JOURNAL
OF THE CANADIAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY / DE L'ACADÉMIE CANADIENNE DE PSYCHIATRIE DE L'ENFANT ET DE L'ADOLESCENT

RECOMMENDED ACADEMIC READING (RAR)

Focus on psychosocial interventions for externalizing behaviours

In this issue, RAR presents recent important findings from studies of psychosocial interventions to improve child mental health, with a focus on externalizing behaviours. Thanks to Drs. Waschbush, Sawrikar, Williams, and Roos, experts in psychosocial interventions for children and parents, for identifying important papers that may be of particular interest and relevance to our readership.

Dr. Brendan Andrade
Research Editor

Dr. Dan Waschbusch's recommended reading is an article by Pelham and Altszuler (1). This article examined the literature on combined treatment for attention-deficit/hyperactivity disorder (ADHD) in children, with a focus on the past 15 years of research. Combined treatment refers to the use of medication and behavioral intervention for ADHD, which are the two evidence-based treatments for this condition. The authors addressed the questions of dosing and sequencing of combined treatment and the impact of combined treatment on functional outcomes, such as academic achievement, peer relationships, and family functioning. The authors reviewed data from the Multimodal Treatment for ADHD (MTA) study, which was a large-scale randomized controlled trial that compared four treatment conditions for ADHD: medication management, behavioral intervention, combined treatment, and community care. As reviewed by Hinshaw and colleagues (2), the MTA demonstrated that combined treatment had a more beneficial acute impact on functional impairments than medication or behavioral intervention alone. Notably, the MTA did not examine the impacts of treatment doses or sequences, which is critical because subsequent research demonstrated that the benefits of combined treatment depended on the dose and sequence of the treatment components. Specifically, starting treatment with low doses of behavioral intervention and adding medication as necessary resulted in better outcomes than starting with medication and adding behavioral intervention. Furthermore, the authors found that starting treatment with medication reduced the likelihood of subsequently initiating behavioral treatments. The authors also found that medication had little to no effect on skill development, whereas behavioral intervention improved children's abilities to acquire sports, homework, and academic skills. The authors concluded that treatment for ADHD should initiate with psychosocial interventions that teach skills to address the functional impairments of children with ADHD. For children who continue to struggle with functional impairment after starting psychosocial interventions, medications may be a helpful addition to the treatment plan. This approach could reduce the side effects and costs of medication and increase the likelihood of long-term maintenance of treatment gains. The authors also emphasized the need for more studies on the long-term impact of this approach and the individualization of treatment based on child and family characteristics. This article critically reviewed the latest research on combined treatment for ADHD, offering child and adolescent psychiatrists, psychologists, and other mental health workers practical recommendations to optimize the positive outcomes of children with this condition.

Daniel Waschbusch, MS, PhD
Professor and Vice Chair for Research,
Department of Psychiatry and Behavioral Health
Penn State College of Medicine
Fellow, American Psychological Association

References

1. Pelham WE, Jr., Altszuler AR. Combined treatment for children with Attention-Deficit/Hyperactivity Disorder: Brief history, the Multimodal Treatment for Attention-Deficit/Hyperactivity Disorder Study, and the Past 20 years of research. Journal of Devevlopmental and Behavioral Pediatrics. 2020;41 Suppl 2S:S88-S98. https://

pubmed.ncbi.nlm.nih.gov/31996571/

2. Hinshaw SP, Arnold LE, MTA Cooperative Group. Attention-deficit hyperactivity disorder, multimodal treatment, and longitudinal outcome: Evidence, paradox, and challenge. Wiley Interdiscip Rev Cogn Sci. 2015;6(1):39-52.

Dr. Vilas Sawrikar's recommended reading is an article by Christopher Hautmann et al., published in Behaviour Research and Therapy (1), which evaluates the clinical utility of using the personalised advantage index (PAI) in assigning families to different parent training programmes for child externalising disorders. The PAI proposes to address the question of "What treatment, by whom, is most effective for this individual with that specific problem, and under which set of circumstances?". The article introduces the different research methods that have been used in the past to address this question and connects these methods to the use of the PAI as a tool for personalising interventions for externalising disorders.

