



# Understanding the Effects of Integrating the Typically Developing Sibling into Pediatric Occupational Therapy Services

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## Introduction

**Background:** Eighty-two percent of children 18 and under live with at least one brother or sister, and their sibling relationship is usually the longest-lasting family relationship in that person’s life<sup>2</sup>. Siblings of children with intellectual and developmental disabilities are an extremely important component of the family dynamic but are consistently understudied<sup>4</sup>. Since typically developing siblings (TDSs) are a consistent figure in the lives of children with disabilities, they can provide ample opportunities for naturalistic interaction and play scenarios<sup>5</sup>. The most holistic and informed approach to therapy is for the programs and interventions to consider how to support the positive health and well-being of the whole family<sup>3</sup>.

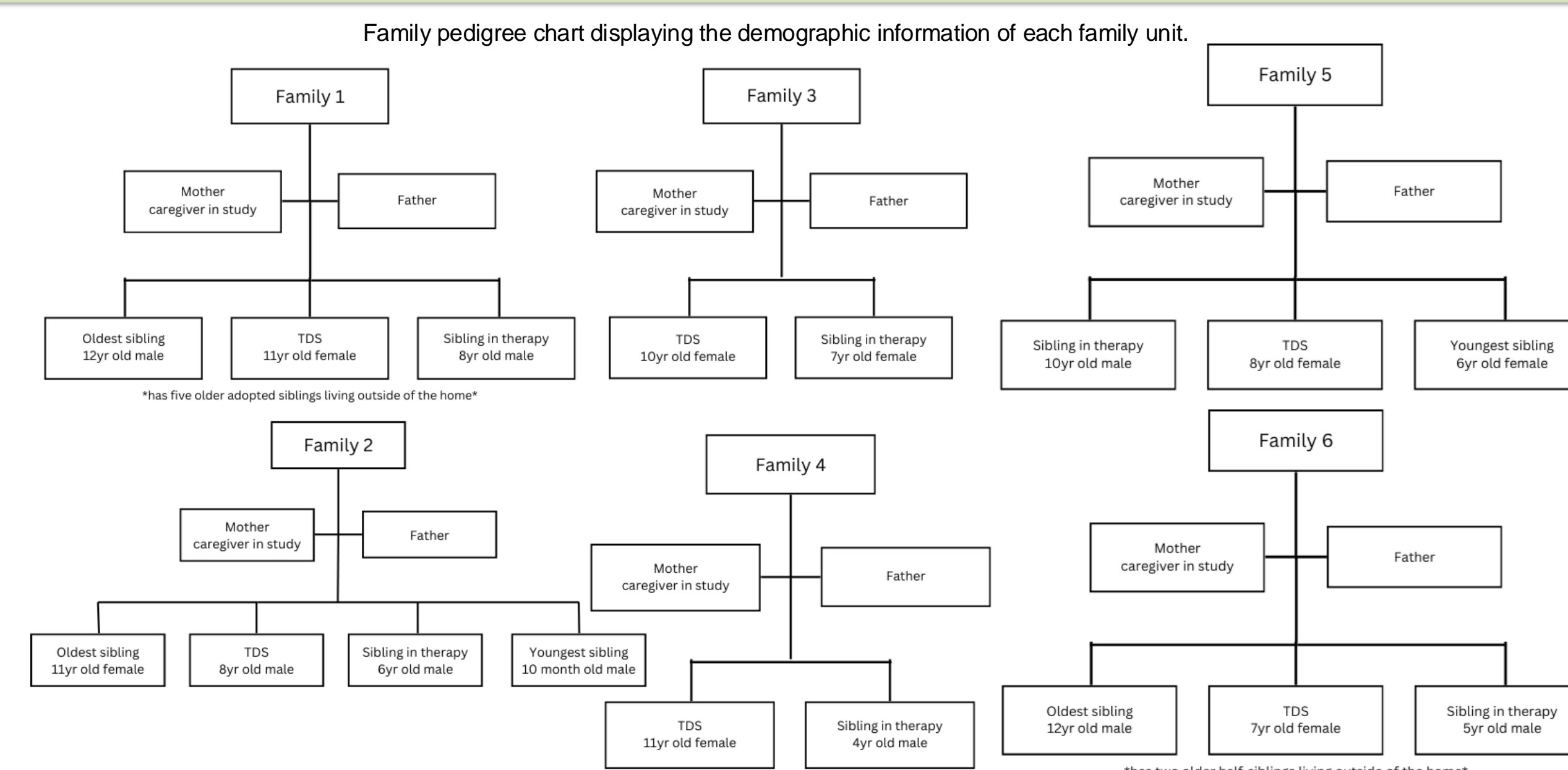
**Theory:** Integrating the typically developing sibling in outpatient occupational therapy sessions supports the family systems theory by Dr. Murray Bowen. The family systems theory suggests that individuals cannot be understood independently but that they are understood as a part of their family because the family is one emotional unit. Families are interconnected interdependent individuals that are connected through a system where they cannot be understood in isolation from that system. A family system is a concept where each member has a role to play and is expected to respond to each other based on their role<sup>1</sup>. This theory promotes the holistic incorporation of the full family unit and recognizes that understanding the interconnections of the family unit is vital for each individual person in the family to be able to thrive.

