle school presents complex challenges, including exposure to a larger peer group, increased expectations for time management and self-monitoring, renegotiation of rules with parents, and pubertal changes. For children in foster care, this transition is complicated by their maltreatment histories, leaving situation changes, and difficulty explaining their background to peers and teachers. This vulnerability is especially pronounced for girls in foster care, who have often experienced sexual abuse and are at risk for associating with older antisocial males. Failures in middle school can initiate processes with cascading negative effects, including delinquency, substance abuse, mental health problems, and health-risking sexual behaviors. An intervention is described to prevent these problems along with a research design aimed at testing the intervention efficacy underlying mechanisms of change.

Chamberlain, P., Price, J. M., Reid, J. B., Landsverk, J., Fisher, P.A., & Stoolmiller, M. (2006). Who disrupts from placement in foster and kinship care? *Child Abuse and Neglect*, 30, 409-424.

Conclusions: The PDR Checklist may be useful in predicting which placements are at most risk of future disruption, allowing for targeted services and supports.

Dore, M. M., & Mullin, D. (2006). Treatment Family Foster Care: Its History and Current Role in the Foster Care Continuum. *Families in Society: The Journal of Contemporary Social Services*.

Data are drawn from two ongoing randomized trials involving foster infants/toddlers and preschoolers.

Consistent with prior animal models of early adversity, these studies have shown that early adversity—particularly neglect, younger age at first foster placement, and higher number of placements—is associated with altered hypothalamic-pituitary-adrenal (HPA) axis function. The interventions under investigation have produced evidence that it is possible to impact many areas that have been negatively affected by early stress, including HPA axis activity, behavior, and attachment to caregivers.

Fisher, P. A., Gunnar, M. R., Dozier, M., Bruce, J., & Pears, K. C. (2006). Effects of a therapeutic intervention for foster children on behavior problems, caregiver attachment, and stress regulatory neural systems. *Annals of the New York Academy of Sciences*, 1094, 215-225.

Young children in foster care are exposed to high levels of stress. These experiences place foster children at risk for poor social, academic, and mental health outcomes. The role of adverse events in stimulating neurobiological stress responses presumably plays a role in shaping neural systems that contribute to these problems. Systematic and developmentally well-timed interventions might have the potential to change developmental trajectories and promote resilience. Moreover, understanding how specific dimensions of early adversity affect underlying stress response systems and how alterations in these systems are related to later psychosocial outcomes might facilitate more precise and targeted interventions. Data are drawn from two ongoing randomized trials involving foster infants/toddlers and preschoolers. Consistent with prior animal models of early adversity, these studies have shown that early adversity—particularly neglect, younger age at first foster placement, and higher number of placements—is associated with altered hypothalamic-pituitary-adrenal (HPA) axis function. The interventions under investigation have produced evidence that it is possible to impact many areas that have been negatively affected by early stress, including HPA axis activity, behavior, and attachment to caregivers.

Smith, D. K., Leve, L. D., & Chamberlain, P. (2006). Adolescent offending and health-risking sexual behavior: The predictive role of trauma. *Child Maltreatment*, 11, 346-353.

Several studies have highlighted high levels of risk for girls who have been exposed to traumatic experiences, but little is known about the exact relationship between traumatic experiences and problems with delinquency and health-risking sexual behavior (e.g., precipitatory and/or exacerbatory roles). However, numerous short- and long-term detrimental effects have been linked to trauma, delinquency, and health-risking sexual behavior. The utility of diagnostic and experiential trauma measures in predicting the greatest risk for poor outcomes for delinquent girls was examined in this study. Results indicate that the experiential measures of trauma (cumulative and composite trauma scores) significantly predicted adolescent offending and adolescent health-risking sexual behavior, whereas the diagnostic measures of trauma (full and partial diagnostic criteria) did not.

Stock, C., Fisher, P., (2006). Language Delays Among Foster Children: Implications for Policy and Practice. 0009-4021/2006/030445-17. 2006 Child Welfare League of America.

