



May I Please Go to My Therapy Session? Empirically-Supported Approaches for Using Technology in Clinical Assessment and Treatment

Bruce M. Gale, PhD

Dr. Mindful opened the door that connected his inner office to the adjoining waiting room. Tommy, a 14-year-old, who had been referred for oppositional defiance at home and school, sat motionless and hunched over, as had been the case upon arriving during each of the three previous sessions. Mustering a surprisingly ineffective smile, the doctor greeted him. Gazing downward, Tommy gave no response; one iPod earplug was firmly implanted in his ear, the other loosely dangling, faintly emanating the repetitive sounds of thumping music. Tommy's mother, Mrs. Worndown, sat tight-lipped, impassively watching the interaction. Suddenly, Tommy rose and slowly shuffled into the therapist's office. He avoided eye contact with the psychologist as he passed and plunked himself heavily into the tub style chair, earplug still firmly implanted. The door closed. Dr. Mindful, thought for a moment, looked at Tommy, and said...

Ever been in this situation? Adnone et al (2007) discusses how today's "digitally-minded student" has infused technology; they require different ways of interacting and different kinds of therapeutic environments. The biggest problem is that clinicians remain reluctant, even avoidant, of such approaches (Rizzo et al., 2000). How should we address this challenge?

This article will introduce you to different ways technology is being used with clients. Everything described is both simple to learn and use and inexpensive to purchase. A range of techniques has been used with students, including video taping (Dowrick, 1991; Dowrick, Tallman & Connor, 2005; Simpson & Ayer, 2004), computer animation (Bosworth, et al., 1996; Gale, 1995; Gale 2004b) and computerized tutorials. Research has demonstrated the utility of such approaches for facilitating pragmatic understanding of nonverbal social cues (Gale, 2004a; Matsuoka & Kobayashi, 2000), social skills, conflict resolution, problem solving skills, and violence prevention (Bosworth, et al., 1996, 1998; Hagstrom, & White, 2006). A wide range of populations has been researched including individuals with learning disabilities, behavior disorders, ADHD, and Autistic Spectrum Disorders (Fenstermacher, Olympia, & Sheridan, 2006; Kimball, Kinney, Taylor, & Stromer, 2004; Margalit, 1995).

Using Technology in the Assessment Process

In its most basic form, assessment focuses on present levels of impairment and distress that are not culturally normative (Barlow & Durand, 2006). It needs to be focused and logically lead to the establishment of treatment goals. Broadly, assessment can address problems with internalizing behaviors, externalizing behaviors, or difficulty interacting with the social or physical environment. While an enormous oversimplification, it provides a forum for explaining how technology may help clinicians quickly get a sense of initial treatment priorities.

You can ask teachers and parents to complete rating scales and computer-score them in order to determine any patterns prior to arrival. Doing so will help you develop a quick sense of why you are seeing a child or adolescent. I developed Rapid Screener, an online multi-rater tool (Gale, 2004a), to collect information in different settings about adaptive and maladaptive behaviors before the first session. This tool is one way to use technology, but not one that primarily involves the student in his or her own treatment.

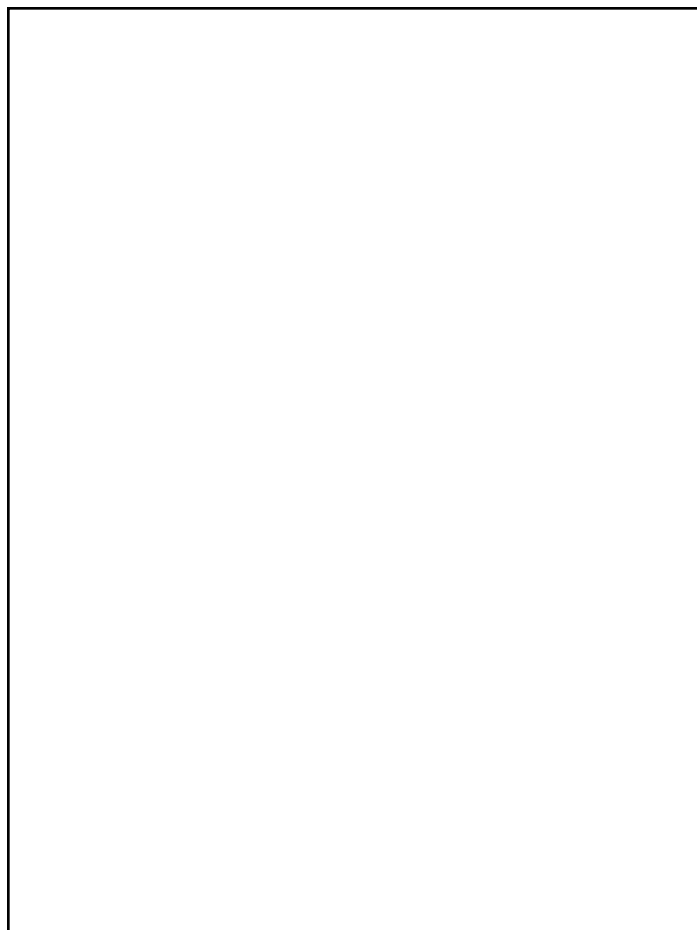
Involving the Student in the Process From the Start

