Certification of Behavior Technicians in the Field of Autism Treatment

Abstract Since the mid-1980s, college students have worked with children diagnosed with autism spectrum disorder (ASD) to implement treatment plans designed by master's and doctoral-level clinicians. Effectively, each student has had a high school diploma or the equivalent and received some preliminary training and education prior to using the principles and procedures of applied behavior analysis (ABA) to increase adaptive skills and decrease challenging behaviors in children with ASD. The seminal study by Dr. O. Ivar Lovaas that first used ABA to treat ASD relied on graduate students to supervise undergraduates at the University of California, Los Angeles. In that study, 47% of the children who received intensive ABA were able to be mainstreamed into regular public school classrooms and maintained their improvements over time, demonstrating the effectiveness of this tiered delivery model. In recent years, two certifications have emerged to credential the heretofore uncertified and unlicensed paraprofessional delivering 1:1 ABA under the supervision of a licensed and/or certified professional. As state agencies and funding sources begin to adopt these certifications, an analysis of their effectiveness in ensuring consumer safety and quality treatment seems warranted.

Tiered Delivery Model The effectiveness of ABA-based autism treatment delivered by uncertified and unlicensed behavior technicians under the supervision of licensed and/or certified clinicians is well established. When the Surgeon General of the United States and the American Academy of Pediatrics state that ABA is effective in the treatment of ASD, they are referring to the two-tiered ABA treatment model routinely used in research and private practice wherein a master's or doctoral-level clinician designs a treatment plan and supervises unlicensed, uncertified behavior technicians who implement the treatment plan by working 1:1 with the individual with ASD. This two-tiered delivery model has been validated repeatedly by numerous studies that pre-date the existence of behavior technician credentials, such as the Behavioral Intervention Certification Council's (BICC) Board Certified Autism Technician™ (BCAT) and the Behavior Analyst Certification Board's (BACB) Registered Behavior Technician™ (RBT).^{2,3}

Treatment and Cost Effectiveness Since that first study by Lovaas, research studies have repeatedly demonstrated that outcomes are maximized when a child receives sufficient hours of ABA. For many children, their ability to become adults who function independently in the community depends on early intensive behavioral intervention (EIBI) of 30-40 hours per week of ABA. Recently, Linstead and colleagues published a study that examined nearly 700 children with autism, ranging in age from 1.5 years to 12 years, and found that the single most important variable influencing outcomes is the number of hours of treatment a child receives. Children who receive fewer hours are more likely to require services over the course of their lifetime, the cost of which has been estimated at \$3.2 million per capita.

Provider Capacity Provider shortages are well documented in the field of evidence-based autism treatment.^{6,7} Since children with ASD experience best outcomes when diagnosed and treated early, any significant delay in the provision of ABA-based treatment to a child with ASD can mean the difference between equipping a child with the skills to live independently in the community and grappling with the needs of a child who will require

^{*} Depending on the state and/or the funding source, these paraprofessionals may be called tutors, therapists, interventionists, and/or behavior technicians. For the sake of clarity and consistency, this article will use the term behavior technician.

constant care and support throughout his/her lifetime. This potential delay is so consequential that the American Academy of Pediatricians (AAP) states that evidence-based intervention should be provided as soon as an ASD diagnosis is "seriously considered." Overly burdensome and/or generic credentialing requirements can hinder and discourage provider growth at a time when more providers must be attracted to the field of evidence-based autism treatment.

Behavior Technician Certification As some state agencies and funding sources have begun to require certification of the behavior technician, a review of benefits and potential pitfalls may better inform the decision-making process. Two primary considerations that make certification attractive to consumers and insurers are the need to ensure top-quality autism treatment and the concern for consumer safety in a field where patients – given their disability and age – are among the most vulnerable. Given these concerns, the two certifications accredited by the National Commission for Certifying Agencies (NCCA) – BCAT and RBT – offer an opportunity for comparison. NCCA accreditation "provides impartial, third-party validation that your program has met recognized national and international credentialing industry standards for development, implementation, and maintenance of certification programs." The BCAT and RBT are the only NCCA-accredited programs directed at paraprofessionals in the field of behavior analysis.

