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## Speaking across the autism worldview divide: a dialogue between critical autism studies and behaviour analytic scholars

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#### ABSTRACT

Applied behaviour analysis and critical autism studies are generally assumed to find no common ground on the guestion of autism support strategies. With the core conviction that no autism support or intervention that seeks to normalise autistic people can ever be considered neurodiversityaffirming, two critical autism scholars and two BCBA behavioural analysts discuss how and why ABA needs to evolve to serve its main clients: autistic people. Building on a guestion-and-answer exchange between the two groups, this article is a cautious collaboration between these two apparently opposing groups, with the objective of discussing whether ABA can evolve and what it would take to do so. This article, one of two generated by this exchange, speaks to critical autism scholars and urges further critical engagement with those factions of the ABA industry seeking to take autism-centred approaches to autism support. A separate paper will speak to the ABA community.

#### **ARTICLE HISTORY**

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#### **KEYWORDS**

autism-affirming ABA; behaviourism; critical autism studies; neurodiversity; normalisation

### **Points of interest**

- This article is the first ever published dialogue between two scholars who view autism as natural human difference and two scholars involved in training practitioners of a therapy based on the science of learning and behaviour - known as Applied Behaviour Analysis which has traditionally seen autism as a defective form of human life.
- Much mainstream Applied Behaviour Analysis seeks to 'fix' or change autistic people so as not to appear autistic.

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  - Some Applied Behaviour Analysis therapists are driving changes to how Applied Behaviour Analysis is practised with a view to providing support for autistic people that is based on not seeing autism as defective.
  - This paper explores common ground between the views of scholars from these often opposing disciplines and seeks more and broader collaboration on improving support structures for autistic people.

### Introduction

Historically, perspectives on autism, and services and support structures catering for autistic people, have largely adhered to a medical deficit model of autism. That is a model where autistic people are seen to deviate from a preferred non-autistic norm, and remedial services have sought to normalise autistic people to make them appear 'less autistic,' in line with the perceived norm of neurotypicality. Although this may be undertaken on the basis of a misguided view that it is in the interest of the autistic person, the interest of a parent or carer is often uppermost. Mainstream Applied Behaviour Analysis (ABA) as a support approach follows this medical-deficit view of autism rewarding behaviour that aligns with that of the majoritarian culture with the view to eliminating behaviour deemed undesirable in line with prevailing social norms. Going back to Lovaas, the goal espoused in terms of therapeutic objectives was to create individuals 'indistinguishable from their peers' (Lovaas 1987). Whilst many will view this as part of ABA's unsavoury history, it should be acknowledged that this outlook and approach is still in continuation in many places and that the motivation to normalise autistic people is still very much alive and well in many areas of current ABA practice (Veneziano and Shea 2023).

The concept of neurodiversity pushes a twofold critique of the medical deficit perspective (1) that divergent brains are a natural biological fact, so autistic brains are just different rather than deficit versions of neurotypical brains, and (2) the growth of a social justice movement to advance the rights of autistic people, as a neurominority, in an often ableist society. In line with this, ABA approaches can be critiqued as vectors seeking to achieve so-called 'recovery' from autism, something that is neither possible nor desirable and has been shown to lead to substantial mental health challenges (Milton and Moon 2012; Kupferstein 2018; Anderson 2023). Moreover, if autistic brains are equally valid but different from neurotypical brains, it is essential that all behaviour is analysed and understood through an in-depth appreciation of autism as a different neurotype with its own internal rationale and purpose (Yergeau 2018). Increasingly, research shows that encouraging behavioural changes that restrict the ability of a person to be authentically autistic is harmful (Chapman and Bovell 2022). Instead,

neurodiversity advocates for an egalitarian society in which autistic people feel able to live authentically autistic lives without feeling devalued, disenfranchised, and barred from accessing social goods and services (Robertson 2009; Chapman 2020). This requires a society that understands autism and where living authentically as an autistic person is celebrated and encouraged. In addition, within a majoritarian neurotypical culture, it is essential, for the purposes of equal access and participation, that education, workplaces, and other sites of cross-neurotype meeting and collaboration factor in autistic differences and that any specific support structures operate in line with an autism-centred perspective.

The different perspectives on autism held in the medical-deficit versus neurodiversity-model approach result in entirely different approaches to how to view autism and how services and support structures should cater for autistic people. Chown et al. (2023) referred to this as the autism worldview dilemma, the idea that we have no clear broad consensus on how to view and respond to autism. But there is an increasing clamour from the autistic community, led by autistic activists, academics, and ABA practitioners, for the autistic voice to be an essential stakeholder in resolving this dilemma (Gates 2019; Mindful behaviour, 2019n.d.; Kolu 2017). As the autistic author John Elder Robison (2020, 231) writes, 'When it comes to policy, parents and clinicians certainly have a say, and deserve a seat at the table, but the table rightly belongs to us. We are autistic people.' Autistic people are developing more autism-centred forms of ABA and others (including the second author) are being trained in ABA-based techniques to better enable them to challenge inappropriate practice. This is in stark contrast to the mainstream ABA community's apparent resistance to learning about autism. Whilst the Behavior Analyst Certification Board (BACB) is not accredited to examine knowledge about any client population, as 81.84% of BCBAs work primarily with autistic clients (BACB, 2020n.d.) the need for specific training on autism is clear. We argue that this is the case regardless of whether ABA is utilised to teach basic skills, prevent self-injurious behaviour, or promote certain behaviour. Whenever it is practised with autistic people (with or without additional intellectual disabilities) it is essential that practice builds on comprehensive training in autism. Lack of training in autism means that any functional analysis, undertaken to inform planned ABA support, is unlikely to sensitively reflect the actual meaning of behaviour which may have unrecognised communicative intent.

Many of those who endorse the neurodiversity paradigm, and/or work within critical autism studies, focus on abolishing ABA as a therapeutic practice for autistic people (Chapman and Bovell 2022; Kupferstein 2018). We contend that this position requires consideration of three issues. Firstly, the ABA industry is expected to grow from its current value of around \$4 billion to around \$6 billion by 2032 (Global Market Insights 2024) and there were

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71,660 BACB certificants in October 2024 (BACB, 2024). On a pragmatic level, this necessitates engaging with, rather than ignoring, this industry. The autistic scholar Patrick Dwyer writes:

I think we should support the efforts of these reformers. There are some important forces – e.g. insurance mandates in the USA, the number of people who depend on ABA intervention for a living – that would make it easier to reform ABA than to replace it with some other kind of intervention (Dwyer 2022, np).

Secondly, CAS critiques of the ABA industry centre almost exclusively on traditional versions of ABA and fail to acknowledge what we will discuss as an evolution towards a more autism-centred ABA. Finally, we contend that as stakeholders it is essential for us to engage with enlightened factions of the ABA industry to call out practice that negatively impacts autistic people, assist evolving autism-centred practice, and challenge tokenistic neurodiversity-lite practice (Chapman 2023).

We argue for a focus on working with ABA practitioners, who admit the shortcomings, and hurt, that has been inflicted on autistic people through ABA practice in the past and who actively seek to internalise the full message and implications of the neurodiversity movement. Cornerstones of such practice include that all ABA practitioners are suitably trained in autism, ensuring that ABA is always focused on enabling autistic people to live an authentically autistic life, always listening to the autistic voice first and foremost, and evolving to better serve autistic peoples' support needs. We believe that it is through working alongside enlightened factions, and engaging in advocacy and knowledge-sharing, autistic stakeholders can provide insight, not as experts in ABA, but as specialists in autism. It is our hope that knowledge exchanges, such as the one presented in this paper, can form the bedrock of a commitment from the ABA industry that support services must start from an in-depth understanding of autism and that this will cause critical questioning around any practice that seeks to normalise autistic people.

