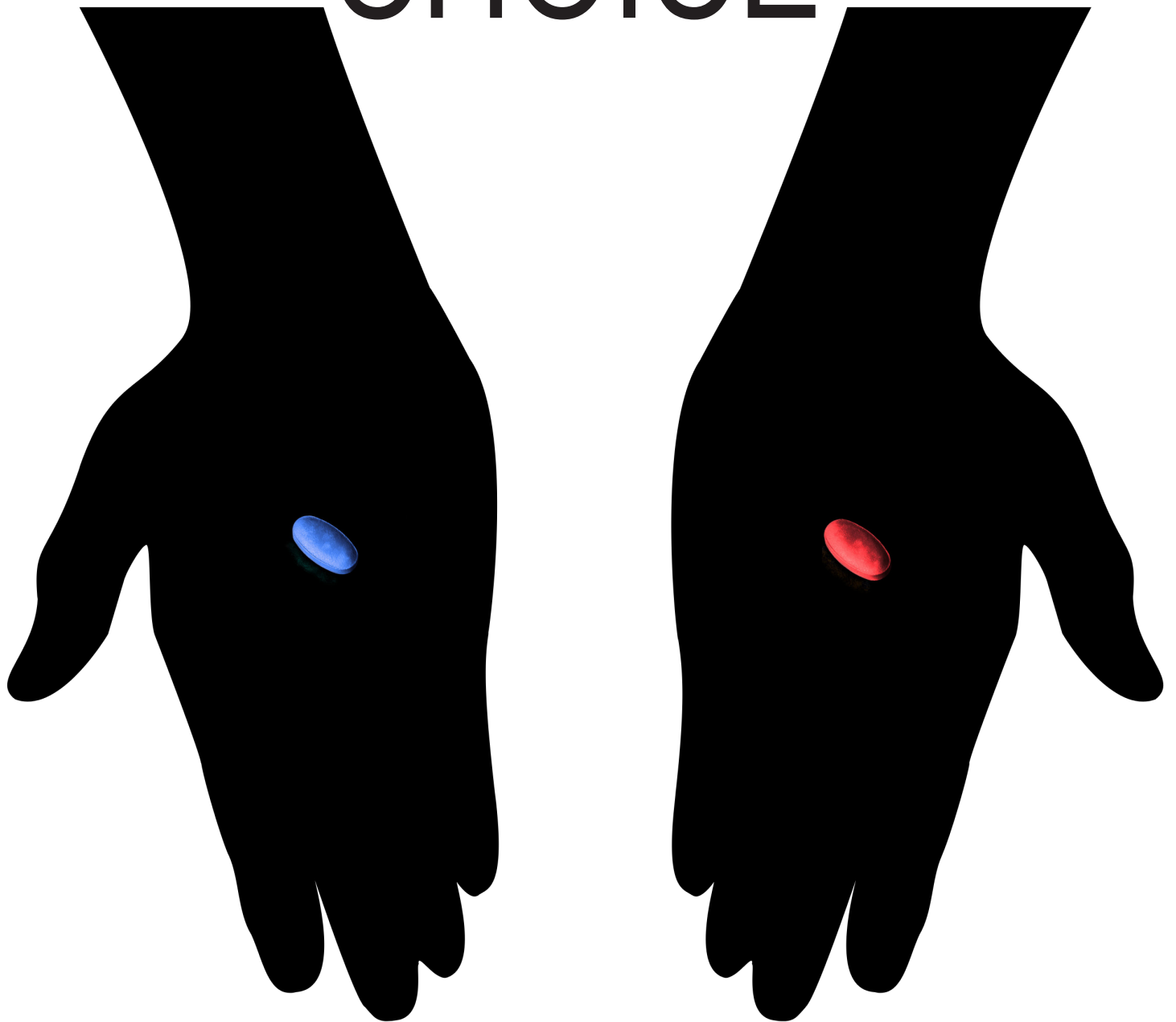




## understanding CHOICE



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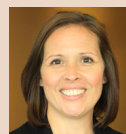
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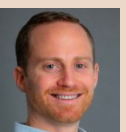
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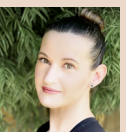
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*We would like to thank those who contributed to this issue.*

*Operants preserves the intellectual tradition of Skinner's writings — articles of interest to the field, but also written without heavy use of citations and references. In most articles intellectual credit to others is given, not by citing and referencing specific studies or articles/books, but rather through discussing the "big idea" or "concept", and naming the person/affiliation. In this way, the intellectual credit is provided while still writing for a wider audience.*

