

Busy Analytical Bee

NEWSLETTER November

Welcome to the November edition. In this addition, we review some research around Acquired Brain Injury. There are a lot of exciting online events coming up this month and further, so check out the events section for those. The NET idea is around writing letters, if you want to use the free Royal Mail service. We celebrate the career of Murray Sidman. Also there is a term and study tip to check out. Have a great month and stay safe!

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ACQUIRED BRAIN INJURY

When there is an acquired brain injury (ABI), there can be a significant impact on the persons life. They may have to relearn many skills, including self-help and daily living skills, mobility and speech and communication. Headway charity state that "In 2016-17, there were 155,919 admissions for head injury. That equates to 427 every day, or one every three minutes". The most significant barrier for many people with ABI is their willingness to engage with their physical therapy. Falcomata & Dixon (2004) state that their "refusal of participation in physical therapy activities can be conceptualised as impulsive as the individual engages in a behaviour that obtains the small immediate reinforcement in the form of escape rather than a behaviour that obtains a larger delayed reinforcer in the form of greater independence".

Exploring this further, delayed reinforcement, choice and self-control has been investigated by these authors in two studies (Dixon & Falcomata, 2004 and Falcomata & Dixon, 2004). In both these studies they compared forced choice and progressive delay of reinforcement. Force choice involves the participant being presented with two coloured cards, one indicating small, immediate reinforcement and the other indicating a set delay

for reinforcement, contingent on the target behaviour. In both studies, all participants showed they had a preference for the smaller immediate reward in the choice condition. The authors then introduced the progressive delay condition. This condition was the same as before but a third card is introduced to represent the progressive delay reinforcement. Initially this was set at 0 seconds of delay, and after the participant chooses this card for three consecutive trials, the delay is increased. The increase continues until they reach the target duration of the respective behaviour. This was the most successful condition for the participants across this study.

One study explored choice of the activities on on-task behaviours (Tasky et al, 2008). This study compared two conditions where 3 tasks were assigned to the participant, and another where the 3 tasks were chosen from a selection of 9 by the participant. For all participants there is a clear preference for the choice condition with higher levels of on-task behaviours. One of the three participants had 100% on-task behaviours during all choice trials, and another had 100% for 9 or the 10 choice trials. This demonstrates that allowing people to choose their tasks, can have a marked impact on how they engage with those tasks.

Another consideration that may help people in this population is Acceptance and Commitment Therapy (ACT). Many people who have ABI also struggle with their mental health as a result. ACT has been shown to



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support people with mental health issues and depression (Bohlmeijer et al, 2011). ACT is underpinned by the idea of accepting difficult thoughts and feelings, making space for these, being present, and living a life that is in line with your values. Kangas & MacDonald (2011) discuss in their paper how ACT could be beneficial for this population. They suggest this will help this population with any psychological difficulties and their ability to adjust and process their recent diagnosis. As discussed previously, many people of the population struggle with the challenging physical therapy activities they may need to do, so ACT can help them overcome these.

There are many behavioural approaches that could be applied with this population to support their recovery from an ABI. These could help alleviate difficulties with mental health, and to support them successfully relearn skills. Careful consideration should be given to choice of task, if possible and use of progressive delay in reinforcement schedules may be preferable. This will help improve their quality of life.

Bohlmeijer, E. T., Fledderus, M., Rokx, T.A.J.J, Pieterse, M. E. (2011). Efficacy of an early intervention based on acceptance and commitment therapy for adults with depressive symptomatology, *Behaviour Research and Therapy*, **49**, 62-67.

Dixon, M. R., & Falcomata, T. S. (2004). Preference for progressive delays and concurrent phsycail therapy exercise in an adult with acquired brain injury. *Journal of Applied Behavior Analysis*, 37, 101-105.

Falcomata, T. S., & Dixon, M. R., (2004). Enhancing physical therapy exercises in persons with acquired brain injury through a self-control training procedure. European Journal of Behaviour Analysis, 5, 29-41.

Headway, Statistics: Acquired Brain Injury 2016-2017. Retrieved November, 1, 2020 from https://www.headway.org.uk/about-brain-injury/further-information/statistics/

Kangas, M., & McDonald, S. (2011). Is it time to act? The potential of acceptance and commitment therapy for psycho-

Picture from: https://flic.kr/p/2goweUz



logical problems following acquired brain injury, *Neuropsy-chological Rehabilitation*, **21**(2), 250-276, DOI: 10.1080/09602011.2010.540920

Tasky, K. K., Rudrud, E. H., Schulze, K. A., & Rapp, J. T. (2008). Using choice to increase on-task behavior in individuals with traumatic brain injury, *Journal of Applied Behavior Analysis*, **41**, 261-265.

