

# Busy Analytical Bee

## **NEWSLETTER** October

Welcome to the October edition. This month I look at the research around supporting and teaching Joint attention. There is a sensory toy activity (NET section), the career of Dr Rick Kubina, and events to learn about. Also, there is a great study tip and product section. Hope you have a great month!

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#### **JOINT ATTENTION**

Joint attention is an important and intricate social skill that begins developing around 18 months old. Joint attention can be difficult to define as it comprises of many behaviours, some of which can be subtle. It includes following gaze, shared attention and Theory of Mind. Theory of mind is an understanding of another person's perspective. Taylor & Hoch (2008) say that "Joint attention is recognised as one of the earliest forms of communication in young children and involves the coordinated attention between a social partner and an object or event in the environment". Children with Autism Spectrum Disorder (ASD) may display deficits in this area, which impact their ability to develop social skills. Holth (2006) discussed key areas of joint attention which include, Look or gaze following, social referencing, protoimperative (gestures to prompt another person to do something beneficial to speaker), protodeclarative (direct another's attention to an item or event), and monitoring. It is thought that behaviour

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analysis principles does not lend itself for teaching behavof iours Joint attention, although Holth discusses how

"attention" is moved due to something in the environment exerting stimulus control over the person. Also, that a variety of reinforcers would maintain joint attention behaviours. Holth also suggests some activities, which would be great to support empirically.

One of the key aspects of Joint attention is to initiate bids of attention (getting someone to attend to an item or event). Taylor and Hoch explored this by setting up novel items in interesting ways, in different rooms and teaching the child to point and comment ("wow", "look", etc.) and to look back at the instructor. For one participant (Erica), her results for looking at the item were 62% during baseline, and then increased to 100%. For making a comment about the item were 38% and then 100% in baseline and intervention respectively. Also, for looking back at the adult were 4% for baseline and then was variable until the eighth session and then increased to 100% and was maintained. This study supports that children with ASD may require specific intervention to develop Joint attention skills, and that behavioural approaches can be effective in doing so.

A similar approach was adopted by Pollard et al (2012) who used text prompts to elicit bids for Joint attention. Items were set up along a hallway and the participant walked along with the instructor and were prompted with gestures to orient towards the item, the text prompt and back at the instructor. They compared three conditions including teaching phase (described above), adult scripted responses (adult elaborated in their responses to bids) and multiple- script training (simultaneous prompts used). The final two stages were used to assess spontaneous and varied initiate bids from the participants. For two of the three participants, when the adults responses were varied, this increased the learners unscripted bids. For one participant (Kevin) during baseline he had no initial bids, and following teaching this increased (3.12, 21.12, 6.7, rates in adult responses in class, multiple scripts in hall,



and at follow-up, respectively).

Teaching joint attention is an important skill for teaching subsequent social and language skills. As observed by Pollard et al (2012), that unscripted language increased in some participants, they state "this may provide support for the importance of joint attention in facilitating language". Both these studies used adult instructors although it has also been demonstrated peer instructors can effectively teach Joint attention (Kourassanis-Velasquez & Jones, 2019). In this study they used verbal instructions, video modelling and live models to teach peers how to teach children with ASD Joint attention. This research showed increase in the Peer Instructors using the strategies and the learners improved Joint Attention. This also had social validity as parents and professional judged the differences as positive.

In these studies most children had language and used 2 -5 word sentences (Kourassanis-Velasquez & Jones, 2019; Pollard et al, 2012; Taylor & Hoch, 2008). Also in Pollard et al (2012) study, the children would have had some word recognition to read the prompts. It is important to consider these prerequisite skills before developing an intervention for Joint attention. This seems an important skill to teach if you want to develop social skills and language skills in children with ASD who demonstrate a deficit in this area. Speak to a Behaviour Analyst for support in developing an effective intervention based on the principles of Behaviour Analysis.

Holth, P. (2006). An Operant Analysis of Joint Attention Skills, *European Journal of Behavior Analysis*, **7**, 77-91.

Kourassanis-Velasquez, J. & Jones, E. A. (2019). Increasing joint attention in children with autism and their peers, *Behavior Analysis in Practice*, **12**, 78-94.

Pollard, J. S., Betz, A. M., & Higbee, T. S. (2012). Script fading to prompt unscripted bids for joint attention in children with Autism, *Journal of Applied Behaviour Analysis*, **45**, 387-393.