*Especially today, we would like to continue to advance the relationship between basic and applied science — and its theory — and make that available to the public.*

# REFLECTIONS ON CHOICE AND CONTROL, INFORMED BY LESSONS IN PARENTING

Camille Kolu, PhD, BCBA-D  
CUSP EMERGENCE



*Dr. Camille Kolu is passionate about preventing harm and expanding options through behavior analysis. She enjoys listening to the stories folks share about their experience, and finding ways to help them forge deeper connections with each other and their community resources. As a behavioral scientist in Colorado, Kolu owns Cusp Emergence, a private practice joining families, universities, hospitals, schools, and agencies of all kinds to engineer behavioral cusps for individuals, their loved ones, or their communities. Through Cusp Emergence University she provides continuing education enabling behavioral providers, teachers, and therapists of all kinds to level up their practices in taking trauma into account in measurable, informative, and compassionate ways. Kolu trained at University of North Texas and Rutgers University examining autism, contextual conditioning, and their neurobiology, and has published her work in peer reviewed journals. She is the author of the SAFE-T Model, which urges behavior analysts toward improving systems support, assessment of risks and needs, and analysis of historical functions of behavior.*

## Cusp Emergence

These days, it is not uncommon to hear both behavior scientists and parents talking about choice. While much has been said about choice, it goes without mention in the 5<sup>th</sup> edition Task List (which covers, as stated in its introduction, “the knowledge and skills that serve as the foundation for the BCBA examination”). When I first heard “all behavior is choice” in graduate school at the University of North Texas, I thought that this idea (which obviously irked some advisors while pleasing others) was reductive, yet also profound. At the time, the idea of *choice* was paradoxical to me. On the one hand, behavioral history is absolutely paramount. On the other hand, it might be ignored if we didn’t play a role in arranging that history or if we did not observe it.

How can something so important go unacknowledged? After all, Choice and Empowerment are core to a trauma-informed therapeutic approach<sup>1</sup>. Recently, assent, one’s willingness or choice to participate in behavioral services, has been more pointedly integrated in the Ethics Code for Behavior Analysts. Nowadays, I am asked regularly about both *choice* and *behavioral history*, because of my current focus on clients whose lives have been affected by adverse conditioning histories. Perhaps the concept of *choice* can be used to understand some of the contributions of a person’s unseen behavioral history. In other words, observation of current choices can potentially indicate what a person has experienced in the past. A history of aversive conditioning (e.g. trauma) might “show itself” through behavior emitted in the presence of offered alternatives.

### Is offering choice a trauma-informed procedure?

Some practitioners express concerns that certain procedures may not be appropriate for clients with a specific history. Have you received input that you should “be more trauma informed” in your practice? Or have you heard that you should make a list and avoid certain procedures that should be off-limits given your population’s special concerns? Perhaps you’ve thought to yourself, “I really care about my client. How can I make sure to avoid practices that are harmful and to use only procedures that are trauma informed? Offering choices is a good idea? Right?” Well... how many choices should be offered, and when? Is it trauma-informed to incorporate choice?

From my perspective, questions such as those can be misleading. Certainly, offering choices is helpful in many situations, but choices are experienced differently depending on the person’s history. Offering choices can be harmful as an initial procedure if all previous persons who offered a choice did so in order to control the person. For instance, clients with coercive histories may have experienced choices delivered by

<sup>1</sup> The reader is directed to <https://www.samhsa.gov/resource/dbhis/infographic-6-guiding-principles-trauma-informed-approach> for additional information.

an abusive person who only offered a so-called “choice” between two distasteful options and forced the person to select one. Or a student might have experienced a history in which choices were offered only as an antecedent variable with the purpose of gaining behavioral momentum to make complying with an unpleasant or difficult task more likely. Finally, many clients in need of more trauma-sensitive behavioral services bring histories in which the previous caregiving and educating adults were abusive. In this case, the components that typically contribute to instructional control like instructions, discriminative or reinforcing conditioned stimuli, and of course “choices” may need examination. Taking this step of curious examination asks the questions “how does my learner respond to me when I give a choice? Do they approach the options and make an observing response, or do they recoil, show distress, move away, or use interfering or escape behavior? What are the conditions under which these toward and away moves occur, and how is this related to my voice, posture, tone, presentation of options, verbiage, etc?” Doing this work may not tell us full details of such a person’s history, but it can help us understand whether it would be helpful or harmful to proceed without further exploration.

