

## **The Development of a Model of Behaviour Analysis in a Residential Service for Children with Autism**

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### **Introduction**

Taylaughlan House is a Fife Council social work residential resource and it currently provides full-time placements for three children who have a diagnosis of autism and display extremely challenging behaviour. Two of these children attend full-time education at a local special needs school. Taylaughlan House consists of two adjoining houses.

An announced inspection by the Inspection and Registration Unit took place at Taylaughlan in November 2000. The inspection report acknowledged that staff were consistent in their practice when working with the children and provided them with a homely, caring environment that was 'autistic friendly'. However, the inspection identified that there was a high level of incidents involving child self-injuries and staff injuries which occurred when the children were unsettled. As there was no formal analysis of these incidents, it was recommended by the Inspection Unit that a formal system be put in place.

The task to devise a workable, formal system of behaviour analysis was given to the first author who works closely with the children who reside in Taylaughlan House. We realised that to analyse the incident report forms and the children's behaviour patterns efficiently would require a system that would allow people to record, monitor and analyse the relevant information methodically and effectively. The issues that were identified by this analysis then needed to be taken to the staff team to be addressed. This paper describes the system of behaviour analysis which was established at Taylaughlan and discusses the issues which the analysis identified, for example: lack of consistency in interpretation of guidelines; inappropriate use of language; inappropriate management of incidents; and inaccuracies in completing incident forms. It provides evidence of the benefits which have followed from the implementation of this system.

### **The Behaviour Analysis Forms**

Seven adaptable forms were designed for the behaviour analysis, providing Taylaughlan with a powerful tool which allows staff to more easily identify

specific 'key-issues' and to highlight inconsistencies in practice and triggers to challenging behaviour.

### *1. Incident Analysis Form*

The incident analysis form has a grid format with one row for each day of the month and each row divided into 24 hours. Specific daily routines can be marked on the form (for example, breakfast, shift handover, bed time). Each incident is noted on the form with a brief description of the incident; it shows clearly the times and dates of individual incidents along with comments on possible triggers to behaviours. This form helps to identify trends in behaviour patterns and triggers to negative behaviours over the one-month period. It can be used for one child or the same form can be used for several children. Information on this form is drawn from incident report forms and discussions with staff.

### *2. Summary Attachment Form*

This form provides a narrative summary of incidents and linked issues which are identified during the month in question. It is attached to the incident analysis form. As the information builds up over time, it becomes increasingly useful and can be used for quick reference, preparing reports, assessment by psychologists and other professionals, and future planning. It can also be used to justify resources for children with particular problems.

### *3. Issues Identified Form*

This form has two columns and one form is filled in for each child. The narrative recorded on the form describes the issues identified in the analysis which need to be addressed. The form is taken to the staff team for open discussion and the right hand column, 'work being done to address the issue' is completed.

### *4. Monthly Graph*

This form is in graph format and shows the 'number of incidents per day' on the vertical axis and 'day of month' on the horizontal axis. It highlights whether there are problems on specific days of the week or the month, showing clearly the number of incidents per day over a one-month period for each child.

### *5. Child Self-Injury Form*

This form is in grid format with one row for each day of the month. Each row is divided into a number of columns, one for each type of self-injury relevant to the child (for example, slaps to face (hard), slaps to face (soft), headbutt walls/door). The number of each type of self-injury is recorded on a daily basis and the bottom row shows the total of each type of self-injury for the month. Information for this form is drawn from the client injury book and compared to the information on the incident report forms; this helps to make sure that information is being recorded appropriately by staff. This form provides a useful

monitoring of self-injuries and helps gauge the effectiveness of measures which are put in place to reduce self-injury.

#### 6. *Staff Injury Form*

The staff injury form has the same format as child self-injury form. It records the daily and monthly totals for different types of injuries (for example, kicks, punch to head/face, hit with object).

#### 7. *Yearly Summary Form*

This form is in grid format with a row for each child and columns for each month of the year. The total number of incidents for each month are entered and these can provide an annual total for each child and the total number of incidents in the establishment. This again provides a useful tool for long-term monitoring and gives evidence of the effectiveness of particular strategies.