**Purpose:** The purpose of this research is to conduct qualitative research on the effects of sibling integration during occupational therapy sessions when typically developing siblings are included in outpatient therapy sessions with their sibling who has a developmental disability. The goal is to address the literature gap regarding TDS integration, better understand the role of TDSs in pediatric occupational therapy (OT) services and foster a more holistic approach to family involvement in pediatric OT services.

## Methods

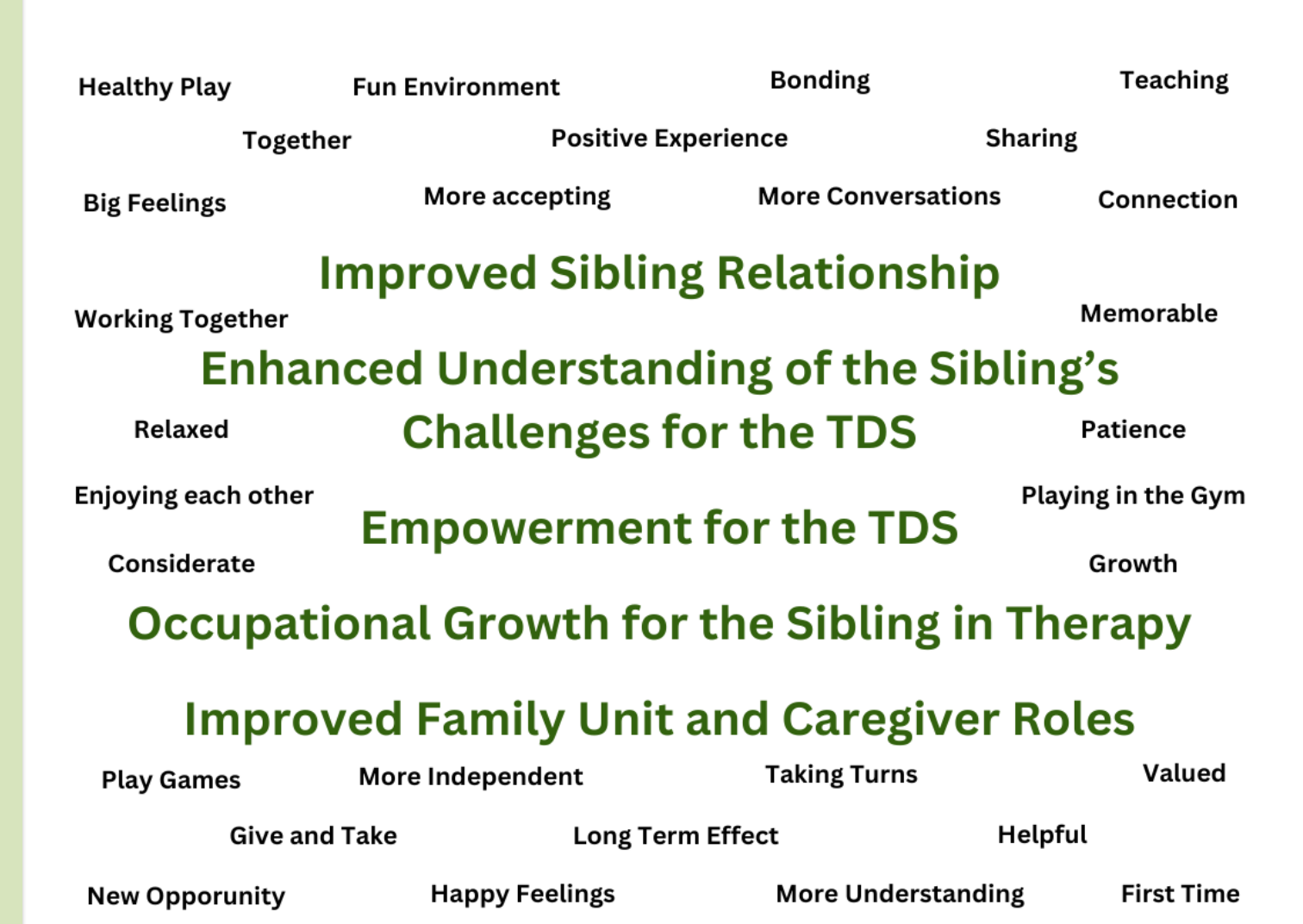
This research was conducted at and with the support of Child’s Play Therapy Center (CPTC), an outpatient pediatric facility. Recruitment was completed by purposive sampling of families receiving occupational therapy at CPTC. There were no exclusions based on race, gender, religion, sexual orientation, or marital status. Six families consisting of one caregiver, one TDS, and one sibling in therapy participated in the study. Research was completed through a combination of routine therapy sessions with the inclusion of the TDS where data was collected through pre- and post-intervention interviews. The interviews aimed to understand the family experiences before and after the TDS integration and to assess the effects of TDS integration in occupational therapy services. The caregiver and the TDS individually participated in separate and specific interviews to target these outcome measures. Research questions were developed based on trends seen in previous research and gaps seen in current