“Offering choices” might be a staple in the repertoire of a behavior technician excited to incorporate choices for all clients. But for some clients, experiencing a vocal choice from a registered behavior technician (RBT) might constitute a surrogate conditioned motivating operation, in the presence of which rapid onset of escape behavior is highly likely. Choices can be employed strategically to reduce behavior labeled as “challenging,” yet could also be experienced as punishing or manipulative.

Ultimately, choice and control are complex, with issues to which answers depend on the method of questioning, schedule arrangement, availability of alternatives (and history of consequences for each), interpretation, and the nature and histories of the organism. Do individuals naturally prefer free choice over forced choice (or do pigeons simply prefer a larger area to peck)? Do organisms prefer to have access to informative stimuli over uninformative stimuli? Do we innately prefer to vary our responses? In the decades since behavior analysis began to examine these issues, some answers (and many more questions) have taken hold: variability is reinforcing; changing over or switching (that is, patch-leaving, in behavioral ecology) can come under operant control; and even apparently “free” choice can be administered in a way that is coercive.

When folks ask for lists of procedures to avoid or to use, I suggest that it’s not the topography or the structure of the procedure they need to know about. It’s more analytical than that. It’s knowing the conditions under which to select, use, and evaluate a procedure, and recognize and analyze related principles—not some list of arbitrary good/bad ones prescribed for certain “behavioral issues.” Equally important is understanding contextual and historical variables that make even the best intentions play out in aversive and unethical ways. Ask new supervisees or trainees the following questions: what have you learned about choice and control? How have

you, and how do you intend to, use this concept to better the lives of your clients? We can answer those questions together with our clinical staff, working at the individual level to ensure history is taken into account. We can begin with the assumption that it may be generally beneficial to give choices as long as we consider the individual learner’s history that might make choice presentation (or a person presenting a choice) aversive. We can teach educators and therapists that choice presentation can function as an antecedent manipulation that decreases the rate of someone engaging in so-called challenging behavior. Giving options is a component of the teacher’s or caregiver’s behavioral repertoire, which can be expanded in additional ways that benefit the learner. Choice has the potential, for example, to be used on an ongoing basis to evaluate the aversiveness of the learner’s behavioral environment. The person giving choices and measuring responses allocated to different options also needs the skills to detect whether they are being approached as a discriminative stimulus for reinforcement, or being avoided as a possible conditioned punisher. The trauma-sensitive behavior analytic skills described in recent literature<sup>2</sup> may be useful in helping behavior analysts consider whether they are experienced as a safe or unsafe stimulus by the person to whom they are offering choices. When we are experienced as an unsafe stimulus paired with aversive history, we might be more likely to have our instructions experienced as signals related to aversive control. If an observer is unaware of this interaction with history and the current learning situation, they might misinterpret the learner’s behavior as rejecting the choices, when the learner’s behavior is actually communicating more about the degree of experienced safety and approachability of the situation.

For practitioners who apply choice literature to challenges experienced by populations affected by significant adverse experiences, some key points may be helpful to consider. Most of these points and questions are designed to help you identify some repertoire components, reasons to use choice related procedures, and how relationships between the dyad members (e.g., the client and their caregiver, or the client and the analyst) are affected by incorporating choice.

### Repertoire component considerations

First, what can help practitioners, clients, and caregivers benefit the most from the choices we offer, keeping in mind, we are striving to avoid coercion in the choices we offer? We need to ensure that when we give choices, we are including multiple appetitive ones. If the choices we give are likely to result in an aversive outcome, we should make sure we have planned, in advance, to support the person to experience that outcome. The behavioral environment we build needs to be set up to safely allow the person to refuse all of the ‘choices’ we had planned to offer. If the person does not take one of the options, saying “no” should still be acceptable. In my work, I sometimes talk about this as including “a dignified way out” and teaching the person that saying no or letting us know

<sup>2</sup> See Rajaraman, A., Austin, J. L., Gover, H. C., Cammilleri, A. P., Donnelly, D. R., & Hanley, G. P. (2022). Toward trauma-informed applications of behavior analysis. *Journal of Applied Behavior Analysis*, 55(1), 40-61.



they need another option. We should not be surprised by so-called “challenging behavior” if the person is offered a choice between two unpleasant alternatives and there is no acceptable way to communicate that they do not want either one. Educators and caregivers sometimes benefit from support to understand how and why this option of saying “no” or requesting something different is acceptable and even beneficial to the client, and why the client may not use the option if it has never been reinforced in the past. Similarly, it is important to ensure the client has fluency with respect to each presented alternative. A history of punishment or aversive control with respect to one or more options makes it less likely the person will choose it even if it is the one the team wants to strengthen. In the same vein, the team may need to consider the client’s skills involved in switching between the schedule components or options, and make sure that the presented options are salient and discriminable.