As such this article, one of two articles produced during this CAS/ABA knowledge exchange project, seeks to open the discussion into whether an autism-centred ABA is possible and stress how vital CAS scholars, autistic academics, advocates, and various other stakeholders are to the project of pushing the evolution of ABA to better serve autistic people.

#### The knowledge exchange process that informed our collaboration

The contact hypothesis (Allport, 1954) states that under appropriate conditions interpersonal contact can be one of the most effective ways to reduce stereotyping, prejudice, and discrimination between majority and minority groups. In our case two behaviour analytic scholars are in the majority and two critical autism scholars are in the minority. Dialogue is one form of interpersonal contact.

From the point of view of the two CAS scholars working within this dialogic collaboration, the impetus for this partnership grew out of frustration that the ABA industry is very insular, holds monopoly over most of the US based autism support industry, and is largely protected from critique from autistic stakeholders. Critiques of ABA therefore often operate in an echo-chamber reaching only those who are already in general agreement regarding points of contention. In addition, given the reach of the ABA industry, and broad support of ABA in many current journals, getting content printed to fuel a critical discussion around ABA often comes with challenges. Similarly, as stated within the introduction, the reluctance to engage is frequently mutual. For many factions of the autism community, ABA is viewed as equivalent to torture. Tentatively finding a way to communicate across this seemingly polarised barrier was a central component of this work.

Following the publication of *Affirming neurodiversity within applied behavior analysis* (Mathur, Renz, and Tarbox 2024), an email exchange was initiated which led to an introductory meeting where positionality on autism was explored in a genuine, honest, and non-judgmental setting. A range of options for collaboration were explored and an initial written Q&A format was agreed upon where meetings were held to clarify questions, discuss initial feedback in terms of responses, and continued discussions on ABA and autism were fostered.

Two articles were developed as a result of this knowledge-sharing project. This article features the questions posed by the CAS scholars with the ABA scholars' responses, and a connected article (Mathur et al. *in progress*) features the questions from the ABA scholars and CAS responses. Our purpose in structuring the work in this way was to utilise this early point in the collaboration to present the project to our respective fields to encourage and grow greater discussion. These initial articles, and the collaboration and communication which they will hopefully stimulate, are also anticipated to form the base for future work where more specific areas can be targeted and increased focus on the operational implications can take place.

It is useful to add a note on the terminology used in this paper. We take critical autism studies to be an interdisciplinary field led by autistic people that furthers the two components of the neurodiversity paradigm in relation to autism (1) to critically query deficit views of autism and the power dynamics at play, and (2) to work toward egalitarian social principles for autistic people. In this paper we have chosen to use the term autism-centred rather than autism-affirming when talking of the evolution away from mainstream ABA. The reason for this is that we feel it is not possible to speak of autism-affirming ABA until greater work on the implementation and operational features of this form of ABA have been more closely studied. Here, we

use the term autism-centred as a wider term to relate to autism support practice that embody and embrace the two commitments from the ABA community of (1) not seeking to normalise autistic people, and (2) being grounded in comprehensive understanding of autism.

#### **Positionality for Q&A**

Ahead of sharing the CAS questions and ABA responses, it is helpful to establish why these questions were asked and the positionality of the participants. The rationale for initiating this collaboration with a set of questions and responses was modelled on the idea of knowledge-sharing and exploring the possibilities of collaboration between these polarised fields. The idea was not to seek or drive opinion towards a consensus. As such, the questions largely explore areas that are perceived as problematic from a CAS/neurodiversity affirming perspective to better understand how autism-centred ABA practitioners might respond to critical viewpoints in these areas.

Our position in posing these questions, and answering connected questions from the ABA side, is as CAS academics. We are not ABA practitioners ourselves, although the second author has undertaken the 40-hour required training for Registered Behaviour Technician (RBT) through the Autism Partnership Foundation (APF) to gain scholarly insight into what such training involves. As has been made clear, there are vastly different perspectives on autism, and the autism community is highly heterogeneous. As such, we do not speak for this community or specific groups of stakeholders. We are seeking to drive this debate to foster dialogue not just between the polarised fields of CAS/ABA but also within the ABA community and within the autistic community. It should be noted that whilst concerns centred around any practice that seeks to normalise autistic people is universal, this discussion may reflect a US viewpoint given that the two ABA academics practise in the US.

#### **Results: questions and answers**

The eleven questions and answers below have been grouped into four themes for easier reading. From the point of view of the CAS scholars, these questions include areas where we required more clarity of issues discussed in Mathur, Renz, and Tarbox (2024) and where we felt deeper understanding on positionality was central to continue to explore whether the concept of an autism-affirming ABA is a feasible development. The first theme 'Behaviourism and autism' covers the rise of the autistic voice, visual thinking and monotropic attention. Theme two 'ABA fundamentals' deals with social validity, functional analysis, and the association of behaviour with reward or punishment. Under the third theme 'Rethinking how autism is viewed and responded to in line with the neurodiversity paradigm' we consider compliance, bi-directional communication, stimming, and masking. Finally, under 'Ethics' we cover the matter of ethical approval for research involving autistic individuals.

#### Behaviourism and autism

The practice of ABA is supposed to be underpinned by radical behaviorism (Johnston 2014; Lundy, Moore, and Bishop 2020) which is a form of behaviourism that allows for private events (thinking and feeling). However, the manner in which mainstream ABA has been carried out with autistic people for decades has reflected a much more methodological behavioural approach which denies the relevance of autistic cognition and emotion. Coming from an ableist, deficit-based perspective, ABA practitioners rarely listen to their autistic clients. The questions under this first theme enable practitioners of so-called autism-affirming ABA to respond to the CAS concern about the failure of behaviourists to accept that autistic people are cognitively different with the concomitant silencing of the autistic voice.

**Suckle & Chown (1):** How has the rise of the neurodiversity movement, increased presence of autistic voices in academia, the ABA community and elsewhere, and testimonies of autistic adults who have experienced ABA in their childhood, influenced how you view ABA?

**Tarbox & Mathur (1):** We have spent some time reflecting on the fact that the voices of the primary population we mean to serve, Autistic people, have been all-but-absent in ABA literature and conferences until recently. Foundational writings (Skinner 1948; Sidman 1989) have emphasized that the purpose of the science of behavior analysis is to build a world more free from coercion, centered around positive reinforcement that is meaningful to each individual person. Leaving Autistic voices out of supports meant to empower Autistic people stands in stark contrast with some of our field's most basic values.

Early responses to the criticisms levied against ABA were often defensive and deflected criticism by stating that *good quality ABA* was not problematic, or that critics did not understand the science. In recent years, ABA practitioners and researchers have begun to acknowledge the feedback from our most significant stakeholders, our autistic clients. Movements including neurodiversity-affirming practices, trauma-informed care, and compassionate ABA reflect this change. Practitioners have begun shifting from focusing on symptom reduction and compliance, to a strength-based approach, recognizing assent and assent-withdrawal, and encouraging self-advocacy. This change is happening slowly but we are convinced that it is critical.

**Suckle & Chown (2):** John B. Watson (1970, 238, author's italics) wrote that 'The behaviourist advances the view that *what the psychologists have hitherto called thought is in short nothing but talking to ourselves*. What is the position of your autism-affirming behaviourism on the visual thinking often, but not always, seen in autism?

Tarbox & Mathur (2): The field of behavior analysis, particularly in the US, has largely moved on from Watsonian philosophical foundations, particularly since Skinner's 1945 paper 'The Operational Analysis of Psychological Terms.' Skinner's philosophical system, Radical Behaviorism, is defined by the assumption that all actions of the whole organism should be included in the science of behavior analysis, regardless of whether those actions occur overtly (e.g. saying a word out loud) or covertly (e.g. thinking the same word) (Moore 1980). Covert behaviors are referred to as 'private events' and include myriad subtle behaviors, such as imagining, visualizing, remembering, and so on. The science of behavior analysis has not done a particularly thorough job of researching private events, largely because they cannot be directly observed by people other than those who are engaging in them. A small amount of ABA research has successfully taught visual thinking in the context of problem-solving skills in children (Sautter et al. 2011). In addition, visual schedules, visual communication systems, and visual prompting are common in ABA supports for Autistic learners and presumably capitalize on Autistic visual strengths. Still, much more research is needed on how to adapt ABA teaching procedures to build upon the visual thinking strengths that many Autistic individuals enjoy. If Autistic voices had been centered more substantially in the research process and if ABA researchers had been trained in autism-specific research outside of ABA, it seems likely that the importance of visual thinking could have been centered earlier in ABA research.

