# Entry for the 2015 RAID Awards for Working with Challenging Behaviour: **Salisbury Support 4 Autism.**

The implementation of Functional Communication Training (FCT) (Break card and timer) to decrease the frequency of physically challenging behaviour and environmental damage, maintained by negative reinforcement (escape from loud, aversive environment) for one non-verbal man with a diagnosis of autism and a severe learning difficulty.

# Background

"Simon" is a 25-year-old man with a diagnosis of an Autism Spectrum Condition and a severe learning difficulty, Simon expresses no vocal-verbal communication and relies on a combination of minimal Makaton, gesture and pointing to communicate. Simon seems to have a sensory processing disorder and it has been reported that he is hyper-sensitive to noise. Simon accesses a day service, with 4 other clients all of whom demonstrate challenging behaviour and who have a diagnosis of an ASC. Simon accesses the community regularly, where minimal challenging behaviour is demonstrated. It has been reported by the staff team that most of Simon's challenging behaviour occurs during communal activities or meal times within the day centre. Simon has previously utilised ear-defenders, however does not use these intentionally and has to be prompted to wear these. Simon attended a specialist school and was utilising PECs at the school, where he was competent at stage 2, however this has not been continued since he left school.

# Assessment and intervention

# **Behavioural topography**

Simon engages in two distinct types of challenging behaviour:

Environmental damage, defined as Simon picking up or tipping items of furniture or plates of food and throwing them with enough force to move them from their original position, usually the items are tipped onto their side or top. Onset classified as the moment the first object is thrown, offset classified as latency of more than five minutes (5m) between objects, all occurrences within 5m of the previous occurrence are classified as a single occurrence. If 5m occur between objects, these will be classed as separate occurrences.

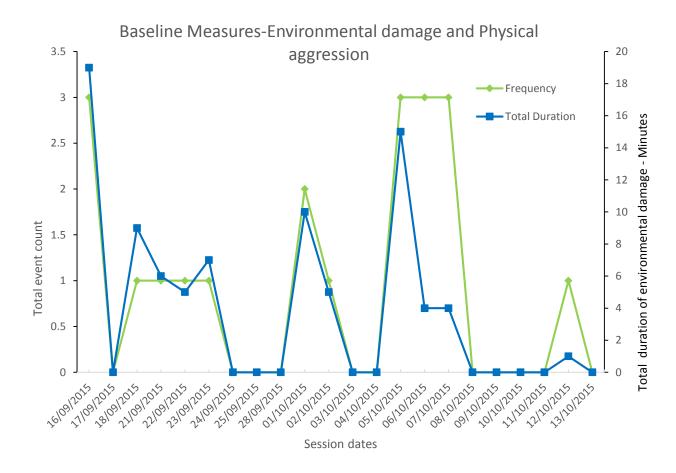
Physically aggressive challenging behaviour, defined as Simon grabbing staff or other service user's hands and arms, and scratching with enough force to leave a mark, these scratches are usually forcible enough to break the skin. Onset classified as the moment Simon grabs the hand or arm offset classified as once Simon releases the staff members arm. Any multiple scratches received during these times will be classed as a single event

Both of these behaviours are accompanied with a high pitched scream, or shout, emitted before, during and after the incident of challenging behaviour.

#### **Baseline measures**

The incidence of environmental damage was recorded, this was due to the behavioural topography and the results of functional assessment which reported that physically challenging behaviour occurred after environmental damage, when staff either tried to intervene or remove him from the area.

Frequency and duration data was recorded at the day service over 4 weeks, the sessions took place each day during communal time, or meal time, these were all in the same environment (a large dining area in the day service), Simon sat at the same seat each day which faced into the room, people entering the room had to walk behind Simon to enter and exit. Staff used ABC sheets and recorded the preceding events, behaviour (including count and duration of incident), and the consequences of the behaviour.



# **Baseline interpretation**

The main antecedents identified for the expression of environmental damage, seem to be busy, or noisy environments and other service user's expressing challenging behaviour. Based on the consequences reported, on 80% of occasions Simon is removed from these environments, and taken to a quieter place (often, although not always a small sensory suite), Simon then returns and reengages with the task, although the amount of time he is removed from the aversive setting varies. On further interpretation, on the occasions he is removed and then reintroduced within a shorter period of time <5 minutes the likelihood of reoccurrence increases. On days where fewer people access the day service the incidence of environmental damage falls to near zero occurrences.

#### Intervention rationale

Based upon the results of functional assessment and baseline recording, it is hypothesised that Simon's environmental damage is negatively reinforced by removal of the aversive stimuli (environmental noise). We looked at environmental antecedent interventions which could act as a socially valid, and functionally equivalent signal that Simon was finding the environment aversive and give him the opportunity to leave and access a quieter environment (sensory room). Functional Communication Training (FCT) has been positively reviewed and implemented in numerous studies (Carr et al., 1994; Durand, 1990; Durand, Berotti & Weiner, 1993; Durand & Carr, 1991) and found to be an effective way of implementing positive antecedent manipulation, and successful decreases in challenging behaviour maintained by negative reinforcement.

