Busy Analytical Bee

NEWSLETTER MARCH

Welcome to the March edition. This edition is an interview edition so I am excited to be joined by Steven C. Hayes PhD. The topic I have reviewed is food refusal and interventions to promote a varied diet. Also, some great events happening in the UK and Europe and a treasure/Easter themed activity. Have a great month.

Kirsty Angel M.Sc. BCBA (Author)

INTERVENTIONS FOR FOOD REFUSAL

Many children can be fussy eaters. This can be a frustrating for many parents who are keen for their children to have a varied and healthy diet. For children with a diagnosis of Autism Spectrum Disorder (ASD), this can be a more serious issue. This is usually because these children can have rigid preferences for particular foods, textures, colours, etc.. This can have serious implications on their ability to access social events, meal times, parties, etc. and also on their nutrition, growth and health. This can be extremely challenging for their families, in particular their parents, who can become increasing concern as their child may only eat one or two items of food.

Food refusal may be maintained by positive reinforcement, attention from parents as they try to persuade their child to eat the undesired food, and/or by the presentation of a preferred food. As parents become concerned about their child not eating, they may "cave" and let their child access their preferred food, to be assured that at least their child has eaten something. Also, this behaviour may be maintained by negative reinforcement, as food that they do not wish to eat is removed.

As Applied Behaviour Analysis (ABA) has seen some success with teaching skills and behaviours to children and adults with adults, so it is hoped that (ABA) is able to develop interventions that would increase variety of foods accepted by children or adults who engage in food refusal. Volkert & Vaz (2010) conducted a review of the literature and found "only four studies published in the *Journal of Applied Behaviour Analysis* (JABA) and

Picture from https://flic.kr/p/bEN3Ta

a few additional studies published in other journals (e.g. *Behaviour Interventions*) since 2007 focused on treatment of feeding problems in children with autism". This is surprising considering the social significance of this topic and more research is needed to understand feeding problems and food refusal. Here we will discuss three studies, that have had successful results, but have different approaches founded in ABA.

Ahearn (2003) conducted a study with a 14-year-old boy, who never ate vegetables. This research used simultaneous presentation, of a high preference food (HPF), which was condiments, with the vegetables. The vegetables would be on the utensil and would have condiments on top (but not completely covering the vegetable). This study adopted a reversal design and when vegetables were presented with condiments (ketchup; identified as highest preferred condiment with a preference assessment), the vegetables were eaten on 100% of trials and never expelled. In the baseline phase, vegetables without condiments were rarely accepted. This shows that using simultaneous presentation is an effective intervention, although this paper did not investigate fading the condiment, so this could be a consideration for future research.

Success has also been observed with parents implementing the intervention (Najdowski, et al, 2003). Najdowski et al, investigated parents implementing a Functional Analysis and the intervention. This intervention used Differential Reinforcement of Alternative Behaviour (DRA) and DRA plus escape extinction and demand fading. The parents presented one bite of a non-preferred food and told the participant, a 5 year old boy, who only ate four foods (chicken nuggets, fries, sweets and crisps; his HPF), he could have a plate full

Picture taken from: https://flic.kr/p/dkKtQD

of his highly preferred food. As the intervention progressed the number of bites of non-preferred foods (NPF) increased and the plate of HPF got smaller. This was also transferred into a restaurant. At the end of the study the participant was eating 62 bites of NPF at home and 12 bites in the restaurant, which represented a portion a child his age would eat.

In addition, a study by Koegel et al (2012) introduced food and used a food hierarchy. Foods that were identified by parents as being food they would like their child to eat but were NPF, were presented on subsequent trials and moved through the following response hierarchy:

1. Touches food and motions towards mouth
2. Puts food to lips
3. Bites the food
4. Bites and puts in mouth, does not swallow
5. Chews food, does not swallow
6. Bites, chews and swallows food, reluctantly
7. Accepts food.

Once the child had responded appropriately they were given access to a reinforcer, which they chose before the trial. There were three participants in this study, and by the end of the intervention one had tried five, another had tried nine, and the last participant had tried eight new foods at the seventh level (after 22 weeks).

