

# Making a Difference for Adolescents with Attention-Deficit/ Hyperactivity Disorder

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## Making a Difference for Adolescents with Attention-Deficit/Hyperactivity Disorder

Tailored interventions are required if adolescents with Attention-Deficit/Hyperactivity Disorder (ADHD) are to meet their full potential. Research by **Professor Steven Evans** at Ohio University illuminates the effectiveness of these interventions and offers valuable insights for families, educators, and clinicians. From the significant impact of compliance with interventions to the diverse response patterns among adolescents, Professor Evans's research underscores the importance of personalised approaches in fostering success. By understanding the nuances of ADHD management and investing in evidence-based strategies, clinicians and educators can better support the well-being and future prospects of adolescents navigating this complex neurodevelopmental condition.

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### Attention-Deficit/Hyperactivity Disorder

Attention-Deficit/Hyperactivity Disorder (ADHD) is a prevalent and enduring neurodevelopmental behavioural condition, which manifests as inappropriate levels of inattention and/or hyperactivity/impulsivity in youth. The global prevalence of ADHD is about 5%, but estimates closer to 10% have been suggested for the USA.

Adolescents with ADHD often face unique challenges in academic, organisational, and social domains. Notably, adolescents with ADHD often struggle with maintaining focus in academic settings, organising tasks and responsibilities, and navigating social interactions. These challenges can significantly impact their overall well-being and future success. However, recent research by Professor Steven Evans of Ohio University in the USA and his colleagues provides valuable insights into the key benefits of interventions tailored specifically for adolescents with ADHD.

### Researching Interventions for Adolescents with ADHD

Professor Evans and his colleagues have shed critical light on the effectiveness, trajectories, and cost-effectiveness of interventions designed to address the specific needs of those affected by ADHD. By understanding the nuances of ADHD management and tailoring interventions to individualised needs, researchers aim to optimise outcomes and support the thriving development of adolescents. These interventions encompass a range of approaches, including behavioural and training interventions, school-based programs, and family support initiatives.

Key factors that contribute to intervention success and strategies that enhance efficacy have been identified, and by exploring the

long-term effects of interventions and considering the economic implications of various intervention modalities, sustainable and cost-effective solutions for supporting adolescents with ADHD are now a reality.

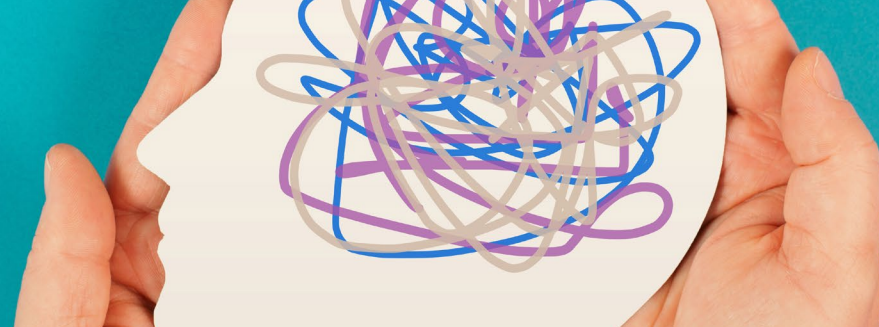
### The Benefits of Challenging Horizons Program

Consistent participation in specialised programs can significantly enhance academic and organisational skills for adolescents with ADHD. Research demonstrates that those who adhere to interventions, such as the [Challenging Horizons Program](#) (CHP), an approach based on training interventions in secondary schools, demonstrate notable improvements in academic performance, organisation, social functioning, and homework completion. There are developmental differences in response, with high school-aged adolescents demonstrating greater improvements in social functioning than younger adolescents and middle school adolescents demonstrating greater benefits than high school adolescents with academic functioning.

As with all interventions, compliance is a critical factor that determines eventual efficacy and success. Professor Evans and his colleagues have shown that there are no discernible demographic differences between intervention compliers and non-compliers in CHP. This suggests that CHP can effectively support adolescents with ADHD, irrespective of factors such as race/ethnicity, age, or socioeconomic status.

