



Myth Busting - ABA and Its Everyday Uses

This is a summary of a webinar offered by *Autism Learning Partnership*. Follow the link to watch the webinar <https://asdatlantic.ca/available-resources/>

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Applied behaviour analysis (ABA), based on the *Science of Learning*, includes many teaching techniques and methods that have been subject to a great deal of research that has shown them to be effective for many individuals. Several strategies, such as shaping, discrete trial teaching and positive reinforcement come from the science of ABA. Research shows that these strategies, among others, are the most efficient to teach learners with autism spectrum disorder (ASD). However, ABA is not always accepted. There is so much information available that it can be difficult to distinguish between what is reliable and what is not. Moreover, some professionals adapt, dilute or add elements to their interventions and then present their version as ABA. Some argue that ABA is not efficient, but what really happens is that the elements that characterize ABA and the level of supervision required to ensure effectiveness were not included. With this article, we aim to summarize the essential elements of ABA and dispel some of the myths sometimes associated with it.

APPLIED BEHAVIOUR ANALYSIS

Shaping

Chaining

Positive reinforcement

Pivotal response training

Discrete trial teaching

Etc.

Science of Learning

Thanks to the principles of ABA, we can explain how behaviour is acquired and how it changes over time. Behaviour, considered everything that an individual does, is maintained because there are variables in the environment which motivate the individual to show behaviour under certain circumstances. There are also variables in the environment that reduce the frequency of behaviour. The variables that increase and decrease behaviour are what we observe when we put the science of ABA into practice. ABA allows us to describe a behaviour and the environmental variables linked to that behaviour, to predict the effect of manipulating these variables and to experiment in order to verify the predictions. Research in the field of ABA uses some rigorous methodologies that allow us to draw conclusions and advance our understanding of behaviour.

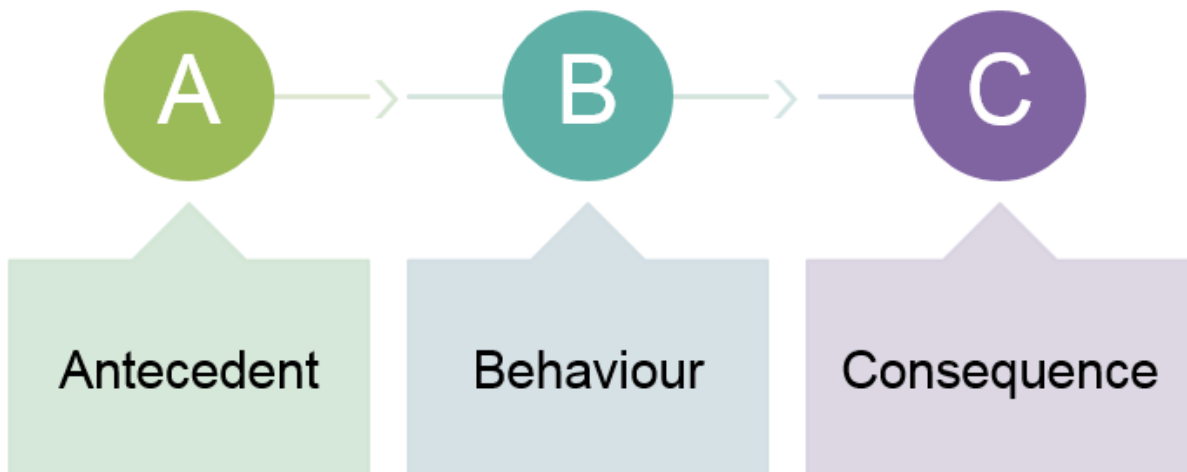
ABA Applies to All

The principles of ABA apply to many areas such as sports performance, education, parenting, work productivity, health, criminology, environment, sales, etc. Some people mistakenly believe that ABA applies only to individuals with ASD. ABA is effective with this population, but it applies to all people. A teacher can use the principles of ABA to determine the impact of different types of rewards on student motivation, employers can use ABA to ensure the safety of their employees, sports coaches can use ABA to improve their players' performance, and parents can teach their children to tie their shoelaces, or to take turns in a game. Regardless of the target population, the same ABA principles are applied: observe, analyze and intervene when a behaviour is considered socially important. The focus is on targeted behaviour and attempts to identify how the behaviour is affected by the environment.