These studies are promising, as they indicate a variety of interventions are effective. Further research is needed to compare these interventions and asses efficacy of each. If you are a parent who would like support with your own child's food refusal, speak with a Board Certified Behaviour Analyst (BCBA) or Board Certified Assistant Behaviour Analyst (BCaBA) who can guide you in implementing a successful intervention.

Ahearn, W. H. (2003). Using Simultaneous presentation to increase vegetable consumption in a mildly selective child with Autism, *Journal of Applied Behavior Analysis*, **36**, 361-365.

Koegel, R. L., Bharoocha, A. A., Ribnick, C. B. Ribnick, R. C., Bucio, M. O., Fredeen, R. M., & Koegel, L. K. (2012). Using Individualized Reinforcer and Hierarchical Exposure Increase food flexibility in children with Autism Spectrum Disorders. *Journal of Autism Developmental Disorder*, **42**(8), 1574-1581

Majdowski, A. C, Wallace, M. D., Doney, J. K., & Ghezzi, P. M. (2003) Parental Assessment and treatment of food selectivity in natural settings, *Journal of Applied Behavior Analysis*, **36,** 383-386.

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).

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).

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.

UK Society for Behaviour Analysis have announced their Speakers Series 6, with Dr. Timothy Vollmer. This will be on the 4th and 5th of May in London. The cost is £150 for members, and £250 for non-members. To find out more and register by going to their webpage.

TERMINOLOGY

Self management is when someone changes their own behaviour using Behaviour Analytical procedures. These can be used to achieve personal goals; learning a new skill or achieving something, like weight loss, quitting smoking or learning to play an instrument.

Interview

Steven C. Hayes PhD

I am very pleased and excited to welcome Steven Hayes, PhD to this edition of Busy Analytical Bee. Steven has had an incredible impact on the field of ABA, in particular in the development and promotion of Acceptance Commitment Therapy (ACT) and Relational Frame Theory (RFT). He has authored 43 books and nearly 600 scientific articles, and has received many awards for his contribution to to psychology. Please tell us a little bit about yourself, Steven.

I grew up in southern California in the 1960's, and was interested in psychology because I wanted a field that combined science and humanities. My earliest substantive interest in psychology was Abraham Maslow and others interested in human growth but was exposed in my freshman year at Loyola Marymount University to behavior therapy by a psychology professor and an early behavior therapist, Irving Kessler. My first undergraduate psychology paper in my sophomore year was written on applying exposure methods to emotions, not just situations (if you know ACT, you now how prescient that was). A budding hippie, I had the usual interests in Eastern thought, T-groups, Esalen, and the like but it came together in the work of B. F. Skinner. I was amazed by ***Walden Two,*** which I think I read in my junior year as part of the honors program. Here at last I saw a technology that might help accomplish the kind of world-altering possibilities that were so tangible in the late 1960's. I went to graduate school at West Virginia University, a behavioral stronghold, did my internship with David Barlow at Brown University, and then spent 10 years at the University of North Carolina at Greensboro working especially with a well known behavior therapist, Rosemery Nelson, and a well-known behavior analyst, Aaron Brownstein. I left for the University of Nevada as Director of Clinical Training, in 1986. I'm now full time in the behavior analysis program at UNR, which Linda Parrot Hayes and I created in the late 1980s. I'm still trying to square the circle of behavior analysis and the deepest issues of human meaning and experience.

How did you become involved in Acceptance Commitment Therapy (ACT)?

My first marriage disintegrated in my first year at UNCG, and the Department itself became very divided, especially between behavioral faculty and information-processing oriented cognitive faculty. In the context of that conflict, I developed a robust panic disorder, which gradually made life unlivable. ACT was in part my answer to that anxiety problem, beginning with a transformational moment in winter of 1981. I tell that story in a TED talk: www.bit.ly/StevesFirstTED. By 1982 -1983 I was doing ACT workshops, and early ACT studies.