EVENTS

Due to COVID-19 large gatherings are still prohibited. You can still collect CEUs and learn at home. I have put together a list of some fantastic online resources, webinars and podcasts, which you can check by clicking this link.

The next UK-SBA Speakers Series will be online and will be on the 12th and 13th November between the hours of 13:00-16:30. The speakers include Prof Jon Bailey, Dr Peter Gerhardt, Prof Henry Roane, and Heather Kadey BCBA. The price for this event for the full event is £50 (Students), £100 for professionals with membership, and £175 for non-members. For more information or to book you place, visit the UK-SBA page.

Vincent Carbone will be leading a Virtual Conference on the 9-11th of November. The 9th will be first workshop which will focus on Teaching Early and Advance Manding and Early Social Skills. The second workshop, 10-11th will focus on using the Essential For Living Assessment and Curriculum. You can attend both events (£350), or individual events (9th: £130, 10-11th: £260). To find more information visit the website.

Association of Contextual Behavioural Science (ACBS) UK and Ireland Chapter is holding their 4th Conference in Manchester and Online on the 16th and 17th November. This conference will be around Acceptance and Commitment Therapy (ACT), Behaviour Analysis and Relational Frame Theory. Visit the website formore information

Association of Behavior Analysis International (ABAI) will be hosting a conference in Dublin, Ireland in September 2021. To learn more, visit the event page.

Child Autism UK are delivering courses online. There are a variety of topics including Behaviour Management, Introductory Tutor Training and Social skills and Playdates. Check out the page for more information and to book your place.

PRODUCTS

This months <u>wish list</u> contains so great puzzles. Puzzles are great for visual performance tasks, and also support generalisation of receptive and expressive labels for animals, vehicles, numbers/letters, shapes, etc..

NATURAL ENVIRONMENT TEACHING (NET) IDEA

Writing a letter to Father Christmas can be a great NET idea for this month or next month. The Royal Mail have a free service, where if you send them a letter with your child's Christmas list before Friday 11th December, they will send a letter back from Father Christmas. Find out more: https://www.royalmail.com/christmas/ letters-to-santa. Depending on your child's ability, you could use pictures (pre-made), go through a catalogue together, write or draw the list. Early learners may benefit from this being a cutting and sticking activity, and more advanced learners could be encouraged to draw or write the items they hope to receive at Christmas. You could then take these letters to the post box and send them to the free service. This activity will offer many opportunities to contrive mands depending on how you present it, your learner will need certain items (pen, paper, scissors, envelope, stamp, etc.), or may ask you to cut out pictures for them (mand 1-6M). They may need help with certain aspects (mand 7f, 7M). You can also cut out several pictures and ask your learner to identify the pictures (Listener responding 3M, 5M. tact: 1-6M). This activity can offer plenty of opportunities to answer/ask questions about Christmas (mand 11M, 15M. Intraverbal 9-11M, 14-15M). Also, use the trip to the post box as an opportunity to embed road safety skills.

From: https://flic.kr/p/aRRu3r



Preceding skills reference to the VB-MAPP Assessment tool: Sundberg, M. L. (2008) Verbal Behavior Milestones Assessment and Placement Program: The VB-MAPP. Concord, CA: AVB Press.

STUDY TIPS

Whilst studying it is a great idea to have some books to reference and make notes from. Check out our Amazon wish list to give you some ideas of fantastic books to buy to help you prepare for the BCBA / BCaBA exam!

TERMINOLOGY

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.

PEOPLE WHO INSPIRE US

Murray Sidman was a pioneer of Applied Behaviour Analysis (ABA), best known for free-operant avoidance (aka Sidman avoidance). He was born in 1923 in Boston Massachusetts. In 1952 he received his Ph.D in Psychology from Columbia University. During his career he worked as a researcher and also taught at many University's, including Columbia University, Johns Hopkins University and Harvard Medical School. He has published many research papers, across many journals, including 'Tactics of Scientific research'. The Association for Behavior Analysts International (ABAI) describe this as a "classic that is still used today". His work on Sidman avoidance, described how people avoid aversive stimuli, and engage in behaviours that prevent the aversive stimuli. He discusses this in his book 'Coercion and it's Fallout'. He also discussed terrorism from a behavioural perspective in this book. Sidman passed away in May 2019, aged 96.

Association for Behavior Analysts International, Murray Sidman— Retrieved November 1, 2020 from https://www.abainternational.org/constituents/bios/murraysidman.aspx

Next month we're going to *Review 2020* so be sure to subscribe so you receive the next exciting edition.

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