Once the forms are completed and the monthly analysis has been done, the forms should be filed together in a *Behaviour Analysis Folder*. These forms can be referred to when doing subsequent analyses and additional comparisons made. A clearer picture is then built up which allows a more efficient way of managing behaviour related issues.

### **The Mechanics of Setting up the System**

Having these seven forms in place provides the basis for doing a thorough analysis. A trusted and committed staff member is nominated by the staff team to do the analysis (more than one person could do the analysis, depending on how many children are involved). At Taylaughlan, the analysis is done on a monthly basis, although the forms can be adapted to suit the needs of any organisation or client group and the information could be recorded over different time periods.

The nominated person should read the incident report forms thoroughly so that the analysis is as comprehensive as possible. When reading the incident report forms, they should record times, dates and trends. They should also look for patterns in all areas which help to identify triggers to behaviours. Some examples of this are: environmental influences (noise levels, building layouts); times of the day; day of the week; and links to regular occurrences such as shift handover. They should check on a range of information such as whether: guidelines have been followed; more than one person gave direction to the child; inappropriate language, tone of voice or body language was used; staff were too involved; inexperience of staff was an influence; the child's needs or requests had been properly met; enough space was given to the child; enough time-out / recovery time was given; there was any peer influence; the child was unwell or out of routine; changes were going on in the child's life.

All forms should be cross-referenced whilst doing the analysis and anything that is unclear or uncertain should be clarified with staff verbally.

Once the analysis is completed, the issues identified as needing to be addressed are recorded on the appropriate form and this is presented to the staff team every month for open discussion. Issues can then be resolved quickly and effectively. This also prevents issues from 'slipping through the net' and being forgotten about. Issues should be presented to the team in a manner that does not target individuals. This is very important to ensure that the issues can be discussed freely, openly and honestly, without anybody feeling intimidated or any staff member being singled out. This makes issues much easier to resolve and encourages a positive, open, honest and reflective culture, with everyone having the opportunity to be involved in any decisions that need to be made. This system allows for a more effective policing of the environment and benefits both children and staff. A feeling of staff empowerment is also created.

### **Issues Identified through Behavioural Analysis**

In February 2001, the incident report forms for the previous month were analysed for the first time using the new behaviour analysis system. It became clear through reading the incident reports that there were a number of issues which needed to be addressed. Despite the comment made in the inspection report, inconsistencies in practice were identified, with staff using different language with the children, and also using different methods of managing their behaviour. When these issues were taken to the staff team for discussion, it became clear that there were also a number of underlying problems which needed to be addressed regarding staff and practice issues. It is true to say that there was a general feeling of confusion and frustration amongst the staff and this set the wheels in motion for a total review of practice.

Following the initial analysis, some issues were identified directly from facts recorded on the incident forms. Other issues were identified more indirectly while discussing with staff the findings from the analysis, their views on them and possible reasons for these findings.

It became apparent that there was a lack of consistency in staff members' interpretation of guidelines and policy, for example, the restraint policy. Staff members also spoke to, and acted towards, children in different ways. At times, staff used an inappropriate tone of voice, inappropriate language and negative body language, or talked over children and ignored them. This was causing children to become more anxious and distressed and this meant that situations were escalating and leading to the high levels of injuries to both children and staff identified by the inspection of Taylaughlan.

Staff were not giving children enough space while they were distressed. This was causing unnecessary confrontation and denying the children the opportunity to

manage their own behaviour. Another problem was the children not being given enough recovery time after an incident. This was causing their anxiety to be prolonged and giving everyone more distress as situations were dragged out.

Staff members (sometimes more than one) were stepping in and taking over control of incidents from their colleagues. This was confusing the children and undermining the staff, causing tension and anger amongst the staff and confusion and anxiety among the children. In addition, some staff were not communicating with each other or respecting others and their differences; they were not listening to, or valuing, other opinions. Some staff were also afraid of hurting people's feelings with constructive criticism and there was also a feeling of lack of support within Taylaughlan.

Sometimes, staff were becoming too involved with, and taking 'ownership' of, individual children which was unfair on everyone. Children can become over-dependent on one staff member and this makes it more difficult for other staff to build relationships. This, in turn, can lead to negative behaviours.

At times, staff were using 'consequences' to negative behaviours that were ineffective. They were not monitoring the effect of 'consequences' on the children and were not recognising when changes were necessary. Staff sometimes rushed children on to their next activity without adequate preparation or did not prepare children for shift handovers.