literature related to this project. Thematic analysis was completed by detailed comparison and analysis of responses between caregivers, responses between TDSs, responses between TDS and caregiver pairs, and a comparison of responses between pre- and post-integration interviews.

## Results



Family	Diagnosis	Reason for Occupational Therapy Services
Sibling 1	No formal diagnosis	emotional regulation, interoception awareness, sensory processing, reflex integration
Sibling 2	Sensory Processing Disorder	emotional regulation, interoception awareness, sensory processing, social skills
Sibling 3	No formal diagnosis	reflex integration, sensory processing, executive functioning
Sibling 4	No formal diagnosis	emotional regulation, fine motor skills, sensory processing, self care skills, social skills
Sibling 5	Autism Spectrum Disorder & Attention Deficit Hyperactivity Disorder	executive functioning, emotional regulation, interoception awareness, sensory processing, reflex integration, social skills
Sibling 6	Autism Spectrum Disorder	emotional regulation, fine motor skills, sensory processing, self care skills, feeding, social skills

TDS demographic table describing the goals and reason for occupational therapy services. The TDS participated in occupational therapy sessions with interventions to target the goals provided for their sibling.



Word Cloud of the most communicated words, topics, and themes from the TDSs and Caregivers following TDS integration sessions, with the green sections being the most prevalent ideas found from each participant.

