IMPROVING SOCIALITY THROUGH POSITIVE BEHAVIOUR SUPPORT

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Young people with intellectual disabilities may present with behaviour that is construed as challenging by those around them. This paper aims to explore behaviour as a form of communication that occurs in response to patterns of construal and anticipation of events. This paper will summarise ways in which the principles of Positive Behaviour Support (PBS) can be used by caregivers in order to develop an understanding of the construal processes of their young people. Using this approach can support the improvement of sociality between caregivers and young people, whilst simultaneously reducing the frequency and severity of incidents of challenging behaviour.

Key words: *sociality, challenging behaviour, intellectual disability, Autism Spectrum Disorder (ASD)*

INTRODUCTION

A widely used definition of intellectual disability is "a significantly reduced ability to understand new or complex information in learning new skills (impaired intelligence), with a reduced ability to cope independently (impaired social functioning), which started before adulthood, with a lasting effect on development" (Department of Health [DoH], 2001, p.14).

Individuals with intellectual disabilities are more likely to present with challenging behaviour than their counterparts within the general population (e.g. Emerson & Hatton, 2007). Challenging behaviour is commonly construed as "culturally abnormal behaviour(s) of such intensity, frequency or duration that the physical safety of the person or others is placed in serious jeopardy, or behaviour which is likely to seriously limit or deny access to the use of ordinary community facilities" (Emerson, 1995). The term 'challenging behaviour' is often used to describe acts of verbal and physical aggression, property destruction, and self-injurious behaviour, but extends to include a broad range of other behaviours including repetitive or stereotyped behaviours, and inappropriate sexualised behaviour. Specifically, it is estimated that 10-15% of people with intellectual disabilities present with challenging behaviour (Emerson & Baines, 2011), with the prevalence increasing for those with more severe disabilities and individuals receiving support via inpatient or residential services (e.g. National Institute for Health and Care Excellence [NICE], 2015).

Challenging behaviour has historically been managed using reactive strategies such as physical restraint, seclusion, and psychotropic medication. Whilst there continues to be a role for these interventions, they have also been used inappropriately and inflexibly, resulting in a range of adverse outcomes including experiencing a poorer quality of life, increased likelihood of inpatient admissions, and being placed at increased risk of experiencing physical abuse (e.g. DoH, 2007; Emerson & Einfeld, 2011; Royal College of Psychiatrists and the British Psychological Society, 2016; Transforming Care and Commissioning Steering Group, 2014). Family members fulfilling a caring role for individuals with intellectual disabilities and associated challenging behaviour have also been identified as experiencing a poorer quality of life, and high rates of burnout and caregiver burden (e.g. Hastings, 2002; Lecavalier, Leone & Wiltz, 2006).

In the United Kingdom (UK), guidelines have been published on the use of Positive Behaviour Support (PBS) interventions as a paradigm shift

in the management of challenging behaviours, in an effort to improve quality of life for individuals presenting with challenging behaviours, to reduce the frequency and severity of incidents of challenging behaviour, and to reduce the use of restrictive interventions (DoH, 2014; NICE, 2015). PBS has been described as a 'multicomponent framework' within which to understand behaviour (Gore et al., 2013). The process of PBS is underpinned by the principles of behaviourism, with the basic assumption that behaviour is learned (e.g. Skinner, 1938), and therefore happens for a reason. Consequently, the premise of PBS is to better understand challenging behaviour by identifying triggers and possible maintaining consequences, before working proactively to implement a person-centred approach to meeting an individual's needs and increasing their adaptive functioning skills in order to reduce the need for the challenging behaviour to occur in the first instance.

The evidence base for PBS approaches for the management of challenging behaviour is steadily increasing (e.g. Hassiotis et al., 2009; Heyvaert, Maes & Onghena, 2010; Heyvart, Maes, van den Noortgate, Kuppens & Onghena, 2012). In the UK, PBS interventions are central to many services for individuals with intellectual disabilities and associated challenging behaviour (e.g. NICE, 2015).

A PERSONAL CONSTRUCT PSYCHOLOGY PERSPECTIVE

The fundamental postulate states that "a person's processes are psychologically channelized by the ways in which he anticipates events" (Kelly, 1955, p.46); Kelly described individuals as active participants in making sense of the world around them, using their prior experiences to construe (or predict) future events, and re-construing events on the basis of subsequent experiences. Additionally, the Construction Corollary states that "a person anticipates events by construing their replication" (Kelly, 1955, p. 50) and the Experience Corollary states that "a person's construction system varies as he successively construes the replication of events" (Kelly, 1955, p. 50). If a particular behaviour meets an individual's needs and therefore vali-

dates their construal, the behaviour will likely be repeated in future when the same need arises. As such, these PCP tenets supports the idea that behaviour can be functional in nature.