**Suckle & Chown (3):** Watson (ibid., 277, author's italics) wrote that 'Attention is merely then synonymous with the complete dominance of any one habit system, be that a verbal habit system, a manual habit system or a visceral one.' What is the position of your autism-affirming behaviourism on the monotropic attention (Garau et al. 2023; Murray, Lesser, and Lawson 2005) increasingly seen as the fundamental neurological difference associated with autism?

**Tarbox & Mathur (3):** Monotropism Theory has been around for over 30 years, was developed by neurodiverse scholars (Murray 1992), is largely supported by the autism community, and yet is almost absent in mainstream courses related to Autism support services, including courses on ABA. We believe that conceptualizing Autistic attention in a monotropic way can encourage clinically meaningful insights. Instead of working to diminish an autistic person's 'obsession,' we can integrate their special interests throughout the teaching process to create a strength-based approach. Autistic adults face difficulty with obtaining and retaining employment (Ohl et al. 2017). However, these employees are often placed in job sites that are of no interest to them, and/or do not fit their skills. Monotropism theory helps us conceptualize Autistic special interests as strengths, rather than something for therapy to work against.

Conceptually, monotropic attention theory is perfectly compatible with an ABA perspective on attention. We might add in some behavior analytic principles of learning and motivation that help explain some outwardly observable behaviors in examples of monotropic attention. For example, if an Autistic learner is engaged in monotropic attention to a particular task, we might say that activity is likely producing a rich source of automatic reinforcement. If a teacher abruptly interrupts it, that may be experienced as aversive. If so, then the learner is naturally motivated to act in a way that results in the teacher discontinuing that aversive disruption, perhaps by ignoring the teacher, asking for the teacher to leave them alone, or acting out in some way. On a more positive note, conceptualizing a learner's monotropic attention as a strength might encourage an ABA practitioner to build learning opportunities around the Autistic client's special interests, thereby potentially making ABA more fun while also making learning likely to happen faster. In sum, the field of ABA could likely do a much more thorough job of investigating monotropic attentional processes in order to fine tune ABA support to build on monotropic attention as a strength, rather than butting up against it out of ignorance.

#### **ABA fundamentals**

Some fundamental aspects of ABA practice are of great concern to CAS scholars. What is considered socially valid at one point in time may be regarded as beyond the pale at a later time. Functional analysis of behaviour has to reflect the nature of autism for the behaviour of autistic people to be understood correctly. If autism is misunderstood, attempts to change the behaviour of autistic people using reward and punishment risks rewarding behaviour that is incompatible with an autistic way of being and punishing behaviour that has meaning to autistic individuals. Our questions under this heading focus on understanding an autism-centred approach to social validity, functional analysis, and the use of rewards and punishments.

**Suckle & Chown (4):** Common and Lane (2017) state that 'Social validity is a keystone variable of inquiry theoretically grounded in ABA'. Wolf (1978, 207) explained that social validity involved, inter alia, behavioural goals that are 'what society wants'. Chown & Murphy (2022) reminded us that gay conversion therapy was once 'what society wants'. How should an autism-affirming behaviourism understand social validity in the context of autism?

**Tarbox & Mathur (4):** Social validity, since its creation by ABA researchers in 1978 (Wolf 1978), was always supposed to include asking the client directly for their input on the goals, procedures, and outcomes of intervention. Quite simply, the field of ABA has failed to do this and has instead relied on asking Autistic learners' parents for their input. Parent input is critical when supporting children but it cannot supplant input from the actual client, the Autistic learner. Obtaining input from young, minimally verbal children is challenging. A second-best alternative might be to ask Autistic adults. A recent ABA research article directly surveyed Autistic adults on their preference for commonly-used ABA goals and procedures (Chazin et al. 2024). Not surprisingly, participants preferred goals promoting self-determination over goals promoting masking. Participants reported higher preference for antecedent procedures and lower preference for some kinds of extinction.

Although Autistic advocate blogs and personal narratives are not scholarly sources, if they are written by Autistic people who have received support services, they should likely be considered a form of client social validity. These sources must be listened to, taken seriously, and used as one of several sources of social validity data (Veneziano and Shea 2023; Mathur, Renz, and Tarbox 2024).

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It should also be possible for ABA professionals to do a better job of directly assessing social validity from minimally verbal children who are clients. For example, ABA researchers have developed client treatment choice procedures that require the practitioner to give the client meaningful choices between different ABA procedures, where the clients do not need to have vocal speech to choose (e.g. choosing with pictures, pointing, etc.), and the practitioner then implements the ABA procedures that the client chooses (Hanley 2010). In addition, measuring ongoing client emotional responses (e.g. indices of happiness and unhappiness) to treatment does not require clients to have vocal speech (Green and Reid 1999). Clearly, ABA procedures that evoke crying and sadness have low social validity from the client's perspective.

**Suckle & Chown (5):** Dixon, Tarbox, and Vogel (2012, 3) wrote that 'the history of functional analysis is inextricably linked to the history of the discipline of ABA.' What factors should a functional analysis of autistic behaviour take into account?

Tarbox & Mathur (5): The four functions of behavior (i.e. escape, attention, tangible, and automatic reinforcement) that have been documented in hundreds of ABA studies on functional analysis (Beavers, Iwata, and Lerman 2013) may ignore important variables relevant to Autistic behavior. We agree that identifying any of these potential functions need not be a stopping point for analysis. A functional analysis may suggest that stimming behavior is 'automatically reinforced,' meaning that it does not rely on reinforcement mediated by other people. While true, it may also be a relatively incomplete or shallow description of the behavior. An individual may stim when they are feeling overwhelmed by sensory stimulation. This is completely consistent with an ABA interpretation of function; the behavior is automatically reinforced in the form of escape from an aversive state of overwhelm. In other cases, an Autistic individual may stim because they are excited or joyful and so stimming may be understood as an expression of joy, or may even enhance the joy felt, not unlike smiling, even if not directed at others socially. Adding the description of escape from overwhelm or expression/enactment of joy adds potentially meaningful extensions to simply classifying behaviors as 'automatically reinforced' and such extensions would likely be common if the ABA research community centered the voices of Autistic people in our research more often.

Similarly, simply stating that a behavior is 'escape-maintained' may be overly simplistic. *Why* is the learner motivated to escape from us? Can we simply blame it on the fact that the learner is Autistic? That would be completely inconsistent with an ABA view of the universe - suboptimal behavior is *never* blamed on the learner, regardless of whether they are labeled with a disability. An age-old expression in behavior analysis is, 'The learner is always right' We must ask ourselves the question, 'What are WE doing that is creating motivation for our Autistic learners to want to escape from us?' These questions call on us to prioritize changing our interventions through preventive antecedent strategies, among others, to reduce the extent to which our behavior motivates Autistic learners to want to escape.

**Suckle & Chown (6):** How can ABA respond to critiques of the use of reinforcers by those who demonstrate the pitfalls of associating behaviour with reward or punishment (Kohn 2020)?

