A Case Study: Charlie and The Effects of Organized Physical Activity on Autism

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Research suggests that individuals with autism spectrum disorder (ASD) spend less time engaging in physical activity when compared to peers without disabilities (Pan et al., 2016), but the benefits of physical activity among adolescents with ASD have shown improvements in behavior, health, and motor skills (Dillon et al., 2016). Organized physical activity (OPA; Dunton et al., 2012) is an intervention for individuals with ASD that combines the benefits of physical activity and the student’s natural community setting. It involves structured physical training sessions supervised by an adult and coordinated by an organization or school (e.g., YMCA, Boys & Girls Clubs, intramurals, Boy Scouts).

In the winter of 2019–2020, the behaviors of Charlie*, an adolescent with ASD, were documented as he participated in an OPA—the high school swim team. Charlie’s behaviors were then coded for themes related to the major developmental domains (i.e., social, emotional, physical, adaptive, cognitive) to determine any deviation from how his autism typically presents while in the context of his participation on the swim team.

Case: Charlie

Determined with ASD prior to entering kindergarten, Charlie is a 16-year-old junior in a public Midwestern high school. Consistent challenges related to Charlie’s diagnosis have impacted his life. Specifically, Charlie has had a lack of motivation toward physical activity, unhealthy relationships with food, delayed gross and fine motor skills, challenges with mental processing, lack of regard for responsibility, and difficulty interpreting social and emotional settings. Finally, Charlie is resistant to joining actions and ideas when invited, but he will ultimately join with compliance when instructed to participate.

At Charlie’s spring 2019 annual IEP meeting that involved planning his junior year, Mr. Johnson*, the high school swim team coach and Charlie’s Resource & Life Skills teacher, led a discussion about Charlie’s potential interests. Although not dedicated to the act of swimming, Charlie shared his enjoyment of being in water. The IEP team then decided that Charlie would become an active member of the swim team in the winter of 2019–2020 to meet the IEP fitness goal.

Coaching Strategies

Mr. Johnson implemented four strategies with Charlie to help make the swim season as enjoyable as possible. First, he empowered Charlie’s teammates to provide unconditional support and acceptance. He encouraged teammates to cheer on Charlie during races and praise him afterward, regardless of the place in which he finished. Second, Mr. Johnson anticipated the stress participation in an OPA might cause Charlie, so he encouraged Charlie’s family to openly communicate any concerns—personal or academic—they observed. Fourth, while Mr. Johnson was sensitive to the characteristics of ASD, he put forth much effort in treating Charlie like any other swim team member. Finally, the most important strategy (recommended by Charlie’s family) was using his disposition toward passive compliance to his advantage. Mr. Johnson would give authoritative directions, use appropriate tone, and avoid punitive measures. For example, Mr. Johnson would say, “Today, Charlie, you are going to dive off the block.” Considering Charlie’s disposition and not relying solely on the IEP were pivotal in increasing his participation in new experiences, which manifested in other areas of his life.

Positive Effects of OPA

It is not always the case that a student with ASD will respond positively to an OPA, especially when asked to comply with others’ requests or adjusting to rules and social norms (Ostfeld-Etzion et al., 2016). However, positive effects of OPA on Charlie were observed in the major domains of development.

Social

Increased verbal communication. During the swim season, Charlie began to “tell stories” to family members about events that occurred during practice and the school day. Charlie
President’s Message

Rob Pennington

DADD Community,

As I end my term as your DADD president, I reflect upon the unique circumstances in which we have had to work and live this year. We certainly have been challenged and, ultimately, changed to varying degrees, but I am moved by the narrative of resilience written in the accomplishments of our membership. Each day our school-based members tackled new obstacles to service delivery and levered new technologies and opportunities to collaborate with families to ensure their students were moving forward. Our family members forged stronger relationships with educators to support their children’s instruction, sometimes toggling between Zoom meetings with teachers and their own work-related responsibilities. In their new virtual settings, university faculty discovered new ways to train teacher candidates and then feverishly set forth to adapt their research methods and agendas to address questions in this new world. We have had many successes, and though they may not mediate the loss that some of our members have experienced, I do believe they direct us to a path forward.

