



## Four Corners ABA Schedule

19th Annual Conference

March 27 & 28, 2026

### Friday, March 27th Goldwater Ballroom

- 7:00 - 7:30 AM Exhibitor Set up (Exhibitors Only Please)
- 7:30- 8:25 AM Check-in and on-site registration
- 7:30- 8:25 AM Continental Breakfast and Exhibit Hall Open
- 8:25-8:45 AM Opening Remarks & Honoring Dr. Peter Killeen  
**Amy Kenzer** President (Four Corners ABA)  
**Federico Sanabria** (Arizona State University)
- 8:45-9:45 AM **Arthur Glenberg** (Arizona State University)

#### *Embodied Cognition of Reading Comprehension and the Opportunity for Behavioral Interventions: Presentation and Discussion*

Principles of embodied cognition suggest methods for improving reading comprehension. In the first part of this talk, I will review my research on this topic, and in particular, I will demonstrate how the externalization of some cognitive processes improves reading comprehension. Given that those processes can now be observed, they can become the target of behavioral interventions. In the second part of the talk, I invite the audience to suggest and discuss principles of behavior analysis that can be combined with principles of embodied cognition to further enhance reading comprehension. (0.5 BACB CEU)

- 9:45-9:55 AM Break
- 9:55-10:00 AM Sponsor Spotlight #1: **Team PBS**

10:00-11:00 AM     **David Barker** (Rutgers University)

*Time Signatures of Pain: Sensory and Motivational Trajectories Across Stress and Chronic Injury*

Physical trauma often produces lasting changes in behavior that extend beyond tissue injury, including heightened vigilance, avoidance, and difficulties with emotional regulation. These behavioral patterns are frequently observed in individuals with trauma exposure and chronic pain, yet it remains unclear how they emerge and change over time. (1.0 BACB CEU)

11:00-11:10 AM     Break

11:10 AM             Sponsor Spotlight #2: **WovenCare**

11:15-12:15 PM     **Tim Shahan** (Utah State University)

*Consummating (Perhaps Awkwardly) the Relationship Between MPR and the Extinction Burst*

In this talk, I pay tribute to Peter and his elegant Mathematical Principles of Reinforcement by applying it to recent data from my lab on the extinction burst. A key component of this application is that, as Peter has stressed, reinforcement is consequential behavior (i.e., consummation). Along the way, I will recount how Peter aroused my curiosity as an emerging behaviorist, guided me toward the use of formal theorizing coupled with the responsible use of metaphor and hypothetical constructs, and inspired me to look beyond the constraints imposed by traditional Skinnerian behaviorism. (1.0 BACB CEU)

12:15-1:40 PM             Lunch (not included)  
   Exhibit Hall Open

1:40 PM                 Sponsor Spotlight #3: **Goldensteps ABA**

1:45-2:45 PM         **Mark Reilly** (Central Michigan University)

*Reinforcement, Coupling, and MPR*

The principle of reinforcement has undergone conceptual drift recently with prominent members of the field calling for the abandonment of the concept altogether. The purpose of this talk is to re-appraise the utility of the concept of reinforcement in light of real or perceived shortcomings. The presentation will provide a brief overview of the inconsistent manner with which the term has been defined. For conceptual clarification and standardization, a refined definition of reinforcement will be introduced that includes critical features of the process that are seldom appreciated and often ignored. Data from

pivotal experiments will be discussed and integrated with the coupling parameter in Killeen's Mathematical Principles of Reinforcement, which allows for precise quantification of the selection process. The utility of reinforcement is unparalleled with respect to technological transfer and achieving the goals of understanding behavior. (1.0 BACB CEU)

3:10 PM                      **Sponsor Spotlight #4: Axis for Autism**

3:15-4:15 PM              **Eric Thraikill** (University of Vermont)

*Attentional Hypothesis of Habit and Goal Direction in Operant Behavior*

Behavior analysts are interested in the prediction and control of operant behavior but not all controlling variables can be observed directly. For instance, operant behavior can be goal-directed such that the organism can flexibly adjust based on changes to the value of the reinforcer. Operant behavior can also be a habit and performed efficiently and with automaticity in the presence of discriminative stimuli. These processes can be identified experimentally using a method called reinforcer devaluation. Here, an operant response earns a reinforcer and then the value of the reinforcer is changed without the response available before a test with the response made available once again but now without reinforcement. Goal direction is evident when devaluation weakens the response in comparison to the level of responding after identical training without devaluation. In contrast, habits are evidenced when devaluation fails to influence the response, but has otherwise clearly changed the value of the reinforcer. First, I will operationally define goal direction and habit in operant behavior, then turn to whether a close look at response rate can distinguish whether a response is goal-directed or a habit. I will then describe two series of experiments that examined habits with behavior chains and with discriminated operant responses. These studies have led to a new theory of the process underpinning whether a response transitions from goal-directed to habit, and back. (1.0 BACB CEU)

4:30-5:30 PM              **Leonard Green & Joel Myerson** (Washington University in St. Louis)