Behaviour change can be supported by first attempting to understand the functions of the behaviour, before alternative ways of meeting a need are identified; sociality can therefore be considered a central process that underpins PBS. Kelly defined sociality as "the extent that one person construes the construction processes of another he may play a role in a social process involving the other person" (Kelly, 1955, p. 95). Put simply, Kelly suggests that our relationships with others are influenced by our ability to interpret their construal processes, and put ourselves in their position. It can therefore be considered imperative for other people in the network of an individual with an intellectual disability and challenging behaviour to attempt to understand their construal processes in order to better attend to their needs whilst simultaneously fostering more positive interpersonal relationships.

CASE STUDY

In order to explore the process of PBS in relation to PCP concepts in more detail, the following case study is presented.

Ethical approval

This case study is based upon a piece of clinical work completed by the author. Formal ethical approval was not required for this case study. Nonetheless, consent was sought prior to writing this paper. All personally identifiable information has been removed, and confidentiality and anonymity have been maintained throughout. For ease of reading, pseudonyms have been assigned.

Introduction

Josh is a 12-year-old male with a diagnosed intellectual disability and an Autism Spectrum Disorder (ASD). Josh was referred to his local Child and Adolescent Mental Health Service

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(CAMHS) where he was seen within a specialist team that support young people with intellectual disabilities and neurodevelopmental conditions. The referral was made by Josh's school after his parents and teachers had observed an increase in behaviours that they construed as challenging and were finding increasingly difficult to manage.

Information gathering

The first phase of a PBS intervention is to gather information regarding the individual and their context. This includes, but is not limited to, creating a profile of their likes and dislikes, understanding their family history and social context, and identifying areas of strength and areas of difficulty. This phase is pivotal to ensuring that any subsequent PBS plans are specific and person-centred (e.g. PBS Coalition UK, 2015). In order to gather relevant background information, an initial assessment appointment was completed with Josh's parents. At this initial stage, it was decided that it would be better for Josh to be absent from this appointment as his parents anticipated that he would find the context of the clinic room anxiety-provoking, become easily bored and agitated, and that it would inhibit their ability to accurately share their experiences and concerns.

Josh lives at home with his parents (Joanna and Chris), and two siblings (Lottie, 8; Rachel, 16). Josh particularly enjoys watching YouTube videos, listening to pop music, being outdoors in large open parks, and running. Josh also enjoys sensory activities such as 'Messy Play'. Josh attends a specialist education provision for children and young people with Autism and associated intellectual disabilities, where he accesses a differentiated curriculum. Josh is non-verbal and at school he communicates using a Picture Exchange Communication System (PECS; see Charlop-Christy, Carpenter, Le, LeBlanc & Kellet [2002] for further detail), however, at home Josh relies upon the use of instrumental gestures (e.g. pointing or grabbing) and vocalisations.

During the initial appointment, Josh's parents described experiences akin to Kellian anxiety. Kelly described anxiety as "the awareness that

the events with which one is confronted lie mostly outside the range of convenience of one's construct system" (1955, p. 495). Josh's parents had described feeling unable to make sense of the behaviours with which they were faced and consequently felt unable to manage them. In an effort to cope, they were relying upon use of consequences, such as time-out or removal of privileges. However, they described finding that these strategies had little effect and at times resulted in an escalation of challenging behaviour. Consequently, their hypothesis that these approaches would result in a reduction in challenging behaviour was disconfirmed and thus their construal had been invalidated. Josh's parents also hypothesised that the change in Josh's presentation has related to an increase in his anxiety levels. This suggested that they were already beginning to attempt to construe Josh's construal processes and endeavour to make sense of his experiences. However, they remained uncertain about exactly why his anxiety levels may be heightened and it was consequently difficult for them to intervene accordingly.

A second aim of the information gathering was to determine patterns leading to Josh's behaviours in order to make further inferences regarding his construing processes. Kelly is known for stating "if you want to know what's wrong with someone, ask them - they may tell you!" (as cited in Bannister and Fransella, 2013). Although Josh is non-verbal, the same notion applies in that assumptions should not be made about his construing processes and efforts should be made to find out. Hence observations were completed in order to provide an opportunity for the clinician to observe Josh's construing in action. During the observations, Josh was able to use communication aids to express his needs and preferences when presented with two choices, for example, choosing a snack or activity.

