



Busy Analytical Bee

NEWSLETTER February

Welcome to the February edition. In this edition we are looking at research surrounding problem gambling. We also have included a review of a rice NET idea, the career of Henry Pennypacker and the three term contingency. Also check out some of the fantastic events that are coming up in the coming months!

Kirsty Angel M.Sc. BCBA (Author)

APPLIED BEHAVIOUR ANALYSIS (ABA) AND GAMBLING RECOVERY

Everyone is aware of how problematic a gambling addiction can be. The financial implications and the impact it might have on the person's ability to function and work can be overshadowed by their need to gamble. This can have a serious influence on their mental health. The Gambling Commission report that gambling participation is reported to be 45% of the general public (participation in the past four weeks of the survey). This shows that gambling is a very common activity. In comparison, they state that "0.5% of people aged 16+ in England identify as problem gamblers (2012)", compared to 0.7% in Scotland and 1.1% in Wales. This may mean that people do not consider their gambling activity to be a problem, and/or are not seeking support. The NHS state that "there may be as many as 593,000 problem gamblers in Great Britain". This figure looks more frightening and may support the idea that people are not seeking support or realising that they may have a gambling addiction.

Applied Behaviour Analysis (ABA) prides itself on tackling socially significant issues (Baer, Wolf & Risley, 1968) and Dixon et al (2003) state that "applied research on pathological gambling is long overdue". One area that has been researched is Delay Discounting. In their paper Dixon et al (2003), investigated this, which is when a delayed consequence loses value the further away it becomes. This means £1,000 prize in 10 years, has a lower value to £1,000 in 10 months. They found in their research that participants who scored a 4 or higher on

the South Oaks Gambling Screen (SOGS) discount more severely than the control. Please note, a score of 4 or higher on the



Picture from: <https://flic.kr/p/4TuT85>

SOGS is associated with pathological gambling. All tests yielded significant results, including the difference in the means for each group (control vs gamblers, $p < .001$) and the medians of indifference points of the two groups ($p < .006$). The value of the prizes decreased more rapidly for the group of gamblers, with a prize delayed by approximately 10 years having near zero value. This results were supported by Dixon & Holton (2009). There is a strong relationship between how people Delay Discount rewards and the development of a gambling problem. Dixon & Holton (2009) state that "persons who gamble discount delayed consequences in a relatively monotonic fashion".

Weatherly et al (2012) discuss many risk factors and found that many factors appear to correlate higher with gambling problems. One factor is being an inmate in prison. They hypothesised that this may be due to the lack of activities available so they engage in gambling activities. They also state that 40% of people who are released from prison, reoffend within three years. They suggest that "an individual may have a problem getting or maintaining a job, which would set up an establishing operation in terms of money and potentially alter the contingencies that maintain gambling behaviour". This may lead to illegal activities, stealing for example, to fund gambling activities.

Weatherly & Flannery (2008) reviewed the research of gambling within the field of Behaviour Analysis. They suggest that gambling is a topic that should be explored further by Behaviour Analysts. Even though researchers have demonstrated a relationship between

delay discounting and gambling addiction, Weatherly & Flannery (2008) state that it “the relationship ... is still less than clear”. ABA can help us better understand this relationship. Also, Weatherly et al (2012) suggests “that the person gambles as an escape”, although gambling may have a tangible or sensory function also. This can be an area of Behaviour Analysts to evaluate. In addition to this, ABA can help develop better treatments. This might include the use of Acceptance, Commitment Therapy (ACT). There still is much more than can be done, and repercussions of problem gambling should spark the interest of the field, as it has a significant impact on society.

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.

Dixon, M. R., & Holton, B. (2009). Altering the magnitude of delay discounting by pathological gamblers, *Journal of Applied Behavior Analysis*, **42**, 269-275

Dixon, M. R., Marley, J., & Jacobs, E. A. (2003). Delay Discounting by Pathological Gamblers, *Journal of Applied Behavior Analysis*, **36**, 449-458.

GAMBLING COMMISSION, Gambling participation and problem gambling, retrieved on the 30/1/2017, retrieved from <http://www.gamblingcommission.gov.uk/news-action-and-statistics/Statistics-and-research/Levels-of-participation-and-problem-gambling/Gambling-participation-and-problem-gambling.aspx>

NATIONAL HEALTH SERVICE (NHS), (2015, April 23), *Gambling Addiction—Livewell*, Retrieved on the 30/1/2017, retrieved from <http://www.nhs.uk/Livewell/addiction/Pages/gamblingaddiction.aspx>

Weatherly, J. N., & Flannery, K. (2008). Facing the challenge: The Behaviour Analysis of gambling, *The Behaviour Analyst Today*, **9**(2), 130-142

Weatherly, J. N., Montes, K. S., Peters, D., & Wilson, A. N. (2012). Gambling behind the walls: A Behaviour-Analytic Perspective, *The Behavior Analyst Today*, **13**(3&4), 2-8.



Picture from: <https://flic.kr/p/5oXGCu>

STUDY TIPS

There are pages that share study questions on Facebook. This is a great way to test your knowledge. Also you can develop your knowledge by posting one yourself! There are regular questions on my [Facebook page](#).

EVENTS

Contextual Counselling are offering a [workshop](#) on the 12th May 2017, and is an Introduction to Acceptance Commitment Therapy (ACT), presented by Dr. Joe Oliver and Dr. Marc Balint. This will be held in London and cost £130 (early bird).