Tarbox & Mathur (6): The consequences of human behavior, whether punishment or reward, can have powerful and lasting effects on human lives, both positive and negative. It is therefore our scientific and ethical responsibility to be aware of those effects and to take care to prevent consequences from being used in ways that produce harm (Behavior Analyst Certification Board 2020). The field of behavior analysis, as well as the larger culture in which it exists, have a history of misusing powerful consequences. The field of ABA must humbly acknowledge this history and move forward in evolving the ways in which we use positive reinforcement by listening to the Autistic community. For example, positive reinforcement must never be used in a way that impinges on the autonomy or dignity of the learner. Positive reinforcers should not be used that are unhealthy for the learner or that require restricting access to stimuli that should not be restricted (e.g. comfort stimuli, basic needs, etc.). In addition, even positive reinforcement can be coercive if the positive reinforcer is withheld excessively outside of ABA sessions, or even if the size of the reinforcer is excessively large to the point that clients are induced to do things that are not in their best interests. Put simply, positive reinforcement should only be used when it has a beneficent effect and the Autistic client must have a say in what is considered beneficent.

# Rethinking how autism is viewed and responded to in line with the neurodiversity paradigm

If there are to be genuinely autism-centred versions of ABA there is a need for autism to be viewed and responded to in line with the neurodiversity paradigm so that autistic individuals are no longer required to behave as the neurotypical people they are not and can never be, autistic masking and stimming are understood for what they mean to autistic individuals, and difficulties in cross-neurotype communication are not blamed on the autistic person but seen as bi-directional difficulties in line with the double empathy concept (Milton 2012). The following questions seek explanations as to how these matters are understood by autism-centred ABA and its practitioners.

**Suckle & Chown (7):** You identify that one area of concern with current ABA practice is the tendency to encourage compliance (Mathur, Renz, and Tarbox 2024). How can ABA practice develop and drive a more critical positioning for autistic people as neurominorities in a dominant neurotypical culture, and do you see it as desirable to do so?

**Tarbox & Mathur (7):** Founders of behavior analytic science believed that one of the central purposes of our science is to produce a more egalitarian society (Skinner 1948). It follows that identifying inequities and taking action to stand against them should be a core practice in the ABA field (Fawcett 1991). From this perspective, it may seem strange that the ABA field largely ignored the larger disability rights movement and the neurodiversity movement until recently. It seems likely that the ABA field was influenced by ableism (Shyman 2016), similar to other helping professions. However, if we care about social justice and we recognize disabled people as a traditionally oppressed group, then it seems clear that the ABA field would take an active role in promoting justice for Autistic people. At a very minimum, this

should involve centering Autistic voices in all aspects of ABA research and practice with Autistic people (Allen et al. 2024).

The ABA field could consider how we can take an active role in empowering and liberating Autistic voices across society. This may start with reconsidering the skills that we teach in our support programs, to eliminate compliance as a goal (other than in true cases of physical safety) and focus instead on self-advocacy and self-determination skills. We can also work with the larger systems within which our ABA supports are implemented, at the family, organizational, and community-levels, to work toward greater Autism acceptance and full inclusion. By working toward building larger and larger community systems of acceptance and inclusion, starting with the systems in which each of our clients live daily, we can work toward building a broader culture that celebrates difference.

**Suckle & Chown (8):** How can ABA support the movement towards more bi-directional communication and social interaction training between autistic and non-autistic people acknowledging that potential difficulties arise not from inherent socio-communication flaws within the autistic person but in the difficulties communicating across neurotypes (Milton 2012).

**Tarbox & Mathur (8):** The behavior analytic view on communication is to conceptualize it from an entirely functional, rather than topographical, perspective (Skinner 1957). In other words, there is no 'correct' or 'incorrect' word, phrase, or other communicative behavior, other than that which works for an interaction between two or more people to be mutually effective. If two people interacting with one another share a highly similar learning history (e.g. language, culture, etc.), then their communicative efforts with one another are likely to work better than if they have highly divergent learning histories (e.g. language, culture, etc.). Therefore, it makes perfect sense from a behavior analytic perspective that one person who has a more neurotypical learning history in a dominantly neurotypical culture may have difficulty communicating with an Autistic person who may have a very different learning history, culture, and different communicative behaviors. A behavior analytic interpretation of this seems to gel nicely with what has been described as the 'double empathy problem' in previous literature (Milton 2012).

To facilitate bidirectional communication between Autistic and non-Autistic communities, ABA professionals must start with the assumption that Autistic communicative and social behavior is not flawed, it is simply different. Then progress would presumably commence by identifying roughly equivalent socio-communicative behaviors that achieve what is important to either Autistic, non-Autistic, or both communities. For example, in many Western non-Autistic cultures, it is expected that individuals would make eye contact and say 'Hi' when meeting. Autistic advocates have made it clear that in Autistic culture these conventions are not necessary and may be unwelcome (Autistic Self Advocacy Network. (2012n.d). To promote mutual understanding in cases such as these, it seems important to educate people on both sides of the customs of the other side and not require either side to conform to the other, but rather behave in an inclusive and compassionate manner. It seems possible that ABA and other helping professions will need to reevaluate our entire language and social skills curricula in order to assess what skills are foundational to both neurotypical and Autistic cultures, versus which skills are arbitrarily insisted upon by non-Autistic culture.

**Suckle & Chown (9):** Kapp et al. (2019, 1782) reported that 'Autistic adults highlighted the importance of stimming as an adaptive mechanism that helps them to soothe or communicate intense emotions or thoughts and thus objected to treatment that aims to eliminate the behaviour.' How should an autism-affirming behaviourism understand stimming?

Tarbox & Mathur (9): From an ABA perspective, all behavior is adaptive (Goldiamond 1974). ABA professionals should be thinking about why stimming behavior is automatically reinforcing for an Autistic learner to do and what we can glean about that learner's needs and preferences. If the learner's parents or ABA clinician desire to decrease the learner's stimming, they must consider the full range of variables to assess before choosing to change a behavior. The Cooper, Heron, and Heward (2020) textbook of ABA, which continues to be the most respected single book on ABA, since its first edition in 1987, listed 19 variables to consider when choosing which behaviors to address (60, 66), none of which include whether the behavior is a symptom of a disorder or whether the behavior is different from the majority. Points to consider include whether a behavior is dangerous, whether it prevents individuals from accessing other important environments, and so on. Why, then, is it so common for ABA practitioners to target stimming for reduction? It seems at least partially due to the fact that Lovaas' work with Autistic children included normalization as a goal of therapy (Lovaas 1987) and stimming is symptomatic of Autism. In addition, many ABA professionals believed that a learner can't pay attention to instruction when they are stimming, ergo, Autistic children must be prevented from stimming so they can learn. However, Autistic advocates often report that they pay attention better when they are able to stim (McCarty and Brumback 2021). Rather than eliminating stimming, ABA therapists can watch for responses to instruction that indicate whether the learner was paying attention and learning new skills.

Like any coping strategy, stimming may not be the optimal strategy across all contexts. Consideration also needs to be made that stimming may create a challenge for others if it is annoying and/or disruptive. To further counter this, awareness training on why stimming can be beneficial for the autistic person can be critical to raising wider societal awareness and acceptance. In cases where the team, including the Autistic client, identifies that a particular stimming behavior does indeed create challenges for the Autistic person, then the team may consider how they might support the learner to self-manage their own stimming behavior in a non-coercive way. For example, it may work better to engage in fine motor stimming activities, rather than very large and disruptive gross motor activities (e.g. jumping up and down), specifically when the teacher is teaching in class.

Parents often express concern that stimming will make their child a target for bullying. However, when a non-Autistic child is bullied, we don't teach them to act differently, we intervene by changing the bully's behavior. In cases of Autistic children being bullied, it is the bully's behavior we should work towards modifying.

In other cases, an Autistic person may want to learn a variety of strategies that serve the same function as a particular stim. For example, if stimming helps attenuate anxiety, learning mindfulness techniques, establishing a regular exercise habit, or learning other cognitive behavioral strategies may empower the person with a larger, more well-rounded set of strategies for managing their overall load of anxiety.