When more choices are offered, thereby freeing up behavior, we may need to attend not only to someone’s fluency with respect to alternatives, but also to the switching – the changing over between schedule components or alternatives. Switching may be considered an operant, subject to reinforcement (but also punishment) contingencies, whether those are scheduled or merely arranged by nonprogrammed contingencies. I observed with wonder the development of “changing one’s mind” or “doing something different” in my very young children. The learning sequence was carefully controlled for my first child. But by the time the now two-year-old experienced learning situations where I thought he was free to change or make up his mind, the 5 year old had already modeled for him that punishment sometimes followed certain choice making behavior. The older sibling said things like “are you sure you want that one?”, “I’m not getting out the blueberries, you already said you wanted strawberries”, and “if you don’t take this cookie, I’m going to eat it.” Watching the dynamic interaction between a toddler’s “choices” and their social environment, I never believed more strongly that we were never really free, and I had never known that we so longed to be (even so, we are reminded by Catania of Adlai Stevenson’s admonishment that a hungry man is not a free man, and as we all know, a toddler is always hungry). Of course, these observations are not from any laboratory. In my earlier days, I had carefully engineered different concurrent schedules arrangements and watched from a computer as undergraduates’ button pressing and patterning behavior came swiftly under the control of constructed contingencies. Then I observed, during extinction, how the actual switching itself could die out, and that this might be independent of the different schedule components. Switching between schedule components was more dependent on the acquisition of very early response patterns produced by the concurrent schedules, and it occurred on the individual level for each participant. Ultimately, if there are two lovely and appetitive options concurrently available to a learner who has been exposed to a history in which changing over between those options is punished or very difficult, the learner might stick primarily with one instead of leaping over to engage in the other, also-desirable option. In behavioral terms, switching is an operant that might need to

be worked on separately so that the learner encounters a meaningful skill they can use when needed. We cannot simply assume, without training or testing, that this skill will be intact in the repertoire.

### **Relationship considerations for the dyad delivering and experiencing choice**

When incorporating choice in an intentional way in someone’s therapeutic program, do all the adult team members agree that the options are acceptable, or is one of the presented alternatives likely to result in unexpected punishment from a team member? With respect to the multiple options being presented as viable alternatives, have some of the options been paired with punitive stimuli or presented in an aversive conditioning context? For the choice-provider, whether that person is a caregiver, staff person, or behavior analyst, is the person skilled in recognizing the ways the client says “no” or “yes”, and is that person prepared to honor a “no” response? If there are only two options presented, is it acceptable for the learner to communicate that they do not like any of the options? Will giving choices harm the relationship between the client and their caregiver in a way that needs to be prevented? Giving choices is one of those seemingly basic procedures that may be suggested to parents without considering that in the past, giving choices may have occurred in a manipulative or coercive context (e.g., experiencing choice can constitute an unsafe stimulus signaling that an aversive condition is about to occur).

### **Some reasons to incorporate choice**

#### *Reveal client needs*

Interested providers benefit from decades of research on using choice paradigms as behavioral assays revealing client needs and preferences for different behavioral environments, programming topics, learning stimuli, and more. Their utility extends far beyond assessing preference for or approach behaviors related to stimuli a provider hopes to use as consequences for a behavior program, and extends to the program itself, the stimuli involved, the procedures used, and so on. And beyond assessing preference, choice paradigms can also be used to condition new preferences and provide meaningful task exposure and appetitive conditioning, as well as to assess whether instructional stimuli (and team members themselves) are experienced as aversive. Results do not have to be used to design a list of stimuli to avoid or present; rather, they can be used to help a team understand, for example, when it is critical to work on re-establishing behavioral safety in a client’s environment or on a client’s team. As discussed earlier in this essay, some learners may not “choose” or approach response options because of the history of aversive control in similar learning situations. If the learner fails to approach the instructor, make observing responses, and engage with a variety of options, it might indicate that there is a need to assist the client to experience the instructor as safe and at least neutral before proceeding with offering additional instructional stimuli. For instance, this situation could be taken as an opportunity to work on safety in one of several ways instead of focusing on increasing approach to the options being offered. We can work on unpairing

ourselves with aversive contexts, increasing the salience of safety cues, or enhancing the discriminability of the learning context from other aversive ones the client must still encounter. Establishing ourselves as neutral stimuli instead of trying different ways to teach can be helpful if the learner is responding as if we are functioning as a conditioned motivating operation.