### Long Term Benefits

Professor Evans and his colleagues highlight the importance of long-term engagement with CHP if maximum benefits are to be achieved. More specifically, they found that high school-





aged adolescents who attended 30 or more individual sessions at school (20 to 30 minutes in duration) demonstrated greater improvements in academic, organisational, and social skills compared to those with lower attendance rates. This suggests that consistent participation leads to cumulative benefits, with incremental gains observed over time.

These benefits also seem to endure beyond the intervention. Professor Evans found that many benefits increased over time well after the intervention was completed. His research points to the enduring positive impact of a training approach and compliance with treatment, especially in improving social skills beyond the immediate intervention period. In other words, the positive impact of training and engagement continues to unfold even after the formal intervention sessions ended.

It is important to acknowledge that with high school students, compliance with treatment led to significant improvements in academic skills during the intervention year, but these effects were not sustained in the following years. Sustained and increasing gains in academics were evident with middle school students beyond the intervention year. This suggests important developmental differences that have implications for future revisions to the CHP and other interventions targeting adolescents.

### After-School Support

A further study conducted by Professor Evans and colleagues analysed the response trajectories of middle school adolescents diagnosed with ADHD who underwent the Challenging Horizons Program in the format of an After-School (CHP-AS) intervention.

Employing advanced statistical methods such as latent trajectory analyses, Professor Evans and his colleagues identified distinct

response trajectories among participants. Notably, a significant proportion of individuals were classified as 'responders'. Specifically, responders showed substantial improvements, transitioning from clinically significant impairment to normal functioning levels in various domains. These responders demonstrated tangible improvements in various areas, including academic performance, organisational skills, and social interactions.

### Working Alliance Between Adolescents and Counsellors

The alliance forged between adolescents and their intervention providers was found to be an important facilitator of the success of adolescents. This alliance, characterised by trust, collaboration, and mutual respect, serves as a positive predictor of response, illuminating the crucial role of personalised approaches when working with adolescents with ADHD.

Central to this dynamic is the therapeutic relationship between adolescents and counsellors, which exerts a consistent and profound influence on outcomes. The quality of this relationship, marked by open communication and shared goals, is instrumental in fostering meaningful change and progress. Indeed, the studies from Professor Evans and colleagues underscore the significance of a positive rapport between adolescents and counsellors.

Of particular interest is the finding that adolescent-rated working alliance significantly predicts response, highlighting the importance of the adolescent's perspective in gauging the therapeutic relationship. This underscores the need for interventions to not only focus on clinical outcomes but also prioritise the subjective experiences and perspectives of adolescents themselves.



Notably, adolescents with ADHD often struggle with maintaining focus in academic settings, organising tasks and responsibilities, and navigating social interactions. These challenges can significantly impact their overall well-being and future success.





Key factors that contribute to intervention success and strategies that enhance efficacy have been identified, and by exploring the long-term effects of interventions and considering the economic implications of various intervention modalities, sustainable and cost-effective solutions for supporting adolescents with ADHD are now a reality.

### Fostering Social Skills for Success

Social functioning is a critical aspect of the developmental journey of adolescents, especially those with ADHD. The CHP shows promising results in bolstering social skills among adolescents with ADHD, as reported by both parents and adolescents.

Although challenges remain, including variability in daily school operations and challenges in evaluating social functioning, the feasibility of implementing CHP in school settings offers optimism for enhancing outcomes for adolescents with ADHD. By effectively targeting social skill deficits commonly encountered by adolescents with ADHD, the CHP paves the way for fostering meaningful connections, enhancing peer relationships, facilitating smoother social interactions, and addressing social skill deficits commonly experienced by adolescents with ADHD.