This article highlights the centrality of language in early childhood development and the potential for language delays to negatively affect long-term outcomes in educational and social domains. Given the high rate of language delays in the foster care population, an emphasis should be placed on assessing language skills among children ages 6 and younger entering foster care. The authors describe several existing approaches to assessing language skills and discuss obstacles to the widespread implementation of systematic evaluation among foster children. Finally, the authors discuss the need for research and programming to establish evidence-based practices that encourage the remediation of language delays in this highly vulnerable population.

Aos, S., Miller, M., Drake, E. (2006). Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates. Olympia: Washington State Institute for Public Policy, October 2006, 1-44.

Current long-term forecasts indicate that Washington will need two new prisons by 2020 and possibly another prison by 2030. Since a typical new prison costs about \$250 million to build and \$45 million a year to operate, the Washington State Legislature expressed an interest in identifying alternative “evidence-based” options that can: (a) reduce the future need for prison beds, (b) save money for state

and local taxpayers, and (c) contribute to lower crime rates. The 2005 Legislature directed the Washington State Institute for Public Policy (Institute) to report, by October 2006, whether evidence-based and cost-beneficial policy options exist. If economically sound options are available, then the Legislature directed the Institute to project the total impact of alternative implementation scenarios. This report describes our results to date. We begin by providing background information on historic and projected incarceration rates in Washington, as well as a history of crime rates and fiscal costs of the criminal justice system. We then describe the process we use to determine if evidence-based and economically sound options exist, and we present our findings. We examine adult corrections, juvenile corrections, and prevention programs. This is followed by our projections of the impact of alternative implementation scenarios. We conclude by discussing some implications of the findings and next steps. For technical readers, appendices begin on page 19 and describe our research methods and results in greater detail.

## 2005

Antoine, K., Fisher, P. A. (2005). Meeting the special needs of young foster children. *Principal*, November/December 2005, 36-40.

Children in foster care have educational, emotional, and physiological needs that must be met if they are to succeed in kindergarten and beyond. The authors describe a promising intervention program that links schools and foster parents in a multidimensional effort to ensure that foster children are ready for school and for new beginnings with their biological or adoptive parents.

Barth, R. P., Landsverk, J., Chamberlain, P., Reid, J. B., Rolls, J. A., Hurlburt, M. S., Farmer, E. M. Z., James, S., McCabe, K. M., & Kohl, P. L. (2005). Parent training in child welfare services: Planning for a more evidence-based approach to serving biological parents. *Research on Social Work Practice*, 15(5), 353-371.

Child welfare service agencies provide parent training as part of their legally mandated responsibility to provide services to assist families to keep their children at home or to achieve reunification. The use of parent-training programs for families in the child welfare system has undergone relatively little examination. Mental health, special education, and juvenile justice have been identifying evidence-based approaches that have demonstrated effectiveness with children and families with conduct disorders and other behavioral problems, although few of these interventions have been tested with child welfare services clientele. This article brings together evidence about the most promising programs from other child service sectors with information about the current parent training approaches in child welfare and generates a range of proposals about next steps to enhance the capacity of parent training and fulfill the high expectations set in law and practice.

Leve, L. D., & Chamberlain, P., & Reid, J.B. (2005). Intervention outcomes for girls referred from juvenile justice: Effects on delinquency. *Journal of Consulting and Clinical Psychology*, 73(6), 1181-1185.

An increasing number of girls are entering the juvenile justice system. However, intervention programs for delinquent girls have not been examined empirically. We examined the 12-month outcomes of a randomized intervention trial for girls with chronic delinquency (N = 81). Girls were randomly assigned into an experimental condition (Multidimensional Treatment Foster Care [MTFC]) or a control condition (group care [GC]). ANCOVAs indicated that MTFC youth had a significantly greater reduction in the number of days spent in locked settings and in caregiver-reported delinquency, and had 42% fewer criminal referrals than GC youth (a trend) at the 12-month follow-up. Implications for reducing girls' chronic delinquency are discussed.

Fisher, P. A., Burraston, B., & Pears, K. (2005). The Early Intervention Foster Care program: Permanent placement outcomes from a randomized trial. *Child Maltreatment*, 10, 61-71.

