BEHAVIOURAL INTERVENTIONS FOR ATTENTION DEFICIT HYPERACTIVE DISORDER (ADHD)

Attention Deficit Hyperactive Disorder (ADHD) affects 2-5% of school aged children (NHS UK website). ADHD is categorised by a group of behavioural symptoms which include hyperactivity, impulsivity and inattentiveness. Children are typically diagnosed between the age of 6 and 12. These symptoms have a significant impact on the child’s development and learning. DuPaul, et al (1998) state “the greatest risks for individuals with this disorder is academic underachievement”. All children engage in off-task behaviours throughout the school day, although children with ADHD find it harder to focus and concentrate and may be off task at a higher rate when compared to their peers. This impacts how they access the curriculum and learning materials. Medication the most common intervention and is prescribed to help reduce the severity of the symptoms. Behavioural Interventions have also been shown to support children with ADHD.

Self management is an effective and popular behavioural intervention. Rafferty and her team investigated the use of self management on spelling performance and on-task behaviours for three students with ADHD (10-11years). Each day the students had a session in which they practised spelling 20 words (target words changed each week). They practised these words by looking at them, covering them, spelling them out loud, or writing them. The self-management procedure involved wearing earphones linked to a tape that had pre-recorded beeps, which sounded randomly. When the student heard the beep they would record if they were on-task or not. There were three comparison students who did not receive training on self management and did not use these techniques. During baseline students with ADHD were on-task on average 45% of the time (comparison students average = 92%) and during the self management intervention students with ADHD were on-task 84% of the time (96% for comparison peers). Spelling accuracy for students with ADHD also improved. The teacher was positive about this intervention as she found it easy to deliver and resources were easily available.

Peers can have a positive impact on other children’s learning. DuPaul et al (1998) investigated the use of Class-wide Peer Tutoring (CWPT). This procedure involves peers working together through academic tasks. One child is the tutor and the other the tutee for 10 minutes and then they switch roles for 10 minutes. This procedure had a direct impact on on- and off-task behaviours. Mean on-task behaviours increased from 29% to 80% for the students with ADHD from the initial baseline to the first phase of CWPT. During the return to baseline, on-task behaviours dropped to a mean 21% and then rose again to 83% when CWPT was reintroduced. The researchers also conducted pre-test and post-test on academic skills each week and the scores were higher during the CWPT phases when compared to baseline. This shows that students with ADHD were on-task more frequently and their academic perfor-
mance was enhanced during CWPT phase, which shows that this intervention may support students with ADHD. Consumer feedback was positive from teachers and students.

Flood et al (2002) conducted a Functional Analysis (FA) and then developed a peer mediated intervention. They compared attention (teachers and peers), control, alone and escape conditions and found the highest frequency of off-task behaviours and lowest number of maths questions answered in the peer attention and alone conditions, in the FA. The intervention they developed involved a Differential Reinforcement of Alternative behaviours (DRA) with prompting with peers. The students with ADHD worked with their peer on maths questions and the peer delivered reinforcement (high fives, “we’re working really fast!”, etc.) when they were on-task. For two of the three participants, this intervention was effective in reducing off-task behaviour. For the remaining participant they also introduced a contingency contract which involved access to preferred items, in addition to DRA with prompting. This was effective for this participant and off-task behaviours reduced.

These studies show that Behavioural Interventions can support learners with ADHD in classrooms. These interventions were delivered by teachers or peers, which indicate that they are easy to administer. These interventions also don’t hinder learning opportunities of the peers used in the peer mediated interventions, as they are involved in learning and also access curriculum materials. They also show a positive impact on on-task behaviours and academic performance within a classroom and group learning environment. If you want to develop an intervention for students, speak to a BCBA or BCaBA for further advise. Also if you are concerned that your child may be displaying symptoms of ADHD, you can speak to your family GP or your child’s teacher for advice.


PRODUCTS

This wish list includes all the essentials that every Behaviour Analyst needs. These will help you make resources and take accurate data.

EVENTS

Association of Behavior Analysis International (ABAI) is happening on the 14th-15th November 2017, in Paris, France. This is the Ninth International Conference. For more information and to book your place click here. The cost is $700 (£559.64 approximately).

