

PROJECT DESCRIPTION: OBJECTIVE, FOCAL POINT, AND RESULTS

The project embodies a new social approach by offering a solution to the difficulties a growing population of individuals with autism and related disabilities are facing on a daily basis. Although applied behavior analysis stems from experimental and psychological studies of the previous century, nowadays it is a recognized branch of psychology whose basis are found in scientifically-validated principles (Cooper, Heron, & Heward, 2007). In Europe, applied behavior analysis (ABA) lacks the professional development and recognition it needs. As far as some countries in the European Union are concerned, ABA is an emerging science for a growing population of individuals with developmental disabilities. Until recently, ABA was considered as a new solution for the lack of this type of rehabilitation services in Croatia. Once the first Board Certified Behavior Analyst made her home in Croatia, we could look at solving this problem of lack of ABA services from a different perspective.

Because ABA is crucial to the individual's life as a strategy that diminishes key maladaptive behaviors and increases functional behaviors in order to promote speech, social skills, and an overall well-being of targeted individuals and their families, ABA can target groups that have received little attention and quality services. This project study can help the understanding and importance of behavior analysis in the natural setting to further change educational policies that include motivation, proactive professional development, and in-setting support for professionals.

This project study's finding can also shed light on how to better apply evidence-based strategies to the natural setting in order to develop focus, information dissemination, and mastery among targeted individuals. By using ABA strategies in various centers and through trained ABA therapist, we can reach the targeted population of individuals with autism and related

disabilities. Previous research showed that when evidence-based strategies are applied in the natural setting, they create a social environment that extends beyond the learning context into the social one. Individuals tend to become more adept at approaching everyday challenges, influence the learning environment, and develop mastery to increase motivation, self-regulation, and development (Matthews & Hagopian, 2014). By using ABA strategies in therapeutic setting we can create lasting, concrete, and enduring changes that are socially significant for individuals with developmental disabilities.

By introducing the children to a quality rehabilitation treatment that is being supervised by a Board Certified Behavior Analyst, we increase their potential as functioning members of the society. Our non-for-profit Avanti BC Zagreb Center's assistants and analyst evaluate children's programs efficacy, offer therapist training, and ongoing supervision in order to disseminate ABA services ethically and proficiently to increase socially significant behaviors for disabled individuals in this part of the world. The children with various disabilities learn functional skills such as compliance, receptive skills, expressive skills, motor and verbal imitation, gross and fine motor skills, social skills and many other facets of the disabled child's life necessary for future integration and success. ABA involves and implicates the targeted population of disabled individuals to interact with the social context and expand the societal awareness of the need of this sensitive target group.

The innovative nature of the project stems from the decision of the Head Analyst to move to Croatia and start something that is new, creative, and alternative. The head analyst Nirvana Kos decided to move from the United States to Croatia to disseminate Applied Behavior Analysis (ABA) in the world, specifically in her home town of Rovinj. Upon arrival, Nirvana was inundated by calls from various institutions, parents of individuals with special needs, and

therapists and teachers requesting training and services. One of the largest growing world epidemic is the prevalence of Autism and related disabilities in the World. Several countries like the United States and in Europe's incidence of autism in 2012 was 1 in 100, in 2019 this number had developed to 1 in 36 children and growing (Autismspeaks.org, 2019; Autismeurope.org, 2019). Because ABA is the only scientifically-validated discipline that shows improvements for individuals with disabilities (autismspeaks.org, 2019) and Croatia did not have an acting analyst upon Nirvana's arrival, dissemination of ABA became a priority for Nirvana in her country.

The Ministry of Health did not have a system that supported this type of rehabilitative therapy and it became crucial to build ABA centers across the country. Soon, dissemination of ABA started with one clinic in Rovinj, then it moved on to building centers in cities across Croatia. Avanti BC Centers in Croatia have grown exponentially in three years with six locations throughout the country and various international supervision connections such as Slovenia, Serbia, Bosnia, and Hungary. Avanti BC currently services five cities in Croatia; Rovinj, Rijeka, Zagreb, Slavonski Brod and a supervised center in Karlovac where the analyst offers supervision services for therapists.

As a rehabilitation facility, Avanti BC currently hires two full-time ABA therapists per location. That is a total of 30-40 children per Center or 15-20 children per assistant. Each child is engaged a minimum of 2 times a week for an 1.5 hours; which is the minimum amount of hours for any changes in the child's developmental status. We are closely monitoring each child's improvements in an excel type file by graphing the progress (an example of an anonymous graph will be included in question 31. of this application form). The current status of Avanti BC Center Zagreb location is that in 2 years of being operational, we trained 12 new ABA therapists that went on to their Institutions to practice ABA therapy under supervision, we consistently hire 2

therapists to care for 14 hours of service a day with our clients on a weekly basis. After evaluating the progress made from 2017-2018 it was noted that our ABA therapist processed worked with a total of 37 children (some graduated from the program and some exited due to financial hardship) and accomplished a little less than 6000 prompt level changes (progress towards a developmental goal), and learned 1041 new and cumulative developmental skills. Each child was added new skills to work on in 2018/2019 that amounted to 667 new skills. These visible effects of our socially innovative program are seen in the lives of our targeted population of individuals with developmental disabilities. Each individual is being monitored for progress and as they change so does their individual programs change with his or her growth. Besides our work with the targeted individuals, we often consult with teachers, speech pathologist, sensory specialists, and rehabilitation experts to create an interdisciplinary team for each child's progress and betterment of socially significant behaviors.

The crucial, public perception of this project is the dissemination of applied behavior analysis in the world, specifically in Croatia. According to data from UNICEF (2012), there are over a billion people in the world that live with one or more disabilities which today it increased to over 18% of the world's population. Applied behavior analysis is a discipline that is scientifically-validated in the world as efficient in helping individuals achieve socially significant changes throughout their lives. Research showed that improvements can be seen among individuals if therapists were trained in how to apply behavior analysis concepts in the students natural setting (Bell & McDevitt, 2014; Twyman, 2014; Wentzel & Brophy, 2014). When the analyst first came to Croatia it was crucial to reach out to the public to disseminate the benefits of ABA among the targeted population of individuals with special needs. Several TV and radio appearances were made. The local government was contacted as an outreach attempt,

to bring awareness to key individuals that we can make a difference in our targeted population's lives. Currently we are applying for several grants from the local government bodies and sharing our statistics to prove children with special needs can develop various skills under our care. As a result of our outreach, several educational institutions, other non-for-profit organizations, and various rehabilitation institutions requested awareness training and professional development seminars.). By using behavior analysis strategies in the natural setting and enriching the therapist's professional development and instruction, therapists can improve the individual's motivation and increase learning (Hodge, 2014). Twyman (2014) stated ABA is a research-based technology that shows meaningful improvements in the quality of instruction and the individual's behaviors in the "outside world".