Preschool-aged foster children face multiple risks for poor long-term outcomes. These risks appear to increase with the number of placement changes experienced. The Early Intervention Foster Care Program (EIFC) targets the spectrum of challenges that preschool-aged foster children face via a team approach

delivered in home and community settings. In this article, we report on permanent placement outcomes from the EIFC randomized clinical trial. Children in EIFC had significantly fewer failed permanent placements than children in the regular foster care comparison condition. The number of prior placements was positively associated with the risk of failed permanent placements for children in the comparison condition but not for children in EIFC. Type of prior maltreatment did not predict permanent placement outcomes. These results provide the foundation of an evidence base for the EIFC program as a preventive intervention to improve permanent placement outcomes for preschool-aged foster children.

Leve, L. D., & Chamberlain, P. (2005). Association with delinquent peers: Intervention effects for youth in out-of-home care. *Journal of Abnormal Child Psychology*, 33(3), 339-347.

Although association with delinquent peers is a recognized precursor to ongoing delinquency problems, youth in the juvenile justice system are commonly prescribed intervention services that aggregate delinquent youth. However, little is known about the process variables that mediate the relationship between aggregating youth in intervention settings and poor subsequent outcomes. We examined data from two randomized intervention trials (one male sample and one female sample) with delinquent adolescents placed either in Multidimensional Treatment Foster Care (MTFC) or in group care. Path analyses suggested that the MTFC youth had fewer associations with delinquent peers at 12 months than did the group care youth. Further, associating with delinquent peers during the course of the intervention mediated the relationship between group condition and 12-month delinquent peer association. Implications for the development of interventions with delinquent youth are discussed.

## 2004

Eddy, M. J., Bridges Whaley, R., & Chamberlain, P. (2004). The prevention of violent behavior by chronic and serious male juvenile offenders: A 2-year follow-up of a randomized clinical trial. *Journal of Family Psychology*, 12(1), 2-8.

Over the past several decades, an increasing number of youth have been incarcerated for violent offenses. Existing interventions for serious offenders target the prevention of subsequent delinquent behavior in general, rather than the prevention of violent behavior in particular. Within the context of a randomized clinical trial of 79 adolescent males involved in the juvenile justice system, we examine the ability of multidimensional treatment foster care (MTFC) to prevent subsequent violent offending relative to services-as-usual group home care (GC). Data on offending were collected every 6 months for a 2-year period following entry into the study. The method of generalized estimating equations was used to analyze the data. Results indicate the MTFC youth were significantly less likely to commit violent offenses than youth placed in services-as-usual group care. The group effect held even after control variables, including age at placement, age at first arrest, official and self-reported prior offenses, and time since baseline, were introduced into the model. Twenty-four percent of GC youth had two or more criminal referrals for violent offenses in the 2 years following baseline versus only 5% of MTFC youth. The rates of self-reported violent offending for MTFC youth were in the normative range following baseline, whereas rates for GC youth were 4 to 9 times higher. MTFC youth were also significantly less likely to report incidents of common violence, such as hitting.

Leve, L. D., & Chamberlain, P. (2004). Female juvenile offenders: Defining an early-onset pathway for delinquency. *Journal of Child & Family Studies*, 13, 439-452.

We examined whether childhood factors predict age of first arrest in adolescent girls referred for placement and treatment for serious delinquency problems (N=62). Measures included child characteristics (i.e., age of menstrual onset, childhood ADHD, and IQ), family environmental factors (i.e., severe punishment, parental transitions, and sexual abuse), biological parent criminality, and juvenile court records. Parental transitions and biological parent criminality significantly predicted the age of first arrest (M+12.5 years), and IQ showed a trend to be a significant predictor. The final model accounted for 52% of the variance. A younger age of first arrest was related to increased health-risking sexual behaviors and to increased self-reported delinquency. Logistic regression analyses indicated that membership in an early-onset group could be reliably formed using family and child predictors with

accurate classifications for 46-90% of the girls. Family environmental and child characteristics played a strong role in predicting which girls would be arrested an earlier age. The strong predictive utility of parental transitions and biological parent criminality, in particular, suggest two avenues for identifying girls at risk for delinquency problems.

## **2003**

Fisher, P. A. (2003). Special Parents for Special Children. *Research to Practice*, July/August 2003, 18-19.