I would like to thank our executive board and the many supporting committee members who have kept the organization moving forward this year. Though rarely in the spotlight, these members offer countless unpaid hours in support of the organization. It is because of their hard work that I can say DADD is well-positioned to tackle its mission into the foreseeable future. We are fiscally sound and have expanded our reach via new media for professional development and connection. In addition, we have been working with our Diversity Committee to identify opportunities to ensure all voices within our organization are heard. I have been honored to work with such a talented and committed group of people. Thank you, Emily, Ginevra, Peggy, Leah, Lynn, Angi, Jenny, Bree, Jim, Chris, Jordan, Cindy, Megan, and Stan.

As I conclude my final president’s message, I would just remind our membership that DADD is a unique and wonderful place to call home. It has an advocate heart but is grounded in its resolve to promote research-based approaches to improving outcomes for students with developmental disabilities. Membership in this person-centered and research-focused community is important in this ever-changing educational landscape to ensure that we avoid missteps in the adoption of unsupported or fad practices and that we are supported in our use of sound educational interventions and practices. It can be difficult to find our way amidst the swirling and often competing narratives about educational programming for individuals with developmental disabilities, but DADD and its members can help us situate our practice both in the needs and preferences of each learner (and family) and in educational science.

Rob Pennington
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Executive Director’s Corner

Emily Bouck

Change is hard. It is well known among my family that I personally struggle with change; it takes time for me to adjust and to become comfortable, even if I initiate the change. Perhaps you are like me: Even when you want the change, it still feels uncomfortable or uncertain. Or, perhaps you embrace change and it excites you. However you handle change, I am sure you, like me, recognize that change is constant in life.

In addition to the changes we experience in our own lives—personal or work—the professional organizations we belong to also experience change. DADD is no exception. We have faced multiple changes in the history of our division, such as changing our name as well as our journal name. We have also experienced changes such as expanding our focus on ABA and, more recently, adapting to having a hybrid conference in January 2021.

DADD needs to change—change allows us to evolve. Some changes are initiated by the Board of Directors of DADD while others are a result of external factors (such as the move to a hybrid conference due to the pandemic).

As I write this in August 2021, I realize we are facing multiple changes in DADD. While we seek not change for the sake of change, we also realize that change can be a positive. Starting in January 2022, DADD is moving to providing members with Focus on Autism and Developmental Disabilities exclusively electronically. DADD members will still receive Focus, but it will not come as a hard copy. We made this change due to increased prices that would negatively impact the financial health of DADD. We also felt this was a positive change so DADD could do our part to become a little greener.

We know this will not be our only change; we all must continue to evolve. However, please know that whenever we make changes, we do so with the DADD membership’s best interests at heart. Hopefully, this change will be as positive for you as it is for me.

Emily Bouck
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Applied behavior analysis (ABA) interventions are among the most effective evidence-based interventions for children with ASD (Fein et al., 2013). The ABA techniques reduce problem behaviors to the extent that many with ASD can be educated with their typical peers (Dawson et al., 2012) and are frequently requested and implemented by educators, service providers, and parents in public school settings (Hess et al., 2008). Nonetheless, there has been some hesitation by public school systems to implement ABA-based interventions (Stahmer et al., 2007). Public school administrators’ lack of specific training on the needs of students with ASD, financial resources, numbers of qualified ABA professionals and teachers, and appropriate support for paraprofessionals result in barriers to the adoption of ABA-based programs (Boe et al., 2008). As school districts allocate resources for this growing population, they often disagree with families as to whether schools are legally required to provide ABA services for students with ASD (Decker & Hurwitz, 2018).

**Parental Litigation in ABA: Historical and Current Trends**

Over the last 25 years of ABA litigation, courts initially took a hands-off approach when deciding whether schools were legally required to provide ABA (Decker, 2017). Although the Individuals with Disabilities Education Act (IDEA) explicitly states that schools must provide to eligible students with ASD a free, appropriate public education (FAPE), families and school districts have disagreed on how to define “appropriate” for over 40 years (Decker & Hurwitz, 2018), culminating in the 2017 U.S. Supreme Court ruling in *Endrew*, wherein the court affirmed IDEA’s intent that children with disabilities make meaningful progress in their education and achieve challenging, individualized objectives (Yell & Bateman, 2017).

