The evolution of the application of behaviour analytic principles to child development, education and management

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Abstract. The principles of Applied Behaviour Analysis (ABA) were first developed over fifty years ago, and used successfully by a small number of practitioners to treat a variety of problems. However, the ABA approach did not find widespread acceptance in the broader therapeutic community. It is only over the past twenty years that its value has been more widely recognised. This paper provides a brief history of the development of ABA and what it has achieved, particularly in the field of child development. It discusses reasons why there has been past antipathy by some to the approach and how this is changing due to the development of Cognitive Behaviour Therapy (CBT) and the Autism 'epidemic'. CBT has provided Social Validity while the demand for solutions for Autism has highlighted evidence-based achievements. It further suggests the direction which needs to be taken to ensure greater acceptance of ABA in the management of children’s behaviour, education and development in the future.

Keywords: Applied Behaviour Analysis, social validity, child development.

Psychology is in the business of changing behaviours, be they physical or cognitive ones. Ideally, changing behaviour will be easier if we can discover the underlying cause(s) of it. But even if the underlying cause is too difficult to unravel, as it often is – particularly with children’s behaviour – the behaviour causes pain to the child and to the family, and in the long run to society, and therefore needs to be changed. Working with Autism Spectrum Disorder (ASD), one is also faced with a range of behaviours which reduce the child’s potential for progress and development, creating a need to accelerate
the child’s acquisition of skills. ABA (Applied Behaviour Analysis) and its offshoot CBT (Cognitive Behaviour Therapy) offer solutions. The basic premise of both is to weaken the undesirable behaviour (place it on extinction) by reducing its eliciting stimuli and its reinforcing consequences, while providing reinforcement for an incompatible or opposite behaviour (DRI – Differential Reinforcement of the Incompatible and DRO – Differential Reinforcement of the Opposite). Once the situation is reinterpreted into behavioural terms like this, solutions suggest themselves. Foundation principles have not changed since Skinner (Holland & Skinner, 1961) first elaborated them, but a detailed body of behavioural technology has since been built upon them to deal with specific aspects, all supported by research evidence and a strong tradition of measuring outcomes. Most behavioural research is in single subject design, with controlled changes of conditions (e.g., ABAB reversal design, multiple baseline design, etc.) allowing for individual solutions to be evaluated.

The work of Lovaas (1987) illustrated the power of ABA not only in behaviour management but also in teaching children with Autism new skills, including language and socialization. He had started in the late 1960s but there was little interest except among academics. Until then Autism was seen as “a lifelong neurological condition” with little chance of language or independence skills developing. Lovaas then refined his approach and provided what is now known as Early Intensive Behavioural Intervention, or EIBI. After about 2 years of intensive therapy 47% of the children who had a diagnosis of Autism were “indistinguishable” at follow up at age 11, while others were much improved. This seminal study included a matched control group, and was published in a peer reviewed journal. In the follow up (McEachin, Smith, & Lovaas, 1993) assessors were blind to the children’s condition.

Interestingly, it did not change the attitude of some. From the very beginning, when it was known as Behaviour Modification, Behavioural Psychology was rejected by those who saw psychology as based on mentalistic constructs, along the lines of Freud. To them psychology was the study of the mind, however, as the mind itself is a construct, its study does not make a science. Behaviourists worked on developing learning theory along scientific principles, then applying it to the behaviour of people, and taking data. It seems that all the data to establish the construct validity of learning theory did not make up for the lack of social validity of the concepts and strategies used, and many who needed its help rejected it.

Two things have helped ABA and Behavioural Psychology make gains in social validity. The first was the adaptation of learning theory principles to Cognitive Behaviour Therapy by its founders Beck (1997) and Ellis (1961). This was seen as a welcome option to the psychiatry of the day which was either medication-based or long-term psychoanalysis which was not specific outcome-oriented. CBT was outcome-oriented and aimed at speedy changes in mood and, thus, behaviour, providing measurable results. Its popularity grew, as did acceptance of the basic learning theory principles, though they were
not always rigidly practiced. Psychologists began to take on clients who in the past would have been referred to psychiatry.

The other was the ‘Autism epidemic’ which emerged in the 1990s and continues today. With numbers growing astronomically, parents demanded results. Governments worried at the potential cost of supporting large numbers of people with long term history of ASD. This brought the work of Lovaas to the fore. The ABA approach to intervention into ASD is now seen as the treatment of choice. It is in high demand and the only intervention supported by solid data (Prior, Roberts, Rodger, Williams, & Sutherland, 2011). Even so, many who acknowledge its power still find it hard to accept it fully and opt to mix ABA with other therapies, preferring an eclectic approach. Unfortunately, this does not work, and ABA is diluted to insignificance (Eikeseth, Smith, Jahr, & Eldevik, 2007; Howard 2016, March).

However, it has taken nearly 40 years to achieve even this much, and there are still critics. Interestingly, no one uses the same arguments for children with leukaemia, and no one allows them to decide to reject therapy even when it is much more painful than ABA, nor do parents just say “let nature take its course” or “let’s see what happens”.

As I see it, all depends on current social validity which is attitude-based and not science-based. But social validity is at last changing.

In the last 10 years we have seen the popularity of the Triple P programme (Positive Parenting Program) coming from the University of Queensland, Australia, and gaining acceptance all over the world, with access to 25 countries, translation into a number of languages, 64,000 trained practitioners and an estimated 7 million families helped. It was also adapted for families who have a child with a disability (‘Stepping Stones’, Sanders, Mazzucchelli, & Studman, 2004), and for working with adolescents. The Triple P is basically a programme to teach parents behavioural parenting skills in order to manage behaviours and relate effectively with their children. The need for that is great and now it is accepted. Behavioural psychologists have been training parents since the 1970s (e.g., Wesley C. Becker – ‘Parents are Teachers’) but only now do we have Super Nanny explaining those same principles on TV. Sanders, the originator of the Triple P explained that by managing Attention Deficit Hyperactivity Disorder and Oppositional – Defiant Disorder behaviours in early childhood children have a chance to grow up pro-social and we can expect less criminal or antisocial behaviour (2016, June). It is well recognized that difficult toddlers become antisocial adolescents and end up in the justice system.