Finally, in addition to the aforementioned parental interview and naturalistic observations, behavioural monitoring charts were completed at home and in school, and additional qualitative information was gathered from Josh's teachers. Since Kelly's individuality corollary states that "persons differ from each other in their construction of event." (Kelly, 1955, p. 55), gathering information from multiple sources is extremely important in order to reduce the influence of

individual construal bias. This has been considered central to implementing PBS plans that are both effective and ethical (Gore et al., 2013).

After gathering the above information, a functional analysis was completed whereby patterns in were sought with regard to antecedents, behaviours and consequences; using a functional analysis to inform intervention for challenging behaviour has been found to be associated with improved outcomes (e.g. Carr et al., 1999; Didden, Duker, & Korzilius, 1997; Scotti, Evans, Meyer & Walker, 1991; Campbell, 2003; Harvey, Boer, Meyer & Evans, 2009).

Antecedents

Antecedents describe anything that happens before a particular event occurs. For PBS plans, it can be useful to differentiate between setting events and triggers. Setting events have been described as "anything that increases a person's level of anxiety or makes a person more sensitive to and less tolerant of people, environments and situations" (Addison, 2013, p.4). Comparatively, triggers have been described as "the event that happens immediately before the challenging behaviour" (Addison, 2013, p.4). For Josh, the functional analysis revealed that setting events included increased anxiety associated with change and transition, boredom, and the environment being crowded, busy or loud. Comparatively, triggers included sudden noises, and being expected to engage in undesirable events or activities (e.g. attend to personal care).

Behaviours

The challenging behaviours described fell into three categories: 1) physical aggression, 2) self-injurious behaviours and 3) property destruction. These behaviours were reported to be occurring on a daily basis and tended to occur in sequence; for example, Josh would initially engage in property destruction, however, this could escalate to use of physical aggression or self-injurious behaviours.

Physical Aggression

Josh was reported to hit and kick others around him. There were no reports of any significant injuries having been sustained, however, Josh's parents were concerned that he was becoming stronger and were pre-empting that the behaviours would continue to become increasingly difficult to manage.

Self-injurious behaviours

Josh was reported to cause physical harm to himself by biting his hands or hitting the side of his head with objects that he had picked up around him (e.g. television remote). At the time of referral, Josh had sustained bruising to his hands and temples, and had broken the skin on his hands resulting in a skin infection.

Property destruction

Regarding property destruction, Josh was reported to slam drawers or doors repeatedly, hit windows with a closed fist, and throw objects (e.g. mobile phone, cutlery, television remote). This behaviour had resulted in damage to a number of items and reduced the number of activities that Josh had access to as his parents had restricted his use of valuable and breakable objects.

Maintaining consequences

Maintaining consequences are those that result in behaviours being more likely to occur in future. Maintaining consequences typically fall into one of four categories: 1) social attention, 2) tangible reward, 3) escape / avoidance, and 4) sensory stimulation (Addison, 2013, pp. 2-3). For Josh, the primary maintaining consequences appeared to be avoidance of aversive stimuli (loud sounds, busy environments) and unpreferred activities, and receiving social attention.

Figure 1 uses the bow-tie diagram (Procter, 1987, 2000) to illustrate the manner in which parental construal and action influenced Josh's construal and action, maintaining the challenging behaviours.

This example is based upon a typical scenario in which Josh would throw cutlery and attempt to

hit family members when seated at the dinner table, if other family members were talking. As a consequence, Josh's parents responded by removing him from the dinner table. However, these responses were inadvertently meeting his need to be in a quieter environment and hence reinforcing the behaviour.

At the time of referral, Josh's life had become increasingly restricted. Whilst he was accessing school, he spent a lot of time outside the main classroom. Furthermore, Josh's parents were finding the behaviours increasingly difficult to manage and consequently reduced access to activities to pre-empt the difficulties they would experience and the difficulty in managing these behaviours in community settings.

Proactive management of behaviours

As above, sociality can be seen as one of the core components of the proactive management of challenging behaviours. Through placing oneself in the shoes of the other, it is anticipated that an individual's needs can be understood and therefore met. In PBS, the aim is to intervene before antecedents occur; this can be achieved through teaching adaptive functioning skills, using praise & positive reinforcement to increase motivation, pre-emptively meeting an individual's needs, and removing aversive stimuli, wherever possible.