Parents are requesting ABA-based educational interventions due to their documented effectiveness for individuals with ASD (Stevenson & Correa, 2019). As they become more familiar with federal laws, state laws, and relevant judicial decisions, parents are using the legal and school-based dispute resolution to advance efforts on behalf of their children. Although prior reviews of court rulings related to ABA in schools have suggested students did not have a right to any particular method, including ABA (Stevenson & Correa, 2019), recent due process cases, litigation, and legislation in states such as Louisiana, Hawaii, and Oregon have shined a light on the growing evidence for ABA as the most effective approach for students with ASD and the related need to effectively integrate it in programming. In those states, parents have successfully sued school districts for FAPE violations as they advocate for access to the evidence-based practices deemed specifically effective for students with ASD (i.e., ABA) mandated by IDEA.

In *R.E.B. v. Hawaii Department of Education* (2017), parents argued that their child with ASD was segregated from the general education classroom and that medically necessary ABA treatment was denied in the school setting, resulting in diminished futures and further exacerbation of the disability. The court ruled that the IEP’s failure to specify ABA methods violated IDEA when the IEP team discussed the methodology and recognized that it was integral to the child’s education. The court also emphasized ABA is widely recognized as a superior method for teaching children with ASD. In Louisiana, legislation was enacted to mandate that schools cannot prohibit behavioral health services from being delivered by ABA providers during the school day, including during instructional time, if the parents have made such a request (LA Rev Stat § 17:173, 2018). In Oregon, parents utilized due process to ensure their student’s IEP was amended to require the district to implement ABA services to deliver the student’s specially designed instruction and behavior support plan, that school personnel meet weekly with the student’s private board-certified behavior analyst (BCBA) to collaborate on ABA service delivery, and that direct ABA services include 30 hours per week provided by a district-funded registered behavior technician (RBT) (Oregon Administrative Hearing Case (continued on page 4)

There are several rationales for delivering ABA interventions to students with ASD during the school day. First, ABA provided in a school setting ensures that skills acquired in home and community contexts generalize to school and that a student’s prescribed treatment hours are delivered. Moreover, services provided by a school under an IEP do not prohibit medically necessary services provided across all settings, including school. To be certain, for treatment to be effective, it must be generalized across all environments, using multiple examples, in different settings, and with different people (Hart & Whalon, 2008). Schools constitute the natural environment for a school-age child.

When ABA services have been authorized by insurance, but a school prohibits the ABA provider from delivering the services at school, parents may seek to modify the IEP to permit the ABA provider access to the school to provide medically necessary treatment for students. Parents may assert a school’s lack of required compliance with the Americans with Disabilities Act (1990), which includes a mandate to integrate students and provide services in the settings in which the child functions, most notably, school (Olmstead v. L.C., 527 U.S. 581, 1999). Parents may also invoke Section 504 of the Rehabilitation Act, which prohibits discrimination based on disability. Since schools dispense prescription medications for students with medical conditions and provide access to speech therapy services on campus, refusal to facilitate ABA delivery at school could be viewed as discrimination (for more details see https://www.centerforautism.com/resources/autism-education-rights/).

Guidance will be increasingly needed so families and school personnel can work collaboratively to resolve conflicts surrounding ABA services and their place in students’ IEP programming. The professional relationship between teachers and healthcare professionals such as ABA providers should be viewed as a partnership, marked by professionals working together with families to meet the educational needs of children and adolescents with ASD. Teacher preparation faculty should reconceptualize current roles and model an interdisciplinary approach that capitalizes on the skills and knowledge of all related providers. Advocating for collaborative approaches among school personnel, BCBAs, healthcare providers, and other members of the IEP team provides the best plan possible for each student with ASD or other exceptional needs. School leaders must ensure teachers and staff receive effective training in ABA approaches and interventions for students with ASD, not only to be prepared for potential legal challenges but also to meet the individual needs of the growing number of students with the disorder.

There is little research to guide how to effectively deliver school-based ABA; moreover, the field has yet to comprehensively address the most effective ways for behavior analysts and school personnel to collaborate in their implementation of ABA as they seek to meet the needs of students. Therefore, knowledge of current legal trends on this topic is timely and relevant for a variety of school professionals—and the teacher educators preparing them—who share a vested interest in improving long-term outcomes for students with ASD.