At the recent World Congress of Behavioural and Cognitive Therapies, held in Melbourne this June, presentations by Ollendick (2016, June) and Dadds (2016, June), well known for programmes for the management of children’s behaviours and anxieties, both emphasised the need to make the programmes acceptable to parents if they are going to be implemented. Adaptation to social validity and societal norms is being implemented. There is no doubt behaviourists have the tools, but they are now learning marketing skills as well. Some parents need a personalized approach, not just be given a manual. If we
assume that parents and teachers can be placed on a continuum of responsiveness – demandningness, or permissiveness – authoritarianism, we may understand why just telling them how they should manage children only works in 50% of cases (Dedousis-Wallace, 2016, June). Using the Collaborative Treatment approach to solve the problem and analysing what is happening to the child lead to the same solutions but in far more empathic terms. Hence, it is far more productive and everyone owns the outcome. Greene’s (2014) approach of Collaborative and Proactive Solutions is based on communication and mutual respect. It has indeed proven very effective in gaining the cooperation of teachers and staff working with extremely difficult children in both schools and youth detention centres, to the point of significantly reducing recidivism and needing to close half the beds in the centre (Greene, 2016, March). Yet the very same behavioural principles were used, only emphasis was more on the driving force or stimulus which caused the behaviour and not on the responses it tended to evoke, often based on blame and punishment.

So what have we achieved in the last 40–50 years? We have a behavioural technology based on the rules of behaviour which is powerful as long as it is implemented properly. It can be finetuned to meet individual differences. It has been adapted to learning all sorts of behaviours and skills and it can be adjusted to whatever the need may be as long as it involves changing a behaviour which is not physiologically determined. However, only now are we making serious efforts to reach those who have been negative towards behaviourism. The time has come to use these strategies in all situations where behaviours need changing, be that the teaching of new skills by teachers in schools, engineering experiences a child may need to enhance slower development or managing hyperactive or aggressive behaviours to ensure children grow up pro-social. There is, however, a concern that in our efforts to make it popular we may lose the very precision that makes Behaviourism effective. The skill is to make ABA “softer” by reducing the rigidity required for research, while not losing the precision required for adapting techniques to individual situations.

References


Elgesio analizės taikymas vaikų ugdymo ir raidos korekcijai: ilga kelionė pripažinimo link

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Santrauka

Psichologija siekia keisti ir reguliuoti elgesį ir taikomoji elgesio analizė (angl. Applied Behaviour Analysis [ABA]) jau senai „žino“, kaip tai padaryti. Net kai yra per sunku suprasti elgesio užuomazgas, galima paveikti jas palaikančius veiksmus. ABA mums jau seniai parodė, kaip galime sukursti vaiko raidai pozityvią terpę, skatinančią reikiamus įgūdžius ir užkertančią kelią netinkamam, progresą trikdančiam, elgesiui. Viskas prasidėjo nuo B. F. Skinnerio tyrimų su žiurkėmis ir išsivystė į plačią elgesio mokslo šaką. Įprasta, kad pritaikoma žmonėms, remiasi įrodytais metodais, įgaliūs keisti įvairų individualų elgesį. I. O. Lovaasas įsitikino, kad taikydami ABA autizmo spektra suristiką turintiems vaikams, galime pakeisti ne tik jų elgesį, bet ir gebėjimą mokytis, ir paveikti tai stipriai, kad bemaž pusei šių vaikų, iki tol laikytās neišgydomais, simptomai išnyko, šių vaikų buvo neįmanoma atskirti nuo įprastos raidos bendraamžių. Deja, to nepakako, kad pasikeistų žmonių požiūris. ABA netapo populiari, nes, daugelio įsitikinimu, psichologijos mokslo paskirtis – suprasti žmonių mintis ir jausmus, o gamtamoksliais įrodymais pagrįsta ABA neatrodė pakankamai humanistinė. Tai reiškia, kad elgesio analizės terapijai trūko „socialinio validumo“, arba psichologų bendruomenės ir plačiosios visuomenės kultūrinio priimtinumo.

Bet dvi aplinkybės pradėjo keisti padėtį.


Mano nuomone, viskas priklauso nuo šiandieninio „socialinio validumo“, visuomenėje priimto supratimo, kas tinka ir kas netinka.


Neseniai lankiausi Pasauliniame elgesio ir kognityvinės terapijos kongrese Melburne. Žinomi šios srities mokslininkai (Ollendick, 2016, June; Dadds, 2016, June) teigė, kad programos, kurių efektyvumas seniai įrodytas, turi būti pateiktos visuomenei priimtinu būdu. Kai žmonės dirba laikydamiesi nustatytų taisyklių, pasieka daug, bet žmones reikia mokėti pritraukti. Problemas reikia spręsti remiantis ne tik konkretiomis ir įrodymais grįstomis strategijomis, bet ir empatija žmogui, kuris turi įveikti problemą. Puikus pavyzdys – darbas su jaunais nusikaltėliais (Greene, 2016, March), kur ABA pagrįsta programa stipriai sumažino recidyvą ir vieną iš dviejų prieglaudų reikėjo uždaryti.


**Esminiai žodžiai:** taikomoji elgesio analizė, socialinis validumas, vaiko raida.