



## What is ABA?

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*Positive Behaviour Support*

*'An approach that blends values about the rights of people with intellectual disabilities with a practical science about how learning and behavior change occur.'*

*Horner, 2000*

### Introduction

PBS is a synthesis of applied behaviour analysis, social role valorisation and person-centred values (e.g., Carr et al. 2002; Gore et al. 2013). Although arguably more than the sum of its parts, to understand the approach it is necessary to know something about how it is made up. In this short paper, we will briefly explore Applied Behaviour Analysis (ABA) as a central component of PBS.

### Behaviour Analysis

Behaviour Analysis is the scientific study of learning and behaviour. Behaviour is what we do. Applied Behaviour Analysis (ABA) is the application of Behaviour Analysis to situations and contexts that society thinks are socially important. ABA is the application of the philosophy and science of behaviourism and not the name of a service delivery model. The philosophy and science of ABA will be found, however, in several contemporary intervention and treatment models including Acceptance and Commitment Therapy (ACT), Early Intensive

Behavioural Intervention (EIBI), Verbal Behaviour (VB) and, of course, Positive Behaviour(al) Support (PBS).

## Misconceptions of ABA

There are many misconceptions of ABA, misunderstanding and misrepresentations. A selection of the most common misrepresentations is presented below:

- **ABA is simplistic.**  
ABA researchers have developed a number of findings, working methods and practices that have been simplified in an effort to make them more accessible to people without a prior training in ABA. This has sometimes created the impression that Applied Behaviour Analysis is itself simple. For example, the 'ABC' of behaviour is a simple idea that most people can grasp. It is, however, a reduction of many years of very complex research in verbal and non-verbal behaviour. The analysis of verbal behaviour is rich in complexity and explanatory power that together with contingency analysis accounts for much of what we do, and why we do it the way that we do.
- **ABA is Early Intensive Behavioural Intervention (EIBI).**  
ABA is not EIBI, the 'Lovaas' model, or any other behaviourally-based scheme of assessment and intervention. EIBI, and many other service delivery models do, however, derive much of their philosophy, design and delivery practices from ABA research. Included in this is the imperative to work behaviourally, with behaviour, in ways that are beneficial, effective, enduring and generalizable.
- **ABA is behaviour modification or aversive conditioning.**  
This common misconception originates from a small number of early attempts by well-intentioned pioneers to bring the potential for behaviour change to bear on socially important problems. The early use of procedures from within the field lacked functional and contextual analysis, which drew criticism that has maintained to the present day. While there is continued debate in the field about the ethics and acceptability of punishment-based intervention, it has never been proposed as an approach of first resort nor for everyday use.
- **ABA is for people with intellectual disabilities or autism.**  
The principles of behaviour are universal. Behaviour analysis has been applied successfully in human and non-human populations from individuals through to multi-national organisations.
- **ABA is narrowly focused.**  
The philosophy and science of ABA is invested in the betterment of society and seeks to improve the life conditions of individuals and groups. ABA pursues behaviour change and learning. Examples include (but are not limited to) reading and maths recovery programmes for children and adults, helping people learn self-help and

personal care skills, training staff to do their jobs, developing behavioural safety in the workplace (e.g., nuclear industries), decreasing potentially harmful behaviour such as smoking, excessive drinking, drug use and gambling, lowering the impact of behaviours of concern shown by people with intellectual disabilities, autism, mental health issues, and those with dementia.

## What is ABA?

Behaviour Analysis is the scientific study of learning and behaviour. The Experimental Analysis of Behaviour does the basic science. Applied Behaviour Analysis (ABA) is the study of behaviour and learning in contexts that society says are important.

In 1968, Baer, Wolf and Risley published the first definitive account of Applied Behaviour Analysis in the first edition of the *Journal of Applied Behavior Analysis*. They outlined seven dimensions of ABA (figure 1) that are still relevant today and taught to students of ABA. Here we provide a brief synopsis of that original paper, which is available, free of charge as a download from the JABA archive, see References, below.

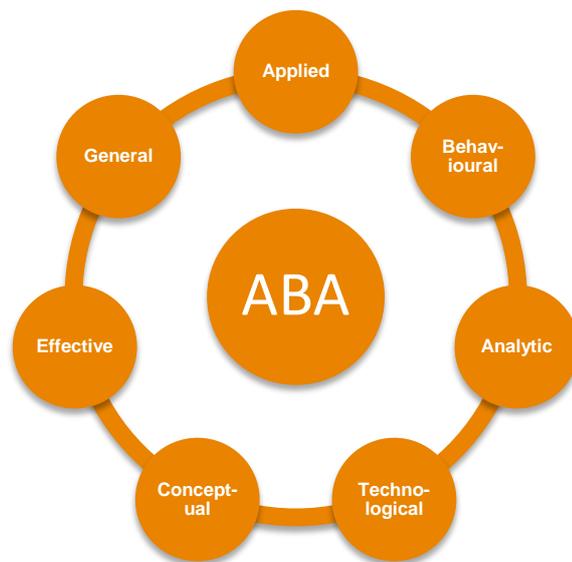


Figure 1 Seven dimensions of ABA

### Applied

In ABA the term ‘applied’ refers the use of behavioural principles in situations and contexts that society and its members decide are important. This applies to research and to practice. Whether or not a situation or context is important depends partly on whether or not the problem calls for a solution. The applied dimension of ABA asks practitioners to consider how immediately important is a behaviour or context to a particular group, to society, or to a person? ABA researchers do not seek answers to questions for their own sake or for the sake of acquiring knowledge. The philosophy of ABA is concerned with improving conditions in the world and for the people who live in it.