The A-B-Cs of Learning

Behaviour is preceded by an antecedent and followed by a consequence, both are variables that can be deliberately added or removed, or that occur naturally in the environment. By looking at what happens before a behaviour, the antecedent, we can organize the environment to promote learning conditions. By looking more closely at the consequences, or what happens after the behaviour, we can identify other variables that have an impact on the probability that a behaviour will or will not happen again in the future. What we call reinforcing consequences can thus be used to teach new behaviours and skills. By better understanding behaviour, we gain relevant and credible information that can help us better interact with a learner.



Some Misconceptions About ABA

One may think that **interventions based on ABA only take place in clinics, homes or segregated therapy settings.** Although it is sometimes necessary to intervene in a quiet place within a one-on-one context, the intervention does not have to take place under these circumstances. It is actually very important to carry out interventions in the learner's usual environment to ensure learning is generalized. If learners can use new behaviour and skills only with the person who taught them the skill and, only in the room where they learned it, then the skill will not be of much use in daily life. The choice of learning environment is therefore critical. If learners can gain new skills in their usual environment, in the living room with their family or in a classroom with peers, this space should be used for teaching. And, whenever, an individual needs fewer distractions or a one-on-one intervention, it is important to provide it. The learners' needs and interests must be identified and respected for intervention to be effective.

Another misconception is that **ABA is a quick fix for problematic behaviour.** Sometimes, a well-planned intervention can lead to fast improvement, but the expected changes may occur at different speeds, depending on the learner's age, needs and strengths. Significant improvements may require time, especially when it comes to learning new skills which will help learners be more independent in daily life. When choosing among the various teaching techniques and methods that lead to developing new skills, it is important to take into consideration the skills being taught and the individual's needs. Some interventions fit some skills better than others. No matter the intervention selected, it is crucial to plan according to learners' needs and to allow the necessary time for learners to make progress.

Some people think that **ABA and Intensive Behavioural Intervention (IBI) are the same thing.** ABA is a general science of behaviour, which focuses on developing abilities and reducing inappropriate behaviour to improve an individual's quality of life, while IBI is an intensive intervention for preschool children with ASD. The objective of IBI is to increase the learning rate of children with ASD to reduce the gap between them and typically developing peers. IBI is based on the principles of ABA, but applies to a specific population. IBI is therefore part of ABA, but they are not the same thing.

Finally, another misconception is that **ABA excludes other professional services** such as occupational therapists, physiotherapists, speech therapists, etc. When a learner faces several challenges, which require the support of other professionals, it is important to ensure effective collaboration so that all professionals involved contribute to setting objectives and determining the most effective approaches to ensure a learner's success. Board Certified Behavior Analysts (BCBA) offer services that include treatment planning, data collection, therapy, case management and training, for the development of programs and interventions that use the principles of ABA to address a wide range of social and human issues. Just like any other professional, they seek to promote their science. However, they do not seek to exclude the contribution of other professionals.

What You Need to Know

Applied behaviour analysis is based on the science of learning and its goal is to ensure that significant objectives are reached for all individuals. ABA research shows several strategies and interventions to be efficient and effective for individuals with ASD, but the principles apply to everyone. Thanks to ABA, it is possible to study behaviour in relation to environmental variables and examine the effect of changing the

variables. It is not a quick solution, but a method with which one can thoroughly measure the individual's progress and bring about necessary changes. The interventions should occur in the environment that best meets the needs of the learner, and all decisions should be made in collaboration with the other professionals involved. IBI is an example of an intensive intervention offered to children with ASD, but there are many other interventions that apply to the broader population. Now that we better understand the principles of ABA, let's say farewell to ABA myths!

About Us

Autism Learning Partnership (ALP), a branch of the Department of Education and Early Childhood Development (EECD) in New Brunswick (Canada), is the sole provider of the Provincial Autism Training curriculum for preschool autism agencies and educational personnel in New Brunswick. The Autism Learning Partnership provides bilingual, evidence-based, high-quality professional learning and resources to support families, preschool agency personnel and educational personnel in the province, and has a mandate to establish partnerships with organizations nationally and internationally.