**Suckle & Chown (10):** Both masking and unmasking are increasingly linked to a considerable mental health impact (Hull et al. 2017; Pearson and Rose 2021; Roberts (2024). How do you conceptualise the role of ABA in helping autistic people navigate considerations in relation to masking? How might your response to this question differ when considering racial and cultural factors and personal safety.

**Tarbox & Mathur (10):** If being Autistic is part of a person's identity, and an ABA program seeks to eliminate signs that the person is Autistic, then the program can unintentionally send a harmful message to that client: *Who you are is not good enough*. No helping profession should seek to eliminate a learner's Autistic identity or any other client identity. ABA programs must encourage pride and self-esteem in the human beings under our care.

ABA programs may consider being proactive by teaching Autistic children what masking is and that they are likely to feel pressure to do it, just like we teach all children about societal pressure to engage in other potentially harmful behaviors (e.g. peer pressure to consume alcohol, etc.). It may be useful to teach Autistic children to develop their own self-management skill of choosing when and where to mask, based on their own unique values and objectives. For example, we worked with an Autistic teenager once who came to our clinic because he was moving to university soon and he wanted to work on desensitizing himself to pizza so that he could attend college parties without being overly disgusted. If hiding his food selectivity was done out of forced conformity, then it would likely be harmful masking, but in this case, this young adult genuinely cared about connecting with new friends at university, and so his choice to expand his food horizons through ABA services was experienced as empowering. Note that it was the Autistic person, *himself*, who chose this particular target for ABA intervention.

Autistic clients who experience other intersecting identities may have substantially more complex experiences of masking. For example, Black Autistics may be able to mask their Autistic behaviors but they cannot change the melanin in their skin (Onaiwu 2017). Furthermore, a particular stimming behavior in a white Autistic person may be perceived by police as odd, whereas the same behavior in a Black male Autistic person may be perceived as dangerous. Therefore learning to mask some Autistic behaviors for some learners may be critical to physical safety, depending on their racial background or the communities in which they live. Broadly speaking, we should empower our learners to change their behaviors when *they* indicate it is important to them, while also considering parent input, and not merely changing behaviors because they are different from the neuromajority.

#### **Ethics**

It is standard practice in mainstream research for prior ethical approval to be obtained when a study will involve human participants. Special attention is given to ethical approval procedures in the case of a potentially vulnerable population such as the autistic population. However, studies of autistic individuals in the behaviourist literature rarely report on ethical approval so the extent to which matters such as informed consent have been considered are often unknown. Our question sought a response to the concern that autistic people are being experimented on in a quasi-medical manner by people without an adequate understanding of autism and without due regard to ethics.

**Suckle & Chown (11):** Autism researchers are required to demonstrate ethical approval for their research (as autistic people are potentially vulnerable), obtain informed consent from participants, and allow participants the right to withdraw from a study. However, articles in behavioural journals reporting on ABA-based interventions with autistic people rarely report on such matters. How would practitioners of an autism-affirming ABA undertaking research with autistic children and young people handle the important research concepts of ethical approval, informed consent, and the right to withdraw?

Tarbox & Mathur (11): Applied behavior analytic research, like all human subjects research, is required to comply with internationally recognized rules regarding human subjects protection (Behavior Analyst Certification Board 2020). Traditionally, much ABA research has been conducted with informed consent from the parents of Autistic children. However, the parent is not the participant and the parent is not usually Autistic, so the concept of assent is critical. Assent is when the child actively indicates their willingness to participate. However, assent has traditionally only been obtained from children who have the vocal language to give their assent and not from less-verbal children (Morris, Detrick, and Peterson 2021). About 20 years ago, ABA practitioners began to discuss the need for obtaining assent from young, less-verbal clients (Fabrizio 2005) but little progress was made. In recent years, assent has been codified in the ABA ethics code (BACB, 2020) and ABA practitioners have been strongly calling for a thorough recognition of the Autistic client's right to assent and withdraw assent to treatment and research (Breaux and Smith 2023). What was previously labeled as escape-maintained 'problem behavior' is now being understood as self-advocacy. A flurry of interest in assent is currently underway, with multiple articles (Abdel-Jalil et al. 2023; Flowers and Dawes 2023) and conferences being offered on the topic (Assent Con 2023; Leland 2019)

Much more research is needed on procedures for affirming assent in ABA but the foundations have been laid (Rajaraman et al. 2022; Shillingsburg, Hansen, and Wright 2019). These foundations include, at a minimum: 1) ABA procedures should not be forced on Autistic learners, 2) Compliance should be abandoned as a goal, except in cases of true physical danger, 3) ALL forms of assent-withdrawal should be recognized, regardless of whether they are deemed 'inappropriate' by the general public, 4) When an Autistic learner withdraws their assent, instruction should pause, 5) Clinicians should use assent-withdrawal as a cue to modify our treatment, and 6) ABA professionals should monitor client emotional responding and modify our procedures accordingly.

#### Discussion

Our ambition in this project has deliberately been modest and cautious. More than anything it is a suggestion that a CAS/ABA dialogue is not only

possible but also necessary. Initially, this amounted to engaging in what our pre-discussion defined as the ability to 'gracefully disagree,' but has evolved into finding areas of broad consensus and knowledge sharing on how to improve support structures for autistic people. A few things have become clear during this process.

We are confident that there are enlightened voices within the ABA industry that are genuinely interested in exploring ways to move towards autism-centred practice and hopeful that such a position will become more broadly held through continued dialogue. Whilst this discussion has only tackled the theoretical underpinnings of such an endeavour, the real question will be whether this is operationally implementable, what this would entail, and whether what we would have at the end can still even be classed as ABA. As Maxfield Sparrow writes about Mathur, Renz & Tarbox (2024):

'If someone takes this paper seriously and comes out the other side deciding to implement the suggestions, they are no longer practising ABA (Maxfield Sparrow 2024, n.p.).'

We feel that this position does not acknowledge that there is already broad variety in how BCBAs practise ABA. We contend that the ABA industry is confined first and foremost by itself. We believe that the monopoly on autism support in the US, with 50US states now requiring that health care insurance must cover autism (Autism Speaks 2019a) and at least 200 million people currently holding health care insurance for ABA (Autism Speaks 2019b), has impeded the evidence-base for other approaches or indeed for ABA to more fully attempt to evolve to better address the needs of autistic people. For example, in the US, for medical insurance companies to pay for autism services, they require practitioners to demonstrate 'medical necessity for treatment' based on autism symptoms, and services are mandated to focus on symptom reduction. This is clearly a mandate centred around a medical-deficit model perspective. In Mathur and Tarbox's responses to our questions, they demonstrate again and again that the evolution of ABA has to be rooted in the outright rejection of the medical-deficit perspective of autism and recognition of a different but equally valid stance towards the observed communication, behaviour, and motivations of autistic clients. Medical insurance companies must not be allowed to dictate the narrative on how to best support autistic people.

Whilst we are keen to acknowledge that so far our collaboration has only focused on the theoretical grounds for an evolved ABA, we are also committed to further observe and check how BCBAs are implementing this in practice. We would expect that centralised insistence on trauma-informed, assent-insisting, ethically transparent practice would form an essential foundation for autism-centred ABA. We would add that an insistence that no practice seeks to normalise autistic people, coupled with short and long-term focus on autistic authenticity, autistic advocacy, and embedding critical positionality for a disenfranchised neurominority would also need to be at the centre of this shift. We would further argue that in the effort to achieve an evolved ABA in any meaningful way, it is essential that autistic people are fully involved. This engagement needs to be at each level within the support structure as there is a strong argument that autistic people need to be supported by autistic role models (Jarret 2014; Cooper et al. 2023). In considering Mathur and Tarbox's responses, there is clear impetus to ensure that it is autistic people who determine what is of benefit to them. In addition, comprehensive understanding of autism, and the role of masking, alexithymia, sensory needs and social-communication preferences, is necessary.