*From Simpler to Complex: Discounting Combination Outcomes*

The vast majority of discounting studies have focused on relatively simple situations (e.g., choosing between immediate-smaller and delayed-larger outcomes, or between certain-smaller and probabilistic-larger outcomes), and the relations among amount, delay, probability, and subjective value in such situations are now well established. Research with these standard delay and probability discounting tasks has provided important insights into decision-making, but many kinds of everyday choices are more complex, involving alternatives that combine delay with probability or that involve both gains and losses. We present an overview of results from our lab's recent work in which

participants discount (a) monetary rewards that are both delayed and probabilistic, (b) monetary losses that are both delayed and probabilistic, (c) immediate losses that are followed by delayed gains (e.g., investments, CDs), and (d) immediate gains that are followed by delayed losses (e.g., drug misuse, loans). Hyperboloid functions like those that describe choice in simple situations also describe choices in complex situations very well, consistent with the view that complex choices, like those that people make every day, may also be evaluated within the discounting framework. (1.0 BACB CEU)

5:45-7:00 PM

4CABA Business Meeting (**Goldwater Ballroom**)  
Open to all

5:30-7:30 PM

Dinner (not included)

7:30-10:00 PM

Poster Session & Peter Killeen Reception, Exhibit Hall Open  
(**Goldwater Ballroom**)  
hors d'oeuvres and cash bar available

## Four Corners ABA Schedule 19th Annual Convention

### Saturday, March 28th Goldwater Ballroom

- 7:30- 8:30 AM Check-in and on-site registration, Exhibit hall open
- 7:30- 8:30 AM Continental Breakfast
- 8:30- 8:45 AM Opening Remarks  
**Amy Crye**  
President-Elect (Four Corners ABA)
- 8:45-9:45 AM **Elliot Ludvig** (University of Warwick)

#### *Memories of rewards past in risky choice and gambling*

When people make risky decisions based on past experience, they must rely on their memories. These memories, however, are often misreported. In this talk, I show how people report stronger memories for the best and worst reward magnitudes that they experience. This memory bias leads people to be more risk seeking for gains than losses, which is opposite to the usual pattern observed when people are told about those odds and outcomes. This bias toward more extreme reward magnitudes seems very deeply ingrained—and is shared with other animals, including pigeons and chimpanzees. When asked afterward about which outcomes they encountered, people are very poor at recalling the exact outcomes and instead confabulate outcomes in line with their choices. Similar biases also pervade real-world gambling—people gamble more based on both how the odds and choices are framed. I conclude with some evidence-based suggestions about how to alter these behavioural patterns to mitigate gambling harm. (1.0 BACB CEU)

- 9:55 AM Sponsor Spotlight #5: **BrighterStrides**
- 10:00-11:00 AM **Patrick Simen** (Oberlin College)

#### *Neural self-excitation: a one-parameter model of the autism spectrum*

We propose a one-parameter model of the autism spectrum. This parameter,  $w_s$ , scales the self-excitatory weights of neural network units in a model of arbitrary-N-choice decision making and operant conditioning. A larger  $w_s$  corresponds to greater symptom severity. The neural net reduces to a diffusion model with thresholds and drift determined by reward rate estimates. Increasing  $w_s$  increases the effective time constant of reward integration and maximizes earnings in environments with slower changes in reward contingencies. We lack an analytical solution for the model's

behavior, so we simulated it over a range of choice set cardinalities, from 2 to 100 options, and over ranges of other nuisance parameters. Choice behavior became more exploitative and less exploratory as  $w_s$  increased, capturing the preference for routine and repetitive behavior that constitute one of two defining features of autism spectrum disorder. Although the model implements a choice function that approximates a softmax function of reward, it is not the softmax temperature that determines its exploration/exploitation tradeoff — instead it is the time constant of reward rate estimates feeding into the softmax function and governed by  $w_s$  that determines it. The reward-maximizing  $w_s$  also depends on the environment, decreasing toward the neurotypical end of the spectrum as the reward environment becomes more dynamic. The implication is that neurodiversity along the autism spectrum allows human populations to host individuals with a range of biases about reward-estimation time constants, allowing populations to adapt to environments with a genetically unpredictable range of reward contingency dynamics. (CEUs pending)

11:10 AM                      **Sponsor Spotlight #6: open**

11:15-12:15 PM            **Ricardo Pellon** (Universidad Nacional de Educación a Distancia)

*Dixie Eastridge Memorial Lecture*

*Tests of the Killeen–Pellón Theory for Competing Traces of Associability*

According to the Killeen and Pellón (2013) theory of competing traces, there are decay delay gradients of different steepness for the various behaviors that occur within inter-reinforcement intervals. This accounts for their temporal structure and organisation. Several experiments involving spout-licking, wheel-running, lever-pressing and magazine-entering have been conducted with rats that appear to support the theory's central hypothesis. (1.0 BACB CEU)

12:30 PM                      **General Session Ends**

**Exhibit Hall Closes**

**Post-Conference Workshop (Arizona Room)**

**(Boxed Lunch included for Attendees)**

12:30 -3:00 PM      **Paige Raetz** (Proof Positive Autism Wellbeing Alliance)

*Designing for Flourishing: Embedding the Science of Wellbeing into ABA*

Within Applied Behavior Analysis, socially significant behavior has traditionally been defined by increases in functional skills, adaptive responding, and reductions in problem behavior. These outcomes remain foundational to ethical and effective practice.

However, an emerging question challenges the field: Are we measuring the full range of outcomes that matter most? (2.0 General, 0.5 Ethics, 1.0 Supervision BACB CEUs)