As per setting events and triggers, PBS differentiates between primary and secondary prevention strategies. Simply, primary prevention strategies are used in response to setting events, whereas secondary prevention strategies are used in response to triggers. Tables 1 and 2 summarise the primary and secondary prevention strategies that were implemented within Josh's PBS plan.
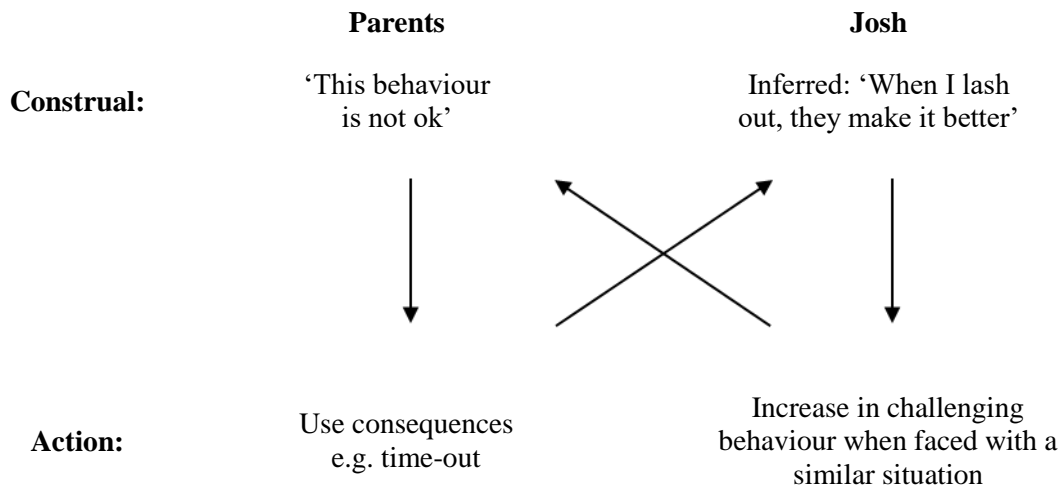

Figure 1: *Bowtie diagram of how behaviours are maintained*

Table 1: *Primary Preventative Strategies.*

Setting Events	Primary Prevention Strategies
Anxiety associated with change and transition	- Ensure Josh's environment and routine are as predictable as possible - Prepare Josh for change and transition by using visual aids and timers - Schedule regular sensory breaks and calming activities to reduce the build-up of anxiety
Boredom	- Ensure that Josh has access to a range of activities at all times. - Ensure that Josh has access to activities at points of transition, or when he is typically less occupied (e.g. car journeys).
Environment is loud, crowded or busy	- Support Josh to wear ear defenders / headphones to block out noisy stimuli - Access community areas (e.g. shops) at quieter times (e.g. avoid the after-school rush or weekends) - Ensure Josh has access to sensory breaks or calming activities at times when it is busy at home (e.g. after school, pre-/post- meal times). - Have access to separate activities for Josh, if required. - Support Josh to communicate his needs (e.g. using visual aids and PECS)

Table 2: *Secondary Preventative Strategies.*

Fast Trigger	Secondary Prevention Strategies
Sudden louder noises, including other people laughing or coughing	- Use ear defenders / headphones to block out noisy stimuli - Take Josh to a quieter space (e.g. give him permission to leave the dinner table) - Have separate family meals, if required.
Unpreferred events / activities (e.g. disliking a song on the radio, being told 'no')	- Give warnings prior to changes in activity. - Support Josh to communicate his needs (e.g. using a card or PECS). - Respond to Josh' needs where possible.

Reactive strategies

As mentioned, construal is a dynamic process, and construct systems are subject to revision. It is therefore important to acknowledge that in spite of sociality and the ability to construe another's construal processes, not all eventualities can necessarily be pre-empted. Regarding challenging behaviour, the role of reactive strategies therefore needs to be considered. Reactive strategies are designed to be used in situations within which the challenging behaviour has already occurred, with the primary aim of keeping the individual and those around them safe from the possibility of harm. For Josh, reactive strategies included removal of aversive stimuli and any potentially unsafe objects from the immediate environment, giving Josh time to himself to calm down, giving Josh access to safe sensory / calming activities that he can use, use of distraction and re-direction, and for other family members to remove themselves from the immediate area.