Inexperienced staff were accepting more experienced staff members' practice and were afraid to challenge them, even when they were aware that the guidelines were not being followed. Some experienced staff were being inflexible and stuck in their ways.

Some staff were failing in their responsibility to the children and their colleagues by not recording incidents or by not giving a truthful, accurate record of events. This meant that it was more difficult to put in place appropriate measures to manage the children's challenging behaviours. In addition, issues arising from incident reports were not being dealt with or were being forgotten; staff were not taking time to read the incident reports and reflect properly on the larger, overall picture. This was of no benefit to the children or staff and was defeating the purpose of filling in incident report forms.

All of these issues contributed to the situation where children displayed high levels of challenging behaviour.

### **Action Plan**

An action plan was then drawn up to try and make improvements in all areas highlighted as having a negative impact on children and staff. This was done at

team meetings and staff development days, with all staff having the opportunity to contribute. The following points highlight the main issues addressed in drawing up this action plan:

- Discussion with the staff team should ensure that everyone is clear about the importance of honest, truthful and accurate recording of information and how this has an impact on planning the care of children.
- Staff should be encouraged to share information and freely discuss any issues that need addressed. Both difficulties, and positive practice that benefits children or staff, should be thoroughly investigated. Discussion should be kept constructive to the benefit of everyone.
- Time should be spent working on any difficulties relating to staff issues. This is as important as thorough analysis of the incident report forms, since the system can only work if the staff team are settled, happy and committed.
- Staff should be encouraged to reflect on and share experiences and look at how their own behaviour affects situations.
- There should be clear guidelines on any form of restraint or intervention and people should realise the importance of their own safety and should be realistic about their own ability to manage situations. Staff need to recognise that although someone may be weak in one situation, they can be strong in another. Staff should respect the fact that all people are different.
- Staff should be aware that if they are not coping with a situation, they should request assistance, let someone else take over and learn to be comfortable with this without fear of retribution. Withdrawing in these situations can often be to the child's benefit and prevent situations from escalating.
- Shift handovers should be discussed as they can be very stressful for children. Ways of reducing anxiety during this time should be investigated.
- Children's routines and guidelines should be updated regularly and all staff should be kept informed of any changes to maintain consistency. Everyone on the team must understand the importance of consistency and individuals should not be allowed to 'do their own thing.' This can quickly undo the good work of others and it gives mixed messages to the children, leading to unsettled behaviours when their expectations are not met.
- The effects of any 'motivators' or 'consequences' to negative behaviour should be monitored closely. Unless practice is reviewed in an analytical way, these can remain in place even when they do not work or have become 'out-of-date'.
- Children should not be ignored or talked over, and language should be used appropriately. Staff should be aware of body language and tone of voice when managing behaviour.

- Staff should be given time to adapt to the new culture and mistakes should be expected. The behaviour analysis system should be given time to work and immediate results should not be expected. The system needs to continue operating even when things are running well and the children appear settled. This ensures that if children become unsettled again, there can be an immediate response and measures put in place to counteract any negative behaviour patterns.

### **Practice Benefits – A Case Study**

David has autism and resides at Taylaughlan (names of children have been changed for reasons of confidentiality). He has a very basic understanding of language and only has the ability to understand simple words and short phrases. This requires staff to adopt a consistent use of basic language when managing his behaviour, especially when he is unsettled, as his ability to process information diminishes when he becomes anxious or distressed.

David was selected as the first child to undergo analysis using the new system and his incident report forms for a one month period were analysed. Through reading the incident report forms and recording the information on the behaviour analysis forms, it became clear that the use of inappropriate language by staff while David was unsettled was escalating situations and causing high levels of child self-injury and adult injuries:

- Thirteen different phrases were used by staff to direct David to his bedroom when he was unsettled. This immediately highlighted inconsistencies in the use of language by staff.
- One of the phrases had 25 words (bearing in mind that David does not have the ability to process such a large amount of information). This demonstrated that there was also a problem with the over-use of language.
- Staff were becoming engaged in superfluous conversations with David while he was anxious and again this was escalating situations. David requires minimal verbal interaction with staff while he is distressed.
- David was not being given enough recovery time at the end of incidents. This was prolonging situations, causing unnecessary distress and tension to both staff and David.
- On several occasions, more than one adult was giving David directions during incidents. No-one was taking control and this again created unnecessary tension for both staff and David.
- There was inconsistency in the use of restraint and David was being restrained by some staff and being left alone by others. This was giving David mixed

messages and adding to his confusion. Restraints were also identified as an area where there were high levels of child self-injuries and staff injuries.

