

Case study: Mission Impossible – Restraint Reduction in the Home Environment?

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Psychological Society of Ireland Division of Behaviour Analysis Annual Conference – 2020

Restraint and Disability

Restraint is a relatively common response to Self Injurious Behaviour (SIB) and aggression (Jennett, Hagopian, & Beaulieu, 2011). And when serious injury to a client or others is likely, restraint is often seen as the only safe option available (Cunningham, McDonnell, Easton, & Sturmey, 2003).

However...

Restraint is more often than not an ineffective method of reducing SIB and aggression, and can act as a reinforcer for these behaviours instead (Ryan, & Peterson, 2004).

Client - Alan

Alan is a 15 year old male diagnosed with XQ28, Autism Spectrum Disorder (ASD) and a moderate to severe developmental delay.

Alan engages in several difficult behaviours, including property damage, sleep anxiety and inappropriate social interaction (grabbing, pushing, shouting etc.).

However, the particularly significant behaviours, and the primary targets of the behavioural intervention, are SIB and aggression, both of which pose a significant risk to the wellbeing of Alan and those around him.

Target Behaviours - Presentation

SIB

Head Banging - striking the front or back of the head against hard surfaces including the ground or walls, often hard enough to cause obvious distress to Alan.

Face Hitting - Using an object or their hand to strike themselves in the face, often repeatedly if an item is not removed.

Hand Hitting - Striking solid surfaces or objects with their hand, this occurs often enough that Alan consistently has large cuts and bruises on their hands.

Alan will sometimes also engage in surface kicking, heel stomping or hitting other parts of the body.

Aggression

Alan will punch, kick, pull hair, and or throw objects when engaging in aggression.

During these aggressive episodes Alan will target anyone around him, including family members, therapists, pets or nearby strangers.

These incidents have often resulted in injuries, particularly to family members, and in many cases have resulted in a certain wariness around Alan.

Target Behaviours - Function

The function of behaviours for Alan is often multifaceted, changing function as the incident progresses, though the three functions at play are generally ***access to tangibles, escape, or attention***

Example - Alan asks for his iPad before he is allowed it, Alan engages in mild SIB and shouting (*access to tangibles*). As a result of this, Alans sister starts crying and his parents stop what they were doing to verbally admonish him for the behaviour, Alan then escalates the behaviour to much more intense SIB (*attention*), often resulting in restraint being implemented, at which point Alan further escalates the behaviour (*escape*).

Impact of Behaviours

School - Alan was reported to be spending a significant portion of the day lying down in various states of undress. Alan did not take part in group activities and was confined to a separate classroom with minimal furnishings, a locked door, and only a single member of staff at a time. As a result, Alan was not meeting academic learning targets and increasingly was becoming more and more difficult to manage.

Home - Alan's home support consisted of Au Pairs with only limited training and input of a behavioural nature. Alan often caused significant damage to his home and had to be physically restrained on a regular basis. Alan's parents were becoming increasingly concerned that they would no longer be able to manage Alan in their home.

In both environments, restraint became a common feature of Alan's routine.

Alan and Restraint - Physical Restraint

When a behavioural episode became intense enough that those around Alan feared for his safety or their own, Alan was physically restrained by either a parent or staff member depending on the setting.

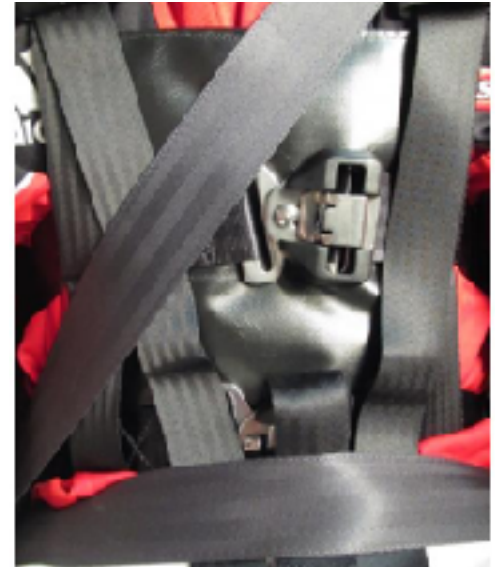
Once restrained, Alan would engage in SIB and lash out physically at the person or persons restraining them until exhausted, at which point Alan would be prompted to have a 'break' until ready to resume normal behaviour.

Note: when the use of restraint was reduced during the behavioural intervention, Alan on multiple occasions attempted to pull therapists down on top of them, this was believed to be an effort to recreate the physical restraint that Alan was used to.

Alan travels to and from school each day on a minibus accompanied by the driver and two staff members. During this trip, as well as on the journey to Respite, Alan is restrained using a harness, while also having a large bean bag on his lap to further reduce movement.

Alan is often reported to have significant behaviours during transitions on to or off the bus.

