THE PLAY PROJECT™

Master Class: Toileting & Autism Selected Research Topics

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Autism & Toileting Research 2024

- Simon M, et al (2022) Toilet training interventions for children with autism spectrum disorder: A systematic review Research in Autism Spectrum Disorders Volume 99, November, 102049 https://doi.org/10.1016/j.rasd.2022.102049

- Wiggins L et al (2022), Toileting Resistance Among Preschool-Age Children with and Without Autism Spectrum Disorder J Dev Behav Pediatr May 1: 43(4): 216-223 DOI: 10.1097/DBP.0000000000001036

- Cocchiola M, et al (2012) Toilet Training Children With Autism and Developmental Delays: An Effective Program for School Settings. Behav Anal Pract. Winter; 5(2): 60-64. DOI: 10.1007/BF03391824

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Simon et al 2022 Review Article

- Current toilet training methods tend to employ operant conditioning strategies.
- Evidence for the effectiveness of toilet training intervention approaches is limited due to study designs.
- Most interventions do not address the breadth of toilet training needs of children with autism spectrum disorder.
- Future research should consider the feasibility and social validity of interventions for children and families.
- Greater consideration of parent-child communication, children's developmental and toileting skill level may facilitate development of toileting approaches that better meet the needs of children on the autism spectrum and their families.

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Vygotsky and Toileting

In Vygotsky's model, four components are posited to support children's learning:

(1) the presence of a more knowledgeable other (MKO);

(2) consideration of the child's developmental or skill level;

(3) providing scaffolding to the child; and

(4) engaging in cooperative and collaborative dialogue.

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Wiggins et al 2022: Resistance to Toileting

- **Objective:** Describe toileting resistance in children with ASD and DD and those from the general population (POP) Identify factors associated with toileting resistance in children with ASD and DD.
- **Method:** Families and children aged 24 to 68 months were enrolled in the Study to Explore Early Development, a multisite case-control study on ASD. Children with ASD (N = 743) and DD (N = 766) and those from the POP (N = 693) who were 48 months or older were included in this study. Parents reported toileting resistance, gastrointestinal issues, behavior problems, and ASD symptoms in their children. Children completed an in-person evaluation to determine ASD status and developmental level.

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Wiggins et al 2022: Resistance to Toileting

- **Results:** Toileting resistance was more common among children with ASD (49.1%) than children with DD (23.6%) and those from the POP (8.0%). **Diarrhea** and **deficits in social awareness** were significantly associated with toileting resistance in children with ASD and DD. Constipation, expressive language delays, and low social motivation were significantly associated with toileting resistance only in children with ASD; very low visual reception skills and oppositional behaviors were significantly associated with toileting resistance in only children with DD (all p ≤ 0.05).
- **Conclusion:** Evaluating gastrointestinal issues, developmental delays, and social deficits before toileting training may help identify children with atypical development who are likely to present with toileting resistance. These evaluations can be incorporated into health supervision visits.

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Cocchiola M et al (2012): School success

5 children in school setting who had trouble toileting:

Intervention focused on:

- (a) removal of diapers during school hours,
- (b) scheduled time intervals for bathroom visits,
- (c) a maximum of 3 min sitting on the toilet,
- (d) reinforcers delivered immediately contingent on urination in the toilet, and
- (e) gradually increased time intervals between bathroom visits as each participant met mastery during the preceding, shorter time interval.
- The program was effective. Paraprofessional staff implemented the program with minimal clinical oversight.

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