

Technology and Social Skills Treatment: A Decade of Lessons Learned

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The purpose of this article is to share my learning experiences from incorporating technology into social skills treatment programs. A little over 10 years ago, I had been consulting at a public school when a 5th grader, who had been bullied and teased, drew a picture. It consisted of a stick figure, a gun, and a grave. Fourteen hours of IEP meetings later, I was contracted to design a social skills program. I had no clue at the time that I was about to launch a technology-infused intervention program that would occupy much of the next 10 years of my practice. What began with eight 4th and 5th graders, a data projector, a single animation program, plus PowerPoint, has since evolved into an empirically-based transdiagnostic program serving 45 children 8 to 17 years old across three groups. We focus primarily upon improving executive function, pragmatic language, social competence, academic readiness, and environmental awareness.

Important to keep in mind is that the use of technology is not an alternative form of therapy, rather an adjunct resource to be incorporated into existing approaches (Castelnuovo, Gaggioli, Mantovani & Riva, 2003; Cucciare & Weingard, 2010). Consistent with the established literature, we found that e-therapy is a useful means for increasing client and student motivation (Newman, 2004; Singh & Means, 1994).

As part of our assessment process, families complete an online behavior-rating program to identify social emotional characteristics. The student and parent subsequently attend an in-office meeting, where they view videos of students from past programs and see sample computer animations completed by prior groups. Right away, this infuses the treatment process with dynamic elements students find engaging.

Working in groups on cartoons, creating and narrating Power-Points, making animation and occasional live movies helps them remember what each is working to improve (Mayer, 2011). Sometimes we turn students into animated characters (avatars) through the use of special inexpensive cameras or software (e.g., Logitech, YouCam). Using phrases such as, "quiet on the set," and taking retake after retake when necessary, helps students practice important behaviors such as maintaining control in front of an audience, speaking their lines without mistakes, and working through fears and social anxiety. Amazingly, they never mind it. The "audience" simultaneously works on controlling talking, suppressing extraneous sounds, focusing, and providing support and enthusiasm. Students are rewarded when they wait about eight seconds after detecting a typo on the screen, rather than impulsively blurting it out.

During post-group feedback, we poll students and their parents. The students complete the surveys on paper and the parents complete

them online. Based upon parent report, 85-95% of students report they enjoyed attending and about 65-74% made significant gains. Forty percent of students demonstrate gains in settings outside the group sessions. Consistent with published literature, we know that the more involved families are in the process, the more progress their child is likely to make (Drugli & Larsson, 2006; Webster-Stratton, Reid, & Hammond, 2004).

Clinician Self-Assessment

When beginning or augmenting your use of technology, start by conducting an informal self-assessment of your level of digital knowledge. Think about your level of proficiency in the following areas: Creating PowerPoints, using digital cameras and digital video, survey creation, making digital audio recordings, editing photos and video,

using online services for file storage and retrieval, creating websites or wikis, using email, displaying or creating animation, and conducting telemeetings. Don't know all of these? That is probably true for most clinicians. If your knowledge base is fairly limited, consider consulting with colleagues, making use of list-servs, and picking up some consumer magazines.

Most of the tools and techniques I refer to are commonly used in education and business and can readily be applied to working with students and adults (Hechter & Guy, 2010). For purposes of this article I have focused on social skills, but the same types of technology may be used for anxiety, depression, and other difficulties (Harwood, et al., 2011). Just as medications may be used "off label," clinicians may find that a product or service can be usefully incorporated into treatment, even though it was not originally intended for that purpose.

Increasing Your Technology Knowledge

Pick up PC World or MacWorld or visit www.allthingsd.com, www. techcrunch.com, www.engadget.com, www.download.com, www.softpedia.com. or www.cnet.com. At these sites, you can read reviews or download programs for your PC or Mac computer. Most have demonstrations of their programs or you can use a search engine to learn more. For examples of what we do, visit www.lunchgroups.com as well as our YouTube channels, "lunchgroups" and "behaviortech." You can read up on our different procedures, view sample animations and projects completed by students, and watch tutorials on supportive technology for parents. Starting off, you may find some YouTube videos that you and your client can watch together and then discuss.

Technology Examples in Our Program

Online Holiday Greeting: Last year the students came up with a joint holiday message using a combination of pictures (legally and freely available from www.commons.wikimedia.org) and dragged onto PowerPoint. We added captions, then recorded the group narrating the PowerPoint and published it on YouTube as a holiday message to their parents. Our security protocol states that we never put up children's images or likenesses, only their voices. For identification on any public webpages, students use the nicknames they create specifically for our program.

