Busy Analytical Bee

NEWSLETTER January

Welcome to the January edition. In this edition we are discussing littering and recycling, stimulus control, some activities involving threading and the career of Sidney Bijou. There are also some new events coming up this year. Happy New Year to all our subscribers.

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HOW CAN ABA CHANGE LITTERING OR RECYCLING?

Applied Behaviour Analysis (ABA) strives to combat issues that are shown to have social significance. In their paper, Baer, Wolf and Risley (1967), discussed the seven dimensions of ABA, and one of these dimensions was Applied. This dimensions is described as being important, not because of the procedures used but, "by the interest of which society shows in the problems being studied" (Baer, Wolf and Risley, pg 92, 1967). This issue is of significant interest to society as the UK taxpayer currently spends £1 billion a year on clearing up litter from streets and free spaces in England, and a further £75 million in Scotland (http://www.forgerecycling.co.uk/blog/the-uk-litter-problem/).

Litter has a knock on effect causing harm to the wildlife, drain blockage, damage to property and the environment, and many more issues. There are many initiatives to encourage people to recycle and dispose of litter in more environmental friendly ways. This includes advertisement to encourage people and being provided with recycling bins, and leaflets to explain materials to be recycled. If people engaged in the desirable behaviours, using recycling and rubbish bins, then this could protect the environment and reduce the costs to the taxpayer.

So what can the field of ABA do to help people engage in these more desirable behaviours? Many researchers have tried to tackle this issue. One study investigated three interventions aimed to decrease the amount of litter found on the floor in a Center whose residents had developmental disabilities (Bacon-Prue, et al, 1980). This study investigated increasing the amount of bins on the grounds, paying two workers to collect litter and a "marked item technique", compared to a baseline phase where residents engaged in their typical littering behaviours.

Taken from: https://flic.kr/p/gVTpHZ

The marked item technique used a fluorescent UV spray on 10 items of rubbish and volunteers collected rubbish (Bacon-Prue, et al, 1980). If they collected an item marked with the spray they were given money and had their photo taken. This 'marked item' phase was the most successful at reducing the amount of litter found on the grounds of the Center, which was an average of 70% less litter acro0ss the five areas assessed compared to baseline. It was also cost-effective compared to paid workers and the residents asked to volunteer to collect litter again. .

A similar study (Burgess et al, 1971) conducted in a theatre compared six different interventions to increase patrons using the bins, including doubling the number of bins, giving customers litter bags and giving litterbags plus a prize (1ocents or a free ticket). Of all these interventions the most successful was when the customers received a incentive (money or tickets) for exchanging a litterbag with rubbish. Neither of these studies demonstrated if the behaviour is maintained by the incentive, or if this incentive can be faded out.

These studies did not demonstrate control over littering behaviour, as litter was collected by the participants so was still being dropped. Both of these studies did try an antecedent approach, by placing more bins, but found this did not decrease the amount of litter being dripped. Increasing bins reduces the response effort of using a bin and should, therefore, increase the probability of the behaviour occurring. One study found that placing additionally bins in strategic places can increase recycling (O'Connor, et al, 2010). Researchers investigated manipulating the appearance of the bins, increasing the number of bins and then placing the additional bins in each classroom. This last condition was effective in increasing the behaviour of recy-

cling plastic bottles, where the other conditions had no change to plastic bottles being recycled. This means location is critical and can be a successful antecedent factor to consider when decreasing littering behaviour.

Another study supports that proximity is an important factor. This study investigated introducing a recycling bins to increase the amount of paper being recycled in an office (Brothers, et al, 1994). Researchers compared two locations against a baseline condition, one in a central location and one by each desk in the office setting (local location). The central location had some impact on behaviour as it increased the paper being recycled, to an average of 28% of all the paper thrown. The researchers used a multiple baseline design across settings, introducing the local location across different areas within the office, increasing to an average of 88% when in the final phase. Follow-up was 92% of paper was recycled.

Image from: https://flic.kr/p/9uDMLx

As stated by Burgess et al, "carrying of litter is probably for most people aversive. Hence, its quick disposal by dropping it on the floor or ground or by throwing it out a car window would be negatively reinforced" (page 75). The studies discussed had different results regarding increasing bins, however the last two papers indicate that proximity is an important factor at reducing the response effort of using bins, or recycling. This is important for society to consider; placing bins appropriately littering can be reduced, and/or recycling increased.

Bacon-Prue, A., Blount, R., Pickering, D., & Drabman, R. (1980). An evaluation of three litter control procedures—trash receptacles paid workers and the marked item technique. *Journal of Applied Behavior Analysis*, **13**, 165-170.

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of Applied Behaviour Analysis. *Journal of Applied Behavior Analysis*, **1,** 91-97.

Brothers, K. J., Krantz, P. J., McClannahan, L. E. (1994). Office paper recycling: a function of container proximity. *Journal of Applied Behavior Analysis*, **27**, 153-160.

Burgess, R. L., Clark, R. N., & Hendee, J. C. (1971). An experimental analysis of anti-litter procedures. Journal *of Applied Behaviour Analysis*, **4,** 71-75.