### Behavioural

ABA is concerned with what people do, not what they say they do, unless saying is defined as the behaviour of interest. In ABA the occurrence and non-occurrence of behaviour and the presence or absence of a stimulus is independently verified through observation. Observers

are human, however, and observing and recording are examples of behaviour that may be influenced by the situation. So when considering the results of behavioural observation it is important to know not only about the accuracy of the data obtained but also its reliability.

### **Analytical**

In ABA the main aim of analysis is to obtain a believable account for the occurrence and non-occurrence of behaviour. In research this means designing studies that demonstrate experimental control. In practice, analytic means interventions are selected based on a convincing account of functional relations – a relationship between the occurrence and non-occurrence of behaviour and salient aspects of the social environment – additionally, how and why the environment selects one response form over others. For a short time during the 1970's the focus on analysis in ABA was weak. A seminal paper by Carr (1977) reinstated the fundamental nature of analysis, and person-centred, context-specific ABA was revived.

### **Technological**

In the context of research, technological addresses the need for procedures to be described in a way that allows replication. In practice technological specifies the need for detail, precision and rigour. So, assessment and intervention procedures have to be specified in enough detail for a reasonably experienced person to follow. Intervention procedures should be broad enough in scope to state what should be done in the presence of all reasonably likely behaviours – not just the behaviour targeted for change.

### **Conceptual**

This dimension of ABA strives to ensure that the assessment and intervention procedures deployed in research and practice are fully relevant to basic behavioural principles and completely related to basic behavioural concepts. These should be described and explained as fully and accurately as possible in behavioural terms so that similar procedures might be derived from the same basic principle. A fundamental aim is for ABA to function as a discipline, rather than a box of tricks to be performed by practitioners. It is important to know, therefore, the nature of procedures deployed in assessment, teaching, learning and evaluation.

### **Effective**

In ABA effectiveness is assessed according to the magnitude of change obtained relative to the size of intervention and the amount of change that must be obtained for it to be considered socially significant. Assessing the social significance of behaviour change invites us to think about who decides – and this will usually be those who are most affected by the behaviour of context under consideration. Generally, ABA interventions are designed to produce significant amounts of behaviour change. If the amount of change is small then the intervention will probably be judged to have failed. Socially significant behaviour change

requires interventions that are powerful. There is an associated responsibility to deploy powerful intervention procedures ethically.

## Generality

ABA interventions should produce behaviour change that lasts, that appears in other settings or contexts, and that spreads to other related behaviours. For example, skills acquired during training are most useful when they spread to the workplace where they should be used, and when they keep on being used for a period of time. ABA research suggests generalisation rarely occurs of its own accord and that it should be planned for rather than expected.

## In summary

*'The functional model of challenging behaviour and the vast majority of assessment and intervention procedures central to PBS are directly grounded in the use of ABA which is fundamental to how PBS should be defined and practiced.'* (Gore et al 2013)

*'Applied behaviour analysis is a science devoted to the understanding and improvement of human behaviour with the basic principle being that behaviour is shaped by the environment and selected and maintained by the consequences that have followed ...'* (Cooper, Heron and Herward 2007)

PBS is a blended approach, and applied behaviour analysis is one centrally defining component. According to most accepted definitions, it would be impossible to deliver PBS in the absence of ABA. ABA is broader than PBS, however, and is not merely the application of basic behaviour analytic principles. ABA is a philosophy and science devoted to improving the human condition, in real world contexts, by applying basic behavioural principles to socially important problems.

The human, economic and opportunity costs associated with behaviour described as concerning or challenging make it a socially significant problem. More often than not such behaviours are responded to by community exclusion and the use of restrictive practices. A number of components must be present for the successful implementation of PBS (Gore et al. 2013) and many of these are derived from ABA. PBS is just one service delivery model that has benefitted from adopting conceptual and procedural frameworks developed by practitioners in ABA.

ABA practice is characterised by operationally defining behaviour, observing its occurrence and non-occurrence, assessing functional relations, setting goals for behaviour change, selecting empirically validated intervention procedures that correspond with function, measuring treatment integrity and behavioural change, and making data-based decisions. The field has produced many procedures for observing and recording behaviour and for

designing and delivering interventions both to increase and decrease behaviour. In our brief review, we chose to look at common misunderstandings ABA and the seven dimensions outlined at the birth of the field by Baer, Wolf and Risely (1968). These are as relevant today as when they were first published.

## References

*Some Current Dimensions of Applied Behavior Analysis*, Donald M Baer, Montrose M. Wolf, and Todd R. Risley, The University of Kansas, *Journal of Applied Behaviour Analysis* 1968, 1, 91-97 Number 1 (Spring, 1968). Download here: <http://1.usa.gov/1Qeaire>

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