ACT was influenced by all of the things in my answer to your first question and by the human potential movement, but it was also influenced by my attempt to understand human language and cognition. Aaron Brownstein was perhaps the most brilliant behavior analyst I ever knew. He and I were studying rule-governed behavior and why verbal rules tend to dominate over direct contingencies and it became clear that we needed to understand verbal stimuli for me to do that. Aaron exposed me to the work on stimulus equivalence and together he and I quickly developed an operant theory that could explain it: Relational Frame Theory. He died no long after so his name is not on that work but had he lived it would have been.

Can you explain briefly the premise of ACT?

Human beings have developed the ability to derived relationship between events based on arbitrary cues to do so, not necessarily based only on their formal properties or direct experience with these events. This process is at the core of human language and cognition. It has enabled humans as a species to prosper because it leads to verbal problems solving, but it is also repertoire narrowing in some ways, because it leads us to take our experience and treat it as a problem to be solved. That is a bad idea and it leads to bad outcomes. ACT is a method that helps people do something different: from a perspective-taking sense of self to open up to private events, to focus on the present moment in a flexible way, and to focus on the qualities of action that are desired – building habits of action around those qualities. That is ACT.

In the nearly 35 years since it began, ACT has been applied to almost every imaginable area and while it is

not a panacea, it has over and over again been shown to be helpful to human functioning.

What sets ACT apart from other therapies? / What benefits do you see in your clients from using ACT? (delete as appropriate)

ACT is different mostly because it is an extension of core ideas inside behavior analysis into human cognition. The development strategy we have pursued is an elaboration of the inductive, functional approach that characterizes behavior analysis. We term it a "contextual behavioral science" (CBS) approach. It needs a new name because it deviates in some ways from traditional behavior analysis.

It is based on a set of philosophical assumptions that modifies somewhat the assumptions of radical behaviourism. ACT is integrated with a radically pragmatic, monistic set of scientific assumptions known as functional contextualism. Functional contextualists view truth as the incremental achievement of prediction-and-influence with precision, scope, and depth, and they assess any act of partitioning the world against that criterion. The ACT rejection of cognitive and emotional causality, the clinical emphasis on values, de-emphasis of an interest in literal truth, and the emphasis on workability all flow from the radical pragmatism of its underlying philosophy.

ACT is part of modern behavior analysis, and as befits that inductive tradition every hard-won and well-established behavioral principle is part of its theoretical armamentarium. Because no empirically adequate behavior analytic account existed of human language and cognition, however, one had to be created to extend behavioral principles to that level. Over the last decade RFT is the most active area of basic human research in behavior analysis, and its findings have implications that go far beyond ACT. RFT takes a different approach to human language that did Skinner, holding that the key ability is learning to derive and combine stimulus relations under arbitrary contextual control, changing the functions of related events on that basis.

What sets ACT apart strategically is that it has emphasized the development of basis processes of change, but practically what sets if apart is its emphasis on acceptance, defusion, contact with the present moment, a perspective taking sense of self, and values-bases action. In essence, all of these "psychological flexibility" components are trying to change how verbal events function in the psychology of people, instead of the traditional CBT approach of trying to change thoughts in order to change behavior.

Is there anyone who has had a particular influence on your career? (i.e. A professor, another professional?)

I trace my lineage primarily through John D. Cone (my dissertation advisor) and David H. Barlow (my internship advisor). John founded the journal *Behavioral Assessment* and studied under the psychometrician Allen Edwards, who studied under A. R. Gilliland, who completed his degree at the University of Chicago while it was still heavily influenced by the functionalist and contextualistic thinking of such faculty members as James Rowland Angell, J. R. Kantor, and John Dewey. Thus this primary academic lineage was a mix of the functional contextual behavioral wing of psychology, and practical applications in assessment and learning.

David Barlow studied under Harold Leitenberg who studied under basic behavior analyst James Dinsmoor who studied under William Nathan ("Nate") Schoenfeld. Schoenfeld, along with Fred S. Keller (a roommate, fellow graduate student, and close friend of B.F. Skinner at Harvard), coauthored the first major textbook in behavior analysis in 1950. Thus, this aspect of my lineage is through the functional contextual wing of behavior analysis, both applied and basic.

The biggest influence on my life though is B. F. Skinner. In many ways I've dedicated my life to helping his tradition overcome the two big barriers he ran into (in my opinion): language and the inability to form a productive alliance with evolutionary thinking.