Chamberlain, P. (2003). The Oregon Multidimensional Treatment Foster Care model: Features, outcomes, and progress in dissemination. In S. Schoenwald & S. Henggeler (Series Eds.), *Moving evidence-based treatments from the laboratory into clinical practice*. *Cognitive and Behavioral Practice*, 10(4), 303-312.

The practice of placing children and adolescents with severe antisocial behavior and delinquency in residential and group home setting is commonplace in most communities in the United States, yet little research exists on the short- or long-term effectiveness of such placements. Furthermore, recent evidence suggests that there are potentially damaging effects from placement in congregate care settings that relate to negative influences that problem youth who are placed together tend to have on each other. The Oregon Multidimensional Treatment Foster Care (MTFC) model was developed as an alternative to group and residential care for youth with delinquency and severe emotional and behavioral problems. The central features of the Oregon MTFC model are described, evidence on the efficacy of the model is reviewed, and practical aspects relating to dissemination are discussed along with conditions that act to facilitate or create barriers to implementation.

## **2002**

Dozier, M., Albus, K., Fisher, P. A., Sepulveda, S. (2002). Interventions for foster parents: Implications for developmental theory. *Development and Psychology*, 14, 843-860.

All children who enter foster care have experienced disruptions in their relationships with caregivers, and many have experienced maltreatment. Studying the effects of these adverse early experiences can inform developmental theory. In particular, insight can be provided regarding sensitive periods in the development of attachment and self-regulatory capabilities. The quality of surrogate caregivers varies as a function of both the intervention services provided and foster parent characteristics. Studying the effects of foster parent quality can suggest which aspects of the child functioning are more or less canalized, at various developmental periods. This paper considers salient developmental issues of infancy, preschool years, middle childhood, and adolescence and examines ways in which difficulties regulating behaviors, emotions, and physiology. Thus, conditions associated with foster care are associated with foster care placement (e.g., disruptions in care, maltreatment) appear to affect very basic and fundamental regulatory processes. Interventions have been designed that target developmentally specific manifestations of regulatory difficulties. Although the literature regarding evidence-based interventions for foster parents is quite limited, preliminary findings provide some evidence that nurturing, responsive care can serve to partially remediate early deficits. These finding suggest that stable and non-frightening care is essential for normal development. Nonetheless, even in the case of quite adverse early experience that results on problematic child outcomes, there is some evidence that the development of many systems remains relatively plastic.

## **2001**

Moore, K. J., Sprengelmeyer, P. G., & Chamberlain, P. (2001). Community-based treatment for adjudicated delinquents: The Oregon Social Learning Center's "Monitor" Multidimensional Treatment Foster Care program. *Residential Treatment for Children & Youth*, 18(3), 87-97.

The following article outlines an empirically-validated treatment approach for addressing chronic, delinquent behavior in adolescents and their families: Multidimensional Treatment Foster Care (MTFC). MTFC grew out of evidence for the effectiveness of behavioral parent training approaches and a clinical need for programs to address the behavior of delinquent adolescents who have been found to be beyond

parental control. MTFC starts with a focus on the need to return the adolescent to the family and community, and thus, the program stresses the generalization of treatment effects. Recent replication studies are reviewed that demonstrate the effectiveness, utility, and cost-effectiveness of the MTFC program.

Smith, D. K., Stormshak, E., Chamberlain, P., & Bridges-Whaley, R. (2001). Placement disruption in treatment foster care. *Journal of Emotional and Behavioral Disorders*, 9, 200-205.

Rates of placement disruption in traditional and treatment foster care are reviewed. Contextual factors, individual child and caregiver characteristics and risk factors thought to influence rates of placement disruption are explored. A model for treatment foster care is described, and data are presented on disruption rates for this program. The results indicated that the likelihood of placement disruption is two times higher during the first 6 months (17.8%) compared to the second 6 months (9.2%) of treatment. Taken together across the first and second 6 months of treatment, 23 of 90 youth (25.5%) experienced a placement disruption. Findings indicate that age and gender play a role in disruption, with older girls at the greatest risk for placement disruption. Limitations of the study, future directions, and implications for treatment are discussed.