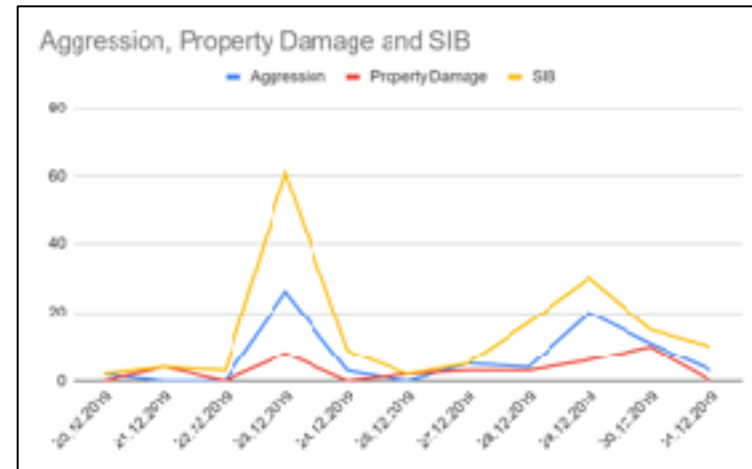
Note: when travelling with his family in a car, Alan sits in the back left seat away from the driver, but a harness is not used in this setting, nor is one used when Alan is travelling on an aeroplane.





Alan is on a very low dosage of anti-anxiety medication, parental reports indicate that when this was prescribed Alan displayed a noticeable decrease in anxiety, where loud unexpected noises no longer caused him visible distress.

Note: In December of 2019 Alan's dosage was increased slightly as a trial, during this time however, therapists noted an increase in both frequency and severity of behaviours, and the dose was reverted to the original amount.





Behavioural Programme - Targets

The primary focus of the current behavioural programme is to reduce Alan's levels of SIB and aggression without the use of restraint, and to significantly reduce the amount of restraint the Alan interacts with on a daily basis.

The target situation is one where SIB and aggression levels are at almost zero, and where behavioural episodes that 'do' occur can be managed with verbal prompting and redirection rather than restraint

This target, if met, would allow Alan to remain in his family home without needing full time care, and give Alan a much higher quality of life.

Behavioural Programme - Strategies

DRO - Differentially reinforced Alan for all behaviour other than SIB, aggression and property destruction. The schedule of reinforcement was initially set to fixed 30 minutes intervals.

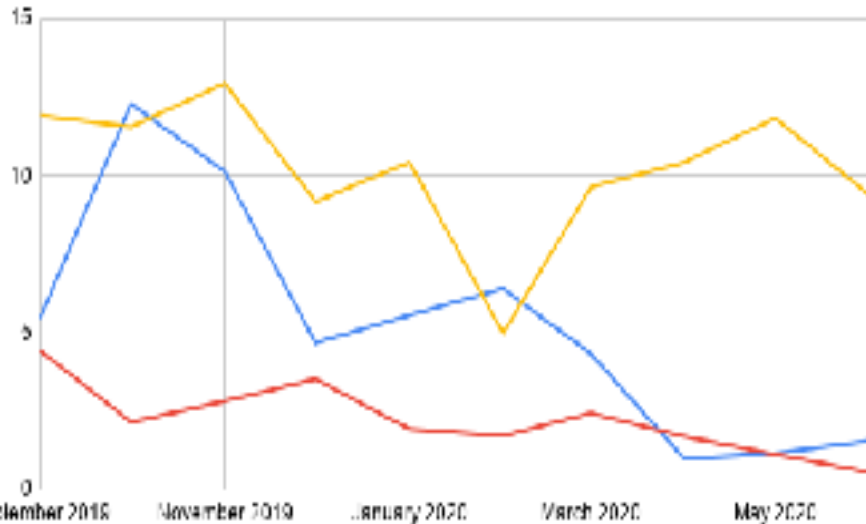
Parental Training - Alan's behaviours were often being inadvertently reinforced by his parents response to them. To help with this, Alans parents were coached to identify the function of Alans behaviours and respond appropriately. The main features of this being ignoring Alans attention seeking behaviours and ensuring his behaviours did not allow him access to tangibles.

Environmental Change - Physical restraint was removed from Alan's environment as much as possible, only being used as a last resort to protect vulnerable persons or items

Results

Aggression, Property Damage and SIB

— Aggression — Property Damage — SIB



Reductions were noted in Alans behaviour prior to the introduction of the DRO, during which time only parental training and environmental changes had been introduced. However, since the DRO was introduced in September of 2019, Alans outward displays of aggression and property damage have dropped significantly.

While SIB remains at a relatively high level, the intensity of these behaviours have reduced and Alan is no longer as likely to seriously injure himself during one of these episodes

Outcomes for Alan and Family

Dramatically reduced SIB, Aggression and Property Damage

Alan's significantly reduced challenging behaviours have made the day to day lives of his parents much easier. A full day without any significant aggressive episodes is now the norm rather than the exception. As a result Alan can be looked after at home by his family for long periods without requiring assistance.

Increased family social interaction

Alan now interacts much more appropriately with his family members, this has improved his interaction with his parents, who are with him for daily tasks, but also with his extended family members. Alan no longer regularly aggresses towards his sister for attention, and plays appropriately with his cousins and siblings during family visits.

Larger range of options for outings

Alan was previously unable to go on outings without being bought a present on the trip, this being denied would cause significant public incidents. As a result of Alan's reduced behaviours, the frequency of trips to the city and to visit relatives homes has increased significantly.

References

- Cunningham, J., McDonnell, A., Easton, S., & Sturmey, P. (2003). Social validation data on three methods of physical restraint: Views of consumers, staff and students. *Research in Developmental Disabilities, 24*(4), 307-316.
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