[Child Autism UK](#) offer a variety of courses throughout the year. There are courses including “Increasing motivation”, “School Shadowing” and more!

Ambitious About Autism run regular workshops for parents and professionals. They cover a wide variety of topics, including Autism, ABA and about other issues including exclusion, discrimination, etc.. To find out more, visit their [website](#).

EABG dates have been announced! The conference will be held on the 10th, 11th and 12th (workshop day) of April. Keep up to date by following the [Facebook page](#).

Association of Behavior Analysis International (ABAI) will be happening on the 14th-15th of 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).

UK Society for Behaviour Analysis (UK SBA) have announced their next Speakers Series, which will be presented by Dr Susan Schneider on the 13th February. The cost is £45 for UK SBA members, £75 for non members and £20 for students. Registration will open this month so check their [website](#).

Robert Schramm is returning to Edinburgh on Tuesday 4th April to present “Be Your Child’s Best Teacher”. The cost is £120 for professionals and £95 for parents and carers, which is early bird before 28th February, after it is £135 and £110 for professionals and parents/carers respectively.

The Applied Behaviour Analysis Forum (ABAF) hold regular meetings for their members, in London and in . For more information you can go to their [website](#), also you can email Nick Barratt on Nick.Barratt@dimensions-uk.org to become a member and join the mailing list.

TERMINOLOGY

This month we're looking at the three-term-contingencies. This contingency explains the relationship between the environment and organisms. This three-term contingency is depicted in the diagram below, the Antecedent, Behaviour and Consequence.



Picture produced by Busy Analytical Bee

Antecedent: A stimulus or environmental event that occurs before the behaviour. This includes Motivating Operations (MO) and Discriminative Stimulus (S^D).

Behaviour: Any response or activity of the organism of interest. Typically, we focus on observable behaviours.

Consequence: This is any stimulus that is added or removed from the environment following the behaviour. This may maintain, increase or reduce the future probability of the behaviour occurring again.

PRODUCTS

This month's product [wish list](#) contains a variety of building toys. These will help you develop fine motor skills, visual performance skills and imaginative play.

PEOPLE WHO INSPIRE US

This month we are celebrating the career of Henry S. Pennypacker. In 1962, he attended Duke University and obtained his Ph.D. under Gregory Kimble. He was introduced to Ogden Lindsey, and through their friendship, began his love of Behaviour Analysis. Pennypacker worked alongside James Johnston on Precision Teaching and they authored '*Strategies and Tactics of Behavioral Research*' together. He also worked at Florida University and, under his influence, established Florida as a behaviour-based treatment model. Pennypacker is also well known for his input in the development of self-examination methods and devices, for breast cancer. He also founded a company called Mammatech that focuses on development of these methods and devices. He has also been president for the Association for Behavior Analysis International (ABAI) from 1986-1987.

NATURAL ENVIRONMENT TEACHING (NET) IDEA

Rice can make an interesting ingredient for sensory play. Rice can make different sounds when dropped or shaken in a tray or container. It has a dry texture for people who may not enjoy the messier sensory options. You can easily dye the rice so that it is extremely colourful and fun to play with, (to find out how to do this click [here](#)). If you prefer a messier sensory activity, you can add rice to water, paint or shaving foam to add a unique texture to any activity. During this activity you can contrive motivation for requesting (manding) for a variety of items, for instance rice, water, jug, (mand 2M, 3M, 4M, 5M), actions, e.g. pour, shake (mand 7M) and two word phrases, e.g. pour rice, shake jug (mand 7a). For early learners this activity is good for working on use of eye contact as a mand (mand 1a, 1b). You can also incorporate prepositions, for example, put the rice *in* the cup, or put the jug *on* the table, put your hands *under* mine (then pour rice onto the hands). These can be done as mands (mand 13e), receptive (LR* 11d, 13c) or tacts (tact 12d, 14d) targets. If you incorporate colours you can receptively identify (LR* 10b) or label (tact) a variety of colours. You can also hide laminated pictures within the rice of any 2D targets you are teaching, including common objects, actions, feature, function and class (FFC) and reinforcing characters or people. This will support generalisation.

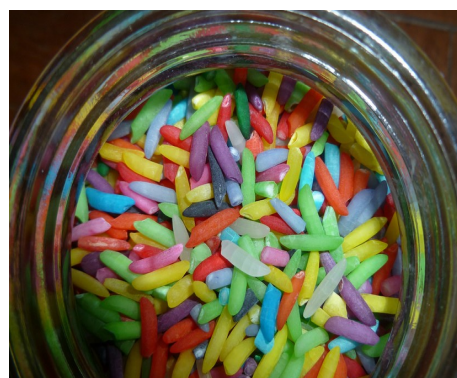
Preceding skills reference to the VB-MAPP Assessment tool:

Sundberg, M. L. (2008) Verbal Behavior Milestones Assessment and

Placement
Program: The
VB-MAPP.
Concord, CA:
AVB Press.

*LR: Listener
Responding

Taken from <https://flic.kr/p/aGhnWg>



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busyanalyticalbee@gmail.com and like our Facebook page and Twitter page @AnalyticalBee

Next month we will be looking at food acceptance interventions so be sure to subscribe so you receive the next exciting edition.

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