References


Oregon Administrative Hearing Case No. 2017-ABC-01193: Oregon Department of Education Case No. DP 17-135)


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As you know, DADD is committed to enhancing the quality of life of children, youth, and adults with autism, intellectual disability, and/or other developmental disabilities. As student representative, I helped further the mission of DADD by ensuring student voices were heard and helped plan and implement new initiatives. Since I will soon complete my term as the DADD student representative, I want to share ways students can get involved in DADD. It’s a great way to grow professionally and contribute to the field. You do not need to take on a role on the board as student representative to contribute to DADD. There are many ways students can get involved, and DADD values the voices of all members, including students!

Review Conference Proposals
In the late spring to early summer, DADD invites members to review conference proposals. As a reviewer, you will read approximately 8–14 proposals and rate them using a rubric. Not only is this a great service item to add to your curriculum vitae, it helps shape the next conference.

Attend Student Networking Events at CEC and DADD
At the DADD conference there is a designated evening for a student networking event. In person or virtually, it is a great chance to meet other students and build professional relationships that often lead to future collaborative work. Additionally, there is a DADD social hour at the CEC convention.

Present at DADD and CEC
In the spring, you can submit a proposal to present at the DADD conference or the CEC convention. At the DADD conference, there is an award for the best student poster. Presenting gives you valuable experience and an opportunity to share your knowledge and work.

Write for the DADD Express
Any time of the year, students can write and submit pieces for the DADD Express. The DADD Express often solicits submissions for the Evidence-Based Practice and Teachers’ Corner articles. These are great opportunities to translate your work into practitioner friendly articles that reach all DADD members.

Nominate a Colleague for an Award
In the summer and fall, the Awards Committee seeks nominations for the eight awards that DADD presents at the conference. As a student member, you can nominate a deserving teacher, self-advocate, paraprofessional, and/or faculty member. See more information about awards on our website at http://www.daddcec.com/awards.

Join and Contribute to Committees
Finally, students are encouraged to join any of DADD’s eight committees (i.e., Diversity, Conference, Communications/Critical Issues, Publications, Membership, Awards, Nominations, and Finance) by attending a meeting at the DADD conference. For example, you can join the Awards Committee to help with the eight awards DADD presents each year. As a member of the Membership Committee, you can help the committee with recruitment, retention, and engagement of attention. As a member of the Diversity Committee, you can help advocate for the rights and safety for a) individuals with autism, intellectual disabilities, and developmental disabilities and b) the professionals who work with them. The committee also supports intersectional contributions to the field and commits to educating others on the importance of intersectionality in special education. Students can join any committee by attending a meeting at the DADD conference. Be sure to check the conference app for details of when and where each committee’s meeting will take place.

I have appreciated the opportunity to be the DADD student representative. I plan to continue my involvement with DADD through committee work, presenting at the conference, and writing for the DADD Express. I encourage student members to take the opportunity to contribute to the work being done within DADD.
Charlie maintained some of the improved behaviors observed during the swim season. He took initiative to exercise by walking his neighborhood, and he maintained consistent academic performance despite multiple transitions from in-person to online learning.

**Cognitive**

**Improved grades.** To be on the swim team, all members must meet a grade point average requirement. Charlie responded positively to this expectation by asking for help and initiating the use of the resource room for IEP accommodations. Charlie’s efforts resulted in improved grades, which meant a decreased need for private tutoring.

**Conclusion**

Charlie’s family has learned over time to work Charlie’s realities to his advantage. They have collectively learned to identify a behavior that is usually seen as a barrier for Charlie and reimagine how the behavior can be used to his advantage. In this case study, the family’s effort to reimagine Charlie’s passive compliance while he participated in an OPA had positive results.

Because human behavior is dynamic and not static, we do not know the causes of all the positive behaviors that were observed in Charlie during the 2019–2020 high school swim season. However, the observations clearly support the research on the benefits of organized physical activity among adolescents with ASD on the domains of development.

*Pseudonyms*

**References**


TOP 10 REASONS to Attend DADD’s 2022 International Conference on Autism, Intellectual Disability & Developmental Disabilities!

1. Connect the dots: Research-Informed Practice presentations focus on evidence-based and practice-informed strategies and interventions.

2. Value added alert: Earn up to 15 BACB CEUs at no additional cost!

3. Networking opportunities: Connect with peers and colleagues at the President’s Reception, luncheons, in the exhibit hall, and at poster presentations.