## 2000

Eddy, J. M., & Chamberlain, P. (2000). Family management and deviant peer association as mediators of the impact of treatment condition on youth antisocial behavior. *Journal of Consulting and Clinical Psychology*, 5(68), 857-863.

The influence of family management skills (i.e., supervision, discipline, and positive adult-youth relationship) and deviant peer association on youth antisocial behavior was examined within the context of a randomized clinical trial contrasting multidimensional treatment foster care and services-as-usual group care. Participants were male adolescents with histories of chronic and serious juvenile delinquency who were mandated into residential care by the juvenile court. As hypothesized, family management skills and deviant peer association mediated the effect of treatment condition and accounted for 32% of the variance in subsequent antisocial behavior.

Fisher, P. A., & Chamberlain, P. (2000). Multidimensional Treatment Foster Care: A program for intensive parenting, family support, and skill building. *Journal of Emotional and Behavioral Disorders*, 8, 155-164. [Also appears in H. M. Walker & M. H. Epstein (Eds.), *Making schools safer and violence free: Critical issues, solutions, and recommended practices. A compilation of articles from Journal of Emotional and Behavioral Disorders* (pp. 140-149). Austin, TX: Pro-ed.]

The goals, objectives and philosophy of Multidimensional Treatment Foster Care (MTFC) are outlined in this article. Three specific mechanisms of the MTFC approach known to reduce conflict in the therapeutic milieu and to contribute to successful outcomes for youth and their families are described: a proactive approach to reducing problem behavior, the creation and maintenance of a consistent and reinforcing environment for the participating youth, and the separation and stratification of staff roles. Controlled outcome research comparing MTFC to other community treatment alternatives with similar populations of troubled youth is also described. Additionally, the results of preliminary research evaluating the impact of an MTFC model adapted to meet the needs of maltreated preschool-age children at entry to foster are presented.

Fisher, P. A., Gunnar, M. R., Chamberlain, P., & Reid, J. B. (2000). Preventive intervention for maltreated preschool children: Impact on children's behavior, neuroendocrine activity, and foster parent functioning. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(11), 1356-1364.

This article describes the results of a pilot study that evaluated the effectiveness of the Early Intervention Foster Care (EIFC) program in the period immediately following a child's placement in a new foster home. **Method:** Data were collected from an EIFC group, a regular foster care group, and a community comparison group – each with 10 participants – via questionnaires for children and their caretakers and salivary cortisol sampling. **Results:** EIFC foster parents adopted and maintained positive parenting

strategies, EIFC children's behavioral adjustment improved, and changes occurred in several salivary cortisol measures. Moreover, regular foster care children exhibited decrements in functioning in several areas over the same time period. **Conclusions:** Results are discussed with regard to how such research fits into a larger program of prevention research for high-risk preschool children.

## 1999

Fisher, P. A., Ellis, B. H., & Chamberlain, P. (1999). Early intervention foster care: A model for preventing risk in young children who have been maltreated. *Children services: Social policy, research, and practice*, 2(3), 159-182.

Treatment foster care (TFC) allows troubled youth to remain in the community and live in a family setting. Prior studies suggest that TFC may be an effective alternative to more restrictive interventions. However, most TFC programs have been designed to treat elementary school age youth and adolescents. At a time when the foster care population is burgeoning, and the proportion of very young children in the system is increasing, there is a need for TFC programs specifically designed to meet the needs of maltreated preschoolers. In this article we describe an early intervention foster care program that targets 3 areas: behavior problems, emotional regulation, and developmental delays. The theoretical model for the program is also described, along with recommendations for the implementation of similar programs.

## 1998

Chamberlain, P., (1998). Treatment foster care. *OJJDP Juvenile Justice Bulletin*, December 1998, 1-11. Treatment Foster Care describes an alternative to corrections—and group care—facilities. The program places juvenile offenders who require residential treatment with foster families who are trained to provide close supervision, fair limits, consistent consequences, and a supportive relationship, instead of with other delinquents. In short, it is an approach that promotes both rehabilitation of juvenile offenders and public safety.