Outcome of the PBS intervention

After the PBS plan was developed, Josh's parents were given the opportunity to implement the plan whilst continuing to attend further appointments to discuss their experience of doing so and troubleshoot any challenges that they experienced. During these appointments, it became clear that via the process of implementing the plan, they were also undergoing a process of constructive revision.

Kelly's Experience Cycle (1955) lends itself to supporting our understanding of the way in which re-construal can occur following PBS intervention. Kelly highlighted five stages within the experience cycle: 1) anticipation, 2) commitment, 3) encounter, 4) confirmation or disconfirmation, and 5) constructive revision. Anticipation is the process of making hypotheses about future experimentation. For Josh's family, anticipation may have occurred at different stages, for example, in advance of requesting support from a specialist service, and in advance of the PBS intervention itself. Commitment describes the stage in which an individual decides to experiment; in this instance, engaging with the PBS intervention in order to develop a more detailed understanding of Josh's behaviour.

Next, the encounter describes the event of engaging with the PBS approach, for example, attending appointments, monitoring behaviours and implementing the resulting PBS plan. The process of confirmation or disconfirmation occurs when construal, or anticipation of events, is either validated or invalidated. Josh's family would have anticipated outcomes of the PBS intervention and these would have either been validated or invalidated on the basis of their experience of implementing the plan. Finally, constructive revision occurs; for Josh's parents, constructive revision initially involved re-construal, and over time became a tightening of their construal as they were better able to pre-empt events with which they were faced.

Specifically, Josh's family committed to experimenting with an alternative way of understanding the challenging behaviours, and to find a way of construing the difficulties with which they were faced. In this instance, the PBS intervention supported the re-construal of Josh's behaviour from something that couldn't be made sense of, to viewing the behaviour as a means of communication, a way of eliciting social attention, and as a strategy to avoid aversive stimuli. Existing constructs regarding Josh's behaviour were elaborated and loosened. Over time, behaviours were construed in varying ways, allowing for a process of change and re-construal. This process of re-construal supported the development of sociality as Josh's parents were better able to construe his construal processes, therefore enabling them to meet his needs whilst simultaneously improving their relationship with him. As a result of the PBS intervention, Josh's parents described a significant reduction in both the frequency and severity of incidents of challenging behaviour. Furthermore, Josh's quality of life improved as his family described being better equipped to manage the challenging behaviours and hence access to community activities was less restricted. Most notably, Josh's parents felt confident enough to arrange a family holiday abroad. With regards to Josh's adaptive functioning, he was taught alternative ways of communicating which appeared to reduce his frustration as he became more confident that other people would respond to his needs; this included extending the use of PECS to within the home environment. Finally, intrafamilial relationships improved, and Josh's parents described

the family as enjoying spending time with one another. Finally, caregiver burden reduced and Josh's parents described improvements in their own emotional wellbeing.

POSSIBLE BARRIERS TO ACCESSING PBS

Whilst the above case study illustrates a positive experience of PBS, it is anticipated that there can also be barriers to families accessing this type of support.

Firstly, anticipation can be associated with an awareness that one's construct system may be about to enter a phase of transition, and consequently may result in the experience of different Kellian emotions and lead to resistance to change. Kellian threat, "the awareness of an imminent comprehensive change in one's core structures" (Kelly, 1955, p. 489), often referred to as an 'identity crisis', could occur if a parent or family become aware that they will need to reconstrue themselves. For example, a parent who construes themselves as a 'competent parent' may feel threatened by the possible invalidation that could occur when alternative and possibly contrasting parenting strategies are introduced. Whilst it would not be the clinician's aim to suggest that they are an 'incompetent parent', pre-emption that this could occur may result in an unwillingness to engage in future experimentation. Similarly, for a parent or family who construe themselves as independent, the realisation that additional support may be required could result in feelings of threat. Kelly described hostility as "the continued effort to extort validational evidence in favour of a type of social prediction which has already been recognized as a fai\\lure" (1955, p. 510). For example, a parent who has great pride in their caring role, may not be ready to accept that they are struggling to care for their child. Rather than finding alternative solutions to managing the challenging behaviours, they may persist with their current approaches, despite evidence that they may be limited in effectiveness. This family may simultaneously persuade themselves that the challenging behaviour is a problem of their child rather than being situated within interpersonal processes.