## Discussion

This study allowed for the effects of TDS integration in pediatric occupational therapy services to be better understood and explored. The effects of TDS integration in pediatric occupational therapy sessions have shown to be impactful and of significance. TDS integration has improved sibling dynamics and relationships, enhanced understanding of disability and the sibling’s challenges for the TDS, created empowerment and positive identity impact for the TDS, led to occupational growth for the sibling in therapy, and improved family unit and caregiver roles. Occupational therapy practitioners (OTPs) should educate caregivers on the role of the TDS and the challenges they might face while also offering support and recourses to the family unit. Conversations on TDS’s mental health, TDS’s understanding of their sibling, and healthy sibling play should be had secondary to the high number of dissatisfactions in these areas during the pre-integration interviews. OTPs should encourage TDS integration in OT sessions to empower the TDSs, increase TDS’s understanding of their sibling, and help to develop the sibling relationship by giving them healthy play opportunities and fond memories that will help their long-term outlook of each other.

## Discussion cont.

If OTPs adopted these methods into their daily practice, the conversations around the TDSs in occupational therapy sessions will begin to shift. Due to the study’s small sample size of six family group participants, the results may lack generalizability to all families receiving pediatric occupational therapy services. Since the majority of siblings in therapy were males and the majority of TDSs were females, the results may not apply to families with different sibling gender matches. All of the siblings in the study had cognitive-specific goals, the results of this study may not be generalizable to a family with a child who has only a physical disability. Future research should be completed to better understand the effects of TDS integration for all families in all pediatric settings.

## Conclusion

The therapeutic impact of TDS integration in pediatric occupational therapy sessions appears to be significant and multifaceted. There seems to be a variety of benefits of TDS integration as stated by the TDSs and caregivers. Themes of improved sibling dynamic and relationship, enhanced understanding of disability and the sibling’s challenges for the TDS, empowerment and positive identity impact for the TDS, occupational growth for the sibling in therapy, and improved family unit and caregiver roles were some of the key findings among the participants. The effects of TDS integration in pediatric occupational therapy sessions have shown to be impactful and important. These key findings address the clear positive implications and impact of TDS involvement in pediatric occupational therapy services for the whole family unit. There is a clearly defined role for OTPs as advocates for TDS involvement in future pediatric occupational therapy services. Continued research on the TDS role in occupational therapy services will initiate more conversations on the importance of the TDS and allow for a practical shift to occur in available research on this subject.

## References

- Bowen M.** (1966). The use of family theory in clinical practice. *Comprehensive psychiatry*, 7(5), 345–374. [https://doi-org.uab.idm.oclc.org/10.1016/s0010-440x\(66\)80065-2](https://doi-org.uab.idm.oclc.org/10.1016/s0010-440x(66)80065-2)
- Dunifon, R.,** Fomby, P., & Musick, K. (2017). Siblings and children’s time use in the United States. *Demographic Research*, 37(49), 1611-1624. <https://www.demographic-research.org/volumes/vol37/49/>
- Nguyen, L.,** Jack, S. M., Davis, H., Bellefeuille, S., Arafeh, D., Di Rezze, B., Ketelaar, M., & Gorter, J. W. (2024). “Filling in the gap”: A qualitative case study about identity construction of siblings of youth with a neurodisability. *Journal of Adolescence*, 96, 1354–1367. <https://doi.org/10.1002/jad.12353>
- Shivers, C. M.,** & Dykens, E. M. (2017). Adolescent siblings of individuals with and without intellectual and developmental disabilities: Self-reported empathy and feelings about their brothers and sisters. *American Journal on Intellectual and Developmental Disabilities*, 122(1), 62–77. <https://doi.org/10.1352/1944-7558-122.1.62>
- Watkins, L.,** Tomeny, T., O’Reilly, M., Sillis, K. H., & Zamora, C. (2021). A naturalistic behavioral intervention to increase interaction between siblings with and without autism. *Behavior Modification*, 45(6), 863–886. <https://doi.org/10.1177/0145445520920813>

## Acknowledgement & Contact information

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