

The importance of pre-requisite skills in toilet training

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Executive summary

Toilet training is one of the most important skills taught at BeyondAutism in terms of quality of life and independence for our learners (Cocchiola and Redpath, 2017). While toilet training is a high priority it is also important learners are taught a number of pre-requisites, ensuring they are ready for toilet training. These pre-requisites are often skills our students do not currently have. It is important to teach these pre-requisite skills when considering running an intensive toilet training schedule. This study looks at implementing pre-requisite toilet training skills for 2 children at Park House school.

Introduction

This study includes two students aged between 4 and 6 years of age. Both students have a diagnosis of autism and are within Level 1 of the Verbal Behaviour Milestone Assessment and Placement Program (VB-MAPP) and their programmes mainly focus on reducing barriers to learning and increasing communication through sign and PECS.

Toilet training is one of the most important and desired skills to teach, as children with a lack of bladder or bowel control is one of the most frequently cited reasons for abuse (Cocchiola and Redpath, 2017).

Research demonstrates children with autism are 11% more likely to have co-morbid constipation and bowel movement issues (Kohane, Mcmurry, Weber, Macfadden, Rappaport et al, 2012). This inevitably causes more problems surrounding learning to toilet train fully. When toilet training typically developing children at 2 years old, a number of 'signs' need to be present prior to starting (Table 1).

Steps required prior to toileting:

1. They know when they are wet or dry
2. They know when they are peeing and may tell you so
3. The gap between wetting is at least 1hr (if it is less potty training may fail and at

the very least will be extremely hard work)

4. They may show they need to pee by fidgeting or going somewhere quiet or hidden
5. They know when they need to pee and may say so in advance

Potty training is usually fastest if your child is at the last stage before you start the training. If you start earlier, be prepared for a lot of accidents as your child learns. They also need to be able to sit on the potty and get up from it when they're done, and follow your instructions. NHS.uk 2018.

The above potty training advice is assuming physical ability and receptive understanding before starting toilet training. This is a significant barrier for many of our learners making these 'signs' less obvious for our cohort of when it is time to start toilet training.

Supervisors at BeyondAutism have based their approach on articles on toilet training (pre-requisites for individuals with learning disabilities) from Drysdale, Yun Ki Lee, Anderson & Moore, (2014). From these studies a list of pre-requisites was compiled for BeyondAutism to use (see Appendix 1). The assessment was broken down into 'must-have', 'should-have', 'good to have' and 'nice to have'; in line with the Essential for Living assessments, used within the schools. The toilet training could not go forward without students having the 'must-have' skills.

When learning skills, Applied Behaviour Analysis typically focuses on breaking skills down into small manageable chunks and ensuring skills are taught in the correct order to ensure fluency in learning. Therefore, this study looks at the importance of teaching pre-requisite skills prior to implementing intensive toileting programmes to ensure success.

Method

For this study, there were 2 students requiring toilet training. The class supervisor completed the assessment for both students and gave data sheets to staff to take baseline data on fluid intake and dressing ability.

Child A was in nappies when starting school and was due to barriers associated with behaviours that challenge, he did not meet any of the 'must-have' goals, with the exception of being able to hold urine for 1hr after consuming (therefore, it was felt no medical examination was needed). The focus for teaching was his pre-requisite skills, focusing on tolerating entering the toilet and tolerating physical prompts (see Appendix 1 for assessment).

Child B was also in nappies at school. Child B had been at the school for a longer period of time and could complete all of the

‘must-have’ skills. However, he could not sit on a toilet for any length of time, he could not pull his trousers up or down and he was aversive to drinking liquids. These were identified as key pre-requisite skills to be taught (See Appendix 2 for assessment).

For both students highly preferred items were identified in class using a preference assessment and this was then used to support the student to complete either entering or sitting on the toilet. When they reached their goal, the student would get the preferred item. Students were differentially reinforced by the delay to reinforcement, i.e. if they walked into the toilet straight away, they would immediately receive the preferred item; however, if they waited outside or refused to sit, the item was not delivered until they did so (therefore differentially reinforcing quick responding).

The above method, was also used for Child A to tolerate changing and tolerating physical prompting to pull his trousers up and down; and for Child B to increase fluid intake.

Forward chaining (Cooper, Heron & Heward, 2007) was utilised for trousers up and down chains, breaking down the steps into small manageable chunks, physical prompting and prompt fading to ensure the steps were learnt.

Results

Child A:

The results show that the student’s behaviour has reduced around the toilet.