Autism-centred ABA may sit uncomfortably for some people on both sides of this debate. For ABA practitioners who hark back to medical deficit models in their view of autism, and still see autistic people as disordered, the end goal is the normalising of autistic people. For autistic people who view all ABA as synonymous with torture, it may be hard to swallow that ABA can evolve into something beneficial given previous abuse. Voices from within the CAS community do appropriately ask: why even try to pursue this? Why not instead add our voices to those seeking to abolish ABA and invest time and effort in other support structures. The answer to that in our case is that we are keen to address the reality of the current situation and context. The ABA industry is growing (BACB, 2024). There are already examples of how neurodiversity has been monetised in attempt to provide validity to an industry that paradoxically still does not centrally insist on training its practitioners on autism despite largely being a support industry claiming to be for autistic people (Bridget et al. 2023; Dwyer et al. 2024). Where we see ABA practitioners who also recognise the social injustices in much current ABA practice and who are keen to move beyond mainstream ABA and support the evolution of ABA into something that can actually serve and support autistic people living authentically, we see it as essential that autistic voices are part of that dialogue.

We came into this project with two unmovable beliefs. Firstly, that all support approaches that focus on normalising autistic people are unethical and deeply at odds with the two drivers of the neurodiversity movement. Any practice that looks to normalise autistic people can never be autism-affirming. Secondly, that any approach for supporting autistic people needs to include comprehensive training on autism and this training needs to be in line with the neurodiversity paradigm and include the voices, presence, and power of autistic stakeholders. We feel that in engaging with our ABA partners in this dialogue there is hope that, at least in theory, there is broader agreement on these two points than we had originally anticipated.

Based on our ABA partners' responses we feel that the following features should be seen as a productive starting point to further explore these two operational shifts. The following list is by no means exclusive, but we hope that it will be the starting point for wider and deeper dialogue with a greater number of stakeholders.

# A: Moving away from practice that seeks to 'normalise' autistic people - respecting autistic clients' autonomy and self determination

- 1. A commitment to listen to, respect, and elevate autistic clients' voices.
- 2. Autistic clients' voices, preferences, and goals should drive all treatment.
- 3. Each individual's behaviour should be understood in a way that is individualised to their learning experience (which naturally assumes that an autistic individual's behaviour should be understood through an autism lens).
- 4. Reinforcement should never impinge on the autonomy of autistic learners.
- 5. ABA should be committed to a shift towards self-advocacy and self-determination skills being cautious of earlier focus on compliance. This should mirror a wider commitment to practice that empowers autistic people as neurominorities within a wider (ableist) community.
- 6. ABA procedures should not be forced on autistic learners and compliance should be abandoned as a goal, except in cases of true physical danger.
- 7. All forms of assent-withdrawal should be recognised, regardless of whether they are deemed 'inappropriate' by the general public. ABA professionals should ensure that all autistic participants have more than one authentic choice to choose from at any given time during ABA sessions and that they are not coerced into 'assenting' simply because they have no other alternative. Careful monitoring of available alternatives needs to be undertaken at all points to ensure that the available choices constitute a realistic choice for the autistic person.
- B: Comprehensive training in autism should underpin ABA practice and no support practice for autistic people can claim social validity if it is not centred in an understanding of autism
- 1. A commitment to further research, explore, and utilise autistic strengths.
- 2. Teaching of monotropism theory on all ABA programmes with a view to explore how this impacts on all areas of an autistic person's life.
- 3. Communication difficulties between autistic and non-autistic people should be treated as bi-directional communication difficulties between equal learning / communication styles bearing in mind that autistic people are impacted by being neurominorities in an ableist culture.
- 4. Stimming should be understood and framed through an autism lens.
- 5. Masking, and its detrimental health implications, should be discussed and factored in to all autism support.

#### Conclusion

We contend that mainstream ABA, unaccepting of the two drivers of the neurodiversity movement, has no future. However, in engaging with this knowledge-exchange, we feel there is growing evidence that all ABA is not equal. Examples such as making someone 'table ready' or where intervention teaches autistic people to have 'quiet hands' are clearly miles apart from examples that seek to build someone's confidence in living authentically as an autistic person. In working with Mathur and Tarbox, we are increasingly convinced that there are, at least in principle, ABA practitioners who want to achieve ethically transparent autism-centred support structures that are rooted in a comprehensive understanding of autism and reject normalising approaches. This dialogue has highlighted that within ABA, there are factions committed to a growing commitment to support autistic people living in ableist worlds without the resulting trauma, anxiety, and significant other mental health fallout that comes through normalisation.

However, from our dialogue with Mathur and Tarbox, it is also clear that it is not just about *whether* and *how* current ABA can evolve, but also about how much some localised current day practice has deviated from the original theoretical basis of ABA and how little oversight there is over the ABA industry. Ultimately, correcting this is the responsibility of key stakeholders within the ABA industry, including educational providers, regulatory bodies, and overseers and we call for greater transparency and engagement of autistic stakeholders in this process. As such, this paper is a call to build partnerships and create appropriate spaces for further dialogue and cross-community involvement on these questions.

We do not conclude this paper with the notion that autism-affirming ABA is possible. That would require far more precise understanding and dialogue around how this would be put into place operationally. The knowledge exchange that is documented in this article is simply the start of a discussion as to whether there is scope to explore an evolved protocol for an autism-affirming ABA in line with the neurodiversity paradigm. If we share a theoretical commitment to furthering autistic authentic living, how is this being realised in the support approaches BCBAs take with their clients? Building on our collaboration in this paper, this is where we see this project going next. Nordell (2021), writing about the contact hypothesis, states that 'if people from different groups can join together with equal status to work cooperatively ... [to be fully effective] the efforts should be backed by an institutional authority.' We argue that for dialogue between behaviour analytic scholars and critical autism scholars to have the best chance of encouraging change further efforts must involve relevant institutions such as the Association of Professional Behavior Analysts (APBA) and Autistic Scholars International (ASI).

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#### References

Abdel-Jalil, A., A. M. Linnehan, R. Yeich, K. Hetzel, J. Amey, and S. Klick. 2023. "Can There be Compassion without Assent? A Nonlinear Constructional Approach." *Behavior Analysis in Practice*. https://doi.org/10.1007/s40617-023-00850-9.