Secondly, families of young people with an intellectual disability and challenging behaviour often have longstanding relationships with services. Challenging behaviour has historically resulted in the use of restrictive, and at times abusive, practices (e.g. DoH, 2007; Emerson & Einfeld, 2011; Royal College of Psychiatrists, 2007). Given we construe events on the basis of prior experience, it makes sense that if construal of professionals and services is tight, this may foster a lack of trust in others, and render it difficult to construe services in a varying way and anticipate that an alternative experience may be possible.

Finally, perceptions of both intellectual disability and challenging behaviour may vary widely within different cultural or faith backgrounds and fear of stigma or blame may complicate family help-seeking. For example, fear of rejection by others from one's culture of origin, lack of information regarding services, and culturally defined construal of family roles can prevent families from accessing support (e.g. Poxton, Taylor, Brenner, Cole & Burke, 2012). Consequently, it is imperative that services are culturally competent, and reach out to different communities in order to support them to move from anticipation to commitment, as per the Experience Cycle.

Regarding each of the above barriers, the need to support a family to work through possible resistance is highlighted. Prior to accessing services, this can be supported by providing adequate information regarding services and support that is on offer, what a PBS intervention will involve, and how it may be helpful for families. Supporting other agencies (e.g. schools, social workers, G.P.s) to develop a comprehensive understanding of specialist services will also enable information to be shared. Upon accessing services, the need for offering space and time to explore a family's hopes and fears, prior experiences, and to address any questions they may have prior to implementing PBS intervention is indicated. Taking a credulous approach to understanding each family's unique experience and perspectives is thought to support this process and improve engagement (e.g. Epting, 1984; Leitner, Dunnett, Anderson & Meshot, 1993; Neimeyer, 1995).

FUTURE DIRECTIONS

It would be beneficial to use a PCP methodology as a way of monitoring changes to construal pre- and post-intervention. There are a number of methodologies that would support an understanding of individuals' construal, and the impact of PBS intervention upon construal and construal processes.

Firstly, the Perceiver Element Grid (PEG; Procter, 2002) can be used to explore family construct systems and make sense of the interpersonal dynamics between family members. In the PEG, each family member can be positioned as both a 'perceiver' and an 'element'; this provides an opportunity for eliciting the ways in which an individual construes themselves and others, in addition to determining how they perceive themselves to be construed by other people. Since young people with intellectual disabilities often exist within a large network of professionals, the PEG can be extended to include other significant others, for example, teachers, carers, or respite providers. If the PEG were completed pre- and post-PBS intervention, it would provide opportunities for any changes in construal and interpersonal dynamics to be mapped overtime. Furthermore, problems such as challenging behaviour can be included in the PEG as both perceivers and elements in order to aid externalisation and separation of the problem from the person, whilst simultaneously supporting individuals to access construal about challenging matters (e.g. Coppock, Winter, Ferguson & Green, 2017; Morris & Appleby, 2012 as cited in Walker, 2016). This may be a particularly important component for families and support networks where the problem behaviour has been located within the young person with the intellectual disability, rather than being construed as interpersonal processes.

Alternatively, the Event Perceiver Grid (EPG; Procter, 2014) can be used to elicit perceivers' construal of others at different moments in time. For example, this methodology could be applied to elicit construal before, during, and after incidents of challenging behavior, and subsequently to map changes in construal that may occur following PBS intervention. Procter (2014) described this methodology as being particularly useful when attempting to understand crises, in

addition to developing an understanding of changes that occur over a period of time.

Finally, the PEG and the EPG both focus upon capturing monadic construing; put simply, construal of another person as an individual. Construing at the dyadic level allows interactions between two people to be understood in more detail. To this end, using a Perceiver Dyad Grid (Procter, 2014) would support the exploration of a perceiver's construal of the interactions between two people. For example, between the young person presenting with challenging behaviour and their parent or carer, and between other individuals or agencies within the young person's network.

CONCLUSION

Kelly (1955) described sociality as central to our interpersonal relationships; being able to anticipate the construal processes of others offers opportunities to place ourselves in their shoes, promoting empathy and understanding. For individuals with intellectual disabilities who may be non-verbal, it is imperative to take the time to observe their construal processes in action in order to elicit an understanding of their experiences. Exploring aspects of sociality when intervening with challenging behaviour is particularly important given the pivotal role it can play in reducing the frequency and severity of incidents that may occur through enabling an individual's needs to be met proactively.

AUTHOR'S NOTE

DECLARATIONS
None.

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