### The Role of Family Dynamics

In adolescent development, family dynamics play a pivotal role, exerting a profound influence on outcomes and overall well-being. The intricate interplay between individual challenges and familial interactions underscores the importance of addressing family-related factors in interventions tailored for adolescents with ADHD.

Professor Evans and his colleagues have illustrated the significant impact of family dynamics, particularly parent-adolescent conflict and parental stress, on intervention response. In fact, these familial stressors were identified as critical determinants of response.

The findings also revealed insights into the reciprocal nature of intervention effects on family dynamics. Notably, parent-rated stress related to their adolescents exhibited significant reductions in the CHP group, suggesting positive effects and a broader

impact on family dynamics and parental well-being. Moreover, the researchers identified a significant reduction in parent-rated symptoms of inattention within the CHP group compared to the control group. This finding is particularly significant as inattention symptoms have been linked to social impairment in adolescents with ADHD.

### Investing in Success: Cost-Effectiveness of ADHD Interventions

Although concerns about the cost of interventions for ADHD are common, a comprehensive cost-effectiveness analysis reveals the surprising value of after-school programs for enhancing academic functioning among adolescents. Despite higher upfront costs, after-school programs like CHP-AS demonstrate greater long-term effectiveness compared to weekly mentoring sessions (CHP-M) and clinic-based individual therapy. Specifically, the after-school program was found to be more cost-effective in improving young adolescents' grade point average (GPA) immediately after the intervention and sustaining these improvements six months later.

In particular, the CHP-AS has been shown to improve academic performance, particularly in terms of GPA. GPA is a key determinant of various positive life outcomes, and the benefits of the CHP-AS on GPA suggest potential societal benefits well beyond the program. Specifically, the CHP-AS may have significant implications for future success and well-being, positively influencing academic outcomes such as high school graduation, higher education attainment, and future employability. Thus, investments in intensive interventions like the after-school program may offer long-term value for schools, students, and communities.



## Avenues for Future Research

The work by Professor Evans and colleagues provides valuable insights into the multifaceted challenges faced by adolescents with ADHD and highlights the effectiveness and cost-effectiveness of tailored interventions (such as CHP) in enhancing academic, organisational, and social skills. Moreover, we are drawn to the heterogeneity of intervention responses among adolescents with ADHD and appreciate the importance of individualised trajectories. By identifying predictors of response, such as the working alliance and family dynamics, Professor Evans provides valuable insights for optimising intervention strategies and tailoring them to the specific needs of adolescents with ADHD and their families.

In terms of implications for practice, the feasibility of implementing the CHP approach in school settings is clear, with potential benefits for both students and parents. Further exploration may well be needed to identify alternative formats of delivering the after-school program that are equally intensive but even more cost-efficient. Such advances could potentially enhance accessibility to effective interventions for improving school functioning among adolescents, playing a positive and potentially life-changing role in their development and future prospects.

## MEET THE RESEARCHER

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Distinguished Professor Steven Evans obtained his Bachelor's in Education in 1981 from Bowling Green State University and completed a Master's in Psychology in 1986 at Ball State University. Professor Evans furthered his education at Case Western Reserve University, earning his PhD from the Department of Psychology in 1990. Professor Evans now holds the esteemed position of Distinguished Professor of Psychology at Ohio University and is the Co-Director of the Center for Intervention Research in Schools. Professor Evans' research is focused on understanding and improving the lives of children and adolescents with attention-deficit/hyperactivity disorder (ADHD) and related challenges. With a focus on school-based interventions, Professor Evans continues to make significant contributions to psychology and school mental health.

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### KEY COLLABORATORS

This work reflects the contributions of many people and those listed below made substantial contributions to the development and evaluation of the Challenging Horizons Program over multiple studies.



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### FURTHER READING

SM Margherio, SW Evans, GJ DuPaul, *et al.*, [Effects of compliance to a training intervention for high students with ADHD](#), *Journal of Clinical Child & Adolescent Psychology*, 2023, 1-14. DOI: <https://doi.org/10.1080/15374416.2023.2292030>

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