Taylor, B. A., & Hoch, H. (2008). Teaching children with Autism to respond to and initiate bids for Joint Attention, *Journal of Applied Behavior Analysis*, **41**, 377-391.

#### **TERMINOLOGY**

The three-term contingency explains the relationship between the environment and organisms. This threeterm contingency is depicted in the diagram below, the Antecedent, Behaviour and Consequence.



Picture produced by Busy Analytical Bee

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

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

<u>Consequence:</u> 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. <u>Learn more...</u>

#### **EVENTS**

Contextual Consulting offer a variety of online webinars and workshops on their website. 'Enhancing your ACT practice with Relational Frame Theory (RFT) - a Master class', will be hosted on the 10th and 11th of October in London presented by Yvonne Barnes-Holmes. There is also, 'ACT for Young People—the Thriving Adolescent' will be on the 14th and 15th of November in London, presented by Dr Louise Hayes.

The UK-SBA is hosting Dr Susan Schneider on the 17th October in London. Dr Susan Schneider authored 'The Science of Consequences: How they Affect Genes, Change the Brain and Impact our World'. Registration will open soon, so <a href="mailto:check the website">check the website</a> for more information!

SEABA Is holding an event in Eastbourne, called "Ethics in Action", on the 16th November. It costs £60 or £50, with or without CEU's respectively. This is the early bird and is valid until 31st October.

### NATURAL ENVIRONMENT TEACHING (NET) IDEA

This month's NET idea is using sensory wind-up toys. These are fun; great for pairing and also for teaching and generalising all those important language, social and play skills! You can choose a large selection of these toys, there's chattering teeth, cars, animals and other characters. If you have a few different toys to complete the activity then this increases the teaching opportunities. Requests could be simply "ready steady..." "go" fill-ins, or requesting specific items, i.e., teeth vs. frog (mand: 1-5M, 8-10M), or if you have the same character in different colours or sizes requesting using adjectives (mand: 13M). You could contrive motivation for requests for actions too, including turn or wind, let go, stop, catch, for example (mand: 7M, 14M). In addition, you could focus on adjectives as receptive (LR\*: 13M, 15e. Maths: 14M) or expressive/tact (tact: 13M) targets, for example "show me the big car" or "let's talk about fast and slow, this one is...". The toys may have features on them, colours, body parts, numbers which you can discuss (LR: . Tact: ). You can also draw or write, shapes, numbers or letters on your toys (They are usually made out of plastic and if you use a board marker this rubs/washes off—This way you can generalise skills specific to your learner!). You could also count the toys (maths: 11a, 12d, 13b, 14a), or ask the learner to count out of the group (i.e., "give me 3 dinosaurs" (maths: 13M), or match to quantity (maths: 15M). The toys could be raced, so you might want to make a start and finish line. You could do this by cutting strips of paper or by drawing on whiteboard (if indoors) or chalk (if outdoors). You could ask your learner to copy a line model (writing: 11M, 12f), or draw it as a receptive instruction "draw a line" (writing 12e).

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



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#### **STUDY TIPS**

ABA Test Prep helps you prepare for the BCBA or BCaBA exams. The features include pre— and post—test, digital flashcards and video modules. There is also fluency feedback, plenty of resources including infographics and leader boards if you like to compete! The full course costs \$39.99 (approximately £32.22\*), alternatively you can select a mini package \$14.99 (approximately £12.08\*)

\*Google currency converter used on 17/9/2019.

#### **PEOPLE WHO INSPIRE US**

This month we are celebrating the career of Dr. Rick Kubina. Kubina received his Psychology and Sociology & Women Studies BA from Youngstown State University in 1992. Also, he completed his masters and PhD courses at Ohio State University in 1993 and 1999 respectively, in Special Education. Between his masters and PhD he taught in special education schools. He knows works in Penn State College teaching courses on and around topics for Behavior Analysis. He specialises in Applied Behaviour Analysis and Precision Teaching. He was previously he editor of the Journal of Precision Teaching and Celeration, and served on various other Behavioural and Special Education Journals. You can learn more about Dr Rick Kubina in <a href="mailto:Dr Mary Barbera's podcast">Dr Mary Barbera's podcast</a>, or by visiting his <a href="mailto:Penn State Faculty page">Penn State Faculty page</a>.

#### **PRODUCTS**

This months wish list is for things that you may find handy when you're working on an ABA programme. Taking data is important so these tools will help you take data accurately and efficiently.

Next month we're looking at *Prison, Crime and Reha-bilitation*, so be sure to subscribe so you receive the next exciting edition.

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