Hautmann et al. subsequently report a secondary data analysis study investigating the utility of the PAI as a decision support tool in the treatment of externalising disorders. The analysis included 110 parents of children (4-11 years) diagnosed with attention-deficit/hyperactivity (ADHD) or oppositional defiant disorder (ODD) participating in a randomised control trial evaluating the comparative effectiveness of two parenting interventions (behavioural versus nondirective). An optimal PAI comprised of treatment moderators, single parent status, and ODD baseline symptoms. For ODD, families randomised to their PAI-predicted intervention showed a treatment advantage of d = 0.54, 95% CI [0.17, 0.97]; for ADHD, the advantage was negligible at d = 0.35, 95% CI [–0.01, 0.78].

The findings of this study are significant because: (i) it emphasises the need to integrate individual needs in ensuring treatment is appropriate for families attending parent training for externalising disorders; (ii) this approach can shift treatment from the static average to treatment having a focus on individual families, with evidence it optimises treatment outcomes; and (iii) the PAI may be a useful decision support tool for finding the right treatment first time for families attending treatment for externalising disorders.

Vilas Sawrikar, PhD
Lecturer in Clinical Psychology
School of Health in Social Science
Centre for Applied Developmental Psychology
University of Edinburgh

References

1. Hautmann C, Dose C, Hellmich M, Scholz K, Katzmann J, Pinior J, Gebauer S, Nordmann L, Metternich-Kaizman TW, Schürmann S, Döpfner M. Behavioural and nondirective parent training for children with externalising disorders: First steps towards personalised treatment recommendations. Behaviour Research and Therapy. 2023;163:104271. https://pubmed.ncbi.nlm.nih.gov/36931110/

Treating little kids with big behaviours: Supporting preterm children with behaviour problems.

Children with serious early medical conditions are often excluded from traditional behavioural intervention programs, particularly research trials, given their comorbid intellectual and/or ongoing physical health needs. Yet, preterm birth is a highly prevalent reality of many children and families across the world with well established early behavioural difficulties and disproportionate rates of ADHD compared to typically developing school-age peers. **This is why Dr. Tricia Williams' recommended reading is an** article by Alison Fisher et al. (1). In this article, the study team examined the feasibility and acceptability of the I-InTERACT Preterm Parenting program. I-InTERACT Preterm is an online positive parenting intervention designed for preterm children ages 3–8 years. The program provides online psychoeducation paired with 1:1 coaching sessions. It is well suited to address the unique needs of preterm children, given the program's prior efficacy documented in other medically complex populations (2-5). It teaches many of the well-known skills positively associated with behavioural outcomes (i.e., warmth, responsiveness, and structure), and in this adaptation was designed to address some of the unique challenges for parents caring for preterm children. Because it is delivered online, it also extends reach and reduces barriers among families already inundated with other medical follow up appointments. In this pilot study, participants included children (age M(SD)=5.26 (1.33) years) born at ≤32 weeks of age that were followed at Cincinnati Children's Hospital Medical Center. In this pilot, 19 families consented to participate (59% enrollment feasibility) and of those families, 11 (59% adherence) completed all seven program sessions. Strong support for the program's acceptability was documented in rating scales (i.e., decreases in parental stress, improvement in parent-child relationship and parenting follow through) as well as qualitative interview data. Despite the low sample and completion barriers, the authors present insightful learnings and suggestions for larger scale clinical trials and future implementation for families of preterm children. This included provision of personalized

tiered approaches and more information regarding the association between preterm birth and behaviour concerns.