Panel Cartoons: I frequently use www.stripcreator.com. Just be sure you turn on the "obscenity filter" and, to make the ads go away, contribute a few dollars. I paid \$5 five years ago and have not seen an ad since. You may also wish to try out Comic Boom (Toonboom.com) or Comic Life (Plasq.com) and there are plenty of others as well. You will need to practice using programs such as this before trying them with a client. In a typical two character cartoon spanning three panels, the group has to think of an engaging story. This discussion is perfect for helping and guiding students to use brief, clear statements; wait until others are finished before speaking; disagree with suggestions respectfully; and appropriately modulate their voice level. Shy students may start off by selecting backgrounds or specific characters while more verbal students say the lines.

2007 Bullying Movie: In a summer program the group created a fiveminute animation about bullying. Students created their own scripts then read them as avatar characters. You can view it by visiting the following web link, http://tinyurl.com/8y9j3td or by typing in "bullying movie lunchgroups 2007" into Google. We immersed students in the Hollywood production mentality, identifying them as "movie producers," "line directors," and of course, "the talent."

If clients have concerns about their voices appearing on the Internet, the pitch and tone can be altered using programs like Audacity. As for editing the movies, I typically use a screen capture program, Camtasia (for PC and Mac) available from Techsmith or import into iMovie.

Supporting Parents

Important activities for parents include: attending our telemeetings, completing online reports of their children's (and their own) behavior, and practicing the behavioral strategies we teach. As you might imagine, parents can initially be intimidated by the technology used in our programs. Last year, we began holding an initial three-hour meeting for families to review our intervention strategies as well as demonstrate how to use the technology in our program.

Our post-group surveys provide information about those technologies parents found most engaging. For example, I replaced blogging with audio progress notes after seeing that very few families actually took the time to read the blogs. I still find that only 35% of the families listen to the audio progress notes, however of that number, 64% report it was "very useful" and 18% report "somewhat useful."

Last summer we created a survey report on how the students are doing and regularly send that out to parents. It contains details of what behaviors we have targeted, which interventions we use, how much progress we see in the office, and suggestions for behaviors to target at home. This often serves as a means for more structured email communications with families.

Concluding Thoughts

It is tempting to become enamored of specific or new technologies. However, by remaining true to one's own clinical strategies, you can avoid treatment gains that are solely due to novelty effects and nonspecific factors. Given that I largely use the same programs and strategies as I did 10 years ago (updated versions, of course) attests to the longevity of using technology for the right reasons to produce positive outcomes. It is simply no longer an option whether to incorporate technology into treatment, just a matter of how and when.

References

Castelnuovo, G., Gaggioli, A., Mantovani, F., & Riva, G. (2003). From psychotherapy to etherapy: The integration of traditional techniques and new communication tools in clinical settings. *Cyberpsychology & Behavior*, 6(4), 375-382. doi: 10.1089/109493103322278754.

Cucciare, M. A., Weingardt, K. R. (Eds.). (2010). Using technology to support evidence-based behavioral health practices: A clinician's guide. New York: Routledge/Taylor Francis Group.

Drugli, M. B., & Larsson, B. (2006). Children aged 4-8 years treated with parent training and child therapy because of conduct problems: generalisation effects to

day-care and school settings. European Child & Adolescent Psychiatry, 15(7), 392-399. doi: 10.1007/s00787-006-0546-3.

Harwood, T. M., Pratt, D., Beutler, L. E., Bongar, B. M., Lenore, S., Forrester, B. T. (2011). Technology, telehealth, treatment enhancement, and selection. *Professional Psychology: Research and Practice*, 42(6), 448-454. doi:10.1037/a0026214.

Hechter, R. P., Guy, M. D. (2010). Promoting creative thinking and expression of science concepts among elementary teacher candidates through science content movie creation and showcasing. *Contemporary Issues in Technology Teacher Education*, 10(4), 411-431.

Mayer, R. E. (2011). Towards a science of motivated learning in technology-supported environments. *Educational Technology Research and Development*, 59(2), 301-308. doi:10.1007/s11423-011-9188-3.

Newman, M. G. (2004). http://www.ncbi.nlm.nih.gov/pubmed/14724921. Journal of Clinical Psychology, 60(2), 141-145.

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