At the time of the first appointment, I begin my consultation by inviting the student, with or without their parent, into my office. I already have explained to parents that the session is solely designed to involve their child, and I might have to meet with them at another time for more background history.

I start by opening a blank PowerPoint or Word file, or a computer animation program, or by showing them some avatar (digital character) technology. This process is key: I find it extremely helpful to create a triad in which the student and I both focus on what is being projected onto the wall-mounted movie screen, rather than a more typical dyad where the student's task is to interact with me directly, turn to their parent and wait for them to answer, or passively wait while parents and I discuss issues of concern. This subtle, but important, distinction serves to give the student immediate "ownership" of the session. Just by choosing what technology they wish to use, it gives them control right from the start.

For oppositional children, immediately introducing technology keeps the process "under their radar." I take notes which appear on the movie screen. I find that writing down what they say and allowing them to see it (e.g., "My parents never let me do what I want") achieves several positive goals:

- 1) It further solidifies their feeling of control over the session and results in them talking more, calming down and focusing as they go along;
- 2) It provides validation in a way that nodding your head in a caring manner doesn't;



- 3) It begins the process of self-monitoring and a creates a dataset for a later "wake-up call" that perhaps they are distorting things.

Moving From Assessment to Treatment

This process sets the stage for problem solving. With all of their complaints, concerns, etc. on the screen, I can now ask clients, "What is one thing you wish were different?" Here is where I begin to exert some control over the therapy session in a low-key manner: I prompt my client to frame their goal in positive rather than negative terms. I explain I need this information because I want something to get better. While true, this explanation captures only part of the reason. I want to turn them into a problem solver rather than a complainer — to be proactive, not reactive.

For kids with ADHD, using technology in the initial session serves a related function. It organizes them and helps them prioritize. With depressed, socially anxious, or withdrawn students, the technology gives them a voice. In these instances, even one item on the screen stands out. When using animation, shy children can nod or choose sound effects, empowering them in the process.

Technology takes the therapeutic process out of its more strictly verbal realm, adding visual permanence. It becomes a simple matter to move clients' information to a Word table or Excel spreadsheet. You can ask them to track how often the problems or good things occur between now and the next session. I find it's best to initially keep the number of behaviors to track very low, five or fewer are best. Adding graphics or little animations (which can be done on paper or on the Internet) enhances students' interest in reporting.

We might create a computer animation that depicts someone being unfair to them; these images set the stage for future problem-solving or resolution. During subsequent sessions, I might ask them to track their own positive behavior or record times their parents did something to upset them. The creation of web forms is part of the therapy process and facilitates working memory and rehearsal of coping strategies.

Having established communication and begun the therapeutic alliance, possibly by the end of the first or second session, momentum builds. Adding in avatars (digital characters) or computer animation pulls the process all together. Imagine a TAT or CAT where students create, and session after session, build upon their own "beginning/middle/end" of the story. Add sound effects, graphics, or other characters. If you can help guide them to focus on problem-solving and resolution, you can incorporate working on imagination, language skills, visual tracking and attention, working memory, tolerating when things do not go their way, coping rehearsal and all kinds of other important skills.

I have created some web pages that will give you a list of the kinds of software I use, where you can purchase them, and the costs involved. I have other information posted as well. Visit www.behavior-tech.net and click on "Demos" to access these resources. If you have further questions, feel free to e-mail me at bgale@behaviortech.net.

Six months later... Having recently spent \$600 on new technology, Dr. Mindful, opened the door. Tommy, seated in the waiting room, was reading a magazine on computer gaming. He looked up. "Hey Doc, when did you get the cool magazine?" Dr. Mindful reciprocated with a smile. "Come on in Tommy. Do you remember what we're working on?"

"Sure!" he replied. "I'm making a PowerPoint of the things my parents do that I like and things I hate. Then we're gonna change my voice and turn me into an Avatar. I want to be the skeleton. That was so cool last time!" Tommy's mother sat quietly, engrossed in reading a mystery novel. Lately she had been reading one after another, now that her son was going to bed on time and getting himself ready for school. She smiled briefly at Dr. Mindful as he and Tommy disappeared into the office, and then returned to her book. □

References

Andone, D., Dron, J., Pemberton, L., & Boyne, C. (2007). E-Learning Environments for Digitally-Minded Students. *Journal of Interactive Learning Research*, 18, 41-53.