Once these issues were identified and recorded, they were presented to the staff team.

Discussion in the staff team led to further investigation of the issues and a questionnaire was drawn up for all staff to complete. This questionnaire collected information on what staff said or did in various situations, for example:

- How would you direct David to his room when unsettled?
- What language would you use to direct David to his bedroom?
- When would you restrain David?
- What would you do /say if David slammed the door?

After considering everyone's views, new guidelines were put in place in March 2001. The aim of the guidelines was to introduce more consistency by making sure that everyone was saying and doing the same things. In addition, a no-restraint policy was adopted. The outcome was very successful, with a dramatic reduction in both the total number of incidents and staff injuries involving David. This is evidenced in the tables below.

January 2001 – March 2001	178
April 2001 – June 2001	63
July 2001 – September 2001	76
October 2001 – December 2001	50
January 2002 – March 2002	41

April 2000 – September 2000	26
October 2000 – March 2001	33
April 2001 – September 2001	8
October 2001 – March 2002	4

Behavioural analysis in relation to the other children in Taylaughlan shows how specific situations were identified as triggering incidents. Analysis of incidents involving Stuart found that on a number of occasions he had been left alone in his room unsupervised and situations were escalating because of this, leading



to damage to his bedroom, self-injuries and violence to staff. An agreement was reached by the staff team that Stuart was not to be left alone at any time in his bedroom and that if he needed space or privacy, staff should sit outside his bedroom so that he could still have security of mind knowing that someone was there. A new guideline was put in place immediately and there were no further incidents of this nature.

Colin's monthly graph form indicated that he appeared to be having problems on Sundays around his swimming activity, with more incidents than normal. Discussion of this with the staff team found a number of inconsistencies. Some staff were taking him swimming while others did not. Some staff were giving Colin his afternoon snack before leaving for the swimming and others were not. Staff were using different bus routes to go to the pool and Colin was unsettled by this. Some staff took his bags back to the bus before walking to a restaurant, while others went straight to the restaurant without going back to the bus. A series of measures were put in place to structure Colin's swimming routine, and all staff agreed to the following guidelines: give Colin his snack before he went swimming; take the same bus route; walk straight to the restaurant from the pool. As well as this, Colin was given a photograph of the pool before leaving to give him a visual aid to help him understand where he was going and after swimming he was given a photograph of the restaurant once again as visual aid. Since all these measures have been put in place, Colin rarely shows anxiety or distress during his Sunday activities.

## **Conclusion**

The formal implementation of the behaviour analysis system at Taylaughlan House has led to positive outcomes which have benefited both children and staff members.

It has assisted in monitoring the quality and accuracy of incident report forms and has prevented issues 'slipping through the net'. It also provides an excellent record of events, with a clearer overall picture of behaviour related issues, and can be used for preparing reports and help towards future planning.

Behaviour analysis has highlighted inconsistencies in practice and enabled the staff team to address these quickly, leading to speedy resolutions to problems. It has boosted confidence and morale and given staff peace of mind, knowing that they are saying and doing the same things in their work with the children. A more open, honest and reflective culture has been promoted, encouraging staff to reflect on and discuss key issues freely without fear of retribution.

Child self-injuries and injuries to staff have been reduced significantly because the analysis has helped identify the causes and triggers to negative behaviours

and provided the context for putting in place appropriate and consistent ways of managing challenging behaviour. Behaviour analysis also creates regular opportunities to review and update guidelines for working with the children.

We acknowledge that working with children with challenging behaviour is demanding and perfection is unlikely to be attainable. The behaviour analysis system has been running at Taylaughlan House since February 2001, and has been of great benefit to each of the children. Issues continue to be raised and resolved on a regular basis. It has been successful because of the continued commitment and dedication of the whole staff team in striving to improve the quality of life of the children we work with.