O'Connor, R. T., Lerman, D. C., Fritz, J. N. (2010). Effects of number and location of bins on plastic recycling at a University. *Journal of Applied Behavior Analysis*, **43**, 711-715.

The recycling blog. Retrived December 31st, 2015, from http://www.forgerecycling.co.uk/blog/the-uk-litter-problem

BEHAVIOURISTS WHO INSPIRE US

The Behaviourist we're celebrating this month is Sidney W. Bijou. Born in Baltimore, US in 1908. In 1933 he completed a degree in business at the University of Florida. He then went to Columbia University in 1937, where he was awarded his masters in psychology and then his PhD at University of Iowa. He developed a reading assessment, the Wide Range Achievement Test, with Joseph Jastak, and also served in the U.S. Army during World War 2. Following this he was hired by University of Washington in 1946, where he worked under B. F. Skinner. Bijou, unlike other psychologists, began to use the Skinners behavioural techniques to encourage desirable behaviours in children. This was the use of praise, hugs and edibles and children that behaviour was undesirable was given time-out. In 1948 he began working in University of Washington and continued to apply these techniques within the Institute of Child Development and with Donald Baer wrote many books. His studies demonstrated the positive impact of encouragement of good behaviour had on children. Ole Ivar Lovaas adapted the work done by Bijou to develop his own techniques. Bijou also helped establish the Journal of Applied Behaviour Analysis, along with many other influential Behaviourists at the time. He worked at the University of Illinois, the University of Arizona and the University of Nevada, Reno developing behavioural programs until 2001. Bijou had a daughter and son and had been married for 67 years before his wife past away in 2001. Bijou died in June of 2009 at his home. It is undeniable that Bijou has had a significant contribution to the field of ABA, developing many of the programmes we use today. To learn more, click here.

STUDY TIPS

In January 1st 2016, the BACB are introducing the 'Professional and Ethical Compliance Code for Behavior Analysts', this is replacing the two previous documents the 'Guidelines for Responsible Conduct for Behavior Analysts' and 'Professional Disciplinary and Ethical Standards'. The BACB September newsletter explains all the changes. It is important that all Behaviourist as familiar with the new guidelines, but is especially beneficial for test takers too!

TERMINOLOGY

Stimulus control: This is when an environmental event occurs and the behaviour is changed by an antecedent stimulus. This occurs when a behaviour is preceded by a stimulus and reinforcement increased the frequency of the behaviour occurring in the future. When this stimulus is present this can affect the latency, duration, frequency or intensity of the behaviour. An example of this is a red light at a traffic light. When the red light is present the behaviour of braking occurs.

EVENTS

Ambitious about Autism have released a new leaflet with all their dates for 2016.

Child Autism UK are offering many courses across 2015. Courses are typically £65 for one day (two day costs £130). For more information, please go to their page.

Mary Lynch Barbera is offering a great online course covering 5 units. There is currently a waiting list for the next phase, occurring early 2016, so sign up today.

Vincent Carbone will be in Chester from the 22nd until the 24th February running a workshop titled "An introduction to Verbal Behavior". This is definitely a fantastic opportunity to listen to an influential Behaviourist.

The ABA Forum (ABAF) hold meetings quarterly with different speakers and also send regular emails about other events and jobs. To join email Nick Barratt on Nick.Barratt@dimensions-uk.org and ask to join today.

PRODUCTS

This month we have pulled together some items that would be useful when conducting a Level 1 Assessment for children using the VB-MAPP (Sundberg, 2008). The toys in the wish list are mostly appropriate for younger children.

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

Remember to contact us at our email account busyanalyticalbee@gmail.com and like our Facebook page and Twitter page @AnalyticalBee

Next month we will be looking at Preference assessments so be sure to subscribe so you receive the next exciting edition.

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NET IDEAS

Threading is a great activity for children to develop better hand-eye co-ordination, and motor control. You can get a variety of sets, with beads that are shaped like animals, numbers, vehicles or coloured shapes (play 8c). Also there are boards with holes in that you can thread around a picture or shape. This activity offers opportunity for requests for help, beads or specific shapes or colours of beads (mand 7f, 6a, 9d). You can also receptively identify or label colours, shapes (LR 10b, 10c) or pictures (LR 6a). If the beads are shaped into vehicles or animals, for example, then this can allow for conversation around the beads. This could be "Car goes….?" (IV 6a) "Where does a cow live?" (IV 11b). You can also ask your client about their preferences, for instance favourite colours, or animal/vehicles/characters/etc. if using pictures (IV 10d). There is also the opportunity to complete sequences (maths 15b) or to count (maths 12d, 13b, 13M). You can also make your own boards to thread through. If you get a picture that your client would like, for example a TV character, laminate it and then hole punch holes around the picture. You client can thread a shoe lace through the holes to support all these skills.

Image from: https://flic.kr/p/6uKg62

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.

LR: Listener Responding. IV Intraverbals (conversation skills)

THANK YOU

I would just like to thank all the subscribers that have supported the newsletter in 2015. The newsletter continues to grow and it is thanks to your continuing support. I would like to wish you all the best for 2016.