Conclusions: Overall the senior author, Dr. Shari Wade, continues to demonstrate her leadership in championing acceptability and efficacy of telepsychological approaches for medically at-risk cohorts that are often excluded from large scale behavioural intervention and research. As the authors insightfully argue, "*Interventions are needed beyond infancy and toddlerhood to support (preterm) children and their families."*

Tricia S. Williams, Ph.D., C.Psych, ABPP
Associate Scientist
Hospital for Sick Children
Toronto, Ontario

References

1. Fisher AP, Miley AE, Glazer S, Gies LM, Parikh NA, Lam L, Wade SL. Feasibility and acceptability of an online parenting intervention to address behaviour problems in moderately to extremely preterm pre-school and school-age children. Child: Care, Health and Development. 2024; 50(1): e13209. https://pubmed.ncbi.nlm.nih.gov/38100158/
2. Aguilar JM, Cassedy AE, Shultz EL, Kirkwood MW, Stancin T, Yeates KO, Taylor HG, Wade SL. A comparison of 2 online parent skills training interventions for early childhood brain injury: Improvements in internalizing and executive function behaviors. The Journal of Head Trauma Rehabilitation. 2019;34(2):65-76.
3. Burek B, Ford MK, Hooper M, Green R, Kohut SA, Andrade BF, et al. Transdiagnostic feasibility trial of internet-based parenting intervention to reduce child behavioural difficulties associated with congenital and neonatal neurodevelopmental risk: Introducing I-InTERACT-North. Clin Neuropsychol. 2021;35(5):1030-52.
4. Maggard B, Gies L, Wade S. Feasibility and Preliminary Efficacy of an Online Parenting Skills Intervention: Gaining Real-Life Skills Over the Web (GROW). Brain Injury. 2022; 36(1):77.
5. Wade SL, Cassedy AE, Shultz EL, Zang H, Zhang N, Kirkwood MW, et al. Randomized clinical trial of online parent training for behavior problems after early brain injury. J Am Acad Child Adolesc Psychiatry. 2017;56(11):930-9 e2.

Dr. Leslie Roos's recommended reading is an article by Jabukovic & Deborah, published in Clinical Psychology: Science and Practice, May 2023 (1). This study conducted a meta-analysis of Dialectical Behaviour Therapy-Based Interventions for externalizing behavior problems in adolescents. Externalizing behaviour mental health disorders, including oppositional defiance disorder (ODD) and conduct disorder (CD) are a significant public health concern for adolescents affecting an estimated 7-9% of the general population. Left untreated, externalizing problems are associations with a multitude of negative long-term outcomes including social problems, low educational attainment, substance abuse, suicidality, and justice system involvement. Evidence-based interventions for externalizing disorders in adolescents are surprisingly limited and generally include a combination of cognitive behavioural therapy and multisystemic family therapy, which requires highly specialized teams and intensive intervention protocols. The authors posit that Dialectical Behavior Therapy for Adolescents (DBT-A) can offer another standardized and ready-to-disseminate approach that may be appropriate for adolescents with externalizing problems given its emphasis on transdiagnostic emotion regulation and building effective skills to build a values-based life. DBT-A further includes parents or caregivers in group skills training, to promote more supportive and validating environments for a youth to engage in behavior change.

The systematic review and meta-analysis identified 17 studies with outcome data across varied reports (caregiver, child; objective & subjective) and found the DBT-A significantly improved externalizing behavior problems with a small-to-medium effect size and large variance across studies. Of the multiple moderators examined, only treatment duration (but not total number of sessions) was significant, suggesting that a longer duration was associated with greater symptom reduction. All others, including treatment setting, country, participant age, and DBT subcomponents were non-significant. The article includes an excellent overview of DBT-A theory and its appropriateness for this population alongside useful tables for learning about each of the studies included. Broadly, this study emphasizes the promise of DBT-A for improving mental health for adolescents across diverse contexts such as schools, justice system programs, hospitals and community mental health settings. With the increased interest and training of mental health professionals in DBT, it may emerge as a valuable therapeutic approach for adolescents with varied symptom severity and mental health needs. More research on long-term follow-up and the importance of DBT adherence and attendance are highlighted as future research directions.

Leslie E. Roos, PhD, C.Psych
Research Scientist, Children's Hospital Research Institute of Manitoba (CHRIM)
Assistant Professor, Departments of Psychology and Pediatrics, University of Manitoba
Winnipeg, Manitoba

Reference

1. Jakubovic RJ, Drabick DA. Dialectical behavior therapy-based interventions for externalizing problems among adolescents: A meta-analysis. Clinical Psychology: Science and Practice. 2023; 30(3): 251-263. https://doi.org/10.1037/cps0000140