- 20 👄 E. SUCKLE ET AL.
- Allen, L. L., L. S. Mellon, N. Syed, J. F. Johnson, and A. J. Bernal. 2024. "Neurodiversity-Affirming Applied Behavior Analysis." *Behavior Analysis in Practice*. https://doi.org/10.1007/ s40617-024-00918-0.
- Allport, G. 1954. The Nature of Prejudice. Cambridge, MA: Addison-Wesley.
- Anderson, L. K. 2023. "Autistic Experiences of Applied Behavior Analysis." Autism: The International Journal of Research and Practice 27 (3): 737–750. https://doi.org/10.1177/ 13623613221118216.
- Assent Con. 2023. "March 3-4. Remote." https://www.assentconference.com/events/assentcon-2023
- Autism Speaks. 2019a. "Autism Speaks Commends Tennessee as It Becomes 50<sup>th</sup> State Requiring That Insurance Plans Cover Autism, Autism Speaks." Accessed November 7, 2024. https://www.autismspeaks.org/press-release/autism-speaks-commends-tennesse e-it-becomes-50th-state-requiring-insurance-plans.
- Autism Speaks. 2019b. "Autism Speaks Advocacy on Health Insurance Coverage of Autism Therapies, Autism Speaks." Accessed November 7, 2024. https://www.autismspeaks.org/ health-insurance.
- Autistic Self Advocacy Network. n.d. Accessed November 14, 2024. https://autisticadvocacy. org/about-asan/what-we-believe/).
- Beavers, G. A., B. A. Iwata, and D. C. Lerman. 2013. "Thirty Years of Research on the Functional Analysis of Problem Behavior." *Journal of Applied Behavior Analysis* 46 (1): 1–21. https://doi.org/10.1002/jaba.30.
- Behavior Analyst Certification Board. 2020. "Ethics Code for Behavior Analysts." Accessed November 4, 2024. https://bacb.com/wp-content/ethics-code-for-behavior-analysts/.
- Behavior Analyst Certification Board. 2024. "BACB Certificant Data." Accessed November 4, 2024. https://www.bacb.com/bacb-certificant-data/.
- Behavior Analyst Certification Board. n.d. "BACB Certificant Data." Accessed November 4, 2024. https://www.bacb.com/BACB-certificant-data.
- Breaux, C. A., and K. Smith. 2023. "Assent in Applied Behaviour Analysis and Positive Behaviour Support: Ethical Considerations and Practical Recommendations." *International Journal of Developmental Disabilities* 69 (1): 111–121. https://doi.org/10.1080/20473869.2 022.2144969.
- Bridget, L., M. F. Gibson, P. Douglas, S. S. Leo, and J. Gruson-Wood. 2023. "Weighing in: Academic Writers on Neurodiversity." *International Journal of Disability and Social Justice* 3 (3): 72–98. https://doi.org/10.13169/intljofdissocjus.3.3.0072.
- Chapman, R. 2020. "The Reality of Autism: On the Metaphysics of Disorder and Diversity." *Philosophical Psychology* 33 (6): 799–819. Advance online publication. https://doi.org/10. 1080/09515089.2020.1751103.
- Chapman, R. 2023. Empire of Normality, Neurodiversity and Capitalism. London: Pluto Press.
- Chapman, R., and V. Bovell. 2022. "Neurodiversity, Advocacy, anti-Therapy." In *Handbook of Autism and Pervasive Developmental Disorder*, 1519–1536. Singapore: Springer Nature.
- Chazin, K. T., J. R. Ledford, J. M. Wilson-Moses, A. Rajaraman, and A. P. Juárez. 2024. "Centering Autistic Perspectives: Social Acceptability of Goals, Learning Contexts, and Procedures for Young Autistic Children." *Journal of Autism and Developmental Disorders*. 55 (3): 812-831. https://doi.org/10.1007/s10803-024-06242-4.
- Chown, N., & Murphy, S. (2022). Social validity in relation to applied behaviour analysis. Academia letters, 4751.
- Chown, N., S. Murphy, E. Suckle, N. Chown, S. L. Murphy, and E. Suckle. 2023. "The Autism Worldview Dilemma: To Normalise or Not to Normalise, That is the Question." *Good Autism Practice* 24 (2): 5–12.

- Common, E. A., and K. L. Lane. 2017. "Social Validity Assessment." In Applied Behavior Analysis Advanced Guidebook: A Manual for Professional Practice, edited by J. K. Luiselli, 73–92. Cambridge, MA: Elsevier Academic Press. https://doi.org/10.1016/ B978-0-12-811122-2.00004-8.
- Cooper, J. O., T. E. Heron, and W. L. Heward. 2020. *Applied Behavior Analysis*. 3rd ed. Columbus, OH: Pearson.
- Cooper, K., A. J. Russell, J. Lei, and L. G. Smith. 2023. "The Impact of a Positive Autism Identity and Autistic Community Solidarity on Social Anxiety and Mental Health in Autistic Young People." *Autism: The International Journal of Research and Practice* 27 (3): 848–857. https://doi.org/10.1177/13623613221118351.
- Dixon, D. R., J. Tarbox, and T. Vogel. 2012. "A Brief History of Functional Analysis and Applied Behavior Analysis." In *Functional Assessment for Challenging Behaviors*, edited by J. L. Matson, 3–24. New York, NY: Springer Science+Business Media. https://doi.org/10.1007/978-1-4614-3037-7\_2.
- Dwyer, P. 2022. "ABA Reform: Distinguishing Meaningful Change and 'Neurodiversity Lite." Autistic Scholar. Accessed November 4, 2024. https://www.autisticscholar.com/aba-refor m-distinguishing-meaningful-change-and-neurodiversity-lite/.
- Dwyer, Patrick, Ava N. Gurba, Steven K. Kapp, Elizabeth Kilgallon, Lynnette H. Hersh, David S. Chang, Susan M. Rivera, and Kristen Gillespie-Lynch. 2024. "Community Views of Neurodiversity, Models of Disability and Autism Intervention: Mixed Methods Reveal Shared Goals and Key Tensions." Autism: The International Journal of Research and Practice: 13623613241273029. https://doi.org/10.1177/13623613241273029.
- Fabrizio, M. A. 2005, October. "Voting with Their Feet: The Role of Child Assent in Behavior Analytic Intervention for Children with Autism." [Conference session].
- Fawcett, S. B. 1991. "Some Values Guiding Community Research and Action." *Journal of Applied Behavior Analysis* 24 (4): 621–636. https://doi.org/10.1901/jaba.1991.24-621.
- Flowers, J., and J. Dawes. 2023. "Dignity and Respect: Why Therapeutic Assent Matters." Behavior Analysis in Practice 16 (4): 913–920. https://doi.org/10.1007/s40617-023-00772-6.
- Garau, Valeria, Aja Murray, Richard Woods, Nick Chown, Sonny Hallett, Fergus Murray, Rebecca Wood, and Sue Fletcher-Watson. 2023. "Development and Validation of a Novel Self-Report Measure of Monotropism in Autistic and Non-Autistic People: The Monotropism Questionnaire." https://doi.org/10.31219/osf.io/ft73y.
- Gates, G. 2019. *Trauma, Stigma and Autism, Developing Resilience and Loosening the Grip on Shame*. London: JK.
- Global Market Insights. 2024. "U.S. Applied Behavior Analysis Market By Application (Autism Spectrum Disorders, Education/Training, Anxiety), Age Group (Children, Adult)." Provider (Home-based Therapy, Center-based Therapy, Community-based Therapy), Forecast 2024 – 2032, Global Market Insights. Accessed November 11, 2024. https:// www.gminsights.com/industry-analysis/us-applied-behavior-analysis-market.
- Goldiamond, I. 1974. "Toward a Constructional Approach to Social Problems: Ethical and Constitutional Issues Raised by Applied Behavior Analysis." *Behaviorism* 2 (1): 1–84.
- Green, C. W., and D. H. Reid. 1999. "A Behavioral Approach to Identifying Sources of Happiness and Unhappiness among Individuals with Profound Multiple Disabilities." *Behavior Modification* 23 (2): 280–293. https://doi.org/10.1177/0145445599232006.
- Hanley, G. P. 2010. "Toward Effective and Preferred Programming: A Case for the Objective Measurement of Social Validity with Recipients of Behavior-Change Programs." *Behavior Analysis in Practice* 3 (1): 13–21. https://doi.org/10.1007/BF03391754.
- Hull, L., K. V. Petrides, C. Allison, P. Smith, S. Baron-Cohen, M.-C. Lai, and W. Mandy. 2017. "Putting on my Best Normal": Social Camouflaging in Adults with Autism Spectrum

Conditions." Journal of Autism and Developmental Disorders 47 (8): 2519–2534. https://doi.org/10.1007/s10803-017-3166-5.