Chamberlain, P., & Moore, K. J. (1998). A clinical model of parenting juvenile offenders: A comparison of group versus family care. *Clinical Child Psychology and Psychiatry*, 3(3), 375-386.

Chamberlain, P., & Reid, J. (1998). Comparison of two community alternatives to incarceration for chronic juvenile offenders. *Journal of Consulting and Clinical Psychology*, 6(4), 624-633.

The relative effectiveness of group care (GC) and multidimensional treatment foster care (MTFC) was compared in terms of their impact on criminal offending, incarceration rates, and program completion outcomes for 79 male adolescents who had histories of chronic and serious juvenile delinquency. Results show that boys who participated in MTFC had significantly fewer criminal referrals and returned to live with relatives more often. Multiple regression analyses showed that assignment to a treatment condition (i.e., GC or MTFC) predicted official and self-reported criminality in follow-up beyond other well-known predictors of chronic juvenile offending (i.e., age at 1st offense, number of previous offenses, age at referral).

## 1997

Capaldi, D. M., Chamberlain, P., Fetrow, R. A., & Wilson, J. E. (1997). Conducting Ecologically valid prevention research: Recruiting and retaining a "whole village" in multimethod, multiagent studies. *American Journal of Community Psychology*, 24, 471-492.

Many prevention studies are now designed with complementary interventions in different settings. Evaluations of these interventions require assessing the child's behavior in each of these settings. Conducting these studies, therefore, may involve recruiting school districts, principals, classroom teachers, peers, parents, siblings, and in later years, employers and intimate partners. These participants may be considered natural raters or satellite subjects, depending on their degree of involvement. Issues of recruitment and retention thus are magnified in multimethod, multiagent studies. To illustrate these

issues, findings are presented for three studies conducted with risk populations in the past decade at the Oregon Social Learning Center: a passive longitudinal study, a selected prevention study, and an indicated prevention study. Findings indicate that achieving high recruitment and retention rates for at-risk and high-risk subjects in multisetting studies is possible, and that a developmental approach should be taken to recruiting risk populations.

## **1996**

Chamberlain, P., Ray, J., & Moore, K. J. (1996). Characteristics of residential care for adolescent offenders: A comparison of assumptions and practices in two models. *Journal of Child and Family Studies*, 5, 259-271.

Staff assumptions and program practices in two models of residential care for male adolescent offenders were compared. Group care settings had from 6 to 15 youths in residence and used peer-mediated treatments. Treatment Foster Care settings had one youngster placed in each home and treatments were adult-mediated. Results showed that group care and Treatment Foster Care program models differed on staff assumptions about therapeutic mechanisms of change, and different patterns of daily program practices were found.

## **1994**

Chamberlain, P., & Reid, J. (1994). Differences in risk factors and adjustment for male and female delinquents in treatment foster care. *Journal of Child and Family Studies*, 3, 23-29.

Differences by gender in the presence of risk factors, patterns of previous delinquency, and response to treatment were examined for a sample of 88 adolescents who were placed in treatment Foster Care. Females were found to have fewer foster parent-reported problem behaviors than their male counterparts during the first month of treatment. By month 6, problem behavior levels for males had dropped, while scores for female subjects had increased to the level of males at month 1. No differences in pre-post arrest data or program completion rates for males and females were found. Implications for research on and treatment of female adolescents with conduct problems are discussed.

Meadowcroft, P., Thomlinson, B., & Chamberlain, P. (1994). Treatment foster care services: A research agenda for child welfare. *Child Welfare*, 3, 565-581.

Treatment foster care is a recent and rapidly expanding multisystem service. This article summarizes the empirical literature on treatment foster care and offers suggestions for future research directions. Results from program evaluations and experimental research suggest that treatment foster care is an effective alternative to residential treatment for seriously troubled and troubling children. The research has lacked rigorous controls regarding the populations served, however, as well as the critical components of interventions used in treatment foster care that produce positive results for the children. Integration with pertinent research findings from other disciplines is also necessary because of the multisystemic needs of the diverse population of children served in treatment foster care.

Moore, K. J., & Chamberlain, P. (1994). Treatment foster care: Toward development of community-based models for adolescents with severe emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders*, 2, 22-30.