The student is now able to pull his trousers up and down independently (Figure 1).

Anecdotal evidence demonstrates that this child is now showing awareness of when he is wet (signs of distress) and will give a nappy or glove to an adult. This is always followed up with staff member taking him to the toilet. Data is currently being taken on whether he is wet or dry. This student is now moving on to the baseline of how often he is soiled during the day and a schedule will be created to see if we can predict when he will urinate and make sure he is on the toilet at the specified time.

Child B:

The results shown how promise reinforcement and differential reinforcement are successful in encouraging students to sit on the toilet (Figure 2.)

This student is able to independently pull his trousers up, but still struggles to pull his trousers down. When taking a baseline for urination, this child only urinates once a day at school. This is incredibly important information, which may make toilet training difficult. This learner also does not consume a high volume of liquids. A programme has been introduced to increase liquid intake. Anecdotally, the learner would not tolerate a drink being presented. This was worked on by asking

the student to take a ‘sip’ every 30 minutes using a schedule.

The results from this study suggest the importance of pre-requisites on planning for success in toilet training.

Discussion

The results show that both children through accurate skill identification have worked on appropriate toileting skills prior to engaging in intensive toileting schedules. It has been particularly effective for Child A who is now showing awareness around toileting, which suggests full toilet training is likely to be more successful (NHS.uk 2018).

This study shows the importance of working on toileting pre-requisites and baselining the current output before putting in difficult to maintain toilet training schedules.

The research demonstrates the importance of looking at all the skills surrounding toileting and not just the toilet training itself. It is important to assess children accurately before rushing into beginning toilet training, particularly as they may not be medically or physically ready for this. A intense toileting schedule may be detrimental to their health.

This research suggests a pre-requisite assessment needs to be conducted prior to beginning intensive toilet training, regardless of age of student.

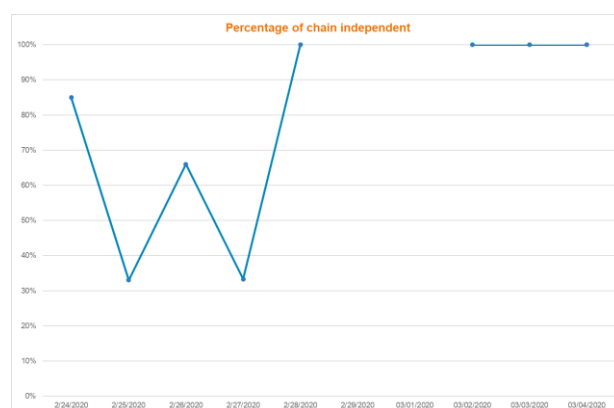


Figure 1: Depicts the number of steps completed independently for trousers down chain.



Figure 2: Demonstrates an increase in the duration of time sat on the toilet.

Pre-requisite	Assessment 1	Assessment 2	Assessment 3
Must have			
Hold urine for 1hr based on normal fluid intake*	█		
Has a communication method		█	
Able to transition with you		█	
Able to sit on a toilet for 2 minutes (minimum)		█	
Has a minimum of 3 strong motivators		█	
Accepts physical prompts		█	
Should Have			
Follows 5 instructions e.g. come here, sit down, stand up	█		
Motor ability – can they independently sit upright	█		
Motor movements related to toileting – e.g. trousers down		█	
Functional communication system		█	
Willingness to consume high volume of liquid		█	
Good to have			
Able to open and close a door independently		█	
Awareness of being wet/ dry		█	
Signals they need to use the toilet		█	
Nice to have			
Language around toileting (e.g. wee poo/ wet/ dry)			
Is socially motivated		█	
More complex motor movements e.g. to be able to wipe self			
Wipes toilet seat after use if needed			
Understands what is clean and dirty			

* If child cannot regularly hold their water intake for up to 1hr medical support must be sought before continuing to a toilet training programme.

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Motor movements related to toileting – e.g. trousers down		█	
Functional communication system		█	
Willingness to consume high volume of liquid		█	
Good to have			
Able to open and close a door independently		█	
Awareness of being wet/ dry		█	
Signals they need to use the toilet		█	
Nice to have			
Language around toileting (e.g. wee poo/ wet/ dry)			
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More complex motor movements e.g. to be able to wipe self			
Wipes toilet seat after use if needed			
Understands what is clean and dirty			

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References

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Appendix 1: Child A pre-requisite assessment.

Appendix 2: Child B pre-requisite assessment.