Barlow, D. H., & Durand, M. V. (2006). *Essentials of abnormal psychology* (4th ed.). Wadsworth/Thomson Learning: Boston.

Bosworth, K., Espelage, D., & DuBay, T. (1998). A computer-based violence prevention intervention for young adolescents: Pilot study. *Adolescence*, 33, 785-795.

Bosworth, K., Espelage, D., DuBay, T., Dahlberg, L. L., & Daytner, G. (1996). Using multimedia to teach conflict-resolution skills to young adolescents. *American Journal of Preventive Medicine*, 12, 65-74.

Dowrick, P. W. (1991). *Practical guide to using video in the behavioral sciences*. John Wiley & Sons: New York.

Dowrick, P. W., Tallman, B. I., Connor, M. E. (2005). Constructing Better Futures via Video. *Journal of Prevention & Intervention in the Community*, 29, 131-144.

Fenstermacher, K., Olympia, D., & Sheridan, S.M. (2006). Effectiveness of a computer-facilitated interactive social skills training program for boys with attention deficit hyperactivity disorder. *School Psychology*

Quarterly, 21, 197-224.

Gale, B. M. (1995). *Using technology in the clinical treatment of social/emotional dysfunction with individuals having learning disabilities: Guidelines for professionals*. Paper presented at the 35th Conference of the Learning Disorders Association-California Chapter, Burbank, CA.

Gale, B. M. (2004a). *The comprehensive behavior assessment & treatment tools (C-BATT)*. Poster session presented at the 38th annual meeting of the Association for the Advancement of Behavior Therapy, New Orleans, LA.

Gale, B. M. (2004b). *Learning, understanding, negotiating, communicating, & helping: Introducing L.U.N.C.H. groups, a multimodal empirically supported group treatment model for treating children and adolescents with Asperger's syndrome and high functioning autism*. Poster session presented at the 38th annual meeting of the Association for the Advancement of Behavior Therapy, New Orleans, LA.

Greene, R. W., & Ablon, J. W. (2006). *Treating explosive kids: The collaborative problem-solving approach*. Guilford Press: New York.

Hagstrom, F., & White, M. (2006). Title talk and task mastery: The importance of socially shared talk during computer-based problem solving. *Clinical Linguistics & Phonetics*, 20, 591-598.

Kimball, J. W., Kinney, E. M., Taylor, B. A., & Stromer, R. (2004). Video enhanced activity schedules for children with autism: A promising package for teaching social skills. *Education & Treatment of Children*, 27, 280-298.

Margalit, M. (1995). Social skills learning for students with learning disabilities and students with behaviour disorders, *Educational Psychology*, 15, 445-456.

Matsuoka, K., & Kobayashi, S. (2000). Understanding of other people's intentions in a child with autism: Environmental cues and generalizations using video discrimination training, *Japanese Journal of Special Education*, 37, 1-12.

Rizzo, A. A., Wiederhold, B., Wiederhold, M. Bouchard S., Ballinger, A., Gale, B. M., & Anderson, P. (2000). *Information technology and cognitive-behavioral approaches: what are the real issues for moving psychology into cyberspace?* Panel discussant at the 34th annual meeting of the Association for Advancement of Behavior Therapy, New Orleans, LA.

Simpson, A., Langone, J., & Ayres, K. M. (2004). Embedded video and computer based instruction to improve social skills for students with autism. *Education and Training in Developmental Disabilities*, 39, 240-252.

Bruce M. Gale, PhD, is a Los Angeles-based clinical psychologist in practice for 20 years conducting assessments and providing individual and group therapy to children, adolescents, and adults who have ODD, ADHD, anxiety disorders, developmental disabilities, and especially Autistic Spectrum Disorders. He is on the editorial board of *Cyberpsychology and Behavior*, is on the part-time faculty at the University of Judaism, and serves as a trainer and Technology Advisor to PENT, a state-wide program for school psychologists (www.pent.ca.gov). Dr. Gale has status as a Nonpublic Agency with the California Department of Education and is a Regional Center provider and often conducts Independent Educational Evaluations plus runs technology-based empirically supported social skills programs. As an APA approved and California BBS Sponsoring Organization, he offers seminars and webinars on clinical applications for various technologies. His company, BehaviorTech Solutions (<http://www.behaviortech.net>), markets *Rapid Screener* and *Progress Communicator*, assessment and behavior tracking programs for special education and mental health.