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## School Participation of Students with Autism Spectrum Disorder and Food Selectivity

Courtney DeSol, MS, OTR/L

Thomas Jefferson University, [courtney.desol@students.jefferson.edu](mailto:courtney.desol@students.jefferson.edu)

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**Title of the Doctoral Presentation:** School Participation of Students with Autism Spectrum Disorder and Food Selectivity

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**Authors:** Courtney DeSol, OTD, OTR/L; Amy Carroll, OTD, OTR/L

**Affiliations:** Thomas Jefferson University, Department of Occupational Therapy, 901 Walnut Street, Philadelphia, PA 19107

**Corresponding Author:** Courtney DeSol, cxd261@students.jefferson.edu

**Abstract:**

**Introduction:** Children with autism spectrum disorders (ASD) are five times more likely to have feeding challenges than neurotypical peers (Sharp et al., 2013). Of these feeding challenges, food selectivity is among the most prevalent (Leader et al., 2020) and is defined as food refusal or limited food repertoire (Bandini et al., 2017). Food selectivity has been correlated with nutrition inadequacies (Bandini et al., 2010; Sharp et al., 2013) and poor diet quality (Johnson et al., 2014) in children with ASD. Additionally, correlations exist with sensory processing difficulties (Leader et al., 2020; Suarez et al., 2014), internalizing and externalizing behaviors (Johnson et al., 2014), and restrictive and repetitive behaviors (Page et al., 2022). In addition to feeding challenges, children on the autism spectrum have lower participation rates at school (Falkmer et al., 2012; Simpson et al., 2019). Despite children with ASD's lower school participation levels and food selectivity's correlations with factors that could impact school participation, there has been limited attention in the literature to food selectivity at school and its impacts on school participation. School participation is an important area of consideration because it is associated with health and well-being (John-Akinola & Nic-Gabhainn, 2014). Furthermore, educators and schools have a responsibility towards school participation because under IDEA students are guaranteed equal opportunity and participation in public education (Individuals with Disabilities Act, 2004).

**Objectives:** This study aimed to explore the school participation of students with ASD and food selectivity from the teachers' perspectives. The objectives were to describe the food selectivity of students on the autism spectrum in the school environment and describe the impact of food selectivity on their school participation.

**Methods:** This study used a qualitative approach using semi-structured interviews (Merriam & Tisdell, 2016) with deductive content analysis (Bengtsson, 2016). Data collection and analysis were grounded in a conceptual framework of school participation for children with disabilities developed by Maciver et al., 2019. Participants were special education teachers who work with students with autism and food selectivity. Teachers selected students with autism and food selectivity to reflect on during the interviews without sharing the students' identities with the interviewer.

**Results:** Ten special education teachers participated. Most participants identified as female and white. Most taught in suburban school districts and their ages ranged from 28 to 62 years old. Categories were identified as Maciver et al.'s (2019) three mechanisms of identity, competence, and experience of mind and body, as well as the five contexts of qualities of adults, peers, structures and organization, physical spaces, and objects. Subcategories were identified under each category guided by the conceptual framework and based on the data from study participants.

**Conclusion:** Teachers described the impacts of food selectivity on the school participation of students with ASD including the presence of anxiety, physical symptoms, and challenging behaviors. Sensory qualities of the environment, in particular the cafeteria, limited meaningful mealtime participation. Additionally, teachers described inequities to the access of preferred foods at school which heightened the impact of food selectivity on participation.

## Reference

- Bandini, L. G., Anderson, S. E., Curtin, C., Cermak, S., Evans, E. W., Scampini, R., Maslin, M., & Must, A. (2010). Food selectivity in children with autism spectrum disorders and typically developing children. *The Journal of Pediatrics, 157*(2), 259-264.
- Bandini, L. G., Curtin, C., Phillips, S., Anderson, S. E., Maslin, M., & Must, A. (2017). Changes in food selectivity in children with autism spectrum disorder. *Journal of Autism and Developmental Disorders, 47*, 439-446.
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open, 2*, 8-14.
- Falkmer, M., Granlund, M., Nilholm, C., & Falkmer, T. (2012). From my perspective- Perceived participation in mainstream schools in students with autism spectrum conditions. *Developmental Neurorehabilitation, 15*(3), 191-201.  
<https://doi.org/10.3109/17518423.2012.671382>
- Individuals with Disabilities Act. (2004) *About IDEA*. <https://sites.ed.gov/idea/about-idea/>
- John-Akinola, Y. & Nic-Gabhainn, S. (2014). Children's participation in school: A cross-sectional study of the relationship between school environments, participation and health and well-being. *BMC Public Health, 14*(964).
- Johnson, C. R., Turner, K., Stewart, P. A., Schmidt, B., Shui, A., Macklin, E., Reynolds, A., James, J., Johnson, S. L., Manning Courtney, P., & Hyman, S. L. (2014). Relationships between feeding problems, behavioral characteristics and nutritional quality in children with ASD. *Journal of Autism and Developmental Disorders, 44*, 2175-2184. DOI: 10.1007/s10803-014-2095-9
- Leader, G., Tuohy, E., Chen, J. L., Mannion, A., & Gilroy, S. P. (2020). Feeding problems, gastrointestinal symptoms, challenging behavior and sensory issues in children and adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders, 50*, 1401-1410.
- Maciver, D., Tyagi, V., Kramer, J. M., Richmond, J., Todorova, L., Romero-Ayuso, D., Nakamura-Thomas, H., van Hartingsveldt, M., Johnston, L., O'Hare, A., & Forsyth, K. (2020). Development, psychometrics and feasibility of the school participation

- questionnaire: A teacher measure of participation related constructs. *Research in Developmental Disabilities*, 106, 103766. <https://doi.org/10.1016/j.ridd.2020.103766>
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: A guide to design and implementation* (4<sup>th</sup> ed.). Jossey-Bass.
- Simpson, K., Adams, D., Bruck, S., & Keen, D. (2019). Investigating the participation of children on the autism spectrum across home, school, and community: A longitudinal study. *Child: Care, Health and Development*, 45, 681-687.
- Sharp, W.G., Berry, R. C., McCracken, C., Nuhu, N. N., Marvel, E., Saulnier, C. A., Klin, A., Jones, W., & Jacquess, D. L. (2013). Feeding problems and nutrient intake in children with autism spectrum disorders: A meta-analysis and comprehensive review of the literature. *Journal of Autism and Developmental Disorders*, 43, 2159-2173.
- Suarez, M. A., Nelson, N. W., & Curtis, A. B. (2014). Longitudinal follow-up of factors associated with food selectivity in children with autism spectrum disorders. *Autism*, 18(8), 924-932.

**Synopsis:** The teachers described food selectivity as impacting school participation. They described students with anxiety, physical symptoms, and challenging behaviors. Occupational therapists should prioritize students' emotional and mental well-being to support participation at school. The environment of the cafeteria limited students' meaningful lunchtime participation. Occupational therapists should address food selectivity at school. They should provide interventions to support participation and help create an environment to encourage the participation of students.

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**Keywords:** autism, food selectivity, school participation, school-based occupational therapy

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