Lastly, as ACT is growing in popularity, what are your hopes for the future?

I hope that it helps to foster a new era of behavioral thinking, that advances the original behavioral dream. The old vision (from rats to Walden II) is alive and well inside contextual behavioral science. I hope that by seeing the values of a contextual behavioral approach people will look again at what the behavioral tradition can do, not just in developmental disabilities, but across the board.

Thank you to Steven for taking the time to join us in this special interview edition. If you want to learn more about Steven you can check out his website. Also Steven writes some blogs that feature on The Huffington Post and Psychology Today.

PRODUCTS

If you'd like to learn more about Acceptance Commitment Therapy (ACT), you can check out the wish list I put together. It includes books written by Steven C. Hayes. Also, it contains books to help you understand ACT theory to help others or books to help you apply the theory in an area of your own life.

NATURAL ENVIRONMENT TEACHING (NET) IDEA

As Easter approaches, organise a Treasure/Egg hunt? Treasure hunts are a great way to generalise skills into the Natural Environment. You can hide reinforcing items to be found or use clues, depending on your clients ability. If using reinforcing items, you can place them in different places that challenge your clients physical abilities, i.e. going through a tunnel or climbing up ladders (play 4M). This will also produce opportunities for mands for help from the adult, including 'help' or 'pick me up', or 'open' if it's inside a container (mand 7b, 7f. Play 4c). If using clues or a map, you can contrive motivation to have the clue read or mand for information, e.g. "what does it say?" or "where's the next clue?" (mand 8b, 8f, 11M. Reading 13b) or a mand to look at the map. If your client can read this is a great way to support this skill. This is a great way to generalise or teach prepositions or locations, by stating where it is "You found it behind the sofa!" or by asking the child to tell you where it was when they found it. Alternatively, if you're using a map you can label where the cross is "It's in the kitchen!" and then your child locates the treasure receptively (LR* 11d, 12b, 12M. Tact 11e, 12M). You can also generalise tacts and intraverbal skills, for example tacting tree or car if you hide treasure or clues near by, you can include intraverbals for instance, "It's near a vehicle, can you tell me a vehicle?" - 'car' - "You're right! Let's look near the car!" (Tact 7M, 10M. Intraverbal 9M, 10M,12M). This is a great NET that can be easily adapted. Happy Hunting!

*LR: Listener Responding

From https://flic.kr/p/gY8KpG

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

Rogue ABA offers study materials and exam prep for people preparing for the BCBA and BCaBA exam. This includes, flashcards, audio files and workbooks. There is also option 1 to 1 tutoring and study sessions. Also they will help you produce an individualised study calendar to help you manage your time. Good Luck!

From https://flic.kr/p/4oVEDS

PEOPLE WHO INSPIRE US

This month we are celebrating the career of Karola Dillenburger. Dillenburger studied at the University of Ulster, Northern Ireland and obtained her PhD in 1991. During her PhD Dillenburger studied Violent Conjugal Bereavement which has led to a development of a research programme into Bereavement, trauma and political conflict. This has led to new conceptual and theory developments in this area and for this research, Dillenburger was awarded the Outstanding Service/ Project Award. In addition to an interest in Bereavement and trauma, Dillenburger has also had influence in the area of Evidence-based interventions for Autism Spectrum Disorder (ASD). Dillenburger also developed the online/blended learning Masters in Applied Behaviour Analysis (ABA) at Queen's University, Belfast. Dillenburger has been involved in a range of research using evidence-based interventions, in particularly ABA, and is an author on nearly 150 research papers and also several books. Dillenburger has also been on the editorial Board for the European Journal of Behaviour Analysis (since 2006) and the Journal of Intellectual & Developmental Disability (since 2007). If you would like to learn more about Karola Dillenburger you can visit the Queen University, Belfast webpage.

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 the teaching Tacts, so be sure to subscribe so you receive the next exciting edition.

To subscribe email **SUBSCRIBE'** to our email account.

Comments, questions or feedback? Please contact busyanalyticalbee@gmail.com