The UK-SBA is holding a workshop on the 9th and 10th of November, in London. They are hosting Prof. Jesse Dallery from the University of Florida, and he will be speaking about Substance Misuse and Contingency management. For more information and to book this event, please go to the UK SBA events page. The cost for non-UK-SBA Members are £175 for one day and £250 for both days. For Members the cost of one day is £100 and both days is £150. If you would like to become a member of the UK-SBA it costs £25 for one year, and you can become a member by registering through the website.

You can study in the comfort of you home with Florida Institute of Technology (FIT). They have a wide range of courses (costs vary) to help you develop you understanding of the principles of Behaviour Analysis. Continuing Education (CE) Units available on many courses.

Please contact busyanalyticalbee@gmail.com | www.busyanalyticalbee.com
Fading: This procedure is used to gradually transfer stimulus control from one antecedent stimulus to a new stimulus and producing the same response of behaviour. This may be done by fading prompts, positions or particular features (size, colour, etc.). For example a visual prompts may be placed closer to the learner and then moved further away across trials.

STUDY TIPS

An essential tool for studying is Cooper, Heron and Heward’s textbook ‘Applied Behaviour Analysis’. Use this to help develop your understanding. I used this alongside the Behavior Development Solutions (BDS) programme. I would read a chapter in the book before completing the respective BDS module. You can find the ‘Applied Behaviour Analysis’ on Amazon.

PEOPLE WHO INSPIRE US

This month we are celebrating the career of Dr. Gina Green, PhD, BCBA-D. She started her career at Michigan State University, where she completed her undergraduate and masters degree studies. Green then completed her PhD in Psychology in 1984 at Utah state University. Gina Green has held positions at Southern Illinois University, New England Center for Children in Southborough, E. K., Shriver Center for Mental Retardation in Walktham, and the University of Massachusetts Medical School. Dr Gina Green has had an important influence on the field through many organisations that aim to promote the field. She was the former president of the Association for Behavior Analysis and California Association for Behavior Analysis and a former member on the Board of Directors of the Behavior Analyst Certification Board. Gina Green has been praised for her work, firstly by Psychology Today who gave her the “Mental Health Professional of the Year” award, in 2000. In 2005, she received a honorary Doctor of Science degree from The Queen’s University of Belfast in Northern Ireland. She has also authored many publications, including books and research papers. Dr Gina Green is now currently working as the Executive Director of the Association of Professional Behaviour Analyst, as a consultant in San Diego and lectures at San Diego State University.

NATURAL ENVIRONMENT TEACHING (NET) IDEA

Cause and effect toys offer a variety of learning opportunities for early learners. Many toys are very colourful and have different components or buttons, and you can find some nice examples in this wish list. Some toys may make sounds or play music. This activity can offer opportunities for many prerequisite skills, including eye contact (mand 1a, IP* 2e), pointing or gesturing towards an item (mand 1b, 1c, 1d, 2a). There’s also opportunities to mand for particular buttons or actions with the toy, or access to the toy (mand 1M, 2M, 3M, 4M, 5M). This may also offer opportunities for your client to want and mand for you to attend to the item they are playing with (mand 4d). These toys also offer opportunities for important independent play skills (IP* 1M, 2b, 2d, 2M, 4b, 4d). Most toys have lots of colours, shapes, letters and/or numbers that offer opportunities for receptive identification or tacting (labeling) any of these (LR**, 3c, 3M, 10b, 10c. Tact, 3M, 4M, 5M, 10d, 10e). The toy may also have different sounds which may relate to musical instruments or animals for example, you could hide the toy and ask your client to label what they hear, for instance “dog” when they hear barking (tact 7b). You can also incorporate echoic (copying sounds) targets within the activity, for instance “Look it’s a dog, can you say dog?” or “say beep”. These may also be great for pairing!


*IP—Independent Play **LR—Listener Responding

TERMINOLOGY

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Next month we’re looking at Time out Procedures, so be sure to subscribe so you receive the next exciting edition.

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