BCAT versus RBT While both BICC and BACB certify behavior technicians who work with the autism population, the BICC's BCAT is autism specific while the BACB's RBT is not. In 2016, Leaf and colleagues expressed concerns about the "generalist approach" of the BACB, stating that the BACB "...has not acknowledged the need for differentiating areas of specialization, such as ASD and early intervention. The absence of a specialty credential may be taken by consumers as an indication that a generalist credential is all that is necessary to be qualified to provide [early intervention] services." Another differentiating factor is that BICC requires BCAT candidates to have autism-specific experience while the BACB has no experience requirement for RBT candidates. Leaf and colleagues address this gap in the RBT credential, saying, "It would be difficult to determine if these skills would generalize to actual therapy sessions." Without actual clinical experience, Leaf and colleagues assert that "...it would be nearly impossible to ensure that RBTs have been successfully trained and have achieved any level of functional competency...."

Features of Certification	BCAT	RBT
NCCA-accredited program	>	>
Minimum of high school education	\	>
Must pass exam	\	>
Must be supervised	>	>
Must have autism-specific training	>	
Autism-specific credential	~	
Must have autism-specific experience	~	
Must have ongoing background check	~	
Requires primary source verification	~	

Table 1 Comparison between BCAT and RBT

RBT Competency Assessment In place of an experience requirement, the BACB requires RBT candidates to pass a competency assessment. The competency assessment raises concerns because the individual conducting the competency assessment may be incentivized to ensure that the RBT candidate passes the competency assessment. Leaf, et al., worry that the subjective nature of the competency assessment can lead to "inadvertent or...purposeful manipulation by the evaluator.... [T]his would artificially increase the likelihood of the RBT candidate demonstrating the procedures correctly during the role-play scenario." Additionally, Leaf

and colleagues worry that the competency assessment itself may create a conflict of interest for the evaluator "...if the person conducting the assessment is also the employer of the potential RBT [because]...there could be an incentive for the assessor to pass the RBT, since having more RBTs can lead to more clients and potentially lead to greater financial reward." In fact, given such a scenario, it is quite possible that the BCBA's role as evaluator of the RBT creates a dual relationship, which is a violation of the BACB's own Professional and Ethical Compliance Code for Behavior Analysts. ¹¹

Consumer Safety Echoing the concerns of funding sources and state agencies, both the BACB and BICC missions include a commitment to consumer safety. Indeed, both the BCAT and RBT certifications require certificants to have passed a criminal background check. The BICC requirement mandates a traditional active and ongoing background check wherein a BCAT candidate must pass the initial background check, and BICC is alerted in the future if a BCAT is arrested, charged, and/or convicted of a crime. The BACB's requirement for the RBT candidate is less rigorous, relying on a Board Certified Behavior Analyst (BCBA) who supervises the RBT to "confirm that the applicant has successfully completed a criminal background check" and attest to the "applicant's compliance" with the BACB background check requirement. The BACB explicitly states that the person attesting to the RBT applicant's having passed the background check is "not required to review the background or registry report." Of additional concern is that the background check required to be an RBT is not active, meaning that the RBT candidate must have passed some sort of criminal background check within the 180 days preceding the submission of the RBT application. Unlike BICC's ongoing background check, though, the BACB appears to have nothing in place to notify it if an active RBT is arrested or charged with a crime after receiving the RBT certification.

Conclusion State and insurer credentialing requirements should address concerns about consumer safety and treatment quality and take care not to act as barriers to treatment. Given the critical nature of early intervention in ASD and a shortage of qualified health professionals to design and oversee ABA-based autism treatment, efforts to impose certification and/or licensure requirements should incorporate existing ABA providers, including psychologists, marriage and family therapists, and other licensed professionals acting within the scope and competency of their license. Certification of behavior technicians should (a) reflect mastery of behavior analytic principles as they apply to autism; (b) require certificants to pass a criminal background check and to submit to ongoing monitoring that alerts employers, consumers, state agencies, and funding sources if the certificant is arrested or charged with a crime; (c) require candidate's to have autismspecific experience. Additionally, the growth of certified behavior technicians, who require ongoing supervision by master's or doctoral-level professionals, should not be hindered by a credential that limits supervision to BCBAs, excluding other qualified professionals and hindering the capacity of states and insurers to meet the behavioral health needs of individuals affected by ASD. Currently, the BICC's BCAT is the only certification for the behavior technician that is autism specific, NCCA-accredited, and committed to meaningful criminal background checks and ongoing monitoring. As consumers and funding agencies articulate their expectations for top-quality treatment and meaningful background checks, other certifications should examine the benefit of an autism-specific credential, an experience requirement, and active and ongoing criminal background checks.

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