Currently, there is a severe lack of midrange community-based treatment models for adolescent with severe emotional and behavioral disorders (SED) (Wells & Whittington, 1990). The Treatment Foster Care (TFC) program has the potential to expand the development of such models for these youths. The aim of TFC is to provide a community-based, relatively nonrestrictive treatment in a setting where youths are not separated from nondisabled peers or isolated from their own families. TFC can be used before youths with emotional and behavioral disorders (EBD) are placed in more restrictive institutional treatment settings. In addition, TFC appears to be a promising model to include when out-of-home and/or out-of-community placements are considered for children and adolescents with EBD. This article presents the program components and research direction of the Oregon Social Learning Center's TFC

program for adolescents who have SED and need out-of-home care. This article concludes with a case study of a typical program intervention in an educational setting.

Moore, K. J., Osgood, W. D., Larselere, R. E., & Chamberlain, P. (1994). Use of pooled time series in the study of naturally occurring clinical event and problem behavior in a foster care setting. *Journal of Consulting and Clinical Psychology*, 62, 718-728.

Pooled time series is an underused analytic technique with the potential to increase researchers' ability to exploit clinical data. This article demonstrates the value of pooled time series by analyzing the behavior of youths in a specialized foster care treatment setting in response to a naturally occurring clinical event: changes in the number of youths living together in a treatment foster care setting. Pooled time series moves beyond typical clinical analyses with an increased capability of controlling statistically for complex within-subject effects and with a clinically useful measure of effect size. The complexity of the intrasubject data made it virtually impossible to determine the relevant significance (i.e. clinical meaning) of the clinical event by the use of standard  $n=1$  visual analysis procedures or standard statistical methods (e.g., chi square). After things such as autocorrelation and individual time trends were statistically controlled, each additional youth increased the number of problematic behaviors by one behavior per youth per day on the Parent Daily Report.

## **1992**

Chamberlain, P., Moreland, S., & Reid, K. (1992). Enhanced services and stipends for foster parents: Effects on retention rates and outcomes for children. *Child Welfare*, 5, 387-401.

Current national trends show that although the number of available foster homes is shrinking, the number of children and adolescents being cared for in the family foster care system is growing. This study demonstrates the significant benefits to both foster parents and the children in their care of providing enhanced services and stipends to foster parents.

## **1991**

Chamberlain, P., & Reid, J. B. (1991). Using a specialized foster care treatment model for children and adolescents leaving the state mental hospital. *Journal of Community Psychology*, 19, 266-276.

This study assessed the effects of providing treatment in a Specialized Foster Care (SFC) program for children and adolescents who had been previously hospitalized. Cases were randomly assigned for placement in SFC or other extra hospital settings, including residential treatment centers and family/relative homes. The SFC program used carefully selected foster parents who were trained and supervised in the implementation of the child's treatment plan. One child or adolescent was placed in each home. SFC placements were augmented by individual therapy for the child or adolescent and by case management services, including coordination with schools and employers, weekly clinical staffing, and crisis intervention. Results showed that the SFC model is a viable treatment option for severely emotionally disturbed children and adolescents, that cases in the SFC group were placed outside of the hospital more frequently and quickly than cases in the control group, and that once placed outside of the hospital, SFC cases were slightly more successful at maintaining in their communities than were control cases.

## **1990**

Chamberlain, P. (1990). Comparative evaluation of Specialized Foster Care for seriously delinquent youths: A first step. *Community Alternatives: International Journal of Family Care*, 2(2), 21-36.

The purpose of this study was to determine if the trajectory of seriously delinquent youths could be interrupted through their placement in a Specialized Foster Care program. The rates of incarceration before and after treatment were examined. The 16 subjects were 12- to 18-year-old boys and girls committed to a juvenile corrections institution, then diverted in lieu of commitment into Specialized Foster Care. These were matched to a comparison sample who had received other residential treatment in the community. Matching was done on 1) age, 2) sex, and 3) date of commitment to the institution. A

higher proportion of experimental cases completed their six-month program placements rather than being revoked to the institution or running away. The subsequent duration of incarceration for one year and two years post-treatment favored the experimental group.