SwRI's Behavior Breakthroughs™

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BOTTOM LINE

While this is not one of the highly rated products from this corner, I do want to give credit to the pioneers developing and consulting on it as this is an important foray into an arena which we, as a field, badly need to boldly go. This is an interesting first attempt at creating a lifelike simulation in which the end-user is a parent having to utilize behavioral skills to manage problem behavior. As our field grows globally, these kinds of training options are going to become more relevant and important. I consider this a great first swing, even if it is ultimately a miss. I hope that SwRI continues to develop and refine this program by dropping the multiple choice and adding more nuanced controls to provide the end-user the kind of experience they will encounter when shaping behavior.

Behavior Breakthroughs™ has recently released Level 2 of its iPhone app and appears to be ratcheting up their marketing of it, so now it seems timely to review this innovative software training application of behavior analysis principles.

The program is described as an “interactive training simulation created for parents and caregivers of children and adults who display challenging behavior.” And its goal is to “provide parents and caregivers with an opportunity to learn and practice reinforcing skills they want to see increase and use extinction to reduce rates of behaviors they would like to see decrease.”

Computer simulation training is an area that behavior analysts should be using in our training of both upcoming behavior analysts and those with no behavioral training. This is a laudable goal! If parents could learn how to use reinforcement and extinction well, families around the world would experience a significant increase in quality of life.

There are 6 levels that aim to teach reinforcement, extinction, shaping, correction, chaining, prompt fading, errorless teaching, and discrete trials. Installation was quick and easy. I had already used the iPhone app (now includes up to Level 2), and so was excited to discover the various extras included in the desktop application. You hear a loud crash and are presented with a 5-year-old child, Asa, who has apparently just broken a lamp and is now screaming and tantruming. The scream-track is an aversive looping audio that quickly becomes aversive. On the left side of the screen are three options: *Say Something* [“Stop that,” “What’s wrong with you?,” “Good quiet,” “You know better than that.”], *Action* [give candy], and *Ignore* [you turn away from the child]. Clicking the correct option results in a winning chime and an incorrect yields a loud buzz. If only all children with autism came with multiple choice options, parenting, and behavior analysis might be much easier.

Appetitive: The value of this software can be found in its innovation and entry into a space that behavior analysts desperately need joined. Unfortunately, its utility as a training tool is not apparent, and research should be conducted to ascertain if there is any benefit. The research I could find indicated that new teachers said it made them more comfortable, but there was no measure of whether they performed any differently because of

the program. Personally, I think it may be of most help in a demonstrative role to supplement training of new staff members and parents. Some users said it was helpful during staff training by having staff members play the game in a public space with the volume turned up extremely loud. Presumably, this will help them learn to deal with the discomfort of working with children with autism. Your mileage may vary.

Aversive: There are some violations of important behavioral principles, mainly that of temporal contiguity. I was still credited for “reinforcing” even 3 minutes after the child had emitted the mand. It wasn’t until Level 6 that timing entered the equation at all. Putting the behavioral incoherence aside, my biggest concern is the potential for this game to negatively impact public perception of ABA-based therapy. It oversimplifies problems (and I get that you have to, for a game), which may offend parents who are living a horrendously stressful, complex, and unappreciated role as the “autism momma or papa.” The fact that Asa stands in one spot for sustained periods (instead of running amok), his tantrums are simply crying (rather than aggression toward self or others) and that he learns so quickly (one to two trials and he acquires a vocal mand) in-game could make it appear that our field just doesn’t understand behavior problems associated with autism and do not have much to contribute. On the other hand, if it does not drive parents away, it may drive them to the behavior basics website FAQ, which provides brief descriptions of the principles and procedures in the game. This could be the beginning of a good thing.

Overall Experience: You can move around the house with your keyboard and look around with your mouse. However, there is no purpose in doing those (as far as game play). It does allow you to examine the house and discover a huge framed picture of B. F. Skinner’s face hanging crookedly on the wall, food out on the counters, Crayola scribbles on the wall, and a shirt in the toilet. I’m not sure that is the message we want to send parents of how we view the home life of a child with autism. Additionally, the graphics are reminiscent of Wolfenstein 3D and at times Asa’s movement was downright creepy.

Price: At one point, I believe it was \$50–99 for the desktop version, which is no longer available on Amazon.