- Jarret, H. 2014. "An Exploration of Identity Formation in Autistic Adolescents, Its Relationship with Psychological Wellbeing, and the Role of Mainstream Education Provision in the Identity Formation Process." (Doctoral dissertation). https://ore.exeter.ac.uk/repository/ handle/10871/15770.
- Johnston, J. M. 2014. *Radical Behaviorism for ABA Practitioners*. Cornwall-on-Hudson, NY: Sloan Publishing.
- Kapp, S. K., R. Steward, L. Crane, D. Elliott, C. Elphick, E. Pellicano, and G. Russell. 2019. "People Should be Allowed to Do What They Like': Autistic Adults' Views and Experiences of Stimming." *Autism: The International Journal of Research and Practice* 23 (7): 1782–1792. https://doi.org/10.1177/1362361319829628.
- Kohn, A. 2020. "Autism and Behaviorism, New Research Adds to an Already Compelling Case against ABA." AlfieKohn. Accessed November 7, 2024. https://www.alfiekohn.org/ blogs/autism/
- Kolu, T. C. 2017. "Treating Trauma from a Behaviour Analytic Perspective." Cuspemergence. Accessed November 7, 2024. https://cuspemergence.com/2017/07/28/new-blo g-series-treating-trauma-from-a-behavior-analytic-perspective/
- Kupferstein, Henny. 2018. "Evidence of Increased PTSD Symptoms in Autistics Exposed to Applied Behavior Analysis." *Advances in Autism* 4 (1): 19–29. https://doi.org/10.1108/AIA-08-2017-0016.
- Leland, W. 2019. Assent Withdrawal, Compliance, and Preventing Client Abuse. 2-Hour Workshop. Chicago, IL.
- Lovaas, O. I. 1987. "Behavioral Treatment and Normal Educational and Intellectual Functioning in Young Autistic Children." *Journal of Consulting and Clinical Psychology* 55 (1): 3–9. https://doi.org/10.1037/0022-006x.55.1.3.
- Lundy, P., J. W. Moore, and K. Bishop. 2020. "Radical Behaviorism." In *Encyclopedia of Personality and Individual Differences*, 4254–4258. Cham: Springer International Publishing.
- Mathur, S. K., E. Renz, and J. Tarbox. 2024. "Affirming Neurodiversity within Applied Behavior Analysis." *Behavior Analysis in Practice* 17 (2): 471–485. https://doi.org/10.1007/s40617-024-00907-3.
- McCarty, M. J., and A. C. Brumback. 2021. July. "Rethinking Stereotypies in Autism." In *Seminars in Pediatric Neurology*. Vol. 38, 100897. WB Saunders.
- Milton, D. E. 2012. "On the Ontological Status of Autism: The 'Double Empathy Problem." *Disability & Society* 27 (6): 883–887. https://doi.org/10.1080/09687599.2012.710008.
- Milton, D. E., and L. Moon. 2012. "The Normalisation Agenda and the Psycho-Emotional Disablement of Autistic People." *Autonomy, the Critical Journal of Interdisciplinary Autism Studies* 1 (1). ISSN 2051–5189.
- Mindful behaviour. n.d. Accessed November 7, 2024. https://mindfulbehaviorllc.org/.
- Moore, J. 1980. "On Behaviorism and Private Events." *The Psychological Record* 30 (4): 459–475. https://doi.org/10.1007/BF03394698.
- Morris, C., J. J. Detrick, and S. M. Peterson. 2021. "Participant Assent in Behavior Analytic Research: Considerations for Participants with Autism and Developmental Disabilities." *Journal of Applied Behavior Analysis* 54 (4): 1300–1316. https://doi.org/10.1002/jaba.859.
- Murray, D. K. C. 1992. 'Attention Tunnelling and Autism', in Living with Autism: The Individual, the Family, and the Professional. Originally presented at the Durham Conference, UK.
- Murray, D., M. Lesser, and W. Lawson. 2005. "Attention, Monotropism and the Diagnostic Criteria for Autism." *Autism: The International Journal of Research and Practice* 9 (2): 139–156. https://doi.org/10.1177/1362361305051398.
- Nordell, J. 2021. The End of Bias How we Change Our Minds. London: Granta.

- Ohl, A., M. Grice Sheff, S. Small, J. Nguyen, K. Paskor, and A. Zanjirian. 2017. "Predictors of Employment Status among Adults with Autism Spectrum Disorder." Work (Reading, Mass.) 56 (2): 345–355. https://doi.org/10.3233/WOR-172492.
- Onaiwu, M. G. 2017. "Black Lives Matter??? The Day After (#WalterScott)." In *All the Weight of Our Dreams, on Living Racialized Autism,* edited by L. X.Z. Brown, E. Ashkenazy, M.G. Onaiwu, 145–147. Nebraska: DragonBee Press.
- Pearson, A., and K. Rose. 2021. "A Conceptual Analysis of Autistic Masking: Understanding the Narrative of Stigma and the Illusion of Choice." *Autism in Adulthood: Challenges and Management* 3 (1): 52–60. https://doi.org/10.1089/aut.2020.0043.
- Proceedings obtainable from Autism Research Unit. School of Health Sciences, University of Sunderland, Sunderland SR2 7EE, UK.
- Rajaraman, A., J. L. Austin, H. C. Gover, A. P. Cammilleri, D. R. Donnelly, and G. P. Hanley. 2022. "Toward Trauma-Informed Applications of Behavior Analysis." *Journal of Applied Behavior Analysis* 55 (1): 40–61. https://doi.org/10.1002/jaba.881.
- Roberts, J. 2024. "Ableism, Code-Switching, and Camouflaging: A Letter to the Editor on Gerlach-Houck and DeThorne (2023)." *Language, Speech, and Hearing Services in Schools* 55 (1): 217–223. https://doi.org/10.1044/2023\_LSHSS-23-00037.
- Robertson, S. 2009. "Neurodiversity, Quality of Life and Autistic Adults: Shifting Research and Professional Focuses onto Real-Life Challenges." *Disability Studies Quarterly* 30 (1): 221–232. https://doi.org/10.18061/dsq.v30i1.1069.
- Robison, J. E. 2020. "My Time with Autism Speaks." In *Autistic Community and the Neurodiversity Movement: Stories from the Frontline*, edited by Steven K. Kapp. Singapore: Springer Nature.
- Sautter, R. A., L. A. LeBlanc, A. A. Jay, T. R. Goldsmith, and J. E. Carr. 2011. "The Role of Problem Solving in Complex Intraverbal Repertoires." *Journal of Applied Behavior Analysis* 44 (2): 227–244. https://doi.org/10.1901/jaba.2011.44-227.
- Shillingsburg, M. A., B. Hansen, and M. Wright. 2019. "Rapport Building and Instructional Fading Prior to Discrete Trial Instruction: Moving from Child-Led Play to Intensive Teaching." *Behavior Modification* 43 (2): 288–306. https://doi.org/10.1177/0145445517751436.
- Shyman, E. 2016. "The Reinforcement of Ableism: Normality, the Medical Model of Disability, and Humanism in Applied Behavior Analysis and ASD." Intellectual and Developmental Disabilities 54 (5): 366–376. https://doi.org/10.1352/1934-9556-54.5.366.
- Sidman, M. 1989. Coercion and Its Fallout. Boston: Authors Cooperative.
- Skinner, B. F. 1948. Walden Two. New York, NY: Macmillan.
- Skinner, B. F. 1957. Verbal Behavior. Acton, MA: Copley Publishing Group.
- Sparrow, M. 2024. "Can ABA Therapy Affirm Autism? Thinking Person's Guide to Autism." Accessed November 7, 2024. https://thinkingautismguide.com/2024/02/can-aba-therapyaffirm-neurodiversity.html
- Veneziano, J., and S. Shea. 2023. "They Have a Voice; Are We Listening?" Behavior Analysis in Practice 16 (1): 127–144. https://doi.org/10.1007/s40617-022-00690-z.
- Watson, John B. 1970. Behaviorism. New York: Norton.
- Wolf, M. M. 1978. "Social Validity: The Case for Subjective Measurement or How Applied Behavior Analysis is Finding Its Heart 1." *Journal of Applied Behavior Analysis* 11 (2): 203–214. https://doi.org/10.1901/jaba.1978.11-203.
- Wright, P. .... Advocate... Autist. 2021. "Mari Cerda, BCBA." ABAI. Accessed November 7, 2024. https://science.abainternational.org/2021/08/10/mari-cerda-bcba-advocate-autist/.
- Yergeau, M. 2018. Authoring Autism, on Rhetoric and Neurological Queerness. Durham: Duke University Press.