4. Timing is everything: It’s in January AND it’s in Clearwater Beach, Florida!

5. Professional Development: PDHs and Attendance Certificates included with registration.

6. Program depth and breadth: 250+ interactive lectures and poster presentations.

7. Great value: An outstanding 3-day program AND breakfast & lunch are included with in-person registration.

8. Hybrid format: A virtual option will be available for those who are unable to attend in person!

9. Focus on diversity, equity and inclusion: 20+ lecture and poster presentations on the program.

10. Go deeper with your knowledge base: Choice of two in-depth, pre-conference training institutes – Using Current and Emerging Technologies to Enhance Equity, Inclusion and Independence Outcomes for Students with ASD and/or Intellectual Disability (3 BACB CEUs) or Ethical Decision Making: Considering Culture, Intersectionality, Diversity, and Bias (3 BACB CEUs in Ethics and 3 BACB CEUs in Supervision).

For further information, please contact Cindy Perras, DADD conference coordinator, at cindy.perras@gmail.com. Please visit our website, http://www.daddcec.com/, for the link to register for the conference!

Please Note: The DADD Board of Directors and the Sheraton Sand Key (a Marriott International property) are committed to providing a safe conference experience for everyone. To that end, the following protocols will be in place:

- All in-person conference participants, including attendees, presenters, and exhibitors, will be required to provide proof of full vaccination through a free, simple, secure, and HIPAA-compliant third-party vendor;
- meeting rooms and the exhibit hall will be set in accordance with social distancing and capacity guidelines;
- CDC guidelines in place at the time of the conference will also be followed.
DADD Featured Teacher of the Quarter

Congratulations to this Quarter’s DADD featured teacher, Alexa Youngberg! Alexa is starting her sixth year as a special education teacher in her self-contained special education classroom. She earned an associate’s degree from Feather River College, a bachelor’s degree in secondary education from the University of Nevada Reno, and a master’s degree in special education (with an emphasis in intellectual disabilities) also from the University of Nevada Reno. Moving forward, Alexa plans to pursue her doctorate in the field as well.

Alexa always knew that she wanted to be a teacher and began her educational journey by pursuing a teaching degree in general education social studies. However, while volunteering as part of her college softball experience, she spoke with families of students with disabilities and realized that she wanted to get more involved with this population. During her student teaching, she elected to work in a self-contained, comprehensive life skills classroom and found her niche through this experience.

In her classroom, Alexa facilitates her students’ participation in community-based instruction (CBI) outside of the classroom, and she also loves to use least-to-most prompting to allow students the opportunity to show what they know. Alexa breaks down complex skills and activities using tasks analysis to better support learning by her students. Alexa is involved in Special Olympics, unified sports, and the Northern Nevada RAVE Family Foundation (Respite and Volunteer Experiences). In addition, she coaches softball at the high school level. Congratulations, Alexa, and keep up the great work.

PRISM Series Update:


One of the most popular books in DADD’s Prism Series, A Guide to Teaching Students with Autism Spectrum Disorder, was originally published in 2013. The good news is that this teacher-friendly guide to instructing students with ASD is being updated. Drs. Darlene Perner and Rob Pennington are leading a team of experts in preparing the second edition. It is being written with preservice and practicing teachers in mind and will reflect the latest in scholarship and knowledge. The new edition will feature content specifically related to providing a range of instructional, behavioral, and social-communicative supports, and it will include new chapters on transition, sexuality, peer supports, and self-management. Another plus will be the inclusion of many sample charts and forms that teachers can put to use in their classrooms immediately. Be on the lookout in 2022 for DADD’s newest resource for teachers of students with ASD.

Editor’s Note

Chris Denning

I hope you enjoyed this issue of DADD Express. We are continuing to use the newsletter to highlight intersectionality and anti-racism, and we plan to continue this focus in future issues. We need to create real and lasting change for our communities, students, colleagues, and friends. Let me know if you’d like copies of recent Teacher’s Corner, Legal Briefs, and EBP articles or look for them on the new DADD website at http://www.daddcec.com/.

Interested in writing for DADD Express? We are always soliciting articles for Teachers’ Corner and for our EBP and Legal Briefs sections. If you would like to contribute, please contact me with ideas or questions (christopher.denning@umb.edu).

DADD Website:
http://www.daddcec.com/