#### *Reduce behavior without extinction*

Interesting to providers and worthy of exploration may be choice related options that produce meaningful reductions in behavior without programmed extinction. To this end, a knowledge of concurrent schedules is key. Concurrent schedules may be designed and pitted against each other to produce rate reductions without extinction. Whether programmed intentionally or naturally occurring, schedules that afford choices can be examined for opportunities to strengthen appropriate behavior or notice contributions to the learning situation for the client. In doing so we can gain information about why the “right” behavior is not happening at sufficient rates or at the appropriate time.

#### *Review and benefit from overlap between alternative sets and choice literature*

Those interested in serving individuals affected by adverse conditioning experiences increasingly state an appreciation for an approach attending to alternative sets and nonlinear contingency analysis, an important area of overlap with issues central to choice and control. In assessing the current behavioral ecology that makes sense of a pattern of responding that appears troubling to an outsider, an analyst must appreciate the contributions of learning histories that shaped, and the contingencies that maintain, multiple response alternatives. Newer analysts coming to appreciate the possibilities of nonlinear analysis via exposure on social media or observing analysts they admire at work, may lack an empirical understanding of choice-related issues like concurrent schedules, switching as an operant response that may need programming and practice, or advantages and disadvantages of different types of schedule arrangements applied to practical issues. These could be easy to miss for a practitioner whose training mostly follows the task list (which mentions schedules only in terms of being able to “define and provide examples of schedules of reinforcement”, and avoids the word “choice” completely)—but providing effective and ethical treatment goes infinitely beyond this, buoyed by the rich history of experimental analyses of behavior.

#### **Review and conclusions**

With a few possible exceptions, it is neither feasible nor appropriate to completely ban procedures merely because someone thinks they are “not trauma-informed”, without first asking the client what THEY think<sup>3</sup> about it.

<sup>3</sup> Here the term “think” is being used loosely and almost tongue-in-cheek. Instead of limiting procedures we should ask the actual client for their opinion, and the very procedures discussed in this article can be used to understand more about someone’s preferences and thoughts. Whether and what a

A procedure contra-indicated for one client may be used ethically to produce socially valid outcomes for another. Complicating the issue, non-vocal clients may have difficulty communicating consent or assent meaningfully. Choice procedures can be employed to “ask” the client what their behavior can tell us (or, more generally, to assess options for treatment based on clients’ histories and current needs). Perhaps more humane and ethical than a universal prescribed list of procedures that should or should not be used, is to continuously employ techniques that ask individuals what *they* experience as most effective, supportive, helpful and appropriate given their unique histories and needs. Sometimes practitioners are surprised by the choices individuals make between procedures (including ones the providers’ history predisposed them to rule out). And perhaps the most important contribution of choice and control to trauma sensitive supports is this: when we find a way to help individuals and caregivers detect and exert some behavioral control over the things they find stressful, the individual can avoid the harmful biological impact of that stressor<sup>4</sup>.

Recently, I published an article for the November 2023 policy issue of *Behavior Analysis in Practice*, on integrating buffering activities in the repertoires of our clients and ourselves. (Buffers are six vital areas where engagement can buffer people against the medical harms caused by adverse experiences). Like most helpful things, buffers may be easier listed than done, which became especially clear as I watched my five-year old struggle today. We are all faced with choices when someone takes something away, accuses us of harm, tells us no or physically hurts us. Will we retaliate, or use tools in our repertoire that do help us to experience emotions and act in helpful ways? (This last one, doing things that can calm us down, is one of the six buffers at our disposal). Again, it occurred to me that how we set up choices between (in this case, concurrently available) alternatives to respond harmfully or helpfully, can make such a difference in terms of whether our lives are well lived. Do I model those helpful alternatives readily and reinforce them or do they go unnoticed by the little creatures in my midst? Do I assist them to gain loads of practice in switching over to doing the helpful thing, building fluency when they are not in crisis, so that switching over is an enduring, stable, and available operant when it’s crunch time? Do I allow myself to respond in big, loud ways that consequence the behavior I wish would just go away, or do I ensure that the most salient, meaningful consequences are reserved for switching to “doing the right thing”? Continuously I am reminded that stimuli discovered in choice and control research (individuals really benefit from informational stimuli about choices—and having a variety of options they can switch to!) have meaningful applications in our everyday lives. ○

person approaches or avoids, tells us a lot about what they choose or think about those things.

<sup>4</sup> The biological impact of such unavoidable stressors is summarized in Kolu (2023), the neurobiological pathways reviewed in Maier and Seligman (2016).