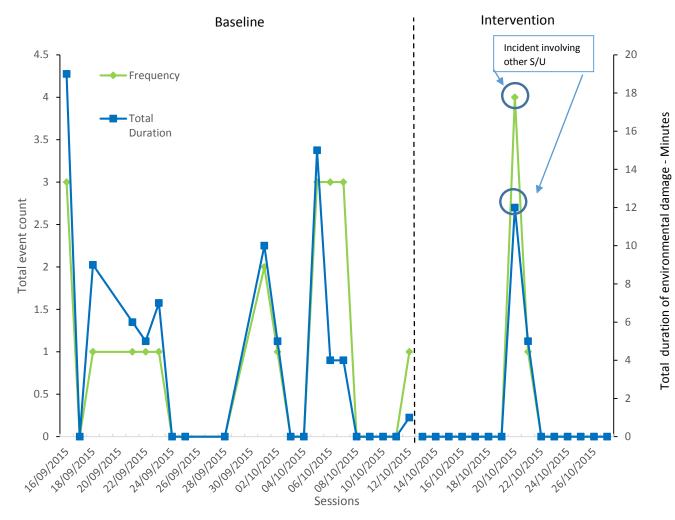
### Intervention summary

The intervention designed was focussed around the implementation of a "break card" which has had been used successfully with service users with similar presentation and skills (Luiselli & Cameron, 1998), which would be available at all times, this break card acted as an discriminative stimuli (SD) for the availability of escape and a visual timer was used to ensure that the amount of time away from the aversive environment was controlled and gave Simon enough time to return to a basal arousal level. The aim would be to steadily decrease this time, as Simon was able to cope with the previously aversive situation through a process of desensitisation training. However, the first stage of the intervention was to ensure Simon started using the "BREAK" tool provided.

Simon was familiar with PECs from school so a PECs book was utilised and the single picture "break" was displayed on the front, Simon carried this at all times but when exposed to what could be an aversive situation, the book was placed on the table in front of him Simon was also prompted to sit facing out into the room so he could see people enter and leave rather than this occurring behind him. When Simon started to show signs of anxiety (hand over eyes, finger in right ear and small vocalisations) the staff member held out their hand in front of the book, if Simon handed over the card the staff would say "Thank you, you want a break" and take Simon to a quiet environment. The visual timer set and Simon given the opportunity to relax in the room. If Simon did not initiate the selection of the card a second person would guide, hand over hand, and place the break card in the primary staff member's hand. The visual timer was set to 20 minutes to start, with the aim of it being gradually decreased as Simon became desensitised to the aversive environment, through systematic desensitisation training.

# Results

Total count and duration data for the emittion of environmental damage was recorded for ten consecutive days to measure the implementation of the intervention. The results are displayed graphically below.



# Intervention monitoring- S- Environmental damage

Simon has been quick to respond to the use of the "break" card, as demonstrated by the reduction in the frequency of environmental damage within 10 days, which also confirms the function of the behaviour did serve to remove Simon from the aversive environment. Simon, now carries his PECS book with him and has started to utilise without prompts, for data point 1 & 2 post intervention, prompting to use the card was delivered after the emittion of challenging behaviour however Simon used the card from data point 3 unprompted. At data point 5 the timer was reduced by 5 minutes to 15 minutes, this has not changed the emittion frequency and there has been limited effect on reoccurrence, this mirrors the results of Luiselli & Cameron (1998).

There was quite a serious incident involving another service user on the 20<sup>th</sup> of October, at this point the staff member who was supporting Simon had to assist other members of staff to intervene with another service user. Simon had tried to use the break card to leave as the noise was distressing him but on this occasion the request had to be ignored. Simon had a further 2 incidents within the space of that hour as staff were unavailable, supporting the other service user. The following day, there may have been some behavioural momentum as Simon didn't use the card but reverted to environmental damage to escape, this was ignored and the card prompted. In this case the use of environmental damage to escape the aversive environment had been differentially reinforced on the 20th. The process of desensitisation training will be started shortly, aimed to help Simon cope in loud environmental damage and physically aggressive challenging behaviour decreased by 75%, and the

total time the individual engaged in challenging behaviour decreased by 80% since the introduction of the functional communication training.

# References

Carr, E. G., Levin, L., McConnachie, G., Carlson, J. L., Kemp, D. C., & Smith, C. E. (1994). *Communication-based intervention for problem behavior: A user's guide for producing positive change*. Baltimore: Paul H. Brookes.

Durand, V. M. (1990). Severe behavior problems: A functional communication training approach, New York: Guilford.

Durand, V. M., Berotti, D., & Weiner, J. (1993). *Functional communication training: Factors affecting effectiveness, generalization, and maintenance*. In J. Reichle & D. P. Wacker (Eds.), *Communicative alternatives to challenging behavior* (pp. 317-340). Baltimore: Paul H. Brookes.

Durand, V. M., & Carr, E. G. (1991). *Functional communication training to reduce challenging behavior: Maintenance and application in new settings*. Journal of Applied Behavior Analysis, 24, 251-264.

Luiselli, J. K., & Cameron, M. J. (1998). *Antecedent control: Innovative approaches